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Departure of the Devil: Landmines and Livelihoods in Yemen

Volume 1: Main Report

On behalf of the
Yemen Executive Mine Action Centre



**Natural
Resources
Institute**

Geneva, November 2006

The **Geneva International Centre for Humanitarian Demining** (GICHD) supports the efforts of the international community in reducing the impact of mines and unexploded ordnance (UXO). The Centre provides operational assistance, is active in research and supports the implementation of the Anti-Personnel Mine Ban Convention.

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THE SURVEY TEAM

Back row: Ahmed Khaled Al Oudayni, Adel Said, Dr Abdul Qadr, Adel Qasim Ahmed Kayed, Madyan Mohammed Obed Gharama, Mohammed Amrani, Barry Pound

Front Row: Hassan Salem Saa'el, Adrienne Martin, Ghada Mohammed Alwadee, Samiyra Mohammed Hassan, Ferdous Sharaf Al Mutaw

Acronyms

CTA	Chief Technical Adviser
DFID	Department for International Development (UK)
ERW	Explosive Remnants of War
FAO	Food and Agriculture Organisation of the United National
GICHD	Geneva International Centre for Humanitarian Demining
GoY	Government of Yemen
IFAD	International Fund for Agricultural Development
LIS	Landmine Impact Survey
MAAC	Mine Awareness Advisory Committee
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organisation
NMAC	National Mine Action Committee
NRI	Natural Resources Institute
SFD	Social Fund for Development
ToR	Terms of Reference
UK	United Kingdom
UNDP	United Nations Development Programme
UXO	Unexploded Ordnance
VMAC	Victim Assistance Advisory Committee
YEMAC	Yemen Executive Mine Action Committee
YLSA	Yemen Landmine and UXO Survivors Association
YR	Yemeni Riyal

Currency

\$ = US dollars. \$1= approximately 200 Yemeni Riyals (YR)

Glossary of Local Terms

awkaf	Charitable endowment of property for the benefit, in perpetuity, of a religious or charitable cause.
girba	Terrace
hema	Meaning "reserve" or "preserve"; an indigenous conservation system under customary law in which tribal clans managed and protected rangelands and designated areas for rotational grazing
kadah	Volumetric measure equal to approximately 24kg. (8 containers of 20cm diameter x 25cm height).
libna	Measure of land area, approximately 44m ²
qat	The shrub, <i>Catha edulis</i> , the young leaves of which are chewed to produce a stimulant effect. Qat chewing is an important social activity in the afternoon
uzla	Administrative unit at the level of a sub district, covering several villages



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Executive Summary

Introduction

Over the past thirty years, Yemen has been plagued with a number of conflicts (1962-1969; 1970-1983; and in 1994) that have resulted in a significant and deadly legacy of landmines and Explosive Remnants of War (ERW). A nationwide Landmine Impact Survey (LIS) completed in July 2000 identified 592 mine-affected villages in nineteen out of the country's twenty-one governorates. The LIS recorded a total of 4,904 casualties over the past ten years, of which 2,560 were killed and 2,344 injured.

The landmine and ERW problem has had a serious impact on access to critical resources, blocking access to grazing land, agricultural land and water sources for drinking and irrigation. It has also impeded infrastructure development and the implementation of social development projects in affected communities.

The government of Yemen is committed to the complete elimination of landmines and explosive remnants of war. The National Mine Action Committee (NMAC) was established in June 1998 to formulate policy, allocate resources, and develop a national mine-action strategy. Furthermore, the Yemen Executive Mine Action Centre (YEMAC) was established in January 1999 as the implementing body of the NMAC with the primary responsibility of coordinating all mine-action activities in the country. The aim of the current Strategic Mine Action Plan is to put an end to the suffering and casualties caused by anti-personnel landmines, by the end of March 2009. As of September 2005, over 240 million square meters of affected land have been surveyed, cleared and returned to the local users.

In 2005, the Mid-term Evaluation for strengthening national capacity for mine action in Yemen praised the achievements of YEMAC and NMAC to date, and also recommended that Community Rehabilitation become an integral part of mine action in Yemen in the future.

This study was commissioned by YEMAC and the Geneva International Centre for Humanitarian Demining (GICHD), with the following objectives:

1. To assess the overall socio-economic returns from mine clearance investments
2. To make a preliminary assessment of complementary development initiatives for mine-affected communities
3. To enhance the capacity of YEMAC to conduct future assessments of socio-economic benefits from mine action; assess the community Landmine Impact Scores as a tool for identifying impact and determining priorities for action; advise on how to design and conduct on-going socio-economic surveys relating to ERW; advise on integrating social differentiation within LIS survey protocols, and advise on enhancements to YEMAC's monitoring and evaluation system

Approach

The Sustainable Livelihood approach was used as a basis for obtaining a holistic view of the situation in landmine-affected communities. This approach views people as operating in a context of vulnerability, within which they have access to certain assets (human, social, natural, financial and physical). The levels and utilisation of these assets are influenced by the external political, institutional and legal environment. Together people's assets and the external environment influence households' strategies in pursuit of outcomes that meet their own livelihood objectives.

The use of this framework to assess the impacts of mine clearance helps to highlight the wider context in which the laying of mines and contamination with ERW has affected communities. It encourages integrated thinking about the benefits of demining and the broader development opportunities and constraints. Mines directly block the use of natural and physical assets, removing farmland and grazing from use, obstructing use of roads and access paths, preventing use of strategically placed buildings etc. Yet the effects of mines also impact indirectly on human capital – through injury and loss - and on financial capital through loss of productive assets. Mines may prompt changes in livelihood strategies (e.g. by encouraging migration out of the village for employment). Mine clearance may give rise to contested claims for rights to land. Initiatives to develop community resources crucially depend on the capacity of local governance and leadership.

An important challenge in the task was to clearly distinguish the immediate outputs of mine action (e.g. cleared land, roads and other assets; greater awareness and knowledge of mine risks; survivor support), from actual outcomes (e.g. increased utilisation, higher productivity and changed behaviour) and, ultimately, impacts in terms of sustainable growth and enhanced well-being.

Some of the *indicators* of socio-economic outcomes/impacts that the study assessed were:

- Reduction in the numbers of mine accidents and loss of human and animal life
- Demined land brought back into productive agricultural use
- Productive output and income from cleared agricultural land
- Value of fodder and firewood collected from grazing land
- Value of stone cut
- Investment in new housing on demined land
- Resumed use of demined roads for productive and social purposes

Methods

A participatory survey of 25 reportedly mine-cleared communities was conducted over two missions: a) a short reconnaissance mission to develop the methodology in three contrasting communities, and b) the main survey of a further twenty-two communities in seven governorates (Sana'a, Dharmar, Ibb, Al-Dhale, Aden, Lahij and Abyan). The twenty-five villages (4% of the total landmine-affected villages in Yemen and 17% of those cleared) were selected to represent the different historical

phases of mining; the range of physical environments and agricultural systems, types of assets affected, market proximity, population size and numbers of recent casualties.

A formal questionnaire was not used. Instead a range of participatory rural appraisal techniques was used to discuss the past, present and potential future situation of the communities and their land (with special emphasis on the cleared areas). The methods used reflected the need to understand the viewpoints of different sections of the community. Thus separate meetings were held in each community with community leaders, farmers, women, children and the survivors of landmine incidents.

The survey obtained a mixture of qualitative and quantitative information designed to assess community outcomes from demining. Except where indicated, the social and economic benefits and the opportunities detailed in this report are those given to us by the community members. A further dimension, explored through a gender-differentiated approach, was the level of participation of women, their perceptions of benefits from mine action and their development priorities.

The dependability of findings was enhanced by the ‘triangulation’ (or the comparison and contrast) of information from a variety of sources. The Landmine Impact Survey of 2000 was a useful baseline, giving information on populations at the time of the survey, the size of the suspected mined area(s), the blocked assets and landmine-related casualties.

For the main survey, three survey teams were trained by the consultants. The teams consisted of YEMAC staff and three contracted women with appropriate backgrounds.

The tools used in the survey were:

- a. A comprehensive introduction to provide information on the team, the mission objectives and the potential benefits to the community
- b. A “Time-Line” to understand the situation before, during and after mines were laid
- c. Use of village maps previously drawn up with the villagers themselves, showing the relationship between the village and the mined/cleared areas
- d. A “Community Profile” that listed the social, financial, physical, natural and human assets inside the community, and the relationship between the community and the outside world
- e. A series of focus group discussions with community leaders, farmers (or other natural resource users such as fishermen, nomads or landowners), women, children and landmine incident survivors
- f. Gender analysis
- g. Farming/livelihood system diagrams and Force field diagrams
- h. Participant observation, and a photographic record of the present situation
- i. A team discussion on the results obtained from each community
- j. An evaluation, by the team members, of the methods used

The preliminary findings were presented to YEMAC, government agencies and NGOs immediately after the survey, and their comments incorporated into the report.

Findings of the survey

The findings of the survey are presented below in three sections:

- The impact of demining on communities
- Development opportunities for demined communities
- Considerations for YEMAC

Impact of demining on communities

Enhanced safety and awareness:

It is important to draw a distinction between an assessment of risk based on the presence of mines and on the number of accidents actually occurring, and local perceptions of risk and the behaviour associated with these perceptions.

The evidence from this survey is that clearance is almost completely effective in eliminating the risk of explosion from landmines and UXOs.

When describing the situation before demining, people in the communities talked of their fear of injury and fatalities from mine accidents and of feeling permanently frightened and concerned about the safety of children. **A reduction in this general fear and a feeling of relief was a notable outcome of the demining activity.**

However, factors influencing community perception of risk are complex. Local judgements of risk and the behaviour which follows from these, are not based solely on understanding such evidence, but are influenced by complex emotional responses. Hence, removal of fear is by no means universal, for a number of reasons:

- In those areas where landmines were present for a long period, the fear of land mines is deep rooted (although diminishing)
- Some communities designated as cleared, were reported by the community as not fully demined
- Community members do not have confidence in some parts of the previously mined areas. They use the land cautiously for some purposes (e.g. unsupervised grazing), but are afraid to enter it themselves. In particular they fear to cultivate the land as they feel that there are still landmines at depths lower than the standard clearance depth of 20cm
- Some sections of the community (particularly women) were less involved with the demining teams and with the formal certification of clearance, and therefore remain unaware, or unconvinced, that areas have been cleared.

Trust is a key factor in influencing perception of risk and how communication of information is actually 'heard'. YEMAC has a great advantage in this regard since it has credibility and respect, and might capitalise more on its solid reputation.

Release of productive potential from cleared assets:

Grazing land: Many mined areas were on rangeland used for grazing sheep, goats and cattle. Clearing the land has returned this asset to the community, often in improved condition due to the long fallow it has enjoyed. This has benefited livestock owners, those who work for livestock owners, and those who use locally-produced livestock products.

Village income from herding in Al-Masharih, Al-Dhale governorate

Number of households with livestock = 240

Daily value per household of grazing = 50 YR

Annual value of grazing to Al-Masharih and neighbouring village = 8,760,000

Additional grazing 4 times per month by third neighbouring village = 1,728,000 YR

Total return to the grazing by the three villages = 10,368,000 YR per year
(approximately \$51,840)¹

The safety of women and children has been particularly enhanced by clearance, as they are often the shepherds caring for the livestock. In some villages, women are constrained from grazing and collecting fuelwood by the presence of army camps on the hillsides.

Traditional natural resource management practices, such as *Hema*, are being considered in some villages that have strong, concerned leadership, to reduce the risks associated with open access to fragile grazing land.

In the desert areas in the south, nomads graze their livestock on previously mined land. For settled communities in the south, grazing areas are important to the whole village. In some instances this facility has been taken away by government developments on previous communal grazing land, while in other villages grazing land is still intact and represents a major resource.

Fuel wood and fodder: Wood is still the main cooking fuel in rural areas, although animal dung and butane gas are also used. The cost of wood is that of the labour to collect it, often the job of women and children. The long period of enforced fallow favoured tree growth in mined areas, and has thus provided a rich resource in some areas (particularly the mid-altitude areas such as Al-Dhale Governorate). In communal areas, all families have access to this resource.

The value of fuel wood to some communities is impressive. In Sha'b in Sana'a governorate for example, 250 families depend on wood as their main fuel at a value of 30,000 YR per family per year, giving a **total value to the community of 7.5 million YR per year (about \$37,500)**.

Cut tree or grass fodder can represent a seasonally important resource (e.g. tree browse in the dry season), and a substantial part of the cost of raising livestock. Without access to areas where fodder can be cut, families have to buy in fodder such as alfalfa, which is very costly. Cleared areas provide good sources of fodder.

Stone: Several surveyed villages quarry stone from cleared areas for construction of houses and other buildings. A particular example is Bait Al- Ra'ae in Ibb governorate, see Box 2 below.

Income from stone from cleared area in Bait Al Ra'ae, Ibb governorate

¹ All dollar figures are in US dollars; \$1= approximately 200 Yemeni Riyals (YR)

Approximately two houses are built in the village per year. Approximately half the stone used comes from the cleared area. Thus the following calculation is made on the basis of the building of the equivalent of one house per year.

To build a medium sized house requires about 3000 stones. This is equivalent to 100 tractor loads, each of which costs 10,000 YR. Thus the value of the stone extracted is 1 million YR. Five men at 800 YR per day can extract 15 tractor loads in one day. Thus the labour cost for 100 loads is 26,666 YR. Add to that fuel, tractor hire, hammers etc, and the costs rise to a total of about 40,000 YR.

The net financial benefit to the village is therefore 960,000 YR (about \$4800)

Crop production: Crop production (including qat and grapes) is important for income generation and food security in all villages apart from peri-urban, nomadic and fishing villages. The need to reclaim private cropland was one of the main reasons why villagers demined land by themselves. The risks were high, but then so were the returns. The highest net return comes from qat, which is one of the few crops that is profitable in those areas such as Qa'tabah District in Al-Dhale where water is very expensive.

In several villages in the south, the government, powerful individuals and outsiders with money seem to be the main benefactors from the clearance of the land rather than the village as a whole.

Qat Production in Al-Qafleh

The qat terraces in Al-Qafleh have been established since the land was cleared of mines. Although the landowners are the main beneficiaries, those who pick the crop, transport it and market it also benefit. The whole rural economy benefits from the cash circulating in the rural areas, and there is a booming construction industry building houses for rich landowners

Cost of water = 300,000 YR annually; Cost of labour = 30,000 YR annually.
Fertilizers and pesticides = 200,000 YR annually; Cost of labour = 100,000 YR annually
Total costs = 630,000 YR

There are 20 terraces in the demined area, with a total annual profit of 7.4 million YR (about \$37,000) in good years.

Bee-keeping: Bees can use mined land without hindrance, but commercial production of honey requires that the hives are located close to the source of nectar and pollen. This is assisted by mine clearance allowing better access to meliferous trees and shrubs. Some communities are making excellent incomes from bees.

Income from demined land for nomad family in Ofeini, Abyan governorate

Costs: Household purchases from town. Water free from local wells. No overheads

Sales: One male camel per year (60,000 YR)

24 sheep/goats per year (6000 x 24 = 144,000 YR)

Honey: 700,000 YR per year in good years

Total gross annual income = 904,000 YR (about 4,520\$)

Roads and paths: In Beer Ahmed (Aden governorate) a new tarmac road has been built on previously mined land from the village to Lahij, and in Bait Al-Azani (Ibb governorate) the main road to the District capital at Nadera was cleared of mines. In Al-Heswa (Aden governorate), the fishermen can now take a much shorter route to the sea because of demining. In Am-Jarba near Lahij town, the minefield used to be in the middle of a built-up urban area. Demining has allowed pedestrian and vehicular traffic to move safely through the area. However, in Bait Al-Shawki in Al-Dhale governorate, the most convenient road to Damt is still dangerous due to mines outside the village area. In other cases (such as Mazlb in Dhamar governorate), local people do not have sufficient confidence in the safety of cleared land to start using paths across it, and still *prefer to walk around the mined area*.

Buildings: Clearing land has opened up the potential for building on that land by private or government developments. An extreme example is in the fishing village of Al-Farsi, which has been surrounded by the foundations of 2,600 new houses to be built for the employees of the Aden Refinery Company at a cost of around US\$11 million. This was made possible by the demining of adjacent land.

Recreation areas: Clearing land has allowed an improvement in recreation, particularly for children who can now play in greater safety to the relief of their mothers.

Support to survivors

The Yemeni Landmine/UXO Victim Assistance Programme was established in 1999 as an integral part of YEMAC. The Mid-Term Evaluation of YEMAC² found this Programme to be “one of the most advanced in the world”, with some 1200 victims having been identified and 286 treated medically between 2001 and 2005. In addition, the excellent training centre in Sana’a has assisted men and women survivors to learn new trades so that they can be less dependent on their families and outside assistance.

Our results suggest that, although the Programme is doing some excellent work, its coverage to date is limited. Very few of the survivors we interviewed had received significant help apart from emergency medical care. Women can be particularly affected by disfigurement, which can condemn them to being unmarried throughout their life. There were some excellent exceptions, such as the woman from Bait Al Shawki (Al-Dhale governorate) who has completed a tailoring course at the training centre. Another has been supported by the Centre with a grant to purchase 50 butane gas cylinders as the start of a sustainable income-generating activity.

Impacts on women and children

Significant gender and age differentiation of roles was found in the survey villages, with consequent differences in exposure to risks, as borne out by an analysis of deaths and injuries to women and girls from the Landmine Impact Survey.

² GICHD. 2005. Mid-term outcome evaluation for strengthening national capacity for mine action in Yemen – Phase II UNDP Project YEM/03/010/01/99. Geneva: GICHD

Meetings with women were held in 23 of the 25 villages surveyed. Efforts were made to ensure all age groups were represented and to include women from poorer households. The women described their fear of the mined areas, the restrictions they imposed and the strategies they adopted to minimise risk, such as driving the animals into grazing areas, but not entering themselves. Butane gas replaced firewood where it was too dangerous to collect wood (at least for those able to afford it).

One of the most valued benefits from demining expressed by women was the enhanced feeling of safety and security for themselves and their families. However, some still worry about deeply buried mines: “We are scared to cultivate our lands because we think that the equipment of the de-miners cannot discover mines located deep in the soil. We discovered a mine two years ago while we were doing land preparation. We handed over the mine to the government. We are reluctant to go into the demined areas because of the feeling of insecurity.” (Mazlb)

In other villages, they admit that, although they know the mines have been cleared, they are still not confident enough to use the land. For some, mines have been such a longstanding, ever-present fear that it is hard to imagine the possibility of complete demining.

Women said that demining had brought them freer and safer access to areas for grazing and fuelwood, benefiting those carrying out the herding and fuelwood collection. Other benefits were the clearance of roads and paths, which has improved communications for the community and restored access to the seashore for fishing villages, and for stone cutting and house construction in the mountains. The cleared land also offered potential for leisure activities.

There is a risk of emergence of disputes over land rights and land development decisions following demining, especially where the land has been unused for a long time.

In nearly all the villages, women were aware that certain areas had been demined. The exception were women in some of the villages affected by the 1994 war where people were new to the areas or where mined areas were distant from the village. In several villages women reported that they, or others in their village did not know which areas had been demined nor, in some cases, were they informed that demining was taking place. The fact that survey and demining teams are all male creates a social and cultural barrier to interaction, especially in villages where many of the village men are absent working outside. In other villages, the women reported a very positive community response to the survey and demining teams. Some said their husbands and children helped the teams to identify the locations of the mines (e.g. Al- Qafleh).

Impacts on children: Mine awareness education appears to have been successfully focused on children, through organised campaigns in schools or by training teachers who then passed on the messages. School students helped with distribution of brochures. It was less clear how far women were involved in these sessions.

The most important sources of information for children concerning mined areas and dangers from mines, were from parents, relatives and other community members (mentioned in 16 villages). School teachers were also important, (mentioned in 10

villages). Children in 13 of the villages visited described lectures and demonstrations on mines given by teams visiting the village. The presence of the survey and demining teams had also raised awareness by putting up signs showing the mined and cleared areas, and through informal interaction and cooperation from the village. The use of dogs in mine detection created interest among the children

Children were generally well informed about children in their age group who had suffered mine related accidents. Stories of child casualties were told in six villages, three of the cases had involved children playing with mines.

The children's reports of the negative effects of mines focused on their role as herders of livestock. Several groups reported that they were now able to herd animals in the demined areas, and were also able to move around freely for fuel wood collection. In other villages, children were affected by blocked paths and roads, which restricted their freedom of movement.

Cost:benefit analysis of demining

While the survey was not designed to provide a complete accounting of the economic benefits accruing from mine action, data is sufficient to perform some analyses of costs and benefits. It is clear from these few examples that the economic benefits are very substantial and, in total, exceed the cost of demining. The most straightforward example is from Al-Jafinah, where an investment in demining of about \$125,000 led to an increase in the market value of the land of \$1,225,000. It also created the opportunity for follow-on investments in the range of \$1.25 to \$1.7 million to develop the land for qat and grapes. These follow-on investments led to a further increase of \$2.53 million in the market value of the land.

The economic returns from demining (either alone or in combination with follow-on investments) vary widely among communities, but in some cases are extremely high. The internal rates of return for four communities range from 66.8% to minus 0.4% (weighted average of 19.9%). These are very solid rates of return, and it must be emphasised that they represent only a partial accounting of the benefits stemming from demining – for example, they do not include the important benefits of (i) reduced landmine deaths and injuries and (ii) an enhanced sense of security for residents in these communities.

Based on this very partial accounting, the total benefits stemming from Yemen's demining programme almost certainly exceed the costs by a wide margin.

Development opportunities for demined communities

Pre-requisites for successful development

The successful development of assets freed by demining depends on good leadership in the communities, and the capacity of communities to gather information, to consult different sections of the community, to make informed, socially-responsive decisions, to write coherent, justified, costed, time-bound proposals, and to follow these through

with the degree of financial management and documentation that would be required by donors. These skills are lacking at present in most communities, and this “community empowerment” is seen as both an opportunity for donors, and also a prerequisite for sustainable development at the community level.

Communities were found to vary widely in their social cohesion, and the extent to which there is internal conflict over the ownership and use of freed assets. In some cases the assets are not under the control of the communities themselves (e.g. those communities within the Aden Free Zone area). Some communities (e.g. Bait ‘Oqab and Al Farsi) have functioning community social welfare organisations that could be an effective bridge between external assistance and the community.

Some communities are still not confident about the safety of cleared land. Further inputs might be required to convince all members of the community of the safety of their assets before they will be used fully.

Opportunities to develop freed assets

Development opportunities vary from village to village. It will be necessary to conduct careful development priority-setting exercises in each village that include the needs of all sections of the community, and are congruent with District plans and planning guidelines.

The survey identified a number of potential development areas related to the freed assets that apply across the majority of communities:

- Water collection and storage on cleared land for irrigation and drinking water
- Re-instatement of traditional natural resource management practices and by-laws for cleared grazing land
- Planting of grasses and saplings to enhance the grazing/browse potential of cleared grazing land
- Training of local people as para-veterinarians to combat heavy livestock losses to parasites and disease
- Enhanced crop advisory services and inputs
- Modern bee-keeping methods and equipment
- New terraces and boreholes for irrigation on cleared land (especially for poorer members of the community on communal land)
- Renovation of existing, but unused, crop terraces in cleared land
- Resolution of land disputes over cleared land
- Alternatives to land-based income for bad years. Skills training and employment advice are important for the balanced development and livelihood security, especially where land resources are limited and climatic conditions are marginal.

Development opportunities for landmine-affected communities

The section above deals with opportunities to develop assets that were directly affected by the presence of land mines and UXOs. However, it can also be argued that the development of the whole community has been blighted by the fear and restrictions caused by these munitions, and that they therefore deserve access to wider

developmental opportunities. Priorities expressed by communities during the survey include:

- Educational facilities. Special considerations are needed for girls, the children of nomads and adults who are illiterate or in need of skills training.
- Medical facilities
- Drinking water and water for irrigation of crops for the whole community
- Sewerage systems (especially in the south)
- Support for fishing communities (upgrading of fishing equipment, and fish storage and transport)
- Farmer associations/cooperatives to access government support, credit, machinery and training

Developmental support to survivors

A range of suggestions for additional government and donor support was provided by survivors and other community members. These included the need for a comprehensive survey of the numbers and needs of landmine and UXO survivors, followed up by the provision of training and the resources needed to enable survivors to start small, sustainable businesses (e.g. small shops, mobile trading; fattening livestock, fishing) that reduce dependency on government, community and family, and give self-esteem to survivors. Some survivors need financial assistance to get to hospital. It was emphasised that mental health care needs for traumatised and depressed survivors were sometimes as important as physical health needs. Several survivors have lost limbs, but have not been able to get artificial replacements.

Women's developmental needs

Many of the needs expressed by women are covered above. However, women's broader developmental priorities were strongly oriented towards educational provision - particularly for girls. They want classes beyond the sixth grade in their local school for girls to study without having to travel outside the area. Playgrounds for relaxation and sport were also mentioned. The other most frequent requests from women were for drinking water and electricity supply, road improvement, adult literacy classes, housing schemes and medical centres.

In several villages, women commented on the lack of cooperation between village members. Cooperatives or associations were suggested by some women as a potential solution to these problems in the community.

Considerations for YEMAC

Capacity of YEMAC staff to conduct similar surveys in the future

This study was an important learning experience for YEMAC, and particularly for the seven YEMAC staff directly involved in conducting the preliminary and main surveys. A thorough training was given to the YEMAC staff, as well as three women from outside YEMAC. As a result, staff expressed the opinion that they would be able to plan, conduct and analyse similar surveys in the future. The survey methods were evaluated by the team members, who concluded that the methods worked well as a

whole, providing a clear and comprehensive picture of the socio-economic benefits of landmine clearance within the limited time available.

Landmine Impact Scores as a tool for identifying impact and determining priorities for action

The Landmine Impact Scores were an outcome of the Landmine Impact Survey. They were composite scores intended to combine the potential risk to human life and the potential to release productive assets, into one figure that guides priority setting for mine clearance. A comparison of the scores given to communities at the time of the LIS, and scores calculated on the basis of the actual situation since the LIS, shows that there are some discrepancies. Thirteen of the twenty-five villages show similar scores, seven are scored higher in the post clearance survey and five lower. It was concluded that the LIS scores are a useful guide, but they need to be flexible to take into consideration the importance of locally economically important assets (such as building stone).

Monitoring and evaluation (M&E) in YEMAC

The emphasis of our study was on field assessment of the impact and outcomes of mine action, and therefore a detailed review of YEMAC's M&E and data management systems was not attempted. It was noted that YEMAC appears to have successfully established procedures to monitor and evaluate the technical processes and outputs of mine action. The monitoring questionnaires assess the technical efficiency and effectiveness of the team's operations, but make little or no reference to the social context of the user community. There do not appear to be systematic mechanisms for ensuring that community feedback is elicited and recorded as part of regular monitoring arrangements.

The focus of our study has been on outcomes and impacts of the programme. That is, it is less concerned with issues of the efficiency of the mine action work, albeit important, than with the *consequences* of the actions and the changes brought about for the communities affected. Annual operational targets are set, mainly at the output level; there are no specified outcome and impact targets against which the programme can be evaluated. The stage of handing over of cleared assets to the community appears to be particularly weak. YEMAC information suggests this is done in a 'formal ceremony', yet no reports of such an event were recorded during village discussions.

Main conclusions

The study was successful in assessing the social and economic impacts of demining, and in identifying developmental opportunities, in twenty-five communities.

Beneficiaries of the land and other assets freed by demining are farming, nomadic and fishing families, building developers, private speculators, immigrants, and governmental and para-statal bodies.

There have been no fatal incidents in the survey villages since clearance. Even so about half of all communities are still not using freed assets to their full potential because of perceived danger.

A major factor in changing communities' perception of mine risks will be improving their knowledge of the demining process and its outputs. Women have been less well informed about clearance operation and the status of minefields than men and children, despite their multiple roles in community life.

Based on the partial accounting possible from this survey, it appears that the total benefits stemming from Yemen's demining programme almost certainly exceed the costs of demining by a wide margin.

Clearance has made considerable areas of land available to the whole community for grazing, fuel wood, bee-keeping and fodder collection. This has had major social and economic impact across the whole community. Crop land, water harvesting channels and stone collection areas have also been returned to safe use, to the great benefit of their individual owners. Clearance of roads and paths has enhanced access to land, to neighbouring villages and to markets.

There is considerable potential to increase the productivity of the land-based assets freed by clearance, through improved inputs – including technical support, improved genetic materials, improved water supply and access to appropriate micro-finance and accompanied by environmental monitoring.

In the south, there are problems over land ownership, with powerful influences, including government agencies, annexing land for their own use.

The Yemen Landmine/UXO Victim Assistance Programme was praised by the Mid-Term Review of YEMAC for its medical and rehabilitation work with survivors. However, apart from a limited number of shining examples of survivors being supported to live fulfilling lives, this survey found that few survivors had heard of the Programme or were receiving assistance from it.

The capacity of communities to plan and implement development projects is limited. Building capacity for sustainable local institutions is a developmental opportunity. In some instances this can build on existing local welfare organisations.

The development of the whole community has been blighted by fear and restrictions caused by landmines and UXOs. Where the circumstances merit investment and meet government guidelines, it is therefore legitimate to give priority to requests by mine affected communities for general development initiatives, such as educational and medical facilities, drinking water, irrigation and sewerage facilities, fishing equipment and fishermen associations.

YEMAC staff are now able to plan and conduct similar surveys to the one described here – especially if supported by a local development specialist.

The current study lends qualified support to the LIS impact scoring method as a rapid method to assess a country's land mine problem and set priorities for land clearance.

YEMAC has established procedures to monitor and evaluate the technical processes and outputs of mine action. However, the level of outcomes and impacts is still to be articulated and systematic mechanisms are required for ensuring that community feedback is elicited and recorded.

The report provides justification for the use of in-country and donor funds to support the rehabilitation of assets, landmine/UXO survivors and the overall development priorities of landmine-affected communities

Main recommendations

YEMAC is acclaimed for its effectiveness in mine clearance, awareness raising and survivor support. However, it is not set up to carry out natural resource rehabilitation or social development. To implement the recommendations made below it would need to build that capability within YEMAC, or commission it from elsewhere.

The next stage of the process of rehabilitation of assets and development of landmine-affected communities should concentrate on the prioritisation of opportunities by social group, with quantified benefits, contributions, budgets and timetables.

To enhance the sustainability of development initiatives, the capacity of community leaders and community-based organisations to identify, plan and implement community development initiatives should be enhanced through training and support.

There is a need to ensure good land management practices for grazing areas (often also used for fuelwood, fodder, stone and water collection). In some cases, these can be based on traditional land management systems such as “*Hema*”, and enforced through local bye-laws.

The expropriation of land from community use by private and government interests should be addressed. YEMAC procedures should ensure the participation of communities in decisions about land distribution and use from the start of clearance.

An inventory should be made of all landmine/UXO-incident survivors, and clear guidelines issued on their eligibility for support. All survivors should be made aware of the services and support mechanisms available to them.

There should be dialogue with all sections of the community from the start of clearance through to final handover, with particular emphasis on actively demonstrating that specific areas are cleared. Community liaison volunteers (men, women and children who are selected by the community and paid a small honorarium for ensuring good two way communication between YEMAC teams and all members of the community) should be identified at the start of clearance and kept informed/involved in all the work of the teams, including handover of cleared land. Community concerns about the safety of land for cultivation need to be recognised and addressed. Where necessary, local people should be contracted and paid by YEMAC to carry out first cultivation by appropriate methods to demonstrate the safety of arable land where this is in doubt.

More specific gender-related procedures addressing the UN Gender guidelines are needed at all stages of YEMAC's work, but most urgently to ensure the participation of women in the post-clearance handover process. This is most crucial to encouraging the maximum use of cleared assets and reducing fear.

Consideration should be given to adapting the LIS scoring system to allow different weightings for productive assets by distinct socio-economic region, within a common framework.

YEMAC should incorporate community feedback and the collection of information on outcomes and impacts from mine action into its monitoring system. The first step is to develop a set of indicators which reflect communities' criteria of impact from mine action, including potential negative impacts. These could be subdivided according to different social groups, differentiated for women, men and children. Information on these indicators should be collected on an annual basis from a sample of villages.

Introduction ³

Over the past 30 years, Yemen has been plagued with a number of conflicts (1962-1969; 1970-1983; and in 1994). Altogether, these conflicts resulted in a significant landmine and Explosive Remnants of War (ERW) problem. Combatants laid these landmines arbitrarily and haphazardly in sand dunes and fields and alongside roads without marking their locations. The mines block access to critical resources including grazing land, agricultural land and water sources for drinking and irrigation.

A nationwide Landmine Impact Survey (LIS) completed in July 2000 identified 592⁴ mine-affected villages in 19 out of the country's 21 Governorates. Of those, 14 communities (with a population of 36,000) were high impact, and 578 communities (with a population of 791,400) were considered to have a medium or low impact. A total of 1,078 mined areas were identified with a reported surface area of 923 million square meters, mainly in the central and southern regions of the country. Human suffering and economic loss due to landmines and ERW in Yemen is significant. The LIS recorded a total of 4,904 casualties in Yemen over the past 10 years, of which 2,560 were killed and 2,344 injured. The most frequent victims were farmers and herders. In 2005, 17 landmine and/or ERW casualties were documented in different incidents.

The landmine and ERW problem has an impact on infrastructure development, which is denying people access to economic opportunities. This problem also has the effect of further reducing the already limited, arable land (only 2.6% of the country) and frequently it results in the death or disabling of farmers, herders (often children) and livestock essential for agricultural production and the resumption of basic economic activities. The government is unable to implement social-development projects with these affected communities due to the presence of landmines and ERW.

The government of Yemen is committed to the complete elimination of landmines and explosive remnants of war. On 1 September 1998, Yemen ratified the Mine Ban Convention and, recognizing that the landmine and ERW problem could not be solved unless integrated into a concerted national initiative, started its Mine Action Program later that year.

The National Mine Action Committee (NMAC) was established in June 1998 to formulate policy, allocate resources, and develop a national mine-action strategy. Furthermore, the Yemen Executive Mine Action Center (YEMAC) was established in January 1999 as the implementing body of the NMAC with the primary responsibility of coordinating all mine-action activities in the country. In addition to survey, clearance and mine detection dog capacity, YEMAC has a landmine Survivor Assistance and Mine Risk Education Program. The NMAC has established a Mine Awareness Advisory Committee (MAAC) and a Victim Assistance Advisory

³ The introduction is taken from the Zero Draft of the Post Clearance Socio-Economic Study of Cleared Communities prepared by YEMAC in 2005.

⁴ In 2002 two additional mine affected communities were identified bringing the total of affected communities to 594.

Committee (VMAC) as well as working groups designed to assist with the planning and evaluation of mine awareness and victim assistance activities.

A nationwide LIS was conducted in July 1999 and completed and certified by the United Nations in August 2000. The survey revealed a comprehensive set of socioeconomic data, which serves as a base on which national mine-action plans in Yemen are designed and implemented. The survey concluded that 14 communities were high-, 86 medium-, and 494 low-impacted, with a total of 923 square kilometers polluted.

Yemen completed destruction of its national stockpile of anti-personnel landmines in compliance with Article 7 of the Mine Ban Convention in April 2002. It also developed and approved a landmine legislation law in accordance with Article 9 of the Convention in December 2004.

In June 2004, NMAC revised its five-year (2001-2005) Strategic Mine Action Plan and extended it through 2009. According to the plan, the national vision is to put an end to the suffering and casualties caused by anti-personnel landmines by the end of March 2009.

As of September 2005, over 240 million square meters of affected land have been surveyed, cleared and returned to the local users. As a result, all high impacted communities are cleared (except 4 minefields in which operations ceased due to lack of technology to clear), 124 medium and low impacted communities are declared free⁵. During the operations 87,000 landmines and items of ERW had been located and safely destroyed. Over 500,000 men, women and children received mine-risk education in 333 affected villages. Over 1200 landmine/ERW survivors have been medically checked and supported and more than 16 small income generating enterprises established for the poor survivors in order to reintegrate them socio-economically into the society. Since the completion of the LIS, integrated mine action has successfully reduced the number of landmines and UXO incidents by 80 percent.

The Mid-term outcome evaluation for strengthening national capacity for mine action in Yemen – Phase II (UNDP project YEM/03/010/01/99) made three recommendations for socio-economic rehabilitation of demined areas, as follows:

Recommendation 1: It is recommended that Community Rehabilitation become an integral part of mine action in Yemen, and be considered the last and essential sixth pillar in this particular programme.

Recommendation 2: It is recommended that YEMAC establish a community rehabilitation planning and coordination competence that would become engaged in pilot assessments / pre-feasibility studies of selected village clusters, culminating in the design of pilot community-based initiatives.

Recommendation 3: It is recommended that the Community Rehabilitation Unit work in close collaboration with GOY, interested donors and the UNDP, with the intent of defining implementation and funding modalities.

⁵ As of May 2006, 130 communities were declared free of landmines (Faiz Mohammad, personal communication)

Objectives of the Consultancy

The overall objectives of the study (see ToR in Annex 1, volume II) were to:

1. Assess the overall socio-economic returns from mine clearance investments through a livelihoods analysis of the landmine impacted communities that are now cleared of mines and other explosive remnants of war (ERW)
2. Make a preliminary assessment of complementary development initiatives for mine-affected communities.
3. Enhance the capacity of YEMAC to:
 - a. Conduct future assessments of socio-economic benefits from mine action
 - b. Assess the community Landmine Impact Scores as a tool for identifying impact and determining priorities for action
 - c. Advise on how to design and conduct on-going socio-economic surveys relating to ERW
 - d. Advise on integrating social differentiation within LIS survey protocols
 - e. Advise on enhancements to YEMAC's M&E system

The first objective addresses the strong perceived need for improved assessment of the social and livelihood impact of mines as well as the economic benefits. The second objective reflects the growing international interest in the development orientation of mine action programmes⁶, integrating the assessment of outcomes and impacts from demining with consideration of communities' developmental objectives and priorities. This was re-enforced by a meeting held with Deputy Heads of Missions from several countries in the Office of the Prime Minister, in which they expressed their interest in supporting development opportunities that could be identified in landmine-affected communities. Subsequent meetings by Ted Paterson (GICHD) with other agencies, including the World Bank, the Social Fund for Development (SFD), the Women's National Committee and CARE International further emphasized the potential for donor support to social and economic initiatives that build on, and enhance the positive impacts of, the demining efforts of YEMAC.

Framework and Approach

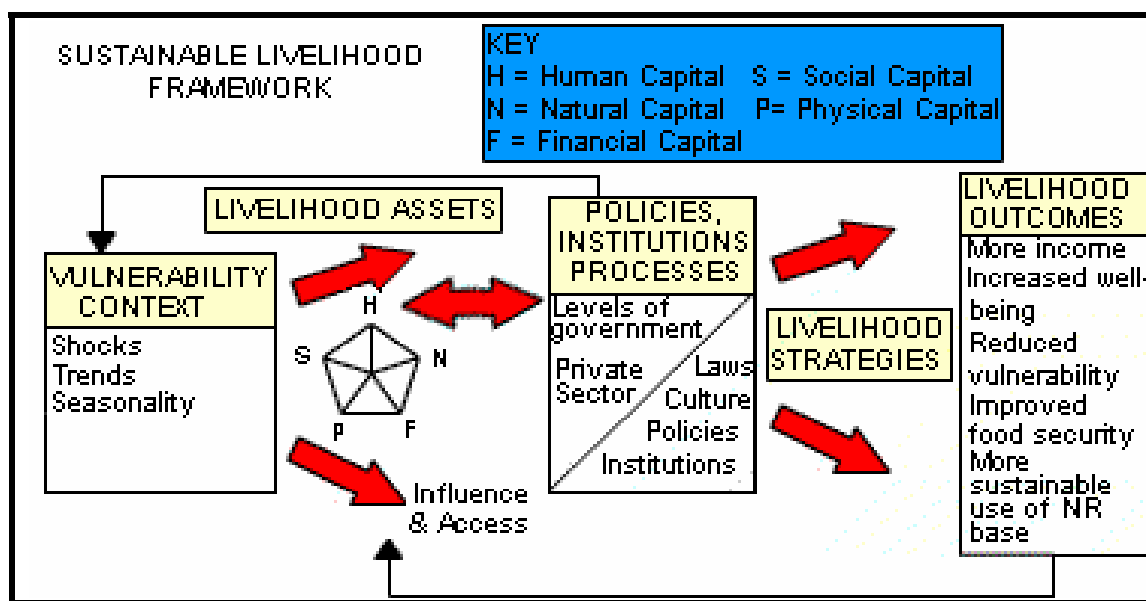
The Sustainable Livelihood Approach was used as a basis for obtaining a balanced view of the situation in landmine-affected communities. This is an holistic (multi-sectoral), people-centred, participatory approach which is well accepted by major development agencies such as DFID, World Bank, FAO and UNDP.

The Sustainable Livelihoods Framework, which is presented in Figure One below, has been developed to help understand and analyse the livelihoods of the poor. Like all

⁶ See the Bad Honnef framework. <http://www.gichd.ch/424.0.html>

frameworks, it is a simplification; the full diversity and richness of livelihoods can be understood only by qualitative and participatory analysis at a local level.

Figure 1- Sustainable livelihoods framework



The framework views people as operating in a context of vulnerability, shown at the left of Figure One. Within this context, they have access to certain assets or poverty reducing factors (human, social, natural, financial and physical capital). The levels and utilisation of these assets are influenced by the external political, institutional and legal environment. Together people's assets and the external environment influence household's livelihood strategies in pursuit of beneficial livelihood outcomes that meet their own livelihood objectives.

The word 'livelihood' can be defined as follows: 'A *livelihood* comprises the capabilities, assets and activities required for living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base'.⁷

The use of this framework to assess the impacts of mine clearance helps to highlight the wider context in which the laying of mines and contamination with ERW has affected communities. It encourages integrated thinking about the benefits of demining and the broader development opportunities and constraints. Mines directly block the use of natural and physical assets, removing farmland and grazing from use, obstructing use of roads and access paths, preventing use of strategically placed buildings etc. Yet the effects of mines also impact indirectly on human capital – through injury and loss and on financial capital through loss of productive assets. Mines may prompt changes livelihood strategies (e.g. by encouraging migration out of the village for employment). On the processes and institutions side, mine clearance may give rise to contested claims for rights to land. Initiatives to develop community resources crucially depend on the capacity of local governance and leadership.

⁷ Adapted from Chambers, R. and G. Conway (1992).

There are important challenges in this task, in particular, that of clearly distinguishing the immediate outputs of mine action (e.g. cleared land, roads and other assets; greater awareness and knowledge of mine risks; survivor support), from actual outcomes (e.g. increased utilisation, higher productivity and changed behaviour) and, ultimately, impacts in terms of sustainable growth and enhanced wellbeing.⁸ Influences beyond the control of YEMAC contribute to bringing about such impacts. The task of this study is to identify outcomes and impacts as well as simply the immediate outputs produced by mine action, and to trace these relationships and influences.

Some of the potential *indicators* of socio-economic outcomes/impacts and the wider contextual factors that influence them are:

Table 1 – Indicators of socio-economic impact

INDICATORS	LIMITING FACTORS
Reduction in the numbers of mine accidents (outcome) and loss of human and animal life (impact).	Both demining and mine awareness education needed.
Demined land brought back into productive agricultural use (outcome).	For sustainable use, requires that access rights are clear and uncontested and owners are sufficiently confident to use land. Feelings of security would be enhanced with more information on cleared areas.
Productive output and income from cleared agricultural land, both irrigated and rainfed, for different crops (outcome and, if sustained, impact).	Depends on resources for rehabilitation of land, adequate water supply, inputs and markets.
Use of cleared grazing areas. Value of fodder and firewood collected (outcome and, if sustained, impacts).	Increased livestock productivity depends on wider grazing management. Unless common areas are managed there may not be any sustained benefit under an open access system.
Value of stone cut (outcome and, if sustained, impacts).	Benefits depend on land ownership and access rights, as well as demand both locally & in nearby communities
Investment in new housing on demined land (impact).	Benefits depend on land ownership and access rights, and on local power relations. Could result in negative impact through loss of common pool resources.
Resumed use of demined roads (outcome, with many possible impacts (e.g. higher attendance in schools in district centre).	Benefits depend on the availability and affordability of transport, and repair and surfacing of roads.

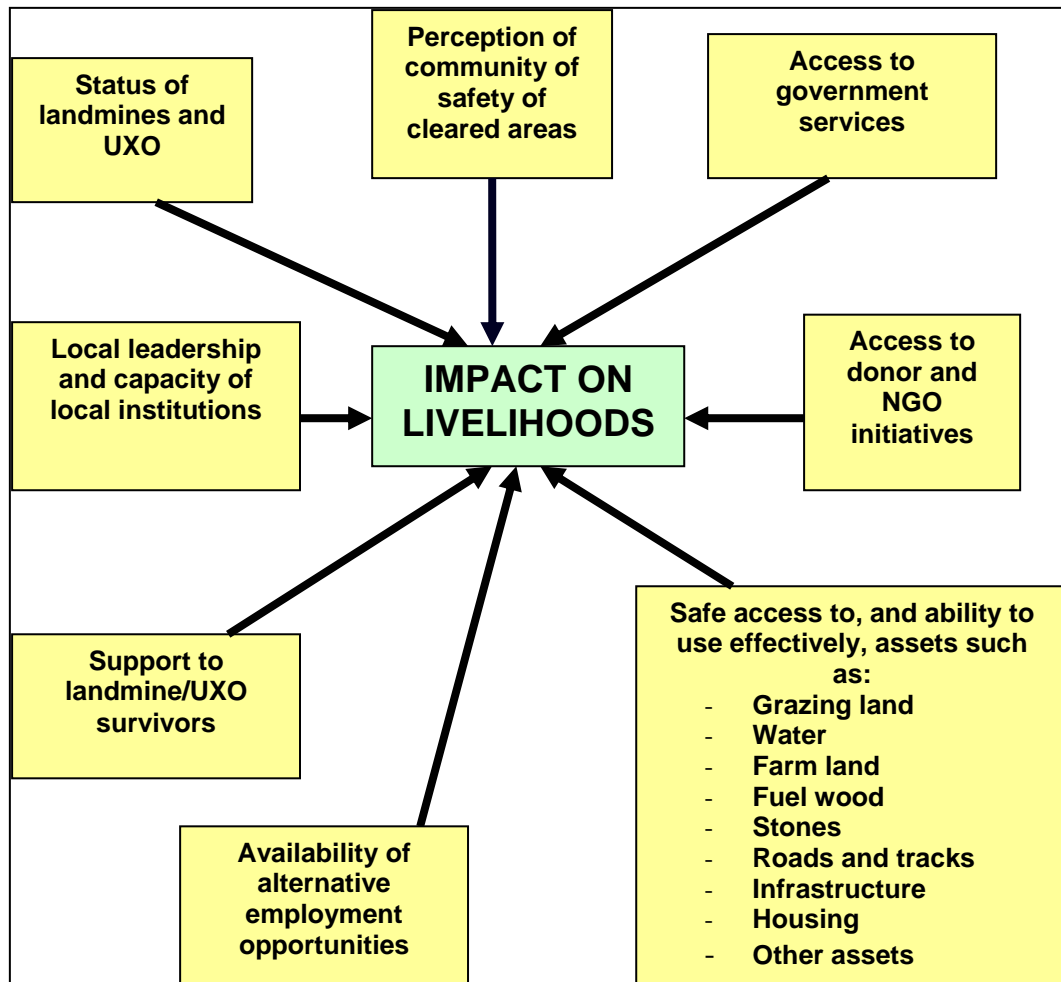
Long term impacts typically depend on a variety of factors in addition to the outputs actually delivered by the mine action programme. The Figure below depicts some of the main influences on impact on the livelihoods of landmine-affected communities,

⁸ For the purposes of this study:

- outputs are the goods and services actually produced by mine action, such as cleared land, MRE sessions, prostheses fitted, etc.
- outcomes are what people/communities do with the outputs, such as plant crops, report landmines to authorities, or resume work
- impacts are the long-term effects due in part to the mine action outputs, both positive (e.g. enhanced wellbeing due to safe access to more land) and negative (e.g. community conflict over the use of cleared land).

which will affect the degree to which mine action outputs such as cleared land lead to sustained benefits for individuals, households, and communities.

Figure 2 - Factors influencing livelihoods in landmine-affected communities



Methods

The overall approach was to conduct a *participatory survey* of 25 reportedly mine-cleared communities over two missions: a) a short reconnaissance mission to develop the methodology in three contrasting communities (see Annex 6 for a summary of findings from this visit), and b) the main survey of a further 22 communities in seven governorates (Sana'a, Dhamar, Ibb, Al-Dhale, Aden, Lahij and Abyan).

A formal questionnaire was *not* used. Instead a range of *participatory rural appraisal techniques* was used to discuss the past, present and potential future situation of the communities and their land (with special emphasis on the cleared areas).

The methods used reflected the need to understand the viewpoints of *different sections of the community*. Thus separate meetings were held in each community with community leaders, farmers, women, children and the survivors of landmine incidents.

The survey obtained a mixture of *qualitative and quantitative* information designed to answer the questions implicit in the ToR. The study was focused on assessing the outcomes for communities in demined areas. While quantitative economic data was included, the main purpose was not to do a cost benefit analysis of the mine action programme as a whole, but to look in detail at the different kinds of outcomes for communities, to help guide setting of priorities for YEMAC and to identify the potential for enhancing benefits from demining. Most of the quantitative data showing benefits were associated with productive assets brought back into use, for which proxy measures of potential market value of production could be imputed – e.g. crop yields on cleared land, value of stone for house building, value of forage etc. Except where indicated, the social and economic benefits and the opportunities detailed in this report are those that were given to us by the community members, rather than those of the survey team members.

Livelihoods Analysis, in the context of this survey, focused on the analysis of access to, and use of, assets and the external environment influencing these assets, firstly, in order to understand the effects of mines and mine clearance and secondly, to identify strategies and activities for improving people's livelihoods. The approach emphasises the understanding of asset-use by different stakeholder groups, exploring how freed assets were used and by whom and how decisions on this were taken.

A further dimension explored was the level of participation of women, their perceptions of benefits from mine action and their development priorities. A gender differentiated approach to impact assessment is important for understanding the differences in experience and priorities between men and women and among women of different socioeconomic groups. In Yemen, female-headed households are over-represented among households in acute poverty; their average income is one third lower than male-headed households. In linking mine action with development initiatives it is important that such disparities are taken into account.

The dependability of findings generated from participatory livelihoods analysis and qualitative techniques is enhanced by the reliance on different sources of information from the community, or 'triangulation', including secondary information from a variety of sources. In our case, this secondary information included the Landmine Impact Survey carried out in 1999/2000. This was very useful as a baseline, giving information on populations at the time of the survey, the size of the suspected mined area(s), the blocked assets and landmine-related casualties.

For the main survey, three survey teams were trained by the consultants over a period of four days (including a full day in the field practicing the methods taught in the classroom). The teams consisted of YEMAC staff and three contracted women with appropriate backgrounds. Details of the training (including a photographic record of the methods used) are given in Annex 4.

The tools used in the village surveys were:

- a. A comprehensive introduction designed to provide information on the team, the objectives of the mission, the potential (realistic) benefits that might come to the community and the methods to be used
- b. A "Time-Line" to understand the situation before, during and after the mines were laid (and how people coped with the mines)

- c. Use of village maps previously drawn up with the villagers themselves, showing the relationship between the village and the mined/cleared areas
- d. A “Community Profile” that listed the social, financial, physical, natural and human assets inside the community, and the relationship between the community and the outside world
- e. A series of focus group discussions with community leaders, farmers (or other natural resource users such as fishermen, nomads or landowners), women, children and landmine incident survivors
- f. Gender analysis
- g. Farming/livelihood system diagrams
- h. Force field diagrams
- i. Participant observation of the situation in the community
- j. A photographic record of the present situation.

The eight men and four women who made up the survey team were divided into three sub-teams who visited 22 villages in seven governorates.⁹ A check on data quality was made through the team feedback processes following the completion of field work in each governorate. At these meetings findings were shared and analysed, and teams discussed any problems and inconsistencies, making adjustments to the methodology and planning for the next governorate. Potential distortions arising from community suspicions were minimised by ensuring clear introductions in the village meetings of the study purpose and team identity. Interviewer bias was checked by sharing of findings within and across teams. The teams emphasised the need to meet people from a wide cross section of the village, not only the better off and articulate.

An overall evaluation of the methods used, the impacts observed and the opportunities identified was carried out by male and female survey members at the end of the main survey. The results of this evaluation, which endorse the individual and collective methods used, are given in Annex 8.

Village Sample

Twenty-five villages (4% of the total landmine-affected villages in Yemen and 17% of those actually cleared) were surveyed, from seven governorates in a line from Sana'a to Aden, representing the main concentrations of mine contamination (see map, page 90). Governorates in the far north, west and east of the country were not selected, and it is possible that findings would have been different from those areas.

The sampling of villages for the study was guided by the need for detailed information on the economic and social impacts of mine action, while ensuring that the range of mine-affected communities (social, physical and political contexts) was represented. Selection was based on criteria relating to factors which influence the incidence and the severity of mine impact and the context of livelihood choices as well as the likely outcomes from the mine action programme. The assumptions are that the impacts of mines and of demining relate to the following;

⁹ Twenty-two villages were surveyed in the main survey in May 2006 in addition to the three villages surveyed in the pilot survey in March 2006.

- The nature of the contamination. The different phases of mining in Yemen under different circumstances of insecurity and conflict, led to different patterns of mining and UXO contamination, e.g. defensive mining around army encampments, mined roads or boundaries to block movement.
- The environment and the physical nature of the mined terrain and its utilisation within the village farming and livelihood system. Agricultural and land use systems vary according to climate, altitude, topography and water availability.
- The specific characteristics of the assets which were blocked by mining. For example, different levels of impacts would be expected from mined areas on hillsides previously used for grazing, firewood collection and building stone; mines around water sources or water channels blocking access to water for domestic and agricultural use; mined coastal areas preventing access to the sea for fishing, and mined infrastructure such as buildings and roads.
- The time frame – the number of years of the community’s experience of living with mines which is likely to affect adaptive behaviour and use of alternatives as well as perceptions of mines and demining.
- Available livelihood options – the extent of options for alternative agricultural activities and non-agricultural employment which are also influenced by degree of access to markets and centres of population and services.

The village sample was selected by YEMAC staff using the information from the Yemen Landmine Impact Survey (LIS). The Landmine Impact Survey, completed in 2000, collected information to assess the impact that landmines have had on communities, and to help set priorities for land mine clearance. It constitutes a baseline for comparison with this present study which is focusing on outcomes and impacts arising from mine clearance. Twenty-five villages were chosen from among the 147 villages in which mine clearance work has taken place.

Table 2- Sample size

Village Impact score	High	Medium	Low	Total
Number of mine affected villages identified in LIS	15	84	495	594
Villages cleared by 2006	15	59	73	147
Selected for Impact Study 2006	4	12	9	25

The villages were chosen to represent:

1. different governorates; seven governorates were included
2. different profits and benefits from cleared lands; agriculture, infrastructure development, water, herding, water harvesting and other assets were included
3. different altitude (high/ medium/ low land). Villages were selected from mountainous areas, coastal areas and from mid-altitude
4. different agricultural systems, e.g. irrigated crops (qat producing areas and non qat producing), rainfed cereal production, livestock rearing and fishing.
5. different population size (large/ medium/ small)
6. communities in terms of being closer, medium and far from markets and cities
7. communities having casualties in recent years and those with no or fewer recent casualties
8. LIS community impact category of high, medium and low impacts.

The details are given in Figure 3

Presentation of the findings of the Study

The findings of the reconnaissance and main surveys are presented together, and are reported against headings that closely reflect the Terms of Reference for the mission, as follows:

- A) Assessment of the socio-economic returns from mine clearance investments from the perspective of men, women, and children, including safety and awareness, assets affected and survivor support
- B) Preliminary assessment of complementary development initiatives for surveyed villages and requirements for support
- C) Enhancement of the capacity of YEMAC to conduct future assessments of socio-economic benefits from mine action
- D) Assessment of community landmine impact scores as a tool for identifying impact and determining priorities for action
- E) Advice on enhancements to YEMAC's processes for survey, clearance, awareness/education and survivor support and advocacy, and for its monitoring and evaluation (M&E) system
- F) Estimated costs of landmine clearance and land release compared to the main economic returns to demining for seven selected villages (one from each governorate).

Conclusions and Recommendations are made at the end of each of these sections, and then collated in the main section on Conclusions and Recommendations.

One village from each of the seven governorates covered by the survey is selected for a short illustrative pen-sketch in Appendix 1.

Table 3 - Criteria for village selection

Village and data base reference ¹⁰ .	Dates mines laid	District	<u>1. Govern orate</u>	<u>2. Blocked assets according to LIS e.g. Agric, Infra-structure, Grazing</u>	<u>3. Altitude High (>2000m) Med (1-2000m); Low (<1000m)</u>	<u>4. Agri-cultural Zone (main agricultural activity)</u>	<u>5. Village Population Small 500 or under. Medium over 500, under 3000; Large 3000 and over</u>	<u>6 Proximity To Market/ City</u>	<u>7 Recent Casualties ¹¹ (According to LIS)</u>	<u>8 LIS Impact Category</u>	Area shown as suspect in LIS and subsequently released m2 (estimated cost in US\$ in brackets) ¹²	Area actually cleared in m2 (Estimated cost of clearance in US\$ in brackets) ¹³
Sha'san (23/24/1/900)	1963-1967	Sanhan	Sana'a	Pasture, agriculture	High	Irrigated qat Rainfed grain Cattle, goats and sheep	Medium	Close	None recent. 8 killed 4 injured in past	Low	450,000 m2 (\$32,400)	128,068 m2 (\$179,295)
Joab (23/25/21/100)	1963	Bani Bahloul	Sana'a	Pasture, agriculture, water/irrigation and animals	High	Irrigated qat Rainfed grain Vegetables Cattle, goats, sheep	Medium	Close	None recent. 5 killed 4 injured in past	Medium	253,300 m2 (\$18,238)	103,206 m2 (\$144,488)
Sha'b ¹⁴ 23/20/32/1000	1978	Arhab	Sana'a	Pasture, water/irrigation	High	Irrigated qat Cattle, goats, sheep	Large	Close	2 recent killed 10 killed, 20 injured in past	Medium	2,000 m2 (\$144)	12,330 m2 (\$17,262)
Al-Jafinah 23/22/26/400	1963	Bani Hushaish	Sana'a	Pasture, agriculture	High	Irrigated qat, fruit Rainfed grain Cattle, sheep, goats	Large	Close	2 recent killed, 2 injured; 2 killed, 2 injured in past	High	3,500 m2 (\$252)	89,273 m2 (\$124,982)
Bait 'Oqb 23/25/23/100	1964-1967	Khawlan	Sana'a	Pasture, water for animals and drinking	High	Irrigated qat Cattle, sheep, goats.	Large	Medium	None recent. 10 killed, 6 injured in past	Medium	1,102,500 m2 (\$79,380)	200,432 m2 (\$280,604)

¹⁰ For ease of reference, in this table, the English transliterations of Arabic village names in this table are the same as those in the LIS database. Elsewhere, some names are spelt to reflect more accurately the actual pronunciation, e.g. Bait Al-Shawki, Bait 'Oqab, Al Khudad, Ofeini, Amsara.

¹¹ Recent casualties refers to those in the 2 years prior to the Landmine Impact Survey in 1999.

¹² All dollar financial figures are in US Dollars. The cost of releasing land is calculated at \$0.072 per sq m

¹³ Actual clearance cost is calculated on the basis of US\$1.4 per sq m. These cost estimates provided by YEMAC may represent incremental costs only.

¹⁴ For Sha'ab and Al Jafinah, the actual cleared area is greater than the area defined as suspect by the LIS. That is because the suspected areas were underestimated in terms of size at the time of LIS. However, during technical survey, larger areas were marked while the number of suspected areas (locations) remains the same.

Village and data base reference.	Dates mines laid	District	1. Govern or- ate	2. Blocked assets according to LIS	3. Altitude	4. Agricultural Zone	5. Village Population	6 Proximity To Market/ City	7 Recent Casualties	8 LIS Impact Category	Area suspect and released m2 (estimated cost in US\$)	Area actually cleared in m2 (Estimated cost US\$)
Mazlb 20/8/23/400	1981-1982	Wesab Al A'ali	Dhamar	Pasture, water for animals, washing and drinking, agriculture, roads to other villages.	High	Dryland terraces, rainfed grain, vegetables, cattle, sheep and goats.	Small	Far	2 recent killed, 17 killed in past.	Medium	800,000m2 (\$57,600)	16,905 m2 (\$23,667)
Al-Sharaf 20/8/23/401	1981-1982	Wesab Al A'ali	Dhamar	Pasture, water for animals, washing and drinking, agriculture, roads to other villages.	High	Dryland terraces, rainfed grain and vegetables, cattle, sheep goats.	Small	Far	1 recent killed, 11 killed, 2 injured in past.	Medium	54,000 m2 (\$3,888)	4,128 m2 (\$5,779)
Al-Soobah 11/6/21/800	1979-1982	Al Nadera	Ibb	Road to district centre	High	Dryland terraces	Small	Medium	1 recent injured, 1 killed, 5 injured in past.	Low	17,600m2 (\$1,267)	14,400 m2 (\$20,160)
Bait Al-Ra' aee 11/6/27/200	1982-1983	Al Nadera	Ibb	Pasture, agriculture, stones	High	Dryland terraces Rainfed grain, fruit, cattle, sheep goats.	Small	Close	1 recent injured, 8 killed, 2 injured in past.	Medium	8,500m2 (\$612)	4,935 m2 (\$6,909)
Bait Al-Azani 11/6/24/2200	1981-1982	Al Nadera	Ibb	Pasture, agriculture	High	Dryland terraces, rainfed grain and Irrigated qat, cattle, sheep and goats.	Medium	Medium	None recent; 2 injured in past.	Low	30,000m2 (\$2,160)	7,658 m2 (\$10,721)
Al-Masharih 30/6/6/3003-	1979	Al Dhale	Al-Dhale	Pasture, agriculture, water for animals and drinking.	Medium	Rainfed grain, cattle, sheep and goats, camels and donkeys.	Small	Close	2 recent killed, 1 injured; 13 killed, 2 injured in past	High	6,000,000m2 (\$432,000)	342,195 m2 (\$479,073)
Al-Qafleh 30/3/22/100	1982-1983	Qa'tabah	Al-Dhale	Pasture, agriculture, water for irrigation, animals, washing and drinking; road.	Medium	Irrigated qat, grain, mountain grazing, cattle, sheep, goats,	Medium	Close	1 recent injured; 4 killed, 4 injured in past	Medium	640,000m2 (\$46,080)	107,091 m2 (\$149,927)

Village and data base reference.	Dates mines laid	District	1. Govern or- ate	2. Blocked assets according to LIS	3. Altitude	4. Agricultural Zone	5. Village Population	6 Proximity To Market/ City	7 Recent Casualties	8 LIS Impact Category	Area suspect and released m2 (estimated cost in US\$)	Area actually cleared in m2 (Estimated cost US\$)
Habil Al Abdi 30/3/25/2001	1980-1981	Qa'tabah	Al-Dhale	Pasture, fuelwood	Medium	Cattle, goats, sheep.	Medium	Close	1 recent injured; 6 killed, 7 injured in past	Medium	135,000m2 (\$9,720)	84,100 m2 (\$117,740)
Bait Al-Shooki 30/3/25/100	1982	Qa'tabah	Al-Dhale	Pasture, agriculture, roads.	Medium	Irrigated qat Grain, cattle, sheep, goats.	Large	Far	None recent 7 killed, 3 injured in past	High	24,000,000m2 (\$1,728,000)	333,222 m2 (\$466,510)
Al-Heswa 34/4/4/800	1994	Al-Buraiqa	Aden	Pasture, fishing, agriculture.	Low	Irrigated grain, fruit and vegetables. Cattle, goats and camels	Large	Medium	3 recent killed, 1 injured; 1 killed, 2 injured in past	High	160,000m2 (\$11,520)	155,447 m2 (\$217,625)
Al-Farsi 24/4/4/230	1994	Al-Buraiqa	Aden	Pasture, fishing, road.	Low	Fishing Cattle, goats and sheep.	Medium	Close	None recent 3 killed, 1 injured in past	Low	2,000,000m2 (\$144,000)	170,710 m2 (\$238,994)
Amran 24/4/4/160	1994	Al-Buraiqa	Aden	Pasture, water for animals, washing and drinking; road.	Low	Cattle, goats, camels donkeys.	Large	Far	None recent 5 killed, 5 injured in past	Medium	100,000m2 (\$7,200)	97,400 m2 (\$136,360)
Beer Ahmed 24/4/4/110	1994	Al-Buraiqa	Aden	Pasture, agriculture	Low	Irrigated field crops, grain. Goats and sheep.	Large	Close	None recent None past	Medium	21,000,000m2 (\$1,512,000)	249,300 m2 (\$349,020)
Al Mas'abain 24/2/1/500	1994	Dar Sa'ad	Aden	Pasture, agriculture, road.	Low	Rainfed crops. Cattle, goat, sheep.	Large	Close	None recent None past	Low	2,310,000m2 (\$166,320)	67,053 m2 (\$93,874)
Al Khadad 25/11/11/1500	1994	Tuban	Lahij	Pasture, road.	Low	Cattle, goats, sheep.	Large	Medium	None recent 6 injured in past	Low	6,480,000m2 (\$466,560)	63,262 m2 (\$88,566)
Al Jarba 25/11/11/5300	1994	Tuban	Lahij	Housing	Low	None	Medium	Close	2 recent injured; 2 injured in past	Medium	400,000m2 (\$28,800)	53,775 m2 (\$75,285)
Beer Naser 25/11/11/20	1994	Tuban	Lahij	Pasture, agriculture, firewood, housing, road.	Low	Irrigated crops, rainfed grain. Cattle and goats.	Medium	Close	None recent 1 killed, 1 injured in past	Medium	1,430,000m2 (\$102,960)	257,942 m2 (\$361,118)
Ofeani 12/8/8/7600	?	Khanfar	Abiyan	Pasture, agriculture, trees	Low	Desert browse, irrigated grain, cattle, sheep, goats.	Small	Far	None recent None past	Low	1,200m2 (\$86)	2,500 m2 (\$ 3,500)

Village and data base reference.	Dates mines laid	District	1.Govern or ate	2. Blocked assets according to LIS	3. Altitude	4. Agricultural Zone	5. Village Population	6 Proximity To Market/ City	7 Recent Casualties	8 LIS Impact Category	Area s suspect and released m2 (estimated cost US\$)	Area actually cleared in m2 (Estimated cost US\$)
Habeel Al-Braq 12/8/8/101	1976-1994	Khanfar	Abiyan	Pasture, firewood	Low	Cattle, sheep, goats, trees.	Medium	Far	None recent; 1 killed in past	Low	300,000 m2 (\$21,600)	4000,m2 (\$5,600)
Imsara 12/4/4/4700	1950	Lowdar	Abiyan	Trees, pasture.	Low	Cattle, sheep goats.	Large	Medium	None recent; 2 killed in past	Low	32,000m2 (\$2,304)	1,200,m2 (\$1,680)
											Total area released: 67,709,600m²	Total area cleared: 2,570,532m² Total cost of clearance: \$3,598,744
											Total cost for release: \$4,875,091	

A. Assessment of the Socio-Economic returns from mine clearance investments

The benefits and other consequences of mine clearance were assessed with communities using complementary survey methods that yielded quantitative and qualitative information derived from a range of social groups within communities (community leaders, farmers/fishermen, women, survivors, business people, government employees and children). Accounts of all the meetings held in the 25 communities are presented in **Annex 11 of volume II**.

Detailed impact information for each village surveyed is tabulated in **Annex 9 of Volume II**.

In the following account, the returns to demining investments are illustrated by their impact on community (and in some cases, government and private) assets.

A.1. Safety and awareness

The investigation and analysis of perceptions of people in mine affected villages concerning the risks posed by mines and changes after demining, is a complex area. There is a substantial body of research on public perceptions of risk and how risk information is communicated.¹⁵ It is a common finding that the public perceptions of risk and safety are different to risk assessments made by technical and professional bodies on the basis of the data.

It is therefore important to draw a distinction;

- a) between an assessment of risk based on the presence/absence of mines and UXO and on the number of accidents actually occurring, from...
- b) local perceptions of risk and the behaviour associated with these perceptions.

The evidence from the village survey is that the clearance is almost completely effective in eliminating the risk of explosion from landmines and UXOs.

Apart from one “hidden” mine in an abandoned well in Bait Al-Shawki (an explosion occurred when an animal fell into the well) there have been no cases of landmine incidents in any of the survey villages since completion of clearance in those villages.

This provides a very favourable contrast with the fairly long list of incidents between the LIS (1999 – 2000) and the start of clearance (incidents were mentioned by people in Sha’b, Joab, Mazlb, Al-Sharaf, Al-Soobah, Bait Al-Azani, Al-Masharih, Habil Al-Abdi, Al-Khudad, Am-Jarba and Beer Naser). Not all of these had been reported to YEMAC.

¹⁵ Slovic, 1987 and 1999.

The majority of communities where clearance has taken place are extremely grateful to YEMAC for the increased safety that enables them and their families to live and work without fear of the dangers of landmines or UXOs. However, removal of fear is by no means universal, for a number of reasons:

- In those areas where landmines were present for a long period (over 40 years in some cases), the fear of land mines is deep rooted and people are still reluctant to enter the previously mined areas. In most cases the local people say that this fear is diminishing bit by bit.
- Some communities (e.g. Joab in Sana'a Governorate) designated as cleared are were reported by communities as not yet fully demined (only two out of seven minefields in Joab were clear at the time of our survey). Similarly in Sha'b (Sana'a governorate) one area (Jebel Suma'a Al-Rawdha) has yet to be demined. In Al-Soobah, villagers reported that one area and a house were still to be cleared, and in Bait Al-Azani, the remaining area to be cleared from mines is called Jebel Ali Sa'eed (located midway between Bait Al-Azani and Katan villages). Also, in Al-Sharaf, both men and women mentioned an area which was still uncleared.
- The local people themselves have cleared some mined areas as they were desperate for grazing or crop land (e.g. In Joab and Sha'san in Sana'a Governorate and Al-Qafleh in Al-Dhale Governorate). These areas have never been officially recognised as cleared.



The Sheikh in Al-Qafleh demonstrates how he used a garden rake to detect landmines before official clearance started

- Community members do not have confidence in some specific parts of the previously mined areas (e.g. in Sha'san, most of the area is being used, but one gully is still held to be suspect, even though the community has signed to say that it is clear and there have been no casualties).
- Communities are using the land for some purposes (e.g. unsupervised grazing), but are afraid to enter it themselves, and in particular fear to cultivate the land as they feel that there are still landmines at depths lower than the standard clearance depth of 20cm. Mazlb and Al-Sharaf communities in Dhamar Governorate are good examples. They insist that, over time, the soil

has moved and gradually covered the mines so that they cannot be easily detected.

- Some sections of the community (particularly women) were less involved with the demining teams and with the formal certification of clearance, and therefore remain unaware, or unconvinced, that areas have been cleared.



Crop terraces such as these in Al-Sharaf (Dhamar governorate) have not been cultivated after official clearance as farmers believe that there may still be mines covered by soil below the standard clearance depth of 20cms

From the perspective of YEMAC (and all demining programmes), the absence of death and injury after demining, constitutes compelling evidence that risks are removed. However, factors influencing community perception of risk are often different. Local judgements of risk and the behaviour which follows from these, are not based solely on understanding such evidence, but are influenced by complex emotional responses.

One model of perception of risks looks at risk in two dimensions – the extent of **dread** and the extent of **knowledge**, combining both the emotional and the information dimensions.¹⁶ It notes that where dread is high and knowledge is low then the overall risk is perceived as very high.

In the case of mines, the ‘dread’ dimension includes fear of injury and fatalities from mine accidents which are seen as particularly threatening to children. People talked of feeling permanently frightened and concerned about the safety of children before demining. **A reduction in this general fear and the expression of a sense of relief was a notable outcome of the demining activity.**

However, it was the knowledge dimension that was frequently cited in discussions about use of cleared assets, particularly uncertainty over exactly which areas are cleared and the ‘unknown’ potential presence of mines deep in the soil. There were

¹⁶ Dread is assessed according to whether the phenomena is uncontrollable and feared, has global catastrophic potential, fatal consequences, inequitable distribution of risks and benefits, high risk to future generations, is not easily reduced, risks increase, and is involuntary. Knowledge refers to whether risks are known or unknown. i.e. the phenomenon is not observable, is unknown to those exposed, is a new risk, delayed in manifestation, unknown to science. (Fischhoff et al 1978)

gender differences in the expression of these concerns; women and girls expressing more fear and uncertainty than men and boys.¹⁷ Women's access to information through public meetings and written material was also less than men's.

The frequent expression of these concerns is unsurprising given the tendency in situations of high concern for negative information to be emphasised rather than positive. However, it is important that YEMAC addresses the concerns of villagers by further exploring which are the most effective ways of communicating visibly and demonstrably, particularly to women and girls, that specific areas are cleared. Trust is a key factor in influencing perception of risk and how communication of information is actually 'heard'. YEMAC has a great advantage in this regard since it has credibility and respect, and might capitalise more on its solid reputation.

A.2. Assets affected by mine clearance

Grazing

Many mined areas are on hillsides as they protected military camps on the tops of mountains. Before mining, this land was mainly rangeland used for grazing sheep, goats and cattle. Clearing the land has returned this asset to the community, often in improved condition due to the long fallow it has enjoyed. Grazing land benefits those with livestock, those who work for livestock owners, and those who use locally-produced livestock products.



Children and women are often the main shepherds for grazing animals, and therefore those most affected by the clearance of mines from grazing land

Livestock owning families can be as little as 5% of the total families in a community, or up to 100% (as with the nomadic inhabitants of Ofeini in Abyan Governorate). The safety of women and children has been particularly enhanced by clearance, as they are often the shepherds caring for the livestock. In some areas where there is less confidence in the safety of the land, the livestock are taken to the area, and then allowed to roam freely without the shepherd. Before clearance this sometimes led to

¹⁷ A finding noted in other research, e.g. Flynn et al, 1994.

livestock casualties. In Joab, one farmer described how he lost his entire flock in one explosion (25 goats, 10 sheep and 2 cows). Although this was 15 years ago, he still hasn't been able to recover sufficient wealth to buy a single head of livestock.

In some villages, women are constrained from grazing and collecting fuelwood by the presence of army camps on the hillsides. Sha'b in Sana'a governorate is an example.

Much grazing land belongs to the village as common property, especially in the northern governorates. In this case any family from the village can put as many stock as they wish onto the area. In a few villages there is concern that completely free access might lead to overstocking, with consequent soil erosion and degradation of the range quality. Traditional natural resource management practices, such as *Hema*, are being considered in some villages that have strong, concerned leadership (e.g. Bait 'Oqab).

The collective financial value from grazing to the village as a whole was difficult to assess accurately as people were reluctant to divulge the exact number of livestock they owned. However, as an illustration, in Sha'b (Sana'a governorate) about 75% of households (250 households) own livestock. They graze the hillsides every day with an estimated value of the grazing to each family of 200 YR per day (calculated on what they would otherwise have had to pay for bought fodder). The value of the grazing on cleared land is thus 18 million YR per year (approximately \$90,000).¹⁸ In Al-Masharih, the net income is also substantial, as shown in Box 1 below:

Textbox 1 - Village income from herding in Al-Masharih, Al-Dhale governorate

<p>Number of households with livestock = 240 Daily value per household of grazing = 50 YR Annual value of grazing to Al-Masharih and neighbouring village = 8,760,000 Additional grazing 4 times per month by third neighbouring village = 1,728,000 YR Total return to the grazing by the three villages = 10,368,000 YR per year (approximately \$51,840)</p>
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In the desert areas in the south (e.g. Amran in Aden governorate and Ofeini in Abyan governorate), nomads graze their livestock on previously mined land, and for those communities they are the main beneficiaries of demining.

¹⁸ A more complete analysis of the estimated costs and benefits of demining in various communities is provided in Chapter F.



Nomads use Sesbania and other desert shrubs to raise camels for meat and milk

In other communities in the south, grazing areas are important to the whole village. In some instances (e.g. Al Farsi, Aden governorate) this facility has been taken away by government developments on previous communal grazing land, while in other villages (e.g. Habel Al-Braq in Abyan governorate) the grazing land is still intact and represents a major resource for nomads and settled families in the community, and is even shared with other villages.

Fuel wood

Wood is still the main cooking fuel in rural areas, although animal dung cakes and butane gas are also used. The cost of wood is that of the labour to collect it, often the job of women and children. The long period of enforced fallow favoured tree growth in mined areas, and has thus provided a rich resource in some areas (particularly the mid-altitude areas such as Al-Dhale Governorate). In communal areas, all families have access to the resource.

The value of fuelwood to some communities is impressive. In Sha'b in Sana'a governorate for example, 250 families depend on wood as their main fuel at a value of 30,000 YR per family per year, giving a total value to the community of **7.5 million YR per year** (about \$37,500).



Fuel wood is collected from grazing areas. All members of the community benefit from these areas being made safe and accessible by landmine clearance

Fodder

Cut tree or grass fodder can represent a seasonally important resource (e.g. tree browse in the dry season), and a substantial part of the cost of raising livestock. Without access to areas where fodder can be cut, families have to buy in fodder such as alfalfa, which is very costly. Cleared areas provide good sources of fodder.

Stone

Several surveyed villages quarry stone from cleared areas for construction of houses and other buildings (usually within the village). A particular example is Bait Al-Ra'ae in Ibb governorate, see Textbox 2 below.

Textbox 2 - Income from stone from cleared area in Bait Al Ra'ae, Ibb governorate

Approximately two houses are built in the village per year (people build their houses over a number of years as resources are accumulated). Approximately half the stone used comes from the cleared area (some - of different colours and textures - from outside the village). Thus the following calculation is made on the basis of the building of the equivalent of one house per year.

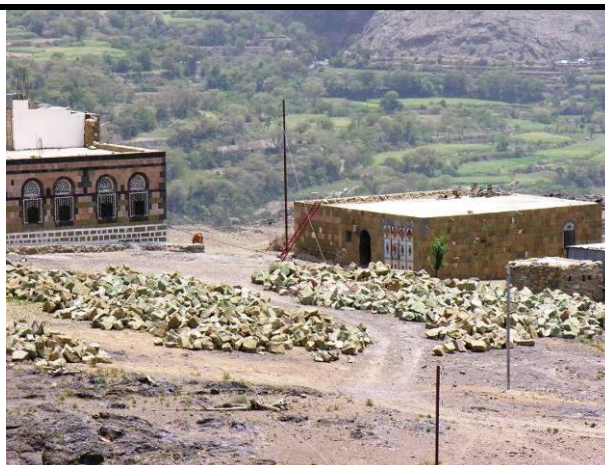
To build a medium sized house requires about 3000 stones. This is equivalent to 100 tractor loads, each of which costs 10,000 YR. Thus the value of the stone extracted is 1 million YR.

Five men at 800 YR per day can extract 15 tractor loads in one day. Thus the labour cost for 100 loads is 26,666 YR. Add to that fuel, tractor hire, hammers etc, and the costs rise to a total of about 40,000 YR.

The net income is therefore $1,000,000 - 40,000 = 960,000$ YR (about \$4800)

However, if that stone had been imported from outside the village, it would have cost 5 million YR. Therefore, by using local resources, they have saved around 4 million YR (\$20,000).

(Note that the value of local stone, and the quantities needed for building a house are consistent with information obtained from Joab village in Sana'a governorate).



Stone worth about 1,000,000 YR from the cleared area in Bait Al Ra'ae ready for building a new house.

Crop production

Crop production is important for income generation and food security in all villages apart from peri-urban villages such as Am-Jarba in Lahij governorate, nomadic communities such as Ofeini in Abyan governorate and fishing villages such as Amran and Al-Farsi in Aden governorate. The impacts of demining on crop production for each of the villages in the survey are summarised in Table 4.

Table 4 - Impact of demining on crop production

Governorate / community	Impact on crop production
Sana'a	
Sha'san	Cleared land provides runoff water for qat, fruit trees and food crops
Joab	Mine clearance gives better access to rainfed crop areas.
Bait 'Oqab	New terraces being established on cleared land for qat and grapes (by those land-owners able to afford the cost of bulldozer hire);
Al-Jafinah (see Box 5)	Returns from planting grapes and qat on approx 1500 libna demined areas by 30 landowning households. Potential net annual income from demined area (grapes /qat) 15,000,000 YR (about \$75,000). Increase in land values of demined area from 1000 YR to 50,000 YR per libna (undeveloped land).
Sha'b	Water run-off from cleared hillsides channelled to downstream lands for irrigation.
Dhamar	
Mazlb	Land not used for crops, as people think mines are still present at deeper levels.
Al-Sharaf	Land is not used for cropping as there is no feeling of security so far.
Ibb	
Bait Al-Ra'ae	Agricultural terraces not being used, because of a lack of confidence in their safety, and the lack of irrigation water
Bait Al-Azani	Very little of the demined area is agricultural
Al-Soobah	Agricultural land freed, but its use is limited because of a lack of irrigation water
Al-Dhale	
Bait Al-Shawki	Insufficient resources to rehabilitate the small proportion of cleared land that is potentially arable

Al-Qafleh (see Box 4)	20 new qat fields have been established on cleared land, with a net income of approximately 7.4 million YR (\$37,000) per year
Habil Al-Abdi	Cleared land is not cropping land
Al-Masharih (see Box 5)	Agriculture - cereals and qat (by 75% of households on 25% of demined area). Return to cereals for the 80 households is 1,440,000 YR per year (\$7200) while that for qat is 18 million YR per year (\$90,000).
Aden	
Beer Ahmed	Much of the cleared land is good agricultural land due to the presence of irrigation water. Some is used by local and immigrant farmers for intensive crop production. Other agricultural land is used by government for housing and other purposes.
Al-Farsi	No crop production
Al-Heswa	Cultivation of crops (fodder production) – by 20 families
Amran	Lack of water constrains arable production
Mas'abain	Land disputes and speculation limit agricultural production
Lahij	
Am-Jarba	No farmers
Al-Khudad	30% of families practice crop production. Income of one family from the cleared land is 765,000 YR per year from livestock and 5,000 YR (net of labour and costs) for cotton (about \$3,850 combined). Problems of disputed land ownership
Beer Naser	Land disputes. Agricultural land being lost to housing
Abyan	
Ofeini	No crop production
Amsara	Demined land is grazing land, not for crop production
Habeel Al-Braq	No crop production

In the highlands, qat, grapes and fruit trees grow where there is irrigation, and cereals and pulses where there is water harvesting or sufficient rainfall. Cereals (wheat, barley and sorghum in the highlands, maize and sorghum at mid-altitude and maize, sorghum and millets in the lowlands) are grown to feed the family, and are of strategic, as much as economic importance. They are sometimes irrigated, but more often rely on rainfall, often supplemented by water that is harvested from hillsides through small channels that are privately owned and maintained. This water can originate from minefields, and is an important resource that has been made more available due to clearance which allows improved access for maintenance of the channels.



These small crop terraces in Joab, Sana'a governorate were in a mined area. Local landowners risked their lives to clear the land

and put a vehicle track to the terraces. The area above the terraces was eventually cleared by YEMAC.

The need to reclaim private cropland was one of the main reasons why villagers demined land by themselves (sometimes using primitive mine detection equipment, such as garden rakes). The risks were high, but then so were the returns.

The highest net return comes from qat, which is one of the few crops that is profitable in those areas such as Qa'tabah District in Al-Dhale where water is very expensive. Box 3 below shows the returns to qat production in newly established terraces on cleared land in Al- Qafleh (Al- Dhale governorate).

Textbox 3 - Qat Production in Al-Qafleh

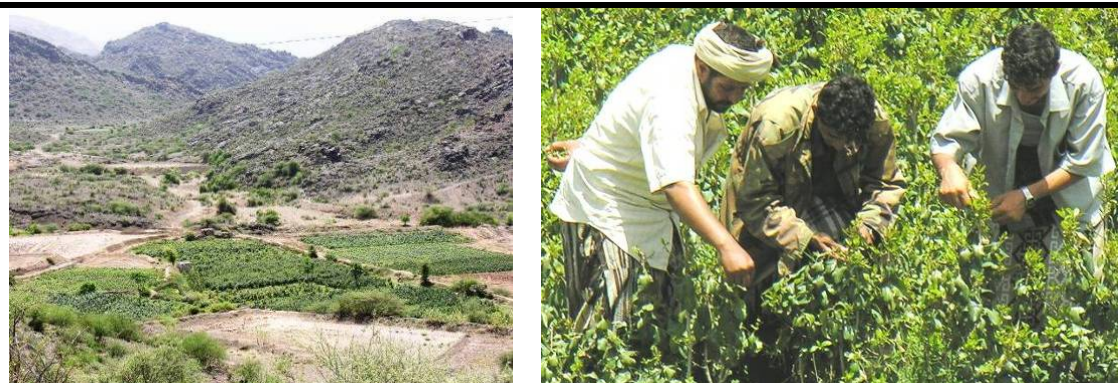
Irrigation for Qat is from wells. The time to irrigate a *girba* is 20 hours.
 The cost of irrigation per hour is 1500 YR. Thus the cost of water is 300,000 YR annually.
 Cost of labour = 30,000 YR annually.
 Fertilizers and pesticides = 200,000- 250,000 YR annually.
 Cost of labour for picking qat= 100,000 YR annually

Total costs = 630,000 YR

The total income from one *girba* of qat is 1,000,000 YR annually.

Thus the profit (net income) from one *girba* is 370,000 YR.

There are 20 *girba* in the demined area, with a total annual profit of 7.4 million YR (about \$37,000, but much less in bad years).



These terraces in Al-Qafleh have been established since the land was cleared of mines, and can be said to be a direct consequence of clearance. Although the landowners are the main beneficiaries, those who pick the crop, transport it and market it also benefit. The whole rural economy benefits from the cash circulating in the rural areas, and there is a booming construction industry building houses for rich landowners.

One village where mines have been cleared from good quality, irrigated crop land is Beer Ahmed in Aden governorate. The land in that village used to belong to the Sultan, but became government land after the revolution. The distribution of the land to individuals is not transparent in Beer Ahmed, or in many other villages in the south (Mas'abain in Aden governorate is an extreme example where local people feel that land is being confiscated by force by one powerful person). In these villages, the

government, powerful individuals and outsiders with money seem to be the main benefactors from the clearance of the land rather than the village as a whole.



Two farmers on newly cleared and cultivated land in Beer Ahmed (Aden governorate). The farmer on the right is a recent immigrant to the village from the north, while the second farmer is a native of the village. They both expect to grow vegetables and other crops for the urban market in Aden city.

In the north (e.g. Bait 'Oqab in Sana'a governorate) there is usually clear land ownership of arable land. The photograph below demonstrates that, with sufficient capital, new terraces can quickly be made on cleared land (in this case for qat production). Bulldozer hire is 8000YR/hour, so poorer members of the community cannot invest in this way without credit, which is difficult to obtain and comes with very stringent conditions.



A bulldozer makes new terraces for qat in Bait 'Oqab (Sana'a governorate). At 8000 YR per hour, this method is too expensive for all but the better-off landowners

In the mid-altitude governorate of Al-Dhale, the cropping potential is high. Textbox 4 gives some of the returns to cereals and qat in the village of Al-Masharih.

Textbox 4 - Estimates of crop production returns for Al-Masharih, Al-Dhale governorate

a) Cereals cultivation

Households cultivating cereals = 80 households

Average yield = 15 kadah. Sale price per kadah = 1800 YR

Total gross income = 2,160,000 YR

Production costs = 720,000 YR

Net income from cereals = 1,440,000 for the village as a whole (about \$7,200)

b) Qat cultivation

Number of households cultivating qat = 240

Average gross income per household = 300,000 YR

Total gross income for all families = 36,000,000 YR

Total annual costs of production (labour, irrigation, chemicals) = 18,000,000

Net income for the village from qat = 18,000,000 YR (about \$90,000)

The benefits from cultivating cleared land in Al-Jafinah (Sana'a governorate) are illustrated in Textbox 5 below:

Textbox 5 - Benefits from cultivating cleared land in Al-Jafinah, Sana'a governorate

30 families have benefited from actually cultivating the cleared land. Not all these families are living in Al-Jafinah – the land was owned and inherited since long ago and the owners currently live in various communities. The land actually planted is approximately 5,000 *libna*.¹⁹ The majority of this was cleared land, although two small sections were previously cultivated.

The cost of the land BEFORE demining was 1000 YR per *libna*, but after demining it increased to 50,000 YR.

The cost of developing 1 *libna* is around 50,000 YR for qat and 65-70,000 YR for grapes. Grapes are more expensive to establish than qat because of the need for supports and trellising. Cuttings were taken from their own fields. Both grapes and qat begin to yield in the third year after establishment, coming into full production within five years.

The selling price of the developed land is around 150,000 YR per *libna*.

¹⁹ 1 Libna = 44 m²

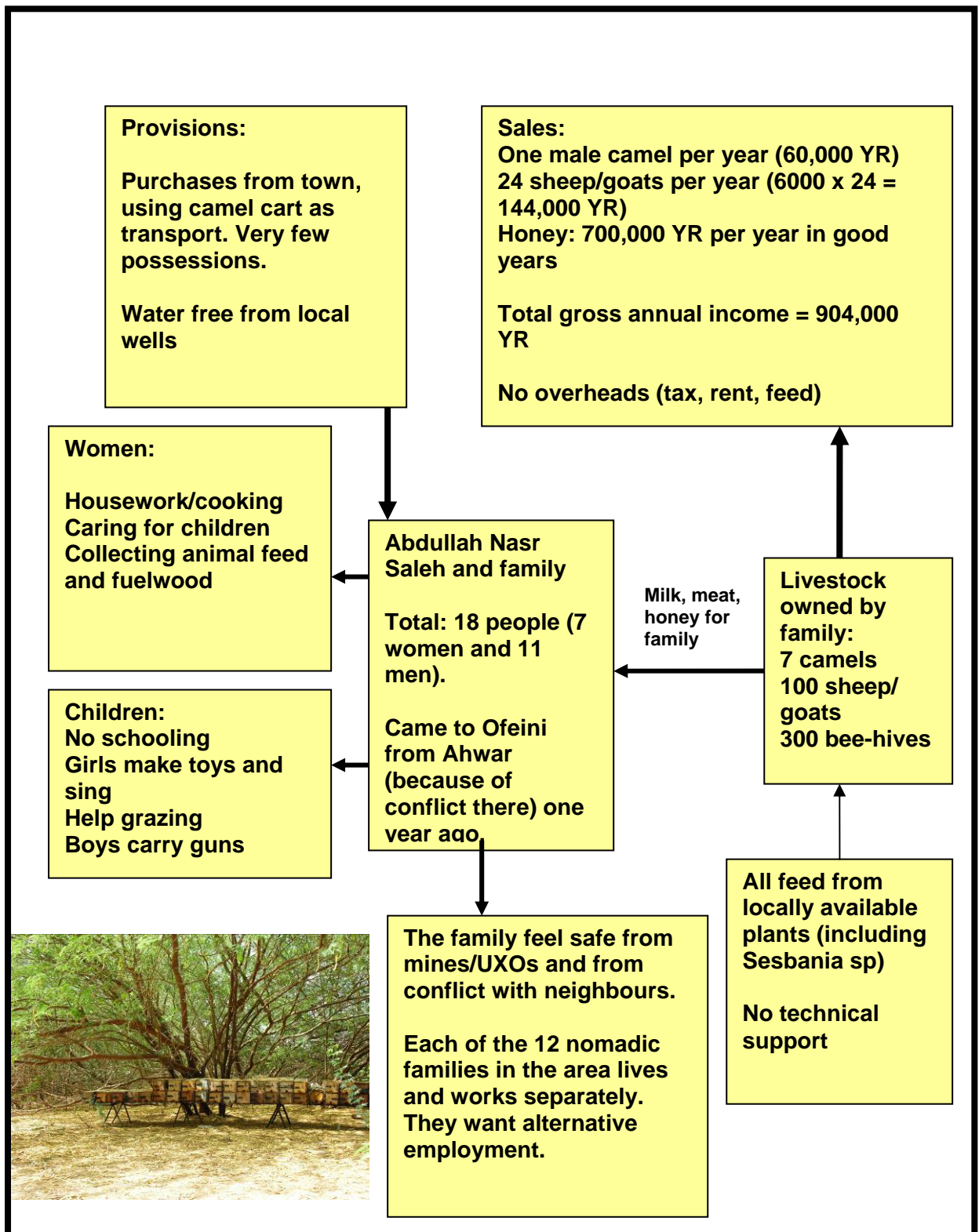
Production costs (mainly irrigation) are higher for qat than for grapes. Diesel costs for irrigation were reported as high and rising; 10,000 YR per year per *libna* for qat and 5,000 YR for grapes. One *libna* of grapes can provide a gross annual income of 10,000 YR and 1 *libna* of qat, 20,000 YR. Of the annual gross income, around 80% is needed to cover production costs, leaving a 20%-30% net margin; however this is also needed to cover capital maintenance and replacement.

Net annual income per *libna* is around 2,000 YR for grapes and 4,000 YR for qat.

Bee-keeping

Bees can use mined land without hindrance, but commercial production of honey requires that the hives are well located close to the source of nectar and pollen. This is assisted by clearance allowing better access to meliferous trees and shrubs. Some communities are making excellent incomes from bees, as demonstrated in Figure 3, which shows the income (dominated by honey production) gained by one nomadic family living in Ofeini in Abyan governorate.

Figure 3 - Livelihood diagram for Abdullah Nasr Saleh and family, nomads living in Ofeini, Abyan governorate, Yemen. 25th May 2006



Roads and paths

Minefields frequently blocked the most convenient access to land, neighbouring villages, the sea shore or parts of the community. In Beer Ahmed a new tarmac road has been built in previously mined land from the village to Lahij, and in Bait Al-Azani (Ibb governorate) the main road to the District capital at Nadera was cleared of mines. In Al-Heswa (Aden governorate), the fishermen can now take a much shorter route to the sea because of demining.

However, in Bait Al-Shawki in Al-Dhale governorate, the most convenient road to Damt is still dangerous due to mines outside the village area. In other cases (such as Mazlb in Dhamar governorate), local people do not have sufficient confidence in the safety of cleared land to start using paths across it, and still prefer to walk around the mined area. In Am-Jarba near Lahij town, the minefield used to be in the middle of a built-up urban area. Demining has allowed pedestrian and vehicular traffic to move safely through the area.



The demined area in Am-Jarba (Lahij governorate) clearly showing tracks made by people and vehicles crossing the area

Buildings (for community, private individuals and government)

Clearing land has opened up the potential for building on that land. Instances where this has already happened include Beer Ahmed (Aden governorate), where private housing is being built for sale, a government housing scheme is being established as part of the Aden Free Zone development, and the University of Aden is establishing a new campus. Similarly in Al-Farsi (Aden governorate), the Aden Refinery Company is building 2,600 houses for employees at an estimated cost of \$11 million (\$6 million for construction and \$5 million for facilities) next to a cleared minefield.

Building is not always a positive experience, as this account from Beer Naser (Lahij governorate) shows: “After demining, the area witnessed an intensive investment in construction of houses and business premises such as warehouses, stores, fenced areas and complexes. Our lives changed forever. Instead of the rural type of living, we found ourselves in the centre of an urban centre and could not open our doors any

more. Range lands vanished and were transferred into construction sites. Land disputes erupted and cases of killing and shooting became daily issues”.



The original fishing village of Al-Farsi in Aden governorate has been surrounded by the foundations of 2,600 new houses to be built for the employees of the Aden Refinery Company at a cost of around US\$11 million

Recreation

Clearing land has allowed an improvement in recreation, particularly for children who can now play in greater safety to the relief of their mothers.

Overview of change in asset status

The above discussion has covered the range of assets which were affected by the presence of mines, resulting in loss of production and income. Figures 4 and 5 below show the number of surveyed villages which reported significantly or moderately affected assets and the extent to which these assets were brought into productive use after demining.

Figure 4 - Productive losses due to mines.

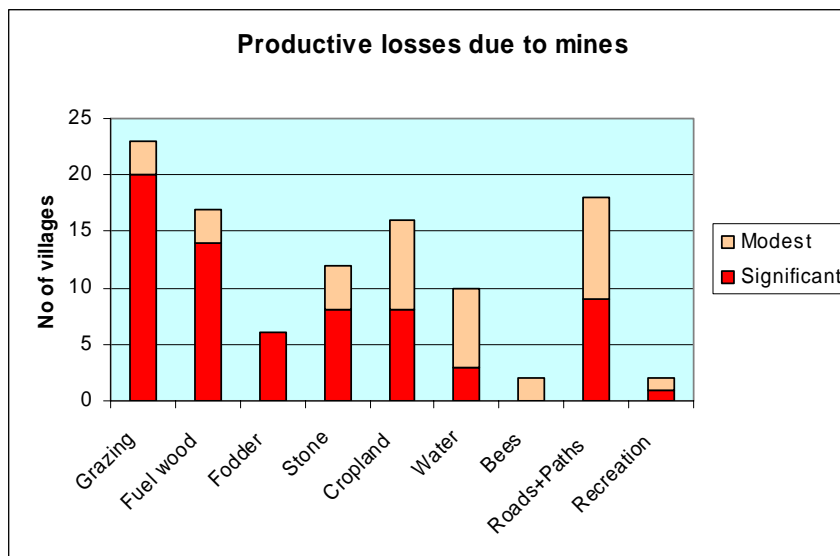
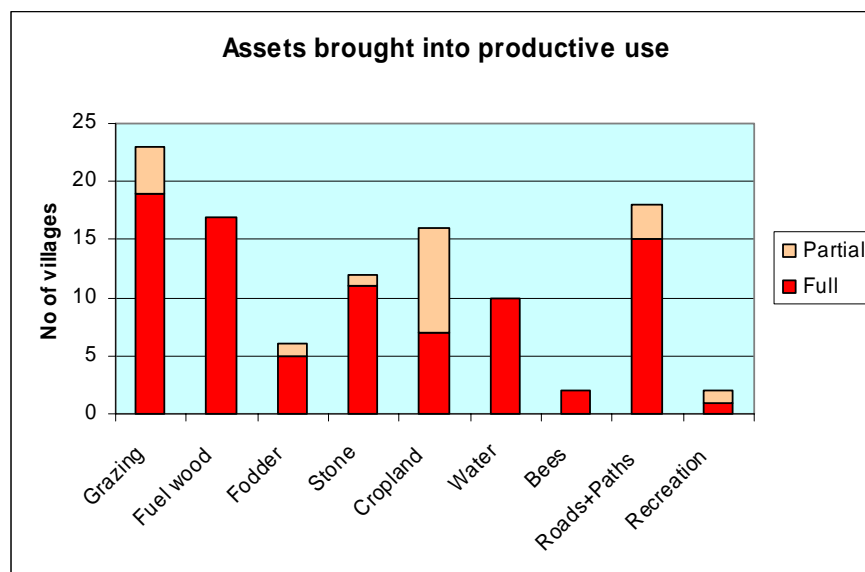


Figure 5 - Assets brought into productive use after demining**Notes:**

The partial use of cropland is attributable in some cases to fear of using the land and in others, to low rainfall, resource constraints or land disputes.

Access to irrigation water sources and water harvesting structures was addressed, but problems of water supply remain in many villages (see sections B2 and B3).

A.3. Support to survivors

The Yemeni Landmine/UXO Victim Assistance Programme was established in 1999 as an integral part of YEMAC operations to identify and assist survivors medically and with their re-integration into society. The Mid-Term Evaluation of YEMAC²⁰ found this Programme to be “one of the most advanced in the world”, with some 1200 victims having been identified and 286 treated medically between 2001 and Feb 2005. YEMAC has a plan to cover all areas in Yemen. In addition, the excellent training centre in Sana’a has assisted men and women survivors to learn new trades so that they can be less dependent on their families and outside assistance, and have greater pride in their own achievements as contributors to society.

Our own results (Table 5) suggest that although the Assistance Programme is doing some excellent work, its coverage to date is limited. Survivors were interviewed in almost all the 25 villages surveyed, as reported in Annex 11. Very few had received substantial help apart from emergency medical care (which they had to pay for in most instances).

Table 5 - Support from YEMAC to survivors in surveyed villages

Governorate /	Type of support reported by survivors
---------------	---------------------------------------

²⁰ GICHD. 2005. Mid-term outcome evaluation for strengthening national capacity for mine action in Yemen – Phase II UNDP Project YEM/03/010/01/99. Geneva: GICHD

community	
Sana'a	
Sha'san	YEMAC promised compensation ²¹ , but nothing forthcoming
Joab	No support from YEMAC. Women survivors had no knowledge of the survivors' association
Bait 'Oqab	No support from YEMAC
Al-Jafinah	No support from YEMAC.
Sha'b	No survivors met.
Dhamar	
Mazlb	No survivors in village
Al-Sharaf	No support to survivors. The survivor could not read the mine information materials she was given as she is illiterate
Ibb	
Bait Al-Ra'ae	No survivors interviewed
Bait Al-Azani	No support from YEMAC to survivors
Al-Soobah	Safe movement
Al Dhale	
Bait Al-Shawki	Support for artificial limbs, tailoring training and start-up of butane gas business
Al-Qafleh	No support given
Habil Al-Abdi	Artificial leg (1) No support received (2 &3)
Al-Masharih	No support received (twins) Artificial limb was too heavy. (Mariam) Family receives 1000 YR/month from Social Welfare Fund
Aden	
Beer Ahmed	Income from social fund of 3000YR/month
Al-Farsi	No support, no knowledge of survivors association.
Al-Heswa	No support given
Amran	No support given
Mas'abain	No survivors in the village
Lahij	
Am-Jarba	Hospital care (paid for by father of survivor)
Al-Khudad	No survivors
Beer Naser	No survivors in village
Abyan	
Ofeini	No victims in the community
Amsara	No landmine survivors
Habeel Al-Braq	No survivors in village

There were some excellent exceptions, such as the woman from Bait Al Shawki (Al-Dhale governorate) who has completed a tailoring course at the Yemeni Landmine/UXO Victim Assistance Programme training centre and is now employed in an executive capacity by that Centre. Another survivor in the same village has been supported by the Centre with a capital grant to purchase 50 Butane Gas cylinders as the start of a sustainable income-generating activity.

²¹ There is no policy of compensation in YEMAC or the government. (Pers. Comm. YEMAC). The father of the survivor in Am-Jarba was reimbursed by NMAC.

Most survivors had not heard of the Yemeni Landmine/UXO Victim Assistance Programme, and are managing the best they can without adequate medical or psychological support. This suggests that there needs to be greater awareness created of the Programme and its work, and greater donor/government support for the Programme so that it can respond to the demands that would result from such an awareness creation activity²².

Some cases were particularly wretched, such as those in Al-Masharih. One woman (see photo below) lost a leg and hand, while a man (see photo below) sustained injuries to the head and stomach. He is emotionally disturbed, and has to be restrained by leg shackles. As in many cases, the families of these victims have also suffered, having had to look after them for the last 25 years. The family of the woman receives 1000 YR per month from the Social Welfare Fund.



Survivors from Al-Masharih (Al Dhale governorate). They were injured about 20 years ago, and have had to be looked after by their families.

The account of Fathia Abdulla from Joab in Sana'a governorate is fairly typical:

“I was herding my animals on Herwe hill 13 years ago. The mine exploded among the animals. Four died and I was injured in my leg. I still suffer and feel pain when I walk or stand on it. My body was badly affected and deformed as a result of the explosion. After the incident, nobody helped. When I grew up I got married to a person who was much older than me. Nobody wanted to get married to an injured woman. I do not know of any organization helping mine victims. Nobody provided me with any assistance”

Some survivors come from fairly well-off families, or have a strong mental attitude that enables them to live a fairly normal life (Textbox 6 below). Others become depressed, or are too poor to be able to travel to hospital for medical care, or pay for artificial limbs.

Women can be particularly affected by disfigurement, which can condemn them to being unmarried throughout their life.

²² YEMAC notes that it costs \$150,000 per year to address the needs of 100 survivors.

Textbox 6 - Case study of Aliah Ali Saleh Mohsen – a divorced female survivor from Sha’san, Sana’a governorate

Aliah was 15-years old when she was collecting fuel wood on a hillside which was later demined. She heard a sudden explosion. When she recovered she realized that she lost her left leg. She did not faint. She realized what was going on. People asked her to drink some water. They believe drinking water helps to prevent the victim from dying. She was rushed to the Al-Thawra Hospital in Sana’a. Aliah also had burns in different parts of her body because her clothes caught fire after the explosion. The burns were severe and complicated her situation further. Upon arrival at the hospital, Aliah saw several more severe cases than her case. She thanked God for the harm she suffered from. “It could have been worse”, she said. Her father played a vital role in helping her recover. He took care of all the costs such as medical treatments, purchase of an artificial leg and repair of the artificial leg when repair is required. Aliah’s father used to warn her not to go to that part of the hill to collect fuel wood. But she ignored the warning. That is why she was to blame for the incident.

The only external support she got was treatment from the hospital and 10 YR from President Al-Hamdy. No training was given to her. The victim knew about “YEMAC”. She said that they came to her six months ago and promised compensation such as an artificial leg. She told them that she wants one of the red cars as compensation for her leg. “That was a joke”, she said. So far she has received no compensation.

Aliah has created a small savings group. She collected 200,000 YR when her turn came. With that money she was able to launch a small business in the village. She expanded her buying and selling in the village to the extent that she was able to construct a small and beautiful house. Her nephew helped her. She sold all her gold and generated 200,000 YR. She deposited this amount in the NCB as fixed deposit to benefit from the interest rate generated. However, the Bank is now closed because of bankruptcy.

Aliah is surviving with a high morale and good spirit for the past 26 years.

A.4. Gender roles and exposure to mine risks

Men, women and children have different roles and responsibilities in their social, productive and domestic lives which influence their exposure to the risks from land mines and how they are affected by them. Thus, in exploring the impact of demining on women and children, their specific patterns of work and use of assets was investigated. In addition, in discussions of development priorities, the influence of social and cultural norms was taken into account; for example, those relating to interaction with ‘outsiders’, since these influence women’s access to information and ability to participate.

UN Gender guidelines for mine action programmes²³ pose important questions to guide planning and implementation of “more efficient, effective and culturally appropriate mine action programmes”. They relate to four of the main areas of mine action – clearance, mine risk education, victim assistance and advocacy. For example, they ask whether information collection was comprehensive and representative; whether the process for prioritisation of areas for clearance takes into account the needs of adults and children and men and women; whether information was collected from men and women on land rights and projected use of cleared land and whether there is equal access to benefits and opportunities. They suggest that mine risk education (MRE) should ensure all individuals have access to culturally appropriate forms of MRE that addresses the activities putting them at risk. The guidelines also cover access to emergency and other care for those injured.

The LIS study, 2000, gives a picture of the incidence of mine related accidents by gender and age and the activity that put them at risk. Twenty-four percent of the victims of landmines were female (although it is likely there was some underreporting). Children under 15 constituted 37% of the casualties; compared with young adults aged 15-30 (33%), or those over 30 years old (30%). Just over a quarter of the child victims were girls. The most risky activity for both sexes was herding, which also had the largest number of fatalities. Other than herding, the pattern of accidents for women and girls includes those suffered while carrying out household work and collecting food and water, whereas men and boys have more accidents while tampering with mines, farming and other unspecified activities.

The discussions with women covered an exploration of the different responsibilities of men, women and children, with a view to understanding how their respective activities related to mine risks. While the degree of participation of men and women in agriculture varies from region to region and village to village, women are heavily involved in the basic activities of looking after livestock, planting, weeding, thinning, manuring crops, harvesting, processing and storage. Crop production and livestock rearing are the main productive activities of women.

Men are responsible for land preparation; carrying out the ploughing using animals or tractors. In qat producing areas, their involvement in agriculture is higher; indeed in some areas the women reported that qat cultivation was the sole responsibility of men (Al-Qafleh, Habil Al Abdi). Men, women and children work together in the more labour intensive activities associated with irrigated production. In remote areas of rainfed agriculture, such as Al-Sharaf and Mazlb, women do more of the agricultural tasks since there is higher male out-migration for wage labour.

Herding is carried out by girls, boys and women. Women collect forage, feed and water animals (cows) and milk cows. Where the community is specialised in animal rearing or are semi-nomadic, men play a great role in livestock management (Ofeini). Men also manage bee hives.

²³ Gender Guidelines for Mine Action Programmes. United Nations Mine Action Service, February 2005.

Household tasks are carried out by women and girls and in some areas, boys help in collection of water for the household. Women and girls are responsible for collection of fuelwood, for preparation of meals; for looking after children and washing clothes.

The gender and age distribution of these tasks is consistent with the patterns of casualties.

Table 6 - Gender Division of labour in 3 villages.

Type of work	Al-Sharaf (Cereal crop)	Bait Al-Azani (Irrigated cereal and Qat)	Habil Al-Abdi (Irrigated cereal and Qat)
Remove stones	Women		
Plough	Men		Men, boys or hired labour
Break clods	Women		
Make lines	Men		
Manure	Women	Women and men	
Fertiliser application		Men and women	Men,
Sow/planting	Women	Women	Men, boys or hired labour
Make bunds to trap run off or irrigation water	Women	Men	Men or hired labour
Thinning	Women		
Weeding	Women	Women	
Spraying		Men	Men and boys
Irrigation		Men	Men and boys
Guarding crops (qat)		Men (overnight)	Men
Harvesting	Women	Men and women (hired labour or machine)	Women or hired labour (cereals); Boys (qat)
Threshing	Women	Women	Women or hired labour
Winnowing	Women, girls, boys		
Cleaning and storage of crops	Women	Women	Women or hired labour
Delivering to market			Men and boys
Herding/grazing livestock	Women	Girls and boys	Boys and girls
Collecting grasses/feeding animals	Women	Women	Women or hired labour
Watering animals	Women	Women	
Milking	Women	Women	Women
Fetch drinking water	Women, girls	Boys and girls	Boys (with donkey)
Collecting firewood		Women	Girls
Cooking and general housework	Women and girls	Women and girls	Women and girls

In some villages, labour is hired for some of the agricultural tasks, particularly weeding, harvesting and herding animals. In areas of intensive agriculture, orchards and vegetable production provide wage labour for men and women (e.g. Habeel Al-Braq; Al- Khudad). Boys and girls also undertake paid labour when out of school. The wages of hired agricultural labour range from 700-1000 YR per day. Agricultural labourers are often drawn from the 'Akhdam', a marginal and social excluded group, originally of African origin, which constitutes the country's largest and poorest minority. For example, in Al-Masharih village they are employed as herders and agricultural workers.

In villages where agricultural land is limited and rates of landlessness are higher, the livelihood strategies are different. Alternatives for men include sharecropping or alternative employment in the military, in construction, or as drivers of cars, tractors or trucks. Some travel further afield for labour, for example to Aden, Sana'a or Saudi Arabia. In some coastal communities, fishing plays an important part in the livelihoods of households (Al Farsi, Al Heswa, Amran).

A.5. Women's perceptions of impacts of demining

Meetings with women were held in 23 of the 25 villages, with between six and 20 women attending each meeting. Efforts were made to ensure all age groups were represented and to include women from poorer households. The discussion explored women's perceptions of the changes brought about by YEMAC's work, starting with the situation before demining and the current status. The discussion then focused on the assets affected by mines and released by demining, examining whether the assets had been brought into use, by whom and with what economic and social benefits. The women's knowledge of and involvement in the different activities of YEMAC – survey, clearance, education/awareness, victim support – was explored. Finally, women's ideas for further developing the freed assets and other potential development initiatives for their village were invited.

Mine impacts and strategies of adjustment

Women gave detailed descriptions of the fear created by mines, the stories of friends and relatives who had been killed or injured in mine related accidents, the livelihood impacts of the mines and the strategies they adopted to minimise risk.

The mining of agricultural land affected production of both food and cash crops;

“We lived with the mines in a permanently frightened state, and we were forced to buy the grain and other foods we needed instead of cultivating crops.” (Al Sharaf)

“After planting of mines we could not go to the wadi... areas planted with qat were planted with mines. Therefore, we were not able to enter qat plantations” (Al Masharih).

“The mines took areas out of cultivation. People who had other lands concentrated there; others had to buy cereals from the market” (Bait Al Azani)

The mining of rangeland affected animal grazing. In some villages, women stopped using rangeland for grazing and firewood collection altogether (e.g. Al-Masharih, Habel Al-Braq). This was possible where other range areas or fodder sources were available. In other villages, the rangelands were used with caution; herding practices changed and animals were driven into the mined area for unaccompanied grazing.

“We leave the livestock to go into these areas for herding and we monitor them from a distance. Although this was risky for animals, we managed to keep the animals by that way because of scarcity of clean (without mines) rangelands in the area”. (Mazlb).

“We used to let the animals enter the (mined) area and we watch them from a distance. We lost lots of animals because of mine explosions.” (Habil Al -Abdi)

“The herder used to send animals to the mined area and monitor them from a distance. Red signs were posted to show that the area is closed.” (Amran)

The mining of rangeland also created hazards for fuelwood collection. Women in several villages explained that, despite the expense, they had changed to using butane gas for cooking because of the dangers of accessing firewood.

“Most households in the village own gas stoves. This is mainly because parents were worried about the safety of their children in areas planted with mines. Therefore they gave up the use of fuel wood. Instead, they purchased gas stoves.” (Al- Qafleh)

However, it was noted that very poor households use only firewood (Bait Al-Azani); an example of how mine risks have a differential impact on the poor.

The mining of roads and tracks has important effects on constraining mobility, affected those needing to travel to and from the village and the provision of external services and access to resources outside (e.g. the seashore for fishing). In the latter case, people tried to walk on stones in the affected areas or take alternative longer roads to reach to coast. Villages where roads were mined with anti-tank mines were particularly affected. (e.g. Habil Al-Abdi; Al -Heswa, Beer Naser).

There were some examples of mining of other assets which disrupted social and cultural obligations. In Mas’abain village, mines were placed in the village cemetery.

“Despite the mines we used to bury our loved ones who die, in the same cemetery. This is because of the wishes of the loved ones - they want to be buried near their relatives.”

In some of the villages in the south of the country, people recounted the effects of the 1994 war, which in some cases forced them to flee their areas (Al-Khudad, Am-Jarba) or blocked access to water and grazing and made people dependent on external supplies (Amran, Al-Heswa).

“Because of the war, water pipes to houses were destroyed. We continued like this for about a year after the war. During this period, the nomads were fetching water from mined fields to the village across the coastal zone. Water cost 1000 YR for a barrel

per day... and one camel load (of fuelwood) cost 1200 YR, enough for 20 days for a household with 10 members.” (Amran)

Attempts to use land before demining were sometimes undertaken, with dangerous consequences; “A school was built in the mined area. An explosion killed four labourers around the school and a truck hit a mine. The wheels exploded but the driver escaped injury.” (Beer Naser)

Impacts of demining

One of the most valued benefits from demining expressed by women was the enhanced feeling of safety and security for themselves and their families. This was expressed in 12 of the 23 villages where discussions with women took place, including the three ‘high impact’ villages.

“The demining of the area is a great relief to us and to our children. We feel safe and calm after an ordeal, which affected our lives for the past decade.” (Al Jarba)

The absence of explosions since demining was an important confidence builder. Another important benefit emphasised was the saving of lives of innocent people.

However, the women in seven villages, including some of those who said they felt more secure, talked of the limitations to their confidence. They questioned whether the areas were really completely clear of mines. In several villages, they cited the depth of the mines (partly as a result of heavy rainfall and soil erosion) which they suspected put them beyond detection (e.g. Bait Al-Azani, Mazlb, Al- Sharaf).

“We are scared to cultivate our lands because we think that the equipment of the deminers cannot discover mines located deep in the soil. We discovered a mine two years ago while we were doing land preparation. We handed over the mine to the government. We are reluctant to go into the demined areas because of the feeling of insecurity.” (Mazlb)

In other villages, they admit that, although they know the mines have been cleared, they are still not confident enough to use the land. For some, mines have been such a long standing, ever-present fear that it is hard to imagine the possibility of complete demining.

“Despite the demining, we are still feeling scared going across the demined area. It could be that this feeling of fear has accumulated from before and will fade away with time.” (Am- Jarba)

“If all areas are demined, we will consider this a sign of departure of the devil.” (Sha’san)

There were some villages where the women said that parts of the village land had not yet been demined (e.g. Sha’b; Joab, Al-Soobah, Bait Al-Azani, Al- Sharaf).

For these reasons, the use of the demined resources was not as great as it could be.

“Most demined lands are not cultivated because we are not confident about clearing of mines.” (Sha’san)

“We would not go to Herwe hill for herding or fuelwood cutting even if there was gold in the hill. Our lives are not cheap. We are not sure that the area is demined completely. The fuel wood and fodder in Herwe are the best in quality, but we cannot go there because of mines. We do not believe that the area is completely demined.” (Joab)

Use of resources after demining

The general findings on assets released by demining have been discussed above. Here the particular perspectives of women are presented. Noteworthy was the willingness of women to discuss sensitive issues concerning control and access to the demined resources compared with the information shared in the more public domain of the men’s discussion groups. Their detailed contribution was on agricultural uses of land - particularly herding, forage and fuelwood collection.

Women said that demining had brought them freer and safer access to areas for grazing and fuelwood, benefiting those carrying out the herding and fuelwood collection, particularly women and children and families with livestock.

“Two months ago, we were told that this area was cleaned from mines. After this, we started feeling safe and secure. We started herding our animals without fear for the animals and for ourselves. After demining we allowed our children to herd animals on their own.” (Al- Qafleh)

“We were grazing sheep there before, but were losing a lot of animals before the clearance. Now we don’t lose sheep.” (Bait Al- Azani)

“After demining, every body returned to collecting fuel wood because of its quality and because of the high cost of butane gas.” (500 YR/container – Al- Qafleh)

The main factor limiting the benefit from demined grazing areas was identified as limited grass growth, attributed both to drought in the last few years and to the lack of water infiltration because terraces could not be repaired and maintained.

“Although the livestock have benefited from the increased grazing area, the benefit is not great as before the mines were laid. There were more grasses then. The damage to the structures and absence of cultivation has reduced water infiltration and so the grass growth is poor.” (Al- Sharaf)

Other benefits cited by women were the clearance of roads and paths which has improved communications for the community and restored access to the seashore for fishing villages (e.g. Al-Heswa); stone cutting and house construction. The cleared land also offered potential for leisure activities.

“After demining we found an area for recreation and dancing.” (Amran)

Ownership and access issues

The women's discussion groups indicated that in general, access to the demined grazing land was not problematic. Herding on range land was generally open without the landowner's permission, although there was one case where permission was required (Al-Khudad), and others where access for animals has been curtailed since demining (Mas'abain). Fuelwood and fodder collection is almost always permitted by landowners.

Rights to stone cutting belong to the landowners, but in several cases, they had given permission for other people to use (e.g. in Al-Soobah where 31 families benefited). Similarly, some landowners granted permission for house construction (Habil Al-Abdi).

There is a risk of emergence of disputes over land rights and land development decisions following demining, especially where the land has been unused for a long time. While these do not relate directly to demining, land clearance increases the value of land and creates the context for the emergence of dormant disputes or new competing claims. The situation is clearer in the Northern Governorates where private freehold accounts for 85% of the land and owner cultivation is the predominant system.²⁴ However, in the south, different phases of land reform and land nationalization have created a complex situation, especially since the decision to return the land confiscated in the 1970s to its former owners. Particular problems were identified in villages in Tuban district, Lahij governorate and in Al-Buraiqa in Aden governorate.

“After demining, we started facing problems related to land disputes. The value of land increased dramatically and original owners started coming back from outside the country and claiming the land. Sometimes the sons or grandsons appeared suddenly and submitted papers claiming the ownership of land in the area.” (Beer Naser)

The perceived problems related both to areas which are government land and areas claimed by private individuals.

“The demined area belongs to the government. The government established housing projects there. We do not benefit anything from the demined area.” (Al-Farsi)

“The villagers used to use this area for construction. However, there are still disputes between the village members and the government. The government wants to construct a big housing project for the academic staff of the education college. On the other hand, the village members want to have their own housing plans for expansion.” (Am-Jarba)

“The demined area was the property of the community. Now the land appeared to be the property of individuals who trade with the land. The land is being sold to anybody who pays. Some land was sold to people from outside the village.” (Al- Heswa)

²⁴ M. Rihan and M. Nasr, 2001.

For some villages, private investment in construction removed grazing resources and increased dependency on the market for purchased fodder, even forcing a reduction in animal numbers (Beer Naser), while in others it removed agricultural land and other amenities (Mas'abain).

“We are now squeezed among buildings and business premises. We do not have access to rangelands; neither can we collect fuel wood. Demining from our perception was of no value with respect to herding and fuel woodcutting. Those who benefited are the landowners especially, the Sheikh.” (Beer Naser)

Knowledge of mine locations and cleared areas

Discussions with women also explored their knowledge of the demining process including YEMAC and its activities; knowledge of which areas were demined and their participation in the handover process. Secondly, their actual information on mines and ERW through training and awareness events.

In nearly all the villages, women were aware that certain areas had been mined. The exception were women in some of the villages affected by the 1994 war where people were new to the areas or where mined areas were distant from the village (Ofeini; Amsara).

In several villages women reported that they, or others in their village, did not know which areas had been demined (Sha'san, Joab, Al-Sharaf, Bait Al-Azani, Bait Al-Ra'ae) nor, in some cases, were they informed that demining was taking place.

“There are people in the village who still do not know that the hill was demined.” (Sha'san)

“We did not [know] when the area was demined. However, when we started seeing soldiers going up and down the hill and we started seeing herders with their animals moving around in the area, we realized that the area was demined.” (Sha'b)

“The surveying teams first came about six years ago. Then they came two years ago with their equipment and they demined the area. They dug big holes all over the place and then left. We were not told whether the area was safe or not and we do not know where exactly the demined areas are.” (Al-Sharaf)

This arises from the lack of information reaching women on the demining process and their lack of interaction with the survey and clearance teams. This is particularly of concern as, without information, women still remain scared of mines and are not empowered to take informed decisions on the use of resources which could benefit them.

“We do not know from where the deminers come from. We think they must be representatives of the government. We pray for their safety because they do a good job and at the same time a dangerous job for us.” (Joab)

“There was fear and suspicion of the deminers. Some were considered kidnappers. Some [people] thought they were looking for diamonds. Later we heard from our

husbands that these people will demine the area surrounding the village.” (Al-Jafinah)

The fact that survey and demining teams are all male creates a social and cultural barrier to interaction, especially in villages where many of the village men are absent working outside.

“We realized the work of de-miners when we heard explosions. We understood later that these explosions were from collected mines. We couldn’t ask about the de-miners or from where they came.” (Mazlb)

“We did not interact with the demining teams or YEMAC. The deminers came and did their work without telling us where the demined areas are. It is not appropriate for women to go after men to ask for information.” (Al-Sharaf)

“We did not know why they were coming and going to and from the village. We did not know if the area was demined or not. Because whenever they come they do not talk to us or explain what they are doing in our village.” (Bait Al-Ra’ae)

In other villages, the women reported a very positive community response to the survey and demining teams. Some said their husbands and children helped the teams to identify the locations of the mines (e.g. Al- Qafleh).

“Two months ago a team from YEMAC came after the area was surveyed, and signs were put on the mined area. They demined the whole area in the middle of the village. When the demining team came to the village, we provided all kinds of help to make their mission a success.” (Am-Jarba)

In some villages, written information was provided, but because of high rates of illiteracy, not many women could understand it. The extent to which women were informed on the demining process was also dependent on social relationships within the village, the extent to which the village leaders took the initiative to encourage information sharing and the flow of information from men to women, girls and boys.

Women were aware through observation that the signs posted by the survey and clearance teams were significant, but not all knew the meanings.

“They used to dig in posts coloured red or white. We did not know what these colours mean. Therefore we kept on feeling scared from the areas planted with mines.” (Bait Al-Ra’ae)

“The demined areas are those areas which were painted with white paint. After demining the white signs were signals of demined fields ... The signs with red (x) used to scare us. These signs are warnings of mined areas.” (Mazlb)

In some cases, information increased concerns. The women in Al-Sharaf and Mazlb were worried that the de-miners equipment only detected mines to a depth of 20 cm, whereas they believe the mines in their area are deeper than this.

“What we need is to dig the land to a depth of two metres and demine the area. This is important in order to cultivate the land and grow crops in it.” (Mazlb)

“We heard that mines can remain in the soil for hundreds of years and still explode.” (Habil Al-Abdi)

Mine Awareness education

Mine awareness education appears to have been successfully focused on children, through organised campaigns in schools or by training teachers who then passed on the messages (e.g. Sha’san, Bait Al-Azani, Al-Heswa, Amran, Mas’abain, Beer Naser). School students helped with distribution of brochures. It was less clear how far women were involved in these sessions.

“We did not have any knowledge on mines except information given to our children at school.” (Sha’san)

In a few villages, the approach, according to the women, seems to have been very comprehensive.

“Mine awareness teams arrived in the village three years ago. They gave lectures and hung posters on the dangers of mines. They showed samples of different mines. They stressed that if anybody found a mine or a strange explosive device, he or she should report that immediately. The teachers cooperated with the awareness team in organizing additional lectures and house-to-house visits to show households the types of mines and their potential danger.” (Mas’abain)

“When deminers came, the entire village welcomed them and provided all the assistance required. We hung the poster in different parts of the village and organized meetings in school for public awareness on the dangers of mines.” (Beer Naser)

A.6. Children and the impacts of demining

The major topics for discussion with girls and boys were their sources of information on mines, the changes in their lives before and after demining, their perception of risks and security and how their behaviour is affected. Meetings with children were held in 22 villages; seven meetings with girls, six with boys and 14 with mixed groups. The age range was from eight to 15 years old. Many of the meetings were held in the village school.



Children talk about their knowledge and experience of mines during a meeting in the primary school, Bait Al-Azani Village.

Children's sources of information on mines

The most important sources of information for children concerning mined areas and dangers from mines, were from parents, relatives and other community members (mentioned in 16 villages). School teachers were also important, (mentioned in 10 villages). *"We are continuously warned at school and at home not to pick up any metal objects to play with."* (Sha'b village).

Children in 13 of the villages visited described lectures and demonstrations on mines given by teams visiting the village. The children were consistent in mentioning that they were:

- given information on mines through lectures from the mine awareness teams in school or in the village
- shown examples of different types and shapes of mines
- given pamphlets and posters to display around the village showing different types of mines
- warned against playing with strange objects *"We were told not to play with strange metallic objects or unknown materials."* (Boy, Al- Qafleh village)
- told to report any finding of a mine or similar object to the de-miners in the area, the military or a police station. Several examples were given by children who followed this advice. *"I was working in my father's field. I noticed an object while I was making a fence from thorny branches to prevent animals from entering our field. I called my father about this object. It appeared like a mine. My father called an officer who called military persons to come and take it away."* (Boy, Al- Soobah)

Additionally, one group said they were told how to get out of a mined area *"They told us if we entered a mined area, we should return in the same direction and should step on the same foot prints."* (Boy, Habil Al-Abdi)

Clearly, where awareness-raising had taken place, the children had understood and retained the information. The presence of the survey and demining teams had also raised awareness by putting up signs showing the mined and cleared areas and through informal interaction and cooperation from the village. The use of dogs in mine detection created interest among the children; *"there are mines in the soil and the dogs sniff these mines before they are lifted by de-miners"* (boy in Mazlb).

Several children said that they and others in the village supported the awareness raising work by sharing information about the dangers of mines (Al- Soobah, Habil Al-Abdi, Al-Heswa).

In two villages, (Al-Heswa, Am-Jarba), girls mentioned that women team members had held separate meetings to talk to women and girls about mines. *"Two years ago, a team of two women came to the village and asked for a meeting with women. The meeting was on awareness raising about the dangers of mines. They also showed us the different types of mines and the way we should deal with these mines in case we found them."*

Table 7 shows the mine information sources reported by children in discussions in the villages. Fourteen of the villages visited had received a targeted awareness campaign. The villages visited constitute a relatively small sample of the villages covered by awareness campaigns. However, the important issue is raised that if awareness campaigns take place in villages, it cannot be assumed that girls necessarily participate, especially if the meeting takes place in a school which they do not attend. There were three villages (Al-Qafleh, Al-Farsi, Al-Khudad) where boys participated in awareness campaigns and girls did not. The positive examples of women's awareness building teams are an indication of the efficacy of a targeted approach to reaching girls and women.

Table 7 - Children's sources of information on mines as reported in meetings.

	No awareness/ no reported source of information	Parents/ relatives only	Parents/relatives/ school only	Participated in awareness Campaign
Girls groups (7)	2	2	2	1
Boys groups (6)		2	1	3
Mixed groups (14)	1 (girls only)	3	1	9 + 1 (boys only)
	3	7	4	14

Children were generally well informed about children in their age group who had suffered mine related accidents. Stories of child casualties were told in six villages, three of the cases had involved children playing with mines.

It is interesting that in the same villages where awareness campaigns created good knowledge among children, women were not necessarily informed nor had interacted with the awareness team. The importance of parents and relatives in providing information suggests that improving the awareness of women on mine risks could have beneficial impacts on both them and on children, and on girls in particular.

Impacts of demining on children

The children's reports of the negative effects of mines focused on their role as herders of livestock. They described how they avoided mined rangelands, or left animals to graze unattended in the mined areas; "*when we herd our animals and they go into mined areas, we just let them till they come back on their own.*" (Sha'san) Several groups reported that they were now able to herd animals in the demined areas, in some cases, usually together with an elderly relative. They were also able to move around freely for fuel wood collection; "*After demining, we are able to move around freely, we are able to herd animals, collect fuel wood, and go for recreation.*" (Al-Qafleh)

In other villages, children were affected by blocked paths and roads which restricted their freedom of movement; "*Whenever we used to go anywhere, we used to walk on the tracks of cars in the road to avoid contact with mines.*" (Al-Soobah) Freedom of movement was mentioned specifically as a benefit in seven villages.

There were also important recreational uses of the demined area. This was mentioned in seven villages. In Amran village children said, "*we go to the demined areas to dance in weddings*" (girls); "*we play football in the demined areas*" (boys).

In two villages the mined areas were far from the village or far from grazing areas (Al-Farsi, Habel Al-Braq) and therefore there were few changes perceived by children following the demining.

Children's perception of risks

As a result of the awareness campaigns, children's understanding of the dangers of mines increased their fear of mines and encouraged avoidance behaviour. However, in some cases, this was slow to change after demining took place. The children's discussions evoked a range of sometimes contradictory views on this, some saying they felt secure and expressing confidence to go into cleared areas and others saying they are still too scared. This latter view was more pronounced among girls and was further exacerbated where some areas were still awaiting demining, or where the children were unclear which areas have been demined.



Girls in Sha'san village explain their feelings about the demined areas; “We still feel scared to go into demined areas. We feel the demining might not be complete. Although our parents tell us the land is demined, we still find people who tell us that demining is still not over. We get scared and do not enter the demined areas.”

A.7. Conclusions and recommendations

There is considerable variation between villages, in terms of their size, remoteness, infrastructure and services, educational and medical facilities, leadership, local institutions, occupations, topography, vegetation, land and livestock ownership and land use. Some villages are almost totally dependent on agriculture, while others have over 50% salaried employees (the major divide is between highland/mid-altitude villages and those in Aden/Lahij, which have a more urban character).

Recommendation 1 - Based on the methodology of the current study, adopt a system of socially-differentiated, gender-sensitive impact assessment of demined areas and integrate it into joint work plans and the information system.

A major factor in changing community perceptions of mine risks will be improving their knowledge of the demining process and its outputs. Awareness of the status of clearance by community members is patchy. In some cases communication between demining teams and the community has been good, but in other cases has been confined to formal meetings with village leaders, leaving others in the community unsure or even unaware of the situation. In some places there is distrust of the safety of cleared land, particularly for cultivation purposes. In some reportedly cleared communities, there is still ongoing active clearance of minefields.

Recommendation 2 - There should be dialogue with all sections of the community from the start of clearance through to final handover, with particular emphasis on actively demonstrating that specific areas are cleared. Community liaison volunteers (men, women and children who are selected by the community and paid a small honorarium for ensuring good two way communication between YEMAC teams and all members of the community) should be identified at the start of clearance and kept informed/involved in all the work of the teams, including handover of cleared land. As part of the required procedures for monitoring the work of the YEMAC clearance teams, records should be kept of team interactions with the community throughout demining, with specific details of the handover process of cleared assets and any demonstrations of safety (also see Section E, below).

Community concerns about the safety of land for cultivation need to be recognised and addressed. Where necessary, local people should be contracted and paid by YEMAC to carry out first cultivation by appropriate methods to demonstrate the safety of arable land where this is in doubt.

A lot of cleared land is now available to the whole community for grazing, fuel wood and fodder collection. This has had a major social impact, as livestock ownership varies between 5% to 100% of households, wood is still the main source of fuel in rural areas, and fodder is seasonally important in livestock keeping systems. The economic value of grazing, fuel wood and fodder can be considerable to the village.

Recommendations 3 - There is a need to ensure good land management practices for grazing, the use of fuel wood, water harvesting and quarrying of stone. In some cases these can be based on traditional land management systems such as “Hema”, and enforced through local bye-laws.

Military camps on or near grazing lands should be relocated where practically possible as they disturb grazing and fuel wood collection by women and children

The different roles and responsibilities of men, women and children need to be taken into account at all stages of interaction with communities concerning mines. Responses from women’s groups reveal the extent of their at-risk behaviour that is linked to their roles in the household. There are opportunities for women’s and girls’ interests to be better addressed in YEMAC work through enhancing their participation and access to information. The survey and clearance process did not systematically interact with women, nor was post-clearance information systematically passed on to

them. The process of signing-off by local council leaders was not mentioned by the women consulted. Information sharing has not been adequate to inform or convince women that their area has been rendered safe.

Recommendations 4 - More specific gender related procedures addressing the UN Gender guidelines are needed at all stages of YEMAC's work, but most urgently to ensure the participation of women in the post clearance handover process. This is most crucial to encouraging the maximum use of cleared assets and reducing fear. YEMAC should continue to encourage greater involvement of women and girls in MRE and awareness campaigns by recruiting more women's awareness teams and by extending the house-to-house approach.

Stone for building is a considerable economic asset to some communities. Land clearance has made this asset safely available.

Crop production is now carried out on cleared hillsides and on wadi land with considerable direct impact on land-owning community members, and indirect benefits to those who provide labour or services to landowners. In some villages, terraces that were under cultivation before mining have not been brought back into cultivation due to concerns over their safety. Hence the recommendation above of assisting with first cultivation. In other places, new terraces are being established in newly cleared land – often for grapes or qat. In the south, there are problems over land ownership, with powerful influences (private individuals, parastatals such as the Aden Free Zone, and government departments) annexing land for their own use. In some places the value of land has gone up 50-fold following clearance, with a further three-fold increase after the land is planted to a high value crop such as qat or grapes.

Recommendation 5 - The expropriation of land by private and government interests should be addressed. YEMAC procedures should ensure the participation of communities in decisions about land distribution and use from the start of the de-mining process.

Bee-keeping is popular in some communities and brings in a good income.

Recommendation 6 - Modern 'bar hives' should be introduced to improve yields and ease the extraction of honey.

Roads and paths have been cleared to the benefit of the community, although there are some roads – often outside the immediate vicinity of the village – that have still to be cleared. These may not have been recorded in the village based mine survey work.

Recommendation 7 - Clearance priorities should be identified with communities. Teams should operate within village boundaries. Where "linear contamination" (landmines between villages) is a problem, then this should be fed back to YEMAC programme planning. However, it is acknowledged that this will only be dealt with in exceptional circumstances because of resource limitations.

The clearance of land has made possible the construction of housing and other buildings by local people and outside private/government interests. In the south, this has led to considerable loss of community assets, such as grazing or arable land.

Recommendation 8 - Local councils should be encouraged to ensure that planning of construction on cleared land should include the views of local residents

Land clearance has made playing and sport safer for children.

Recommendation 9 - Permanent play/sport areas should be designated for children

The Yemen Landmine/UXO Victim Assistance Programme was praised by the Mid-Term Review of YEMAC for its medical and rehabilitation work with survivors. However, apart from a limited number of shining examples of survivors being supported to live fulfilling lives, this survey found that few survivors had heard of the Programme or were receiving assistance from it²⁵. This suggests that there needs to be greater awareness created of the Programme and its work, and greater donor/government support for the Programme so that it can respond to the demands that would result from such an awareness creation activity.

Recommendation 10 -

- **An inventory be made of all survivors and the development of clear guidelines on their eligibility for support from various sources**
- **Survivors are made aware of the services available**
- **Medical care (physical and mental) is available for all survivors, regardless of when the landmine or UXO accident happened - including support with transport and other costs incurred by survivors when they attend hospital**
- **Continue and expand the provision of support for survivors to start their own small businesses and be independent of external assistance**
- **In needy situations, assistance be given to the families of survivors who have difficulty caring for them.**
- **Revise the existing eligibility rules of the Victim Assistance Programme to ensure that different categories of survivors and types of disability can be included.**

²⁵ YEMAC is working with the Ministry of Social Affairs to register all the survivors.

B. Preliminary assessment of complementary development initiatives for surveyed villages and requirements for support

The survey teams asked different groups from each community (community leaders, farmers/fishermen, women, survivors, girls and boys) about the potential for improving their livelihoods, from the assets freed through demining, and for the community as a whole. The full accounts of all meetings for each community are contained in **Annex 11**.

Information on opportunities is available in tabulated form for each surveyed village by social grouping in **Annex 10**.

The relevant factors affecting rural development in Yemen are presented first, followed by the range of development initiatives suggested by different social groups.

B.1. Factors affecting the potential for successful development in landmine affected communities

The successful development of assets depends on a number of factors:

The leadership of the community, which – especially in the northern governorates – is often very autocratic (by the sheikhs). The capacity of communities to plan, to gather information, to consult different sections of the community and to make informed, socially-responsive decisions is very limited. Also limited is the ability to write coherent, well-justified, costed, time-bound proposals, and the ability to follow these through with the degree of financial management and documentation that would be required by donors. These limitations are partly the result of undeveloped community management structures, and partly a lack of training in planning, financial management, proposal writing, etc. This “community empowerment” is an opportunity for donors, and also a pre-requisite for sustainable development at the community level. The lack of capacity is manifested in most villages by a lack of community plans. Exceptions to this were in those villages with strong community Associations (e.g. Bait 'Oqab in Sana'a governorate and Al-Farsi in Aden governorate).

The social cohesion of the community. This is often a consequence of two circumstances: firstly a shared origin (ethnic/geographic) across the population of the village, and b) good leadership by the sheikh, with a clear hierarchy between sheikh, sub-sheikhs and community members. For example, good social cohesion was noted in Bait 'Oqab in Sana'a, while not far away in Joab the impression was that the village was divided into different fractions following different sheikhs.

The presence of a local Association/Welfare Organisation that can prepare proposals and coordinate the implementation of plans. As mentioned above some communities already have local Associations. In the case of Bait 'Oqab, this is a charitable organisation which receives monthly contributions from the better-off members of the

village. This is used for community projects (e.g. the building of the new mosque) or to assist the poor and needy in the community.

In Al -Farsi, it is a social welfare fund that receives contributions from within the community, but also actively seeks funding from outside (e.g. from donors such as the World Bank small projects fund, or from industry such as the Aden Refinery Company). Community members, such as poor fishermen, can take out short-term loans against the fund to cover difficult times or to purchase inputs.

The confidence of the community in the safety of the assets. As noted in the previous section, there are still some minefields to be cleared in a minority of the reportedly cleared communities. In addition some communities, or sections of communities, are still very wary of the cleared areas, and are therefore not using the land fully (e.g. for crop cultivation). The confidence of communities can be improved through communication and demonstration by YEMAC to all sections of those communities (men, women and children).

The remoteness of the community and its access to markets and inputs. Some communities (e.g. Mazlb and Al-Sharaf in Dhamar governorate) are in remote locations, making the marketing of products more difficult and costly. In contrast, other villages are in an excellent situation to make full use of urban markets (e.g. all those near to Sana'a, Aden or Lahij).

The financial capacity of the community or its access to investment finance. Some villages in the south and the north have a proportion of wealthy, powerful households that are able to take any opportunities that freeing of assets present, and there is a real danger of the benefits being appropriated by these households (as in Mas'abain). However, the majority of households are struggling to make ends meet, and unable to invest in new enterprises. A common constraint voiced by community members across all locations was the difficulty in obtaining credit, especially from formal institutions such as Banks. The conditions imposed by these institutions make them inaccessible to the poor. It may therefore be preferable to think about alternative forms of credit, such as group savings and credit schemes. Something like this has already started with the Social Welfare Association in Al-Farsi.

The presence of donor or government projects or support activities. If there is a donor project in the area (e.g. The IFAD *Dhale Rural Development Project* in Al-Dhale governorate), then certain development opportunities can be covered by linking with that project. However, development should be balanced between economic, institutional and social development, and between different sections of the community (young and old, men and women, poor and better-off, land-based and non-land based). Thus the presence of such a project should not disqualify the affected communities from other opportunities.

The extent to which the community is in control of its assets. In the south, government owns much of the land and the community has less say in how cleared assets are used/distributed, making good representation on the local Council a priority as many community members feel disenfranchised (e.g. in Beer Ahmed in Aden governorate).

B.2. Development opportunities for the cleared land

The completion of mine clearance, and the improvement of community confidence in the safety of cleared land

A minority of communities²⁶ reported that they still have un-cleared minefields within the community area. In some cases this may be due to lack of information on what has actually been cleared; in others, the mined area described was not included in the original LIS and therefore not on the YEMAC schedule for clearance. Others, such as Bait Al-Shawki in Al-Dhale have mines blocking a major trading route (to Damt) outside the community boundaries. Many other communities are still not convinced that all mines have been removed. In some cases the limited extent of communication with the community by survey teams, demining teams and awareness-education teams has left at least some members of the community (often women and children) not fully aware of the work carried out or the safety status of the land. Only when all members of the community are convinced of the safety of their assets will they be used fully and effectively, with long-term investment of cash, organisation and labour.

Removal of military encampments

It may be impractical to remove or re-locate existing military camps, but it is important to recognise that they have a considerable influence on the activities that can be undertaken in their vicinity. Removal would enable water harvesting, grazing and fuel collection in and around the present camp area, particularly by women (e.g. Sha'san, Sana'a governorate).

Water harvesting and storage

Water harvesting from hillsides above cultivated land helps to enhance crop and fodder yields and reliability. Water harvesting channels are usually privately owned, as an extension of the privately owned parcel of land that they service. Where topography and sub-surface are appropriate, these hillsides could also be used for short-term storage for supplementary irrigation of fruit trees, qat and crops. Where hillsides are above the village housing, and a clean supply of water is available, water tanks can be installed for drinking water that would then flow by gravity to houses or communal taps.

Re-instatement of traditional natural resource management practices and byelaws

The impression from the survey was that in most cases there are no restrictions on the use of communal grazing lands by village members. Thus an unlimited number of animals can graze these areas, and an unlimited amount of fodder and fuel can be gathered. With increased populations, this could be unsustainable and lead to the degradation of the natural resources. There are traditional methods of natural resource management that could be re-instated (as they have in Bait 'Oqab, Sana'a

²⁶ For example: Joab, where of the seven minefields, two are cleared, one is in the process of clearance, four are yet to be started; Sha'b, where the area known as *Jebel Suma'a Al-Rawdha* was reported by villagers as not having been demined; Bait Al-Soobah, where villagers reported that one area and a house were still to be cleared; Bait Al-Azani, where the remaining area to be cleared from mines is called *Jebel Ali Sa'eed* (located midway between Bait Al-Azani and Katan villages).

governorate), as well as encouragement for specific bye-laws for the use of rangeland. Awareness could be raised, especially among women and children who do most of the herding and fuelwood collection, about natural resource management considerations. On private land trees could be planted, especially on terrace risers to conserve soil. Communities mentioning soil and water conservation as a requirement for the future included Al-Khudad and Habeel Al-Braq in Lahij governorate, both of which are experiencing the erosion of the wadi banks from floods.

Planting of grasses and saplings to enhance the grazing/browse potential

Livestock production in general is a low input/low output activity, using local breeds, available fodder and forages, and minimal veterinary care. There is certainly scope (voiced by some villagers) for improvement of breeds, husbandry, feeding and health, which would result in large gains in productivity. This would come at a price, and the economics and social aspects of higher input/output systems would need to be carefully weighed before recommending them.

Training of local people as paravets

Many communities are too far from professional veterinary care to use them except for the most valuable animals. The training of locally-selected individuals in basic veterinary care would provide the community with a local source of expertise. These paravets (or community-based animal health workers) would receive a basic set of veterinary equipment and some commonly-used drugs, and be linked to government or private vets for situations that they could not handle, and for the reporting of notifiable diseases.

Extension services, and the introduction of new types of grasses and trees

As with animal production, food crop technology (especially on rainfed land) is geared towards reliability and local preferences, rather than high output or market needs. Very few villagers mentioned the need for improved extension services or improved technologies. This may be because there is very little profit in food crops compared to qat, and the motivation to invest scarce resources for uncertain returns is understandably low. However, good seed and modest pest and disease control measures could save considerable losses of production.

There is potential for the introduction of new forage species, including the enhanced use of *Prosopis* (see the account in Annex 11 for Bait Al-Shawki in Al-Dhale governorate) and *Opuntia* (see the account from Bait 'Oqab in Sana'a governorate). The spread of *Sesbania* in the wadi conditions in Ofeini in Abyan governorate shows the value (and dangers) of an introduced species. *Sesbania* was introduced from India to reduce wind erosion in sandy areas, but it is now an important fodder for camels and other livestock in the coastal wadis.

Modern bee-keeping

The considerable income accrued from bee-keeping (700,000 YR/year) by a single family in Ofeini (Abyan governorate) demonstrates the potential of this enterprise. That family is using crude box hives, rather than bar hives, which could improve management and yield of bee colonies.

New terraces and boreholes for irrigation on cleared land

Where cleared land is not in private ownership, it is often because it is land of poor quality or accessibility, and is used for grazing and fodder/fuel wood collection. However, some communal land could be developed into crop land through terracing and irrigation for the benefit of poorer members of the community with little or no land of their own. This would require a one-off capital development grant for the bulldozing of the terraces, the sinking of boreholes and the initial establishment of appropriate food or cash crops, in addition to the establishment and training of a local organisation to administer the grant, supervise the land development process and support the new land users.

Renovation of existing, but unused terraces

A number of communities (e.g. Al-Sharaf and Mazlb in Dhamar governorate, Bait Al-Ra'ae in Ibb governorate) are not using freed crop land because they are still concerned about the danger of mines buried deeper than 20cm. YEMAC maintains that these areas are safe, and could demonstrate that by deep-ploughing them. That should be sufficient to convince landowners and others in the community to bring them back into production.

Resolution of land disputes over cleared land

In the north, the ownership of land is generally clear. Private ownership is recognised (often from many generations) by the whole community. The main alternative is communal use of land, with varying degrees of control depending on the interests and strength of the sheikh. However, in the south – because of its different history – the situation is much more confused. Land passed from big landowners to the State after the revolution, and then partly back to the original owners, partly to private individuals from inside and outside the village, and partly into government or parastatal uses that don't directly benefit the local community.

In Aden governorate, all the cleared villages are within the catchment area of the Aden Free Zone. Theoretically, with appropriate government approval, that organisation can use any land within its jurisdiction (e.g. as it has for the Al Aml housing development in Beer Ahmed in Aden governorate). The villagers in Amran (Aden governorate) suggest a survey of the village land, and its redistribution to settled and nomadic families in an equitable way.

The uncertainty about land ownership is holding up the utilization of land in Beer Naser (Lahij governorate), and a resolution would help the community, investors and the government according to local leaders. One suggestion (from villagers in Bait Al-Azani in Ibb governorate) is to transfer cleared land ownership into *awkaf* (charitable endowment), so that it can be protected from private or government annexure, and developed for the good of the community (e.g. for recreation or sports grounds).

There are many instances of disputed ownership of land (e.g. Al-Khudad in Lahij governorate and Al-Heswa in Aden governorate). This can slow down its development and productive use or provide a situation in which the unscrupulous can gain improper access to land (as appears to be the case in Mas'abain, Aden governorate). A land dispute tribunal, which would need to establish its impeccable integrity, could be set up to settle such disputes.

Alternatives to land-based income for bad years

The need for such alternatives can be demonstrated using two very different situations. The remote Ofeini community is inhabited by nomads. They live a precarious existence that depends on the vagaries of the climate and the good will of the sheikh. There is no employment in bad years when camels have to be sold and honey production is low. Am-Jarba, by contrast, is situated on a main road and is close to both Aden city and Lahij town. Despite this many rural incomers do not have the skills relevant to their new urban environment. Skills training and employment advice are important for the balanced development and livelihood security of such situations.

B.3. Opportunities for the whole community

The section above deals with opportunities to develop assets that were directly affected by the presence of land mines and UXOs. However, it can also be argued that the development of the whole community has been blighted by the fear and restrictions caused by these munitions. It is probable that travel was restricted into and out from the community, and that teachers, health workers, agricultural extension staff and others will have been put off visiting the landmine-affected communities.

In addition, managers of government development programmes and donor projects may have selected communities without the difficulties and dangers presented by landmines (as has been documented in other mine-affected countries). It is therefore legitimate to give some priority to requests by communities for general development initiatives. **Annex 10** lists these in detail by community and by different interest groups. While it is understood that each of these requests would have to be considered on its merits, and according to guidelines for each development programme, the Annex and the sub-sections below simply record what was requested.

Educational facilities

Requests for education facilities came in many forms and, with water and medical-related initiatives, were the most numerous. Communities recognise the major influence a good education has on employment and advancement prospects for girls, boys and adults.

Where a community lacked its own primary or secondary school, or where the local school was more than one or two kilometres away, the women and children's interest groups almost always came up with a request. Children and particularly girls, mentioned the need for enhanced provision of schools in nearly all the group discussions.

While it is recognised that there are guidelines about where a government school is justified, there are clear issues connected with the social restrictions preventing girls from travelling any distance outside the village to school and in consequence the potential exclusion of girls from continuing beyond primary education. For similar reasons, the need for female teachers for girl students was emphasised (see section on women's development priorities below).

Examples of communities requesting schools are: Sha'san (for an intermediate school for girls); Bait Al-Ra'ae (school for girls); Bait Al-Azani (girls' school); Al-Qafleh (basic and secondary schools – with female teachers for girls); Habil Al-Abdi (intermediate and secondary schools); Al-Masharih (extension of primary school to 9th grade); Al-Farsi (extension of present school).

A specific educational problem exists with nomad children, encountered in a number of communities in the south (e.g. Ofeini – Abyan governorate, Al-Khudad – Lahij governorate and Amran – Aden governorate) who find it hard to get an education. While the children of Ofeini cannot read or write, we discovered that they are very skilled at making dolls from locally available materials, suggesting that there may be opportunities to develop vocational skills as well as academic ones.

The lack of employment opportunities has been previously highlighted. This has prompted requests for a range of adult training opportunities for men and women, from adult literacy classes to computer classes and vocational training in tailoring and other subjects. Examples include Sha'san, Al-Sharaf, Bait Al-Azani, Habeel Al-Braq (all for adult literacy), Bait Al-Ra'ae, Beer Naser and Am-Jarba (vocational training centres for women); Al-Heswa (training centre for women and girls); Amran (training in the use of computers and other office equipment already provided by a donor).

Medical facilities

Over half of the communities surveyed feel the need for local medical facilities. Many have no trained people or facilities within the community. Examples are: Sha'san; Al-Jafinah; Bait Al-Ra'ae; Bait Al-Azani, Al-Qafleh; Habil Al-Abdi; Al-Masharih; Al-Farsi; Al-Heswa; Mas'abain; Al-Khudad; Habeel Al-Braq; Beer Naser.

Drinking water

The call here is for clean, reliable, easily accessible drinking water in communities, including: Sha'b; Al-Sharaf; Bait Al-Azani, Al-Soobah; Al-Masharih; Amran (for nomads); Habeel Al-Braq.

Water for crop production

Depending on their situation, villages are calling for boreholes (Sha'san, Mazlb, Al-Soobah, Al-Qafleh) or water storage and drip irrigation (Al-Jafinah; Bait Al-Azani) to provide water for irrigation of qat, fruit trees, fodder crops and food crops. In Amran the call is for boreholes to provide drinking water for livestock and for the nomads that keep them.

Sewerage

Some opportunities are region-specific. In the south more than half the communities requested sewerage systems to reduce disease (Al-Farsi; Mas'abain; Amsara; Habeel Al-Braq). An innovative idea in Al-Heswa was to use the cleaned water to irrigate palm trees, which are used to make vinegar and handicrafts.

Fishing

Also specific to the southern, coastal villages were requests to upgrade the fishing industry, which is very small scale at the present time. Fishing families want improved boats with motors and better nets, transport of fish to market, refrigeration

facilities (Al-Farsi and Al-Heswa, Aden governorate), and a fish canning factory (Al-Heswa).

Support to survivors

A range of suggestions for government and donor support was provided by survivors and other community members. These included the need for a survey of the needs of landmine and UXO survivors (Beer Ahmed), followed up by the provision of training and the resources needed to enable survivors to start small, sustainable businesses (e.g. small shops, mobile trading; fattening livestock, fishing) that reduce dependency on government, community and family and give self-esteem to survivors (these suggestions came from Al-Qafleh; Habel Al-Abdi; Al-Farsi; Al-Heswa).

In Al-Qafleh, the need for financial assistance to help survivors get to hospital (transport costs and some money to cover the expenses of hiring extra labour) was mentioned, while in Al-Masharih it was emphasised that mental health care needs for traumatised and depressed survivors were sometimes as important as physical health needs. Several survivors have lost limbs, but have not been able to get artificial limbs (e.g. in Al-Jafinah and Habil Al-Abdi).

There is a clear need for the Yemen Landmine/UXO Victim Assistance Programme to find out how many survivors there are and what their needs are, and to develop plans for communicating with and assisting this category of community members.

Farmer associations/cooperatives to access government support, credit, machinery and training

Local institutions (apart from the sheikh and the Local Council) are generally poorly developed, with farmers acting independently for the purchase of inputs and the sale of produce. However, a few communities (e.g. Al-Jafinah) see the benefits of collective action, and have requested the formation of farmers associations or cooperatives for these functions. In Beer Ahmed, farmers are looking for soft loans for the purchase of agricultural machinery and livestock. Two communities (Habil Al-Abdi and Beer Naser) want local associations to help build houses in demined fields for local people.

Community welfare organisations

A few communities surveyed (e.g. Al-Farsi and Al-Heswa in Aden governorate and Bait 'Oqab in Sana'a governorate) have active local social welfare organisations with a good level of donation by the wealthier members of the community. Other communities (e.g. Sha'san, Amran, Mas'abain, Al-Khudad) requested that the establishment of such organisations be facilitated in their locations. An advantage would be that donor or government development initiatives could be implemented through these organisations. In addition, by training the executive members in proposal writing, planning, financial management, etc, a body of local expertise could be built to write further proposals and administer future projects.

Miscellaneous requests

In addition to the carefully considered requests detailed above, villages also suggested a "wish list" of capital projects, as follows:

- Cemetery: Al-Farsi
- Bus services: Al-Farsi

- Market: Al-Farsi
- Post office: Amsara
- Pavements and street lighting: Al-Farsi
- Electricity supply: Al-Sharaf; Al-Soobah; Al-Qafleh; Habil Al-Abdi; Al-Masharih; Amsara; Habeel Al-Braq
- Mosque: Bait Al-Azani
- Extension Centre/advice: Bait Al-Azani, Al-Soobah, Al-Qafleh, Beer Ahmed
- Tractors: Al-Qafleh
- Play/sports ground: Bait Al-Azani; Al-Farsi; Al-Heswa; Amran; Mas'abain; Am-Jarba; Amsara; Beer Naser (better use of time than chewing qat!)
- Preliminary court: Amsara.

B.4. Women's discussion of development opportunities and priorities

In terms of opportunities for development of the cleared assets, women's suggestions were similar to those of men. Women identified the main constraint to increasing the productivity of rangeland grazing and of agriculture as the limited provision of water. Hence they suggested the construction of wells and irrigation systems, dams and water harvesting structures. Support for land rehabilitation was suggested in two villages and for animal health and management in another two. Both men and women identified the importance of solving land disputes. Women specifically articulated the need for completion of demining where this was still required, and for deeper demining where they were not confident that mines were removed.

Women's broader developmental priorities were strongly oriented towards the provision of drinking water (the most frequently mentioned topic), electricity and educational provision. Education for girls was particularly emphasised. They want classes beyond the sixth grade in their local school for girls to study, without having to travel outside the area.

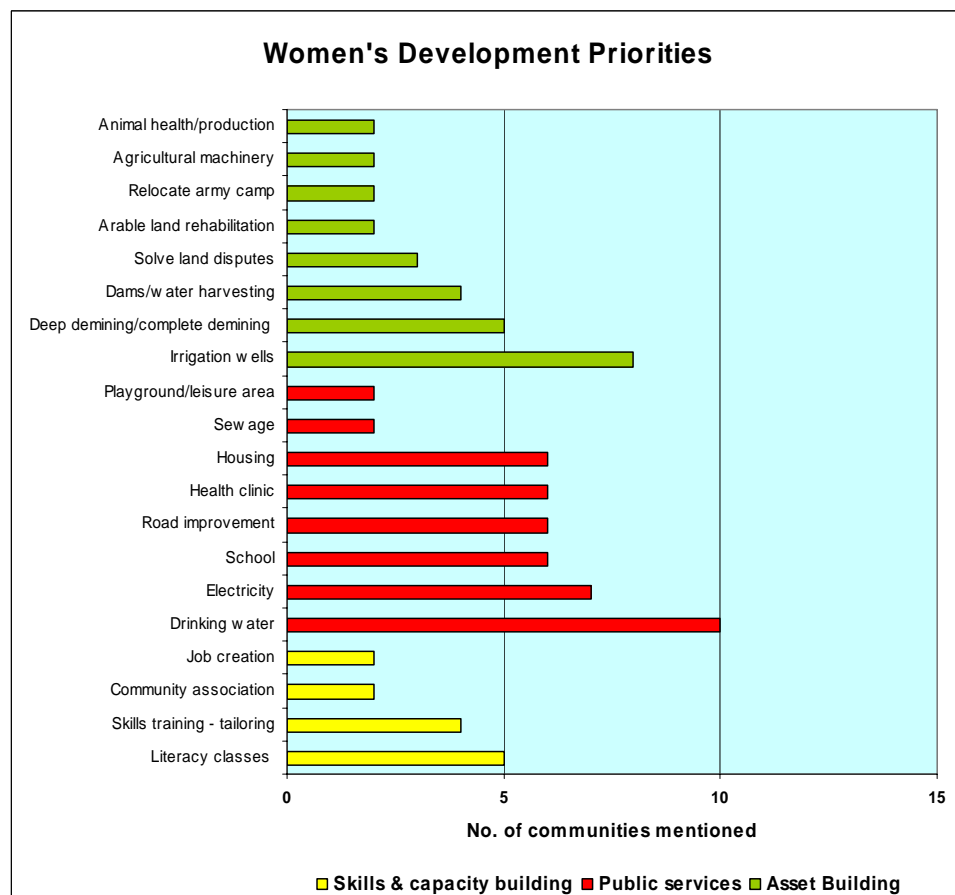
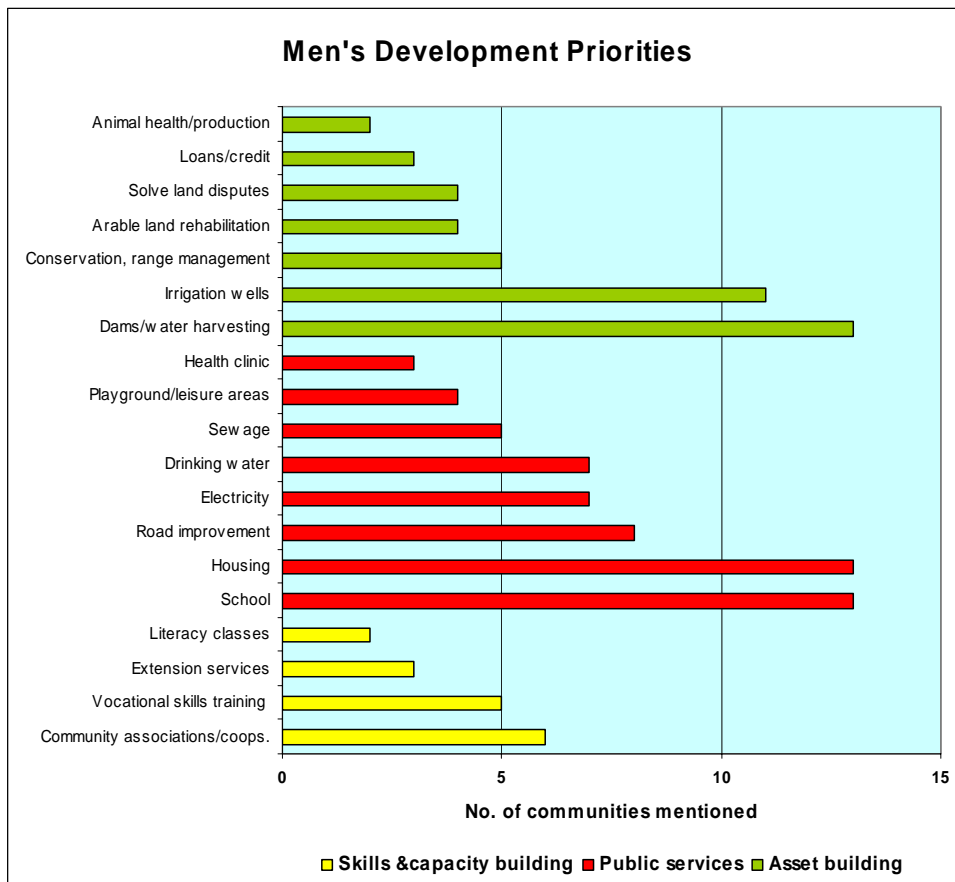
"There is one primary school in the village till the sixth grade. After this, the children go to another school in a neighbouring village. The schooling there is mixed and the teachers are men. In our case, we cannot allow our daughters go to mixed schools. They are not children anymore. Similarly, we do not accept that male teachers give lessons to our grown up daughters. We demand that a basic school be built in the village and supported by female teachers to educate our daughters. Everybody in the village wants girls to have adequate education. The dropout [rate] of girls after the sixth grade is high in our village." (Al-Qafleh)

The other most frequent requests were for road improvements, housing schemes and medical centres. Literacy classes, skills training and other job creation initiatives were also requested. In several villages, women commented on the lack of cooperation between village members. Although there was cooperation in social events, village initiatives to create opportunities and encourage investments were lacking. In some villages (e.g. Bait Al-Azani which already has a strong village organisation), people regarded it as their responsibility to contribute to solving problems, while in others it was considered the government's responsibility to bring them opportunities. In Beer

Ahmed, the women suggested the establishment of a cooperative/association as a potential solution to the problems in the community. Such organisations could then attract government support. However, past local experience of trying to set up cooperatives showed that failure could result from too rigid conditions set by the government for their formulation and establishment. Comparisons of women's and men's development priorities for asset development, public services and skills and capacity building, are illustrated in figure 6.

Children's development priorities were clearly focused on educational provision for the reasons discussed above. Their second most frequently mentioned need reflects their specific interests – a playground where they could relax and play sports. Other needs were similar to those of adults, such as water supply and electricity projects.

Figure 3 - Comparison of Women and Men's Development Priorities.



B.5. Conclusions and recommendations

Successful development depends on good leadership. Leadership in the villages, particularly in the north, is very autocratic and of variable quality and effectiveness. The capacity of the community to plan and implement development projects is limited, although a few communities have successful community welfare organisations. There is poor capacity at village level to develop budgeted, time-bound business plans for development opportunities.

Recommendations 11 -

- **Give priority to demined lands and to the communities affiliated to these lands during the preparation of development plans, with emphasis on the comparative advantage and unique situation of each community.**
- **Revive the role of current Civil Society Organizations (including community welfare associations) in the communities where land was demined and promote the formulation of new organizations**
- **Promote investment in the demined areas**
- **Promote sustainable development initiatives through capacity building of local leaders (M&F), and of local communities, in planning and implementation of developmental community-based initiatives.**

There is considerable potential to increase the productivity of the **land-based assets freed by clearance**. Some possibilities have been mentioned in the previous section, and additional ones are listed below:

- Installation of water storage for drinking water and supplementary irrigation
- Soil and water conservation (particularly for wadi banks where flooding occurs)
- Training local individuals identified by the community as para-vets
- Establishment of terraces for the poorer members of the community who cannot afford the capital investment involved
- Provision of agricultural extension advice on soil fertility management, pests and disease management, crop, livestock and fodder husbandry, honey production, woodlots, etc.
- Provision of advice on the storage, processing and marketing of agricultural and handicraft products for men and women

The development of the **whole** community has been blighted by the fear and restrictions caused by these munitions. Where the circumstances merit investment and meet government guidelines, it is therefore legitimate to give priority to requests by mine-affected communities for general development initiatives, such as:

- Educational and medical facilities
- Boreholes and wells for drinking water and irrigation
- Sewerage facilities
- Fishing equipment and processing plant
- Farmer/fishermen associations/cooperatives

Recommendation 12 - Communities should be involved in the identification of development priorities, using this report as a starting point. The development of sustainable local capacity should proceed hand in hand with tangible development initiatives that benefit the whole community (within district plans and government guidelines).

Women, men and children have different development priorities.

Recommendation 13 - The priorities of each group should be identified separately and priorities of women, men and children should be addressed.

C. Enhancement of the capacity of YEMAC to conduct future assessments of socioeconomic benefits from mine action

This survey was an important learning experience for YEMAC, and particularly for the seven YEMAC staff directly involved in conducting the preliminary and main surveys. A thorough training in the theory (see Annex four) and practice (in Sha'san community, Sana'a governorate) was given to six staff, as well as three women from outside YEMAC. The methods used in the survey are illustrated in the photographs below:

C.1. Photo record of methods used in the survey



Sha'san. Identifying the cleared areas with community members



Sha'san. Time line



Sha'b. Introductions



Sha'san. Constructing a village profile with village members



Joab. Using the map as part of discussions



Joab. Meeting with children



Sha'b. Meeting with girls



Ofeini. Meeting with women



Al-Qafleh. Meeting with boys



Bait Al-Ra'ae. Farming systems diagram



Joab. Meeting with survivors



Am-Jarba. Force field diagram



Ofeini. Meeting with nomads



Al-Khudad. Meeting with children



Al-Heswa. Interviews during qat sessions



Amran: constructing a village profile with a fishing community

These photographs show how involved the staff were in using all the methods. In addition, all team members (including the female team members) were involved in an assessment of the results and an analysis of the methods used after the completion of each governorate. At the end of the survey, the team was divided into three groups, each of which did an independent evaluation of the survey methods used (see Annex 8).

As a result of these trainings and evaluations, staff expressed the opinion that they would be able to plan, conduct and analyse similar surveys in the future. This report, and particularly the training materials in Annex 4 (repeated in Arabic in Annex 5), are available as training and survey materials for the further training of others.

The evaluation of the survey methods reported in Annex 8 generally endorses the methods used, with some reservations. These include the following perceptive observations by team members:

Introductions: Good to make people aware what we want to do with them and why we are there. Important to focus on introductions and not allow general discussions.

Community profile: Some questions were difficult for people with limited education and literacy. “Political” issues raised in the profile (e.g. land distribution) can cause disquiet. Helped to get good information about the context.

Time line: Important method, and directly related to our purpose. Easier to do it in the afternoon, during qat.

Community maps: Maps sometimes not accurate enough to be useful for all purposes. Sometimes it was an excuse not to see the cleared area for ourselves (it is important to go to see the area).

Focus group discussions (FGDs): Most important method, but people were puzzled by the relationship between some of the questions and landmines. Confusion between the opportunities for the cleared land, and for the village as a whole. It would have been better to keep them separate. FGDs gave information in detail to complement the general information from the community profile.

Participant observation: Not properly explained in the training. First impressions can be misleading, and need to observe carefully throughout visit, and be prepared to alter opinions. Eighty percent of the social and economic benefits from cleared land can be seen by eye. Helped to validate the information given in other methods (triangulation).

Photographs: Sometimes pictures can tell a story, but not everybody could take the pictures. Some restrictions on photos of women. Need to assign this task to an individual. Otherwise good opportunities can be lost to take photos as evidence.

Farming system diagram: Subject may not be representative of the village. Methods like Farming Systems Diagrams touch on very sensitive issues, that some rural people don't like to answer (e.g. numbers of livestock, income etc).

Village analysis: Very good reflection method, which gave chance to compare between focus groups and other methods, and see the consistency of information, and allowed team members to appreciate the whole picture

The team concluded that the methods worked well as a whole, providing a clear and comprehensive picture of the socio-economic benefits of landmine clearance within the limited time available.

C.2. Conclusions and Recommendations on survey methods

YEMAC staff received a short, but intensive, training in participatory approaches and methods, and over the three weeks of the survey became competent in their application. Several staff grasped the concepts and the practice well, and would be able to plan and conduct similar surveys in the future – especially if a local development specialist supported them. The methods used were appropriate to the cultural conditions and were effective in understanding the impacts of landmine clearance on men, women and children.

Recommendations 14 -

- **Women should form part of future survey teams, as the views of women and girls are vital to the full understanding of community situations**

- **The methods used in any future survey should depend on the objectives of that survey, building-on, and adapting, the methods used here.**
- **Further studies should be carried out on a proportion of cleared communities by YEMAC staff supported by a social scientist and women surveyors. These studies would have three purposes: a) the learning of lessons by YEMAC so that procedures can be further improved; b) the documentation of experiences and achievements to inform interested national and international audiences; c) to provide the basis for development initiatives.**

D. Assessment of community landmine impact scores as a tool for identifying impact and determining priorities for action

D.1 Landmine impact score methodology and assumptions

The overall vision for Landmine Impact Surveys as articulated by the Survey Contact Group, is to “facilitate the prioritizing of human, material and financial resources supporting humanitarian mine action at the national, regional, and global level.” (Land mine impact survey, 2000). Amongst the subordinate objectives, was to “give implementers baseline impact data that will provide success indicators for mine action programs”.

A detailed discussion of the methodology for landmine impact scoring is given in Benini (2002) and Benini et al (2002). These show how information from the surveys is used to compile a ranking of communities by the severity of mine impact. The criteria for assessing impact are chosen to reflect the risks and the extent and value of blocked assets, e.g. the types of areas to which landmines are blocking access, including services and livelihoods; the actual number of recent victims and the nature of the contamination and the terrain (table 9). The indicators are combined in an index – the Mine Impact Score – to create the ranking. The high-impact communities are given priority attention for technical surveys, clearance, victim assistance and mine risk education.

Table 8 - Indicators and weighting for Impact Scoring (from Land Mine Impact Survey 2000)

The presence of mines	2	Low impact: Score 1-5; Medium impact: Score 6-10; High impact: Score 11 and above.
The presence of unexploded ordnance	1	
Access to some irrigated crop land was blocked	2	
Access to some rain-fed crop land was blocked	1	
Access to some fixed pasture was blocked	1	
Access to some migratory pasture was blocked	1	
Access to some drinking water points was blocked	1	
Access to some water points for other uses was blocked	1	
Access to some non-cultivated area was blocked	1	
Access to some housing area was blocked	1	
Some roads to administrative centers were blocked	1	
Access to some other infrastructure was blocked	0	
Mine victims in the last 24 months	2	

The method of ranking on a composite score has the advantage of combining the dimension of saving human life and the benefit of released assets, without requiring a calculation of the trade off between them. The importance of the asset type in influencing the level of economic return from demining is illustrated from a mine impact study in Afghanistan which found that clearance of irrigation works and

agricultural land brought more than 10 times the economic benefits of clearing grazing land.²⁷ These issues are reflected in the weighting given in Yemen survey criteria to recent casualties and to blocked irrigated land. The methodology also ensured the inclusion of small communities.

The working assumption is that communities scoring high on this index are also the ones in which mine action has a greater potential for reducing future suffering and releasing productive potential.

D.2 Relationship of village scores in LIS to actual post clearance impacts

The pen sketches of individual villages, and the detailed notes contained in Annex 10, show the complexity of the factors which influence how individuals and communities react to the opportunities presented by mine clearance. The methodology has emphasised the assessment of the benefits and for whom they are advantageous or detrimental. This study has focused on community level and perceptions of benefits rather than attempted a broader cost benefit analysis of, for example, the value of released land for major housing or infrastructure investment which may be of no benefit to the affected community. In order to make a rough and ready comparison, some indicators to score the village information for comparison with the LIS were applied.

Table 9 - Indicators for scoring current study impact data

Absence of victims since 2000	2
Absence of victims since demining	2
Freed access to irrigated land	2
Freed access to rainfed land	1
Freed access to pasture	1
Freed access to migratory pasture	1
Freed access to water points (drinking)	1
Freed access to water points (other uses including water harvesting)	1
Freed access to stone cutting /collection	1
Freed access for firewood collection	1
Freed access for housing development	1
Freed access to roads to administrative centres.	1

A comparison of the data from the LIS with the findings from the surveyed villages in this study shown in Table 10 reveals some interesting observations on the extent to which the actual outcomes reflected the initial score and on the factors that account for the differences.

Thirteen of the 25 villages show similar scores, seven are scored higher in the post clearance survey and five lower. There are several reasons for the discrepancies;

²⁷ See - Study of the Socioeconomic impact of mine action in Afghanistan, revised draft report June 2001; Byrd and Gildestad, 2002.

- For those scored lower, the original score may have included blocked water sources when these were not reported in the present study (e.g. Mazlb and Al-Sharaf). Also for these two villages, their major livelihood resource – rainfed agricultural land, was not brought back into use after demining because of fears over its safety. An important valued asset not included in the original LIS scoring was stone. This helped to increase some of the originally ‘low’ impact villages to a medium impact score, e.g. Sha’san, Al-Soobah, Bait Al-Azani.
- Two of the four ‘high’ impact villages had a medium score, probably because the scoring against victims since mine action was not weighted according to the number of victims before mine action began.
- A number of the ‘low’ impact villages have medium scores, based on a simple count of the assets being utilised. However, in some cases assets have been grabbed by individuals, resulting in exclusion of community members and negative impacts (e.g. Al-Mas’abain, Al-Jarba, Al-Farsi and Beer Naser).

D.3 Comments on the tools for landmine impact scoring

The findings of the current study lend support to the LIS impact scoring method as a rapid method to assess a country’s landmine problem. Although the outcomes calculated by the method used here are not completely consistent with the impact scenarios of the LIS, they are closely linked. The survey has highlighted the importance of certain blocked assets such as building stone which is a major source of income from mountain areas in highlands. Although this was recorded in the LIS, it did not figure in the scoring. Other sections of this report discuss the constraints to using cleared agricultural land, including the need to overcome perceptions of danger and uncertainty about the status of mine clearance within communities.

The weighting methodology of the LIS makes no allowance for whether an asset constitutes a major element in local livelihoods. Blockage of irrigated land is clearly likely to present a greater loss in income, but rainfed agriculture may be equally crucial for particular communities where there is no alternative. Similarly, different communities may have different degrees of success in adapting to the blocking of assets.

An important influence over whether assets will be used effectively or not is the existence of ambiguity or conflict over rights of ownership. This element should be addressed in future surveys

D.4 Recommendations for landmine impact survey methods

Points to consider in future development of the LIS methods are the potential for;

Recommendation 15 -

- **Adapting the weighting according to the importance of the affected assets for people’s livelihoods in different regions.**

- **Including in the land mine impact scores a measure of adaptation to the blocking of assets, through exploring the community strategies for dealing with the situation.**
- **Including an assessment of the ownership rights over assets which affect the likelihood of equitable access or conflict after clearance is complete.**

Table 10 - Comparisons of asset status, casualty data and impact scores, pre and post demining.

Village	Blocked assets (LIS)	Assets actually used.	Casualties from LIS	Casualties since mine action	LIS Impact	Study Assessment
Sha'san	Pasture, agriculture	Pasture, firewood, stone cutting and water harvesting.	None recent. 8 killed 4 injured in past.	No victims since 2000, or since demining	Low	Medium
Joab	Pasture, agriculture, water/irrigation and animals	Pasture, rainfed land, water harvesting, and firewood.	None recent. 5 killed 4 injured in past.	No victims since demining	Medium	Medium
Sha'b	Pasture, water/irrigation	Pasture, water harvesting, stones, firewood. (No irrigated land was mined.)	2 recent killed. 10 killed, 20 injured in past.	No victims since demining	Medium	Medium
Al-Jafinah	Pasture, agriculture	Irrigated land, pasture, water harvesting, stones, firewood and local paths. Recreational area for children.	2 recent killed, 2 injured; 2 killed, 2 injured in past	Informants put the recent 2 killed and injured <u>15 years</u> ago, around 1991. No victims since 2000, or since demining	High.	High
Bait 'Oqab	Pasture, water for animals and drinking.	Pasture, stone cutting, firewood, water harvesting and local paths.	None recent. 10 killed, 6 injured in past	No victims since 2000, or since demining	Medium	Medium
Mazlb	Pasture, water for animals, washing and drinking, agriculture, roads to other villages	Pasture and local paths. No report of blocked water sources.	2 recent killed, 17 killed in past.	No victims since demining	Medium	Low
Al-Sharaf	Pasture, water for animals, washing and drinking, agriculture, roads to other villages	Pasture, stones and local paths. No report of blocked water resources	1 recent killed, 11 killed, 2 injured in past.	No victims since demining	Medium	Low
Al-Soobah	Road to district centre	Rainfed land, pasture, stone cutting, firewood and the road to the administrative centre.	1 recent injured, 1 killed, 5 injured in past.	No victims since demining	Low	Medium
Bait Al-Ra'ae	Pasture, agriculture, Stones	Pasture, stones	1 recent injured, 8 killed, 2 injured in past.	No victims since 2000, or since demining	Medium	Medium
Bait Al-Azani	Pasture, agriculture	Pasture, stone cutting, firewood, road to administrative centre.	None recent; 2 injured in past.	No victims since demining	Low	Medium
Al-Masharih	Pasture, agriculture, water for animals and drinking.	Irrigated land, rainfed land, pasture, water sources for irrigation & drinking, stone cutting, firewood and local paths.	2 recent killed, 1 injured; 13 killed, 2 injured in past	No victims since demining	High	High
Al-Qafleh	Pasture, agriculture, water for irrigation, animals, washing and drinking; road.	Irrigated land, rainfed land, pasture, firewood and local paths. No report of blocked washing/drinking water.	1 recent injured; 4 killed, 4 injured in past.	Two victims injured in 1998 and 1999. No victims since 2000, or since demining	Medium	Medium

Habil Al-Abdi	Pasture, fuelwood	Pasture, water harvesting, stones, firewood, housing development, local roads.	1 recent injured; 6 killed, 7 injured in past	No victims since demining	Medium	Medium
Bait Al-Shawki	Pasture, agriculture, roads.	Rainfed land, pasture, stones, firewood and local paths. (Also honey production)	4 recent killed, 3 injured; 7 killed, 12 injured in past.	No victims since demining. (Victims since 2000 not reported.)	High	Medium
Al-Heswa	Pasture, fishing, agriculture.	Irrigated land, pasture, firewood and the road to access the coast for fishing. Recreational area and access to handicraft materials.	3 recent killed, 1 injured; 1 killed, 2 injured in past	No victims since 2000, or since demining	High	Medium
Al-Farsi	Pasture, fishing, road.	Road to access coast, housing development (but not for the community - negative impact on forage availability.)	None recent. 3 killed, 1 injured in past	No victims since 2000, or since demining	Low	Low
Amran	Pasture, water for animals, washing and drinking; road.	No report of blocked water sources. Pasture, firewood and the road.	None recent. 5 killed, 5 injured in past	No victims since 2000, or since demining	Medium	Medium
Beer Ahmed	Pasture, agriculture	Pasture, rainfed agriculture (but little capacity to rehabilitate), firewood, housing (but not for the community) and road to administrative centre.	None recent. None past	Past victims were met in village No victims since 2000, or since demining	Medium	Medium
Al-Mas'abain	Pasture, agriculture, road.	Pasture and road to administrative centre, land for housing development. But ownership of agricultural land is disputed.	None recent. None past	No victims since 2000, or since demining	Low	Medium
Al-Khadad	Pasture, road.	Irrigated land, pasture, firewood. Road mentioned by children	None recent. 6 injured in past	No victims since demining	Low	Medium
Al-Jarba	Housing	Housing development, but for the university not the community. Road.	2 recent injured; 2 injured in past	No victims since demining	Medium	Low
Beer Naser	Pasture, agriculture, firewood, housing, road.	Road, pasture, water company benefited from secure water supplies, housing development, but disputed with villagers.	None recent. 1 killed, 1 injured in past	More victims were reported from the past No victims since demining	Medium	Medium
Ofeini	Pasture, agriculture, trees	Migratory pasture, firewood. Also beekeeping. Rainfed agriculture only when sufficient rainfall.	None recent. None past	No victims since 2000, or since demining	Low	Low
Habeel Al-Braq	Pasture, firewood	Pasture, stone cutting, cement factory and local paths.	None recent; 1 killed in past	No victims since 2000, or since demining	Low	Medium
Amsara	Trees, pasture.	Rainfed land, pasture, water harvesting, firewood	None recent; 2 killed in past	No victims since 2000, or since demining	Low	Medium

E. Advice on enhancements to YEMAC's processes for survey, clearance, awareness/education and survivor support and advocacy, and for their M&E system

E.1 Monitoring and evaluation in YEMAC

Effective monitoring and evaluation (M&E) systems are essential for programme accountability and quality assurance, and for assessing the value of outcomes and impact against the resources and money invested. But equally, they are fundamental to learning about processes and problems and hence to improving performance. The relationship between planned activities, the necessary inputs to achieve them, the immediate outputs and longer term outcomes and impacts, can be conceived as a “chain of results” in which lower level activities contribute to higher level goals and impacts. M&E systems assist organisations to track these relationships and assess their success against their goals and objectives and performance standards set. The emphasis of this study was on field assessment of the impact of mine action, and therefore a detailed review of YEMAC's M&E and data management systems was not attempted. However, some observations are included below.

The overall mission of the National Mine Action Strategy 2004-2009 is to put an end to suffering of the people and the casualties caused by anti-personnel mines in mine affected areas by end of March 2009. The elements of YEMAC's programme include survey and clearance, awareness and community education, survivor support and advocacy. The major expenditure is on survey and clearance and it is in this area that YEMAC's monitoring and evaluation systems are most developed. When the monitoring and evaluation department began in 2002, its first task was to ensure proper organisation, tracking and accountability in relation to the programme resources, particularly equipment. Following this, efforts were made to establish systems for the regular (6 monthly) technical monitoring of teams undertaking field operations, in particular, the technical survey, clearance and dog clearance teams. Using questionnaire formats developed from UN standard operating procedures, the field teams are regularly monitored at the activity and output level. Specific questionnaires are used for different teams, and include a section for assigning a performance score, space for observations, report of corrective action and feedback from those reviewed. The efficiency of the clearance teams' operations is assessed in terms of areas cleared per day, numbers of mines and UXO cleared and destroyed. In addition, the questions pay close attention to issues of team management, planning and communication, supervision and quality control, and health and safety.

In addition, mine risk education activities are monitored annually at governorate level. The questionnaire covers the types of training given, the numbers of men, women and children trained, the preparation and management of the training, the clarity and accuracy of content, training skills and use of materials and whether the training goals were achieved.

The Survivor Assistance programme has had its first two monitoring visits carried out, focusing on the victim support programme. A draft questionnaire is under preparation, but not yet formally approved.

It was not clear whether the data from the different areas of monitoring were structured in a data base in such a way to allow cross comparisons, nor how data on casualties reported since 2000 are handled in the data base.

Information from the monitoring questionnaires is summarised, together with the analysis of reasons for good or poor performance and progress. The main findings and recommendations are passed to the director for decision and action. Reports are produced for the annual planning meeting and the quarterly mine action committee meetings at which targets are compared to achievements.

Annual operational targets are set, mainly at the output level, for example, the number of square metres to be cleared, the numbers of workshops on mine risk education and the planned provision of medical support to land mine survivors.

E.2 M&E in relation to communities

What is striking is that the monitoring questionnaires explore in detail and assess the technical efficiency and effectiveness of the team's operations, but make little or no reference to the social context of the user community or surrounding population. The land mine impact survey (LIS), 1999, is the main source of information provided from the communities on their experience with mines. Our current study selected villages according to some of the main parameters from the LIS and used some of the information as the 'baseline' against which post clearance impacts are assessed (Table 10).

However, it is unclear what interaction the technical survey and clearance teams have with the community or any specific sections within it, such as herders, women, children, etc. There do not appear to be systematic mechanisms for ensuring that community feedback is elicited and recorded – at least, not as part of regular monitoring arrangements. The clearance team monitoring questionnaire asks whether people on site know there will be an explosion of a mine and that all the people are within the safe area during the explosion of the mine. It does not specify whether 'people' refers to both the mine clearance team and their support personnel or includes the local community, passers by etc. There are no questions which examine how this information is communicated.

The questionnaire dealing with the clearance teams' camps asks whether the leader visits local authorities regularly and whether health personnel attached to the team extend medical services to local villagers.

There are no ongoing procedures for asking and recording information on the ownership status of assets and the intended use of demined land. This is important as in some cases demining can exacerbate community conflict by releasing contested assets.

E.3 Assessing outcomes and impact

YEMAC appears to have successfully established procedures to monitor and evaluate the technical processes and outputs of mine action. However, the level of outcomes and impacts is still to be articulated. There are no specified outcome or impact targets against which the programme can be evaluated.

The focus of the current study has been on outcomes and impacts of the programme. That is, it is less concerned with issues of the effectiveness and efficiency of the mine action work, albeit important, than with the *consequences* of the actions and the changes brought about for the communities affected. It considers such questions as:

- Has cleared land and other blocked assets actually been brought into use and by whom?
- Have behaviour and incidences of mine related accidents changed following awareness campaigns and demining?
- At the impact level, has the increase utilisation of previously mine affected assets actually had an impact on people's livelihoods (e.g. widened opportunities, generated more income and employment, increased security)?

Attribution of outcomes and impacts to specific mine action interventions is difficult because of the intervening factors which affect the utilisation and benefits from freed assets. It is recognised that there is a complex relationship between awareness raising within communities and ensuring safety. Some people do not receive information, through absence or because information is not passed on (e.g. from men to women; from the centre of the village to outlying settlements). There is a range of motives and reasons which contribute to accidents, e.g. some people are forced by poverty and pressing need to take risks. Monitoring of the education and awareness programme mainly tracks the delivery of services rather than outcomes in terms of changes in behaviour. However, YEMAC does collect the important information on accident rates pre- and post-awareness campaigns. Thus, accident rates are one of the main indicators of impact of the mine action programme.

In relation to the first evaluation criterion – whether cleared assets are actually being used by the community – the reasons for limited use in many cases related to lack of clear information. The stage of handing over of cleared assets to the community appears to be particularly weak. YEMAC information suggests this is done in a 'formal ceremony', yet no reports of such an event were recorded during village discussions.

E.4 Recommendations

The experience of this study was that people in villages were readily able to articulate their fears and concerns about the mine risks, and to comment on the activities and performance of the survey and demining teams. The need for good communication skills within the teams is clear – it is not necessarily the same individuals who are responsible for the technical management of demining who should handle sensitive discussions with villagers. It is important to create an interview context in which feedback will be freely given to the teams.

Recommendations 16 -

- **YEMAC to reinforce understanding across all its programme areas of the importance of learning from feedback, specifically to encourage greater interaction with communities throughout all mine action processes. Records should be kept of all interactions with the community, covering:**
 - **Consultation with communities and local leaders over locations of landmines and UXO**
 - **Participation of communities during demining – records of information shared and to whom**
 - **Feedback of communities from education and awareness building activities.**
 - **Feedback on progress and experience of survivors.**
 - **A separate file should be kept for each village recording all stages of the awareness/clearance/handover processes. The file would also record feedback from the community, and performance against Quality Assurance indicators.**
 - **Criteria for community and gender balanced interaction need to be incorporated into monitoring forms.**
- **YEMAC to incorporate the collection of information on outcomes and impacts from mine action into its monitoring system. The first step is to develop a set of indicators which reflect communities' criteria of impact from mine action, including potential negative impacts. These could be subdivided according to different social groups, differentiated for women, men and children. Information on these indicators should be collected on an annual basis from a sample of communities.**
- **Prior to demining, YEMAC to undertake an assessment of potential development plans through participatory consultation with the community, both for the released assets and for the sustainable livelihoods of the village more generally. This should be consistent with national and local planning processes. It should incorporate careful investigation of the ownership of the mined areas, specifically where ownership is contested. This should be clarified by the village, together with agreement on how the unblocked assets will be allocated. Communities should be encouraged, wherever possible, to allocate resources to victims, landless and marginal groups.**
- **Questions relating to the handover process of cleared assets to the community should be a required part of the monitoring procedures, covering issues of participation of different groups (including women and children) and the nature of the physical demonstration of the safety of the cleared areas.**

F. Estimated costs and economic returns of clearance and release

The full figures on costs of mine clearance for all 25 communities visited were given in the last columns of Table 3. YEMAC calculated the estimated costs of landmine clearance on the basis of US\$ 1.4 per sq m of minefield cleared and the costs of land release on the basis of US\$ 0.072 per sq m of minefield released (although these may represent incremental costs only).

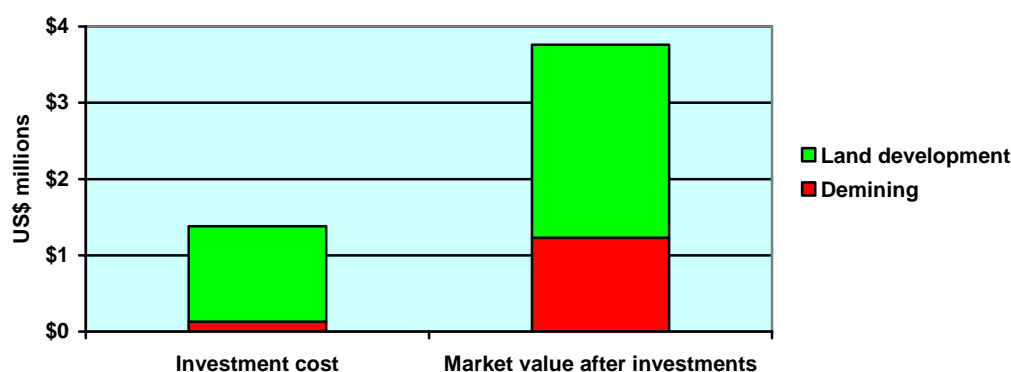
F.1 Cost-Benefit Analysis²⁸

While the survey was not designed to provide a complete accounting of the economic benefits accruing from mine action, we have obtained sufficient data to perform some very useful analyses of costs and benefits in some communities. Because the communities were not selected randomly, we cannot extrapolate from these illustrative cases to generate an estimate of the total economic benefits stemming from the mine action programme in Yemen, but it is clear from these few examples that the economic benefits are very substantial and, in total, exceed the cost of demining.

The most straightforward example is from Al-Jafinah, in Sana'a Governorate where an investment in demining of about \$125,000 led to an increase in the market value of the land of \$1,225,000. It also created the opportunity for follow-on investments in the range of \$1.25 to \$1.7 million to develop the land for crops (qat and grapes). These follow-on investments led to a further increase of \$2.53 million in the market value of the land (Table 11).

Figure 4 – Creating value and Opportunity in Al Jafinah Community

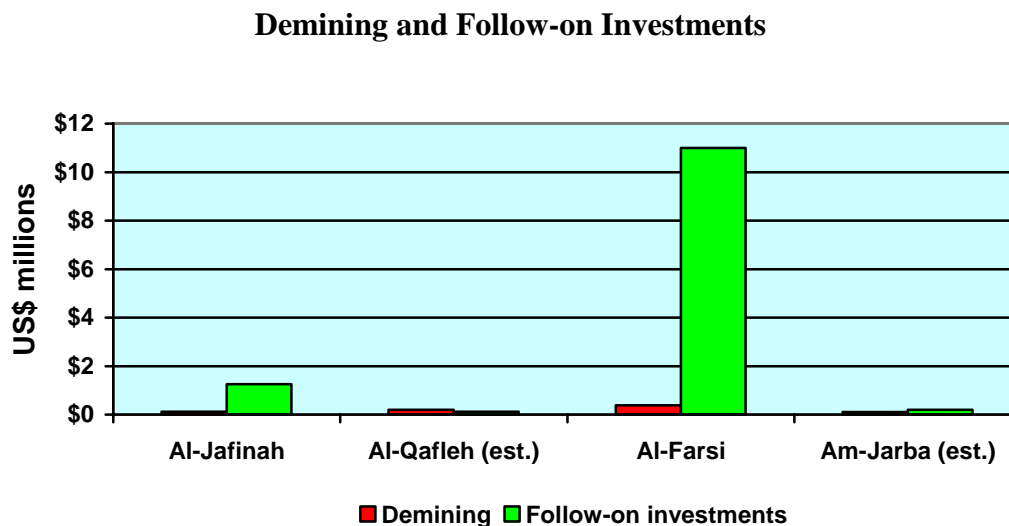
Creating value and Opportunity in Al Jafinah Community.



²⁸ From calculations by Ted Paterson based on data obtained during the survey. Details on the calculations and assumptions are obtainable from him at t.paterson@gichd.ch.

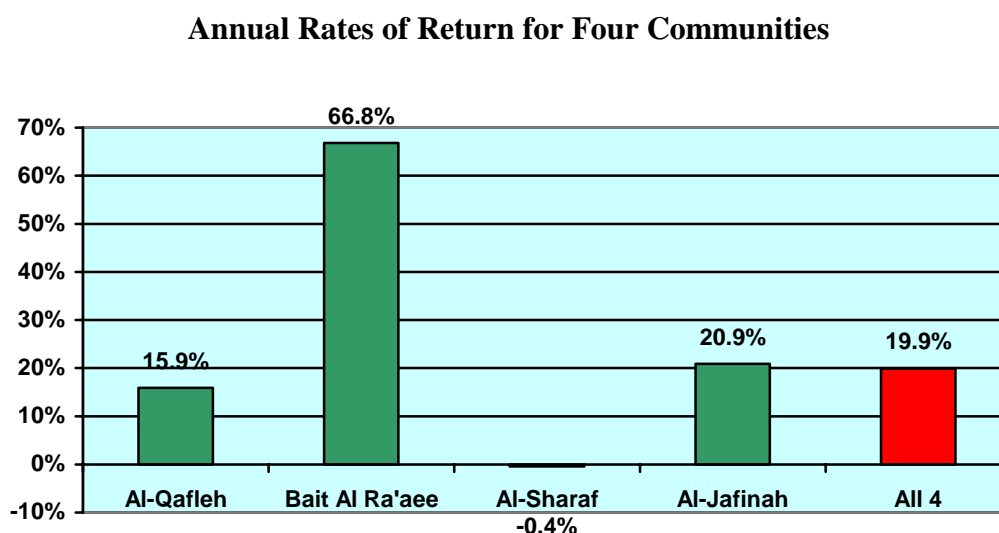
Demining created opportunities for follow-on investments in housing and land improvements for agriculture in a number of other communities, as illustrated below in Table 12.

Figure 5 – Demining and Follow-on Investment



The economic returns from demining (either alone or in combination with follow-on investments) vary widely among communities, but in some cases are extremely high. A convenient way of summarising the economic benefits is to calculate the internal rate of return (IRR – roughly equivalent to the annual rate of interest earned on an investment). We have been able to calculate IRRs for four communities. The results range from 66.8% to minus 0.4% (weighted average of 19.9%), as shown in Table 13.

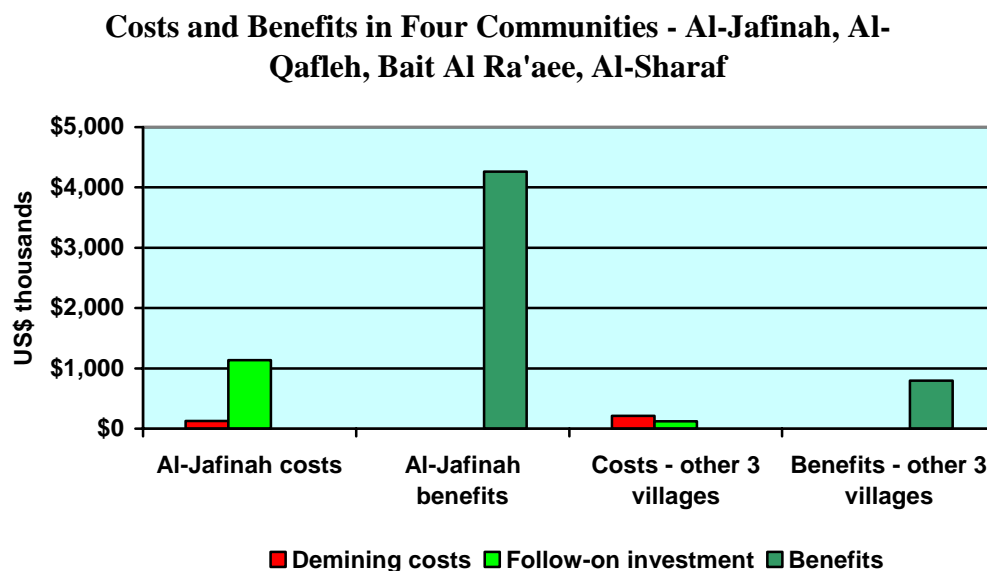
Figure 6 – Annual Rate of Return for Four Communities



These are very solid rates of return, and it must be emphasised that they represent only a partial accounting of the benefits stemming from demining – for example, they do not include the important benefits of (i) reduced landmine deaths and injuries and (ii) an enhanced sense of security for residents in these communities.

The size of the costs and benefits also varied significantly among communities. Of the four communities for which we were able to do a full cost-benefit analysis, the benefits were particularly large in Al-Jafinah, as depicted below.

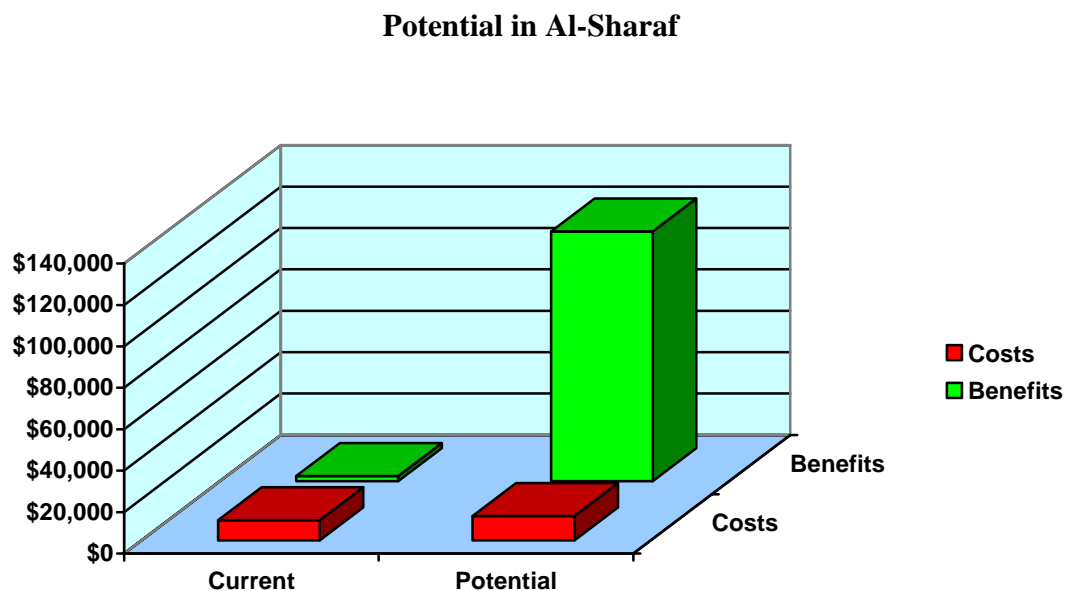
Figure 7 – Cost and Benefits in Four Communities – Al- Jafinah, Al- Qafleh, Bait Al Ra'ae, Al-Sharaf



The net economic benefits (i.e. after deducting the costs of demining and the follow-on investments) accruing from these four communities amount to almost \$3.5 million. This represents about 41% of total demining costs for the 25 communities included in the survey (the cost of demining those four communities was only about 4% of the total demining costs for all communities surveyed). Based on this very partial accounting, the total benefits stemming from Yemen's demining programme almost certainly exceed the costs by a wide margin.

This does not mean that demining has proved to be a good economic investment in each community. In some cases, the areas released by demining are not particularly productive and demining is motivated more by safety concerns and by Yemen's obligations under the Anti-personnel Mine Ban Treaty. In other cases, economic benefits have not been realised because the residents in the community are still afraid to make best use of the land. Further confidence building measures could pay significant dividends in such cases. This is illustrated in Table 15 below for Al-Sharaf, where assistance with a first cultivation of the demined land might provide a convincing demonstration that it is safe to use for growing crops.

Figure 8 – Potential in Al-Sharaf



Note on methodology – Standard cost-benefit approaches were used. Present values for both costs and benefits were calculated for a 15 year period based on a discount rate of 10%. Land was assumed to retain its value in real terms. Where current market values for land were reported, this figure was used; otherwise, today’s market value is assumed to be 5 times the net present value of the income flows associated with that land (the comparable market value figure for Al-Jafinah, where we have data on both the market value and income streams, is 7 times the discounted income flows).

Notes on the cases

Al-Jafinah (Sana’a governorate): 30 families have benefited from cultivating approximately 5,000 libna (approximately 22 hectares of cleared land). The value of the land before demining was 25,000\$ but after demining it increased to \$1.25 million before development, while the value of developed land was around \$3.75 million. The estimated net income from growing grapes and qat on this land is around \$75,000 per year. This compares to the combined landmine clearance and land release costs of \$125,234. Thus the cost of clearance and land release could be said to be recouped after 2 years.

Al-Sharaf (Dhamar governorate): All 7 families in Al-Sharaf have benefited from using the cleared land (around 25% of the total village cultivable land) for grazing their animals. They also collect stones from the land for house construction. Two small areas, formerly the site of the army camp, are cultivated by two households, with an estimated gross value of food crop production of approximately 54,000 YR or US\$276. If the community could (by itself or with help from YEMAC) overcome their fear of cultivating the rest of the cleared land, the annual

gross income from crops alone could potentially be around 2,700,000 YR or US\$13,776, compared with costs of clearance of US\$9,667.

Bait Al-Ra'ae (Ibb governorate): The net revenue from cutting stone is considerable (960,000YR per year), and has been of benefit to the majority of households in the village. This revenue compares to the estimated cost of landmine clearance and release of US\$7521 (1.47 million YR). This again suggests that two years revenue from stone cutting would pay for the combined clearance and land release costs.

Al-Qafleh (Al Dhale governorate): Since the access roads have been made safe, 20 terraces of qat have been established, with a net income of about 7 million YR per year. This compares with an estimated landmine clearance and release cost of US\$196,007 (38.4 million YR), which suggests that the total cost of clearance and land release would be covered by 5-6 years of good qat crops.

Al-Farsi (Aden governorate): The main beneficiary of clearance, is a large housing estate (2,600 houses) under construction for the Aden Refinery Company, with an estimated value of \$US11 million. This compares with an estimated landmine clearance and land release cost of US\$382,994, which is only 3.5% of the value of the completed houses and facilities. Without landmine clearance the houses could not have been built.

Am-Jarba (Lahij governorate): The minefield was in the middle of an urban area. After demining in 2005, people started utilizing the area for building houses, as a road, a playground and for herding animals. The land is privately owned, and the landlords have plans for building houses, with a rental value of 3 million YR per year. This can be compared to the landmine clearance and land release costs of US\$104,085 (20.4 million YR), suggesting that the costs would be covered after about 7 years.

Conclusions and Recommendations

This section brings together the conclusions and recommendations from all other sections, and then provides suggestions on how YEMAC and donors could use the study to benefit communities. These recommendations were discussed at a stakeholders' workshop in November 2006 and will be used as the basis for developing a detailed plan for the development of landmine-affected villages and the upgrading of YEMAC procedures.

Overall conclusions and recommendations

- This is the first survey that looks at both social and economic impacts of demining, and at developmental opportunities for cleared assets and landmine-affected communities. The survey was successful in identifying the impacts of demining and developmental opportunities in 25 communities (a 4% sample of all landmine-affected villages in Yemen and 17% of cleared villages) in 7 governorates (but not in the far north, the far west or the east of the country).
- The survey teams built up a strong relationship with the communities in the short time that they stayed in the villages. Community members gave freely of their time, ideas and hospitality. The presence of the survey teams and their questions will have raised community expectations that some action will follow to benefit the communities.
- Beneficiaries of the land and other assets freed by demining can be local farming, nomad or fishing families, building developers, private speculators or immigrants to the area, and government or para-statal bodies, (e.g. Aden Refinery Company, Aden Free Zone...). In some instances a community's interests can be damaged by assets being taken away from them by these external institutions.
- **There have been no fatal incidents in the survey villages since clearance.** Even so about half of all communities are still not using freed assets to their full potential because of perceived danger.
- The full cost of landmine clearance and land release is matched in most communities in the first few years by economic benefits that are a direct result of freeing up of assets by demining.

Recommendation 1

- **YEMAC is a focussed organisation that is acclaimed for its effectiveness in mine clearance, awareness raising and survivor support. However, it is not set up to carry out natural resource rehabilitation or social development. To implement the recommendations made in this report it would need to build that capability within YEMAC, or commission it from elsewhere. If it is to do the latter, at least one development specialist would need to be recruited into YEMAC who understands the issues and is able to monitor the programme effectively.**
- **The next stage of the process of rehabilitation of assets and development of landmine-affected communities should concentrate on the prioritisation of opportunities by social group, with quantified benefits, contributions, budgets and timetables.**

- **The report provides a good basis for approaching in-country and external organisations for funds to support the rehabilitation of assets, landmine/UXO survivors and the overall development priorities of communities within local council guidelines.**

A. Impact of awareness raising, demining and care for survivors

There is considerable variation between villages, in terms of their size, remoteness, infrastructure and services, educational and medical facilities, leadership, local institutions, occupations, topography, vegetation, land and livestock ownership and land use. Some villages are almost totally dependent on agriculture, while others have over 50% salaried employees (the major divide is between highland/mid-altitude villages and those in Aden/Lahij, which have a more urban character).

Recommendation 2

Based on the methodology of the current study adopt a system of socially-differentiated, gender-sensitive impact assessment of demined areas and integrate it into joint work plans and the information system.

A major factor in changing community perceptions of mine risks will be improving their knowledge of the demining process and its outputs. Awareness of the status of clearance by community members is patchy. In some cases communication between demining teams and the community has been good, but in other cases has been confined to formal meetings with village leaders, leaving others in the community unsure or even unaware of the situation. In some places there is distrust of the safety of cleared land, particularly for cultivation purposes. In some reportedly cleared communities, there is still ongoing active clearance of minefields.

Recommendations -

- **There should be dialogue with all sections of the community from the start of clearance through to final handover, with particular emphasis on actively demonstrating that specific areas are cleared. Community liaison volunteers (men, women and children who are selected by the community and paid a small honorarium for ensuring good two way communication between YEMAC teams and all members of the community) should be identified at the start of clearance and kept informed/involved in all the work of the teams, including handover of cleared land. As part of the required procedures for monitoring the work of the YEMAC clearance teams, records should be kept of team interactions with the community throughout demining, with specific details of the handover process of cleared assets and any demonstrations of safety (also see Section E, below).**
- **Community concerns about the safety of land for cultivation need to be recognised and addressed. Where necessary, local people should be contracted and paid by YEMAC to carry out first cultivation by appropriate methods to demonstrate the safety of arable land where this is in doubt.**

A lot of cleared land is now available to the whole community for grazing, fuel wood and fodder collection. This has had a major social impact, as livestock ownership varies between 5% to 100% of households, wood is still the main source of fuel in rural areas, and fodder is seasonally important in livestock keeping systems. The economic value of grazing, fuel wood and fodder can be considerable to the village.

Recommendations -

- **There is a need to ensure good land management practices for grazing, the use of fuel wood, water harvesting and quarrying of stone. In some cases these can be based on traditional land management systems such as “Hema”, and enforced through local bye-laws.**
- **Military camps on or near grazing lands should be relocated where practically possible as they disturb grazing and fuel wood collection by women and children**

The different roles and responsibilities of men, women and children need to be taken into account at all stages of interaction with communities concerning mines. Responses from women’s groups reveal the extent of their at-risk behaviour linked to their roles in the household. There are opportunities for women’s and girls’ interests to be better addressed in YEMAC work through enhancing their participation and access to information. The survey and clearance process did not systematically interact with women, nor was post-clearance information systematically passed on to them. The process of signing-off by local council leaders was not mentioned by the women consulted. Information sharing has not been adequate to inform or convince women that their area has been rendered safe.

Recommendations -

- **More specific gender related procedures addressing the UN Gender guidelines are needed at all stages of YEMAC’s work, but most urgently to ensure the participation of women in the post clearance handover process. This is most crucial to encouraging the maximum use of cleared assets and reducing fear.**
- **YEMAC should continue to encourage greater involvement of women and girls in MRE and awareness campaigns by recruiting more women’s awareness teams and by extending the house-to-house approach.**

Stone for building is a considerable economic asset to some communities. Land clearance has made this asset safely available. Crop production is now carried out on cleared hillsides and on wadi land with considerable direct impact on land-owning community members, and indirect benefits to those who provide labour or services to landowners. In some villages, terraces that were under cultivation before mining have not been brought back into cultivation due to concerns over their safety. Hence the recommendation above of assisting with first cultivation. In other places, new terraces are being established in newly cleared land – often for grapes or qat. In the south, there are problems over land ownership, with powerful influences (private

individuals, parastatals such as the Aden Free Zone, and government departments) annexing land for their own use. In some places the value of land has gone up 50-fold following clearance, with a further three-fold increase after the land is planted to a high value crop such as qat or grapes.

Recommendation - The expropriation of land by private and government interests should be addressed. YEMAC procedures should ensure the participation of communities in decisions about land distribution and use from the start of the de-mining process.

Bee-keeping is popular in some communities and brings in a good income.

Recommendation - Modern bar hives should be introduced to improve yields and ease the extraction of honey.

Roads and paths have been cleared to the benefit of the community, although there are some roads – often outside the immediate vicinity of the village – that have still to be cleared. These may not have been recorded in the village based mine survey work.

Recommendation - Clearance priorities should be identified with communities. Teams should operate within village boundaries. Where “linear contamination” (landmines between villages) is a problem, then this should be fed back to YEMAC programme planning. However, it is acknowledged that this will only be dealt with in exceptional circumstances because of resource limitations.

The clearance of land has made possible the construction of housing and other buildings by local people and outside private/government interests. In the south, this has led to considerable loss of community assets, such as grazing or arable land.

Recommendation - Local councils should be encouraged to ensure that planning of construction on cleared land should include the views of local residents

Land clearance has made playing and sport safer for children.

Recommendation - Permanent play/sport areas should be designated for children

The Yemen Landmine/UXO Victim Assistance Programme was praised by the Mid-Term Review of YEMAC for its medical and rehabilitation work with survivors. However, apart from a limited number of shining examples of survivors being supported to live fulfilling lives, this survey found that few survivors had heard of the Programme or were receiving assistance from it²⁹. This suggests that there needs to be greater awareness created of the Programme and its work, and greater donor/government support for the Programme so that it can respond to the demands that would result from such an awareness creation activity.

²⁹ YEMAC is working with the Ministry of Social Affairs to register all the survivors.

Recommendations -

- **An inventory be made of all survivors and the development of clear guidelines on their eligibility for support from various sources**
- **Survivors are made aware of the services available**
- **Medical care (physical and mental) is available for all survivors, regardless of when the landmine or UXO accident happened - including support with transport and other costs incurred by survivors when they attend hospital**
- **Continue and expand the provision of support for survivors to start their own small businesses and be independent of external assistance**
- **In needy situations, assistance be given to the families of survivors who have difficulty caring for them.**
- **Revise the existing eligibility rules of the Victim Assistance Programme to ensure that different categories of survivors and types of disability can be included.**

B. Development opportunities for landmine-affected communities

Successful development depends on good leadership. Leadership in the villages, particularly in the north, is very autocratic and of variable quality and effectiveness. The capacity of the community to plan and implement development projects is limited, although a few communities have successful community welfare organisations. There is poor capacity at village level to develop budgeted, time-bound business plans for development opportunities

Recommendations -

- **Give priority to demined lands and to the communities affiliated to these lands during the preparation of development plans, with emphasis on the comparative advantage and unique situation of each community.**
- **Revive the role of current Civil Society Organizations (including community welfare associations) in the communities where land was demined and promote the formulation of new organizations**
- **Promote investment in the demined areas**
- **Promote sustainable development initiatives through capacity building of local leaders (M&F), and of local communities, in planning and implementation of developmental community-based initiatives.**

There is considerable potential to increase the productivity of the **land-based assets freed by clearance**. Some possibilities have been mentioned in the previous section, and additional ones are listed below:

- Installation of water storage for drinking water and supplementary irrigation

- Soil and water conservation (particularly for wadi banks where flooding occurs)
- Training local individuals identified by the community as para-vets
- Establishment of terraces for the poorer members of the community who cant afford the capital investment involved
- Provision of agricultural extension advice on soil fertility management, pests and disease management, crop, livestock and fodder husbandry, honey production, woodlots etc
- Provision of advice on the storage, processing and marketing of agricultural and handicraft products for men and women

The development of the **whole** community has been blighted by the fear and restrictions caused by these munitions. Where the circumstances merit investment and meet government guidelines, it is therefore legitimate to consider the requests by communities for general development initiatives, such as:

- Educational and medical facilities
- Boreholes and wells for drinking water and irrigation
- Sewerage facilities
- Fishing equipment and processing plant
- Farmer/fishermen associations/cooperatives

Recommendation - Communities should be involved in the identification of development priorities, using this report as a starting point. The development of sustainable local capacity should proceed hand in hand with tangible development initiatives that benefit the whole community (within District plans and government guidelines).

Women, men and children have different development priorities

Recommendation - The priorities of each group should be identified separately, and priorities of women, men and children should be addressed.

C. Capacity development of YEMAC staff

YEMAC staff received a short, but intensive, training in participatory approaches and methods, and over the three weeks of the survey became competent in their application. Several staff grasped the concepts and the practice well, and would be able to plan and conduct similar surveys in the future – especially if a local development specialist supported them. The methods used were appropriate to the cultural conditions and were effective in understanding the impacts of landmine clearance on men, women and children.

Recommendations –

- **Women should form part of future survey teams, as the views of women and girls are vital to the full understanding of community situations**
- **The methods used in any future survey should depend on the objectives of that survey, building-on, and adapting, the methods used here.**

- **Further studies should be carried out on a proportion of cleared communities by YEMAC staff supported by a social scientist and women surveyors. These studies would have three purposes: a) the learning of lessons by YEMAC so that procedures can be further improved; b) the documentation of experiences and achievements to inform interested national and international audiences; c) to provide the basis for development initiatives.**

D. The Landmine Impact Survey

The findings of the current study lend support to the LIS impact scoring method as a rapid method to assess a country's landmine problem and priorities for action. Although the outcomes calculated by the method used here are not completely consistent with the impact scenarios of the LIS, they are closely linked. The survey has highlighted the importance of certain blocked assets such as building stone which is a major source of income from mountain areas in highlands, yet does not feature in the scoring.

Recommendations – Points to consider in future development of the LIS methods are the potential for:

- **Adapting the weighting according to the importance of the affected assets for people's livelihoods in different regions.**
- **Including in the land mine impact scores a measure of adaptation to the blocking of assets through exploring the community strategies for dealing with the situation**
- **Including an assessment of the ownership rights over assets which affect the likelihood of equitable access or conflict after clearance is complete.**

E. Advice on enhancements to YEMAC's processes for survey, clearance, awareness/education and survivor support and advocacy, and for their M&E system

Recommendations –

- **YEMAC to reinforce understanding across all its programme areas of the importance of learning from feedback, specifically to encourage greater interaction with communities throughout all mine action processes. Records should be kept of all interactions with the community, covering:**
 - **Consultation with communities and local leaders over locations of landmines and UXO**

- **Participation of communities during demining – records of information shared and to whom**
- **Feedback of communities from education and awareness building activities.**
- **Feedback on progress and experience of survivors.**
- **A separate file should be kept for each village recording all stages of the awareness/clearance/handover processes. The file would also record feedback from the community, and performance against Quality Assurance indicators.**
- **Criteria for community and gender balanced interaction need to be incorporated into monitoring forms.**
- **YEMAC to incorporate the collection of information on outcomes and impacts from mine action into its monitoring system. The first step is to develop a set of indicators which reflect communities' criteria of impact from mine action, including potential negative impacts. These could be subdivided according to different social groups, differentiated for women, men and children. Information on these indicators should be collected on an annual basis from a sample of communities.**
- **Prior to demining, YEMAC to undertake an assessment of potential development plans through participatory consultation with the community, both for the released assets and for the sustainable livelihoods of the village more generally. This should be consistent with national and local planning processes. It should incorporate careful investigation of the ownership of the mined areas, specifically where ownership is contested. This should be clarified by the village, together with agreement on how the unblocked assets will be allocated. Communities should be encouraged, wherever possible, to allocate resources to victims, landless and marginal groups.**
- **Questions relating to the handover process of cleared assets to the community should be a required part of the monitoring procedures, covering issues of participation of different groups (including women and children) and the nature of the physical demonstration of the safety of the cleared areas.**

F. Comparison of the costs of clearance and land release with the economic returns to landmine clearance

Community level data was used analyse costs and benefits. Investment in demining increased the market value of the land and created opportunities for follow-on investments in land improvements and housing. The economic returns from demining vary widely among communities, but in some cases are extremely high. In addition, it must be emphasised that they represent only a partial accounting of the benefits stemming from demining – for example, they do not include the important benefits of (i) reduced landmine deaths and injuries and (ii) an enhanced sense of security for residents in these communities.

Demining did not prove to be a good economic investment in every community, especially where the residents are still afraid to make best use of the land. **Further confidence building measures could pay significant dividends in such cases.**

Based on this very partial accounting, the total benefits stemming from Yemen's demining programme almost certainly exceed the costs by a wide margin.

Indicators of achievement and the way forward

The Table below summarises the indicators of achievement of YEMAC's core objectives, and some of the requirements for their effective realisation in tangible terms.

Table 11 - Indicators of achievement and requirements for effective development

INDICATORS OF ACHIEVEMENT OF YEMAC OBJECTIVES	REQUIREMENTS FOR EFFECTIVE REHABILITATION/DEVELOPMENT
Reduction in the numbers of mine accidents and loss of human and animal life.	Both demining and mine awareness education needed.
Demined land brought back into productive agricultural use.	For sustainable use, requires that access rights are clear and uncontested and owners are sufficiently confident to use land. Feelings of security would be enhanced with more information on cleared areas
Productive output and income from cleared agricultural land, both irrigated and rainfed, for different crops	Depends on resources for rehabilitation of land, adequate water supply, inputs and markets.
Use of cleared grazing areas Value of fodder and firewood collected	Increased livestock productivity depends on wider grazing management. Unless common areas are managed there may not be any benefit under an open access system
Value of stone cut	Benefits depend on land ownership and access rights.
Investment in new housing on demined land	Benefits depend on land ownership and access rights and local power relations. Could result in negative impact through loss of common pool resources.
Clearance of mined roads, leading to reduced transport cost and travel time; access to coast and fishing; improved market and social access	Clearance teams work outside the immediate village area



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Appendix 1. Pen sketches of individual villages

There follows a sample of illustrative case study villages (one for each of the seven Governorates surveyed) to demonstrate the range of circumstances under which landmine clearance has taken place, the socio-economic impacts achieved, the developmental potential and the situation of some of the survivors.

Bait 'Oqab (Sana'a governorate)

Bait 'Oqab is an *Uzla* located in Khawlan District, Sana'a Governorate. The village is very old, having been established at least 1200 years ago. There are about 7000 inhabitants, of which about 80% are land-owners and 20% landless. Many find it difficult to make sufficient money from the land alone, and about 15% are also government employees. Although only 30 minutes from Sana'a by road, the area is rural, and many activities of the local community are related to agriculture with the production of cereals and pulses under rainfed conditions, and qat, grapes and vegetables under irrigation. The prevailing drought has led to a reduction of irrigated crops, and a high cost of water. Many wells are dry and farmers cannot afford to drill wells to the depth required. The village was classified as medium impact in the LIS.

The history of land mines in the area goes back to the early sixties, and is associated with the civil war during the presence of the Egyptian forces. Over 1 million m² of land mines were laid on the hill slopes overlooking the wadis where agricultural production is practiced. These hill slopes were sites for the grazing of animals, fuel wood collection, the collection of building stone and the harvesting of water for crops. Paths also crossed the hills to neighbouring farms and villages. With the land mines all of these activities were severely reduced for some 40 years, instilling a great sense of caution into at least two generations. The combined cost of landmine clearance and land release for the 100 hectares of mined land was \$360,000.

Since demining the feeling of security is returning, and with it the various activities described. The hillsides are being used again for grazing, firewood collection and stone collection. However, caution still prevails. One road is still mined with anti-tank mines (Nagd Al-Salaf).



Building new terraces in demined land in Bait 'Oqab

Three major problems exist with the demined land:

1. Deterioration of range lands as a result of overgrazing and over cutting of shrubs and trees. Local suggestions to address this are to revive the traditional range management practices (*Hema*), increase awareness of the dangers of overgrazing, and to organise planting of trees and forages into the rangeland.
2. Limited numbers and low productivity of livestock in the area. Establishing a veterinary unit, or training paravets would help, as would better training of livestock keepers and the slaughter of unproductive animals.
3. New terraces are being established on demined land by the better-off farmers. Funds are needed to assist the community to make terraces and sink boreholes to benefit the poorer and landless members of the community.

Schooling in the village is inadequate, and there is a need for separate schooling to reduce drop outs among female students.

There is a social welfare organisation in the village. This is "Asad Al-Kamel", which is very active and highly praised by the community because of its genuine services to the needy in the community. The main resource of the charity is the monthly fees from community members. This charity could be used to channel government or donor funds to the needy in the community.

Case study of Hasan Ali Saleh Al-Kol (resident of Bait 'Oqab)



Hasan Al-Kol was lost one of his legs to a mine accident in the 1960s. An artificial leg was provided in Egypt, which was later replaced locally by another leg which proved unsuitable. Mr. Hasan now uses a stick to support his movement. Although he farms and is quite well-off, Mr. Hasan is interested in other project opportunities to enrich his life. He has had no contact with the Yemen Landmine Survivors Association.

Al-Sharaf Community

Wesab Al A'ali, Dhamar Governorate

Al-Sharaf is a very small village with only seven families and around 140 inhabitants, located in a remote high mountainous area, about four km from Wesab Al A'ali. The area was originally mined because an army camp was positioned on the village land during the early 1980s. The village was classified as medium impact in the LIS. Demining took place in 2004, and there have been no mine related accidents since then.

Before mines were laid, agriculture was the main source of income for the local community *"...we used to cultivate all the land around the village growing sorghum, barley, fenugreek, mustard, peas, and broad beans. We had enough for our needs"*. The main assets affected by mine laying were cultivated lands, estimated at more than 25% of the village total. Some paths to cultivated areas and grazing were also affected. After the mines were laid, alternative sources of income had to be found; local people migrated to Saudi Arabia and to major urban centres in the country. Many returned to the area after the Gulf War in the early 1990s. Currently the local economy depends on wage labour outside the village and some petty trading (mainly by men), cultivation of crops and livestock raising (mainly by women and children). Cereal production is insufficient to cover household needs and the economic returns from agriculture are minimal. The families' situation is one of general poverty.

The village has few services and no active associations or organisations. There is a secondary school in Wesab Al-A'ali, but the primary school is very distant. The water supply is located far away and requires a two hour round trip on foot. There is no electricity connection or telephone in the village. There are no government employees.

The community acknowledged the significant support of YEMAC in demining activities. They said that the benefits from demining have been the greater utilisation of and access to grazing land. They are also feeling more secure because there have been no mine explosions since demining. In addition, they have benefited from stone collection for house construction and terraces. However, they are still not sufficiently confident to cultivate the land as they believe there are mines deep in the soil. The only areas cultivated since demining were two small plots of sorghum planted this year on the actual site of the former army camp.



Sorghum plot on former army camp site



Fear of deep mines prevents cultivation

Suggestions for the future were, firstly, for demining of the remaining mined area and the need for further information on the already cleared area and mine awareness campaigns. Women suggested rehabilitation of the land which after 20 years without cultivation has suffered erosion and damage to the terraces, resulting in poor water infiltration and limited grass growth. The community suggested the construction of small dams for harvesting rainfall, as the scarcity of water and limited rainfall are the major constraints on cultivation.

Village level development suggestions from men, women and children, were for a drinking water supply project which would bring water near to their village and surrounding communities; a primary school to be built within easy reach of the village, literacy classes for women and girls and an electricity supply. They felt that the government or external donors should support these initiatives.

All seven families in Al-Sharaf have benefited from using the cleared land (around 25% of the total village cultivable land) for grazing their animals. They also collect stones from the land for house construction. Two small areas, formerly the site of the army camp, are cultivated by two households, with an estimated gross value of food crop production of approximately 54,000 YR or \$276. If the community could (by itself or with help from YEMAC) overcome its fear of cultivating the rest of the cleared land, the annual gross income from crops alone could potentially be around 2,700,000 YR, or \$13,776, compared with costs of clearance of \$9,667.

Case study: Fatima Ali Ahmed

Fatima Ali Ahmed is about 16 years old. The accident happened in 2000 when she was 10 years old. She was digging a plot of land to prepare for planting. Her mother was working some distance away from her, when she heard the explosion and saw her daughter was injured. Fatima was given first aid in the village and then her father took her to hospital in Sana'a. She stayed for two months in the hospital. Her foot was badly injured, but the doctors managed to save it. The family bore all the costs (transport, treatment and operations) by taking loans from relatives. "We ought to continue her treatment - she still needs another operation and physiotherapy, but our economic situation doesn't allow this. The costs totalled more than one million riyal. We still owe money from the loans we took."

The mother was aware generally that the area was planted with mines, but not of the risks of that particular location. Following the accident, some pamphlets with drawings were distributed warning us about mine explosions written in English and in Arabic. Neither Fatima nor her mother is able to read.

The family did not receive any outside support and had not heard about the victims association. The mother wishes somebody could help her daughter to complete her medical treatment because she still suffers pain and needs exercises and a further operation. Furthermore, she needs psychological care and support; "*She is depressed and permanently nervous. She stays at home alone and doesn't want to go out and mix with other girls or women.*"

Bait Al-Ra'ae (Ibb governorate):

Bait Al-Ra'ae is a small (20 multi-family households), medium-impact village at 2387 metres altitude. It is three kilometres from the district capital, Al Nadera, which has good facilities and good wadi agriculture (maize, qat, sorghum, fruit, some vegetables). Bait Al-Ra'ae in contrast, has no irrigation, and few crops were planted this year due to poor rains. The village has a reticulated water supply (although this doesn't work all the time), electricity supply and telephone, and several village members have mobile phones and televisions. There is a culture of cooperation among families and households, and the village is open with its information.

The demined area used to be used for cultivation of agricultural crops, herding animals and cutting stones. Mines were planted in 1982. During the period when the mines were there, some exploded, killing twelve people and numerous livestock from the village at different times. Mines were cleared during the period 2003-2004.

The demined lands are private property, and have been returned to the original owners. However, herding animals is open to the whole community. Cutting of stones is permitted upon request for members of the local community only.

The area is used for grazing, fuel wood collection and stone collection. However, because people are still not confident in the safety of the minefields, the terraces are still not cultivated. Women in particular were not informed about the activities of the deminers. As one woman said about the demining team: *"We did not know why they were coming and going to and from the village. We did not know if the area was demined or not because whenever they come they do not talk to us or explain what they are doing in our village. They used to dig posts with red colours or white colours. We did not know what these colours meant. Therefore we kept on feeling scared about the areas planted with mines."*



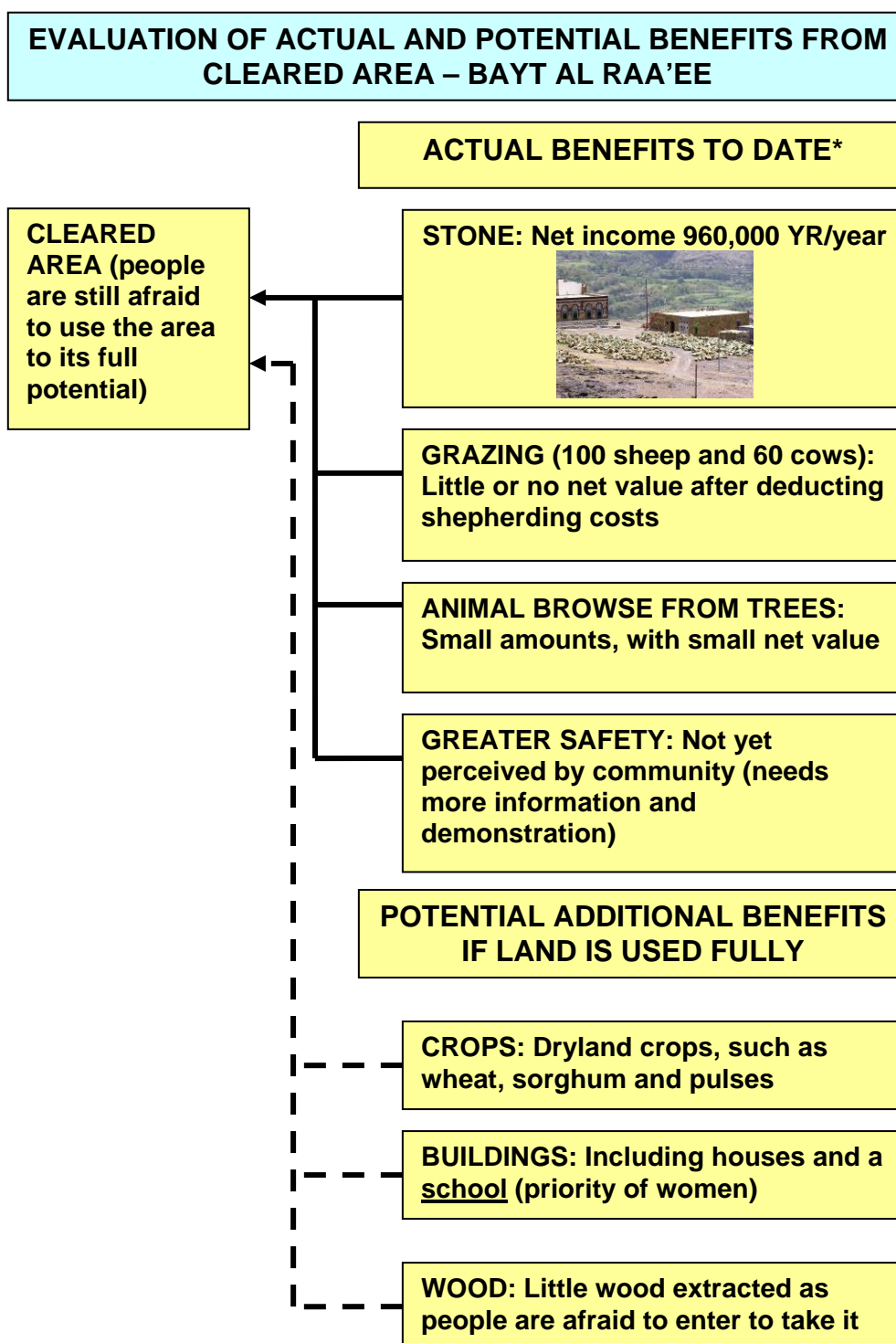
The demined area, showing unused crop terraces.

The net revenues from cutting stone is very considerable (960,000YR per year), and has benefited the majority of households in the village. This revenue compares to the estimated cost of landmine clearance and land release of \$7,521 (1.47 million YR). This suggests that two years revenue from stone cutting would pay for the clearance and land release costs.

Case study of Yahya Ali Saleh Al-Ra’ae

Yahya was 25 at the time of the accident in 1998. He was collecting stone for profit at the time, even though he was aware that he was in a mined area. His right leg was amputated below the knee, and there are metal pieces in the left leg. He received no support, and was un-aware of the Yemen Landmine Survivors Association. The injury did not deter Yahya. On the contrary, it gave him more reason to struggle for a better life.

Figure 9 – Evaluation of Actual and Potential Benefits from Cleared Area- Bayt Al Raa’ee



Al-Qafleh (Al Dhale governorate):

Al-Qafleh is a small, mid-altitude village with four minefields. It is 15 minutes from Qa'tabah town and less than one hours drive to Al-Dhale, the District capital. The community is predominantly agricultural now although in the 1960s – 80s many able-bodied men migrated to Kuwait, Saudi Arabia and the Persian Gulf. The village was on the frontier between North and South Yemen, so has known conflict for some time. There is no village council. Everything is decided by the sheikh, who then convinces the local Council to support his projects. The community contributed one million riyals towards building a six-class school in 1997, and the government put the roof on. Water comes from hand-dug wells, and a deep borehole (480 metres) which cost 5 million to dig and 6 million to equip.

The mines were planted in 1982. Before this, the local people were living a safe life practicing agriculture, herding animals and collecting fuel wood for their local needs. After planting of mines, their lives changed drastically. The feeling of insecurity got worse and worse and there were several casualties (people and livestock). The land was 20% cleared of mines by the community by itself, using rakes to locate the mines. The other 80% was done by YEMAC. Official demining started in 2005. After demining, people started to feel more secure, and started to utilize the demined area for agriculture, herding animals and fuel. The demined area consists of 5% agricultural land, which belongs to landowners in the village, with the balance rangeland, which is considered community property. Nearly all households own livestock, so the return of important grazing lands has made a big impact on the whole village.

Since the access roads have been made safe, 20 terraces of qat have been established on the agricultural land, with a net income of about 7 million YR per year. This compares with an estimated landmine clearance and release costs of \$196,000 (38.4 million YR), which suggests that the total cost of clearance and land release would be covered by 5-6 years of good qat crops.

The irrigated land is owned by 5% of the population. However most households benefit from good returns to qat in one way or another (labouring for 600-1000 YR/day, selling etc). There is also immigrant seasonal labour (some of whom settle in the village).



Fuel wood collection and grazing of livestock in cleared areas of Al-Qafleh by women and children

In this village the women were aware of the activities of the deminers. One of them said: *“The deminers came to the village a while ago and camped here for almost a year. They were removing mines in the mountains. We used to see them always. Our husbands and our children used to help them in identifying locations of mines. Two months ago, we were told that this area was cleaned from mines. After this, we started feeling safe and secure. We started herding our animals without fear for the animals and for ourselves. We also started collecting fuel wood from the same area. The wood of this area is considered the best fuel wood. Women from neighbouring villages come to collect fuel wood from our area.”*

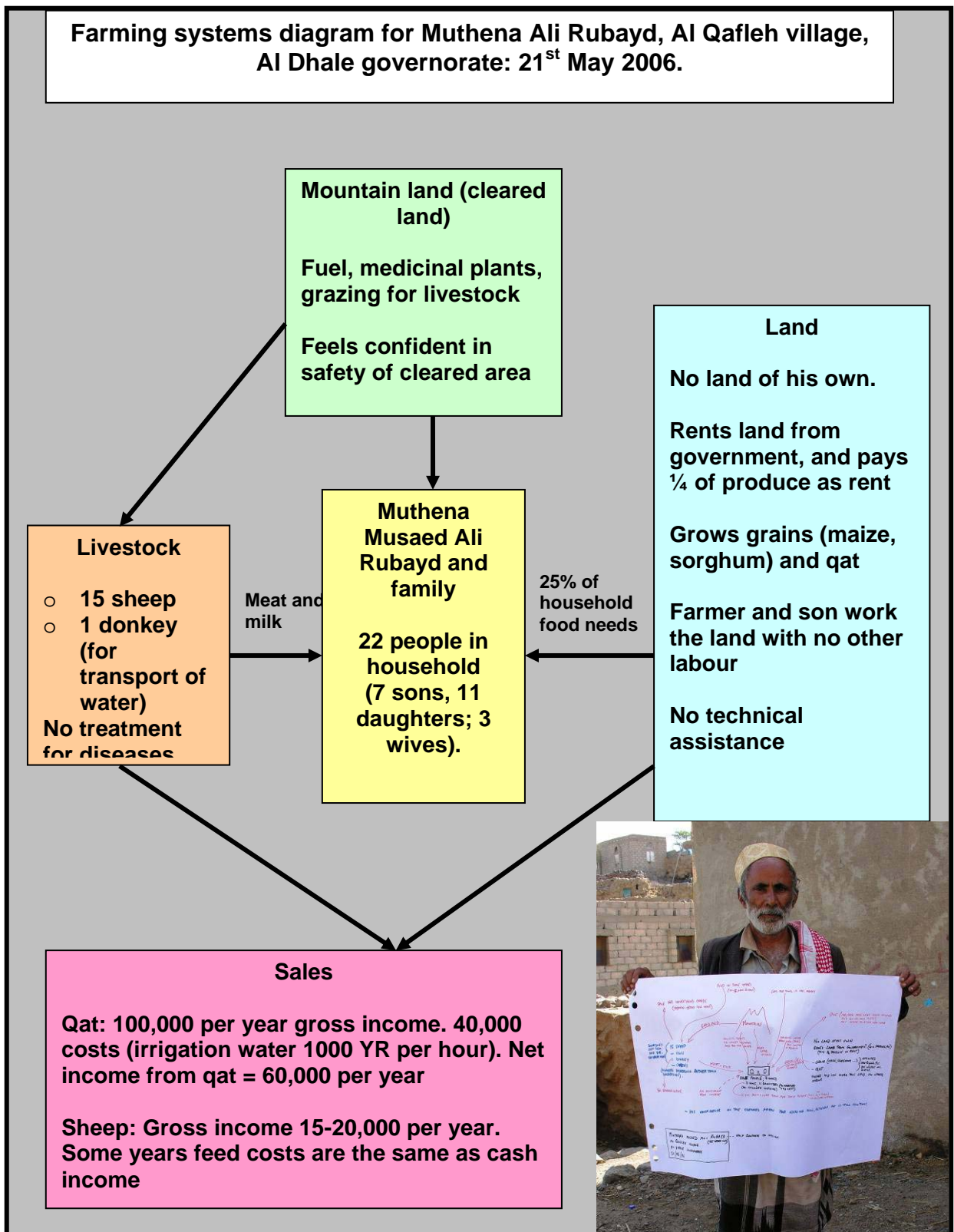
The main developmental opportunities identified by men and women are the digging of deep wells for clean drinking water and the provision of schooling, especially for girls.

Case study of Omer Mohamed Thabet

Omer was 33 years old at the time of the incident,. He is now married with eight children. *“I was herding when the incident occurred in Lakamat Al-Karameed. This happened in 1999. I was rushed to Aden and underwent an operation. I was aware about the dangers of mines, but I did not expect the explosion. My right leg was amputated below the knee. After the incidence, I felt depressed and dependant on others. I did not get any assistance whatsoever. I knew about the department of victims (survivors) in “YEMAC”. I need anything to help create my own business and to be self-reliant.”*



Figure 10 – Farming System diagram for Muthena Ali Rubayd, Al Qafleh village, Al Dhale governorate



Al-Farsi (Aden governorate)

Al Farsi is a medium-sized, low-impact village on the coast close to Al-Buraiqa town. The village was involved in major military activity during the civil war, so there were minefields surrounding the village, on the coastline and near the strategic bridge to Al-Buraiqa. Mines were anti-tank, not anti-personal, so that most victims were killed outright. Only one survivor was found. Demining took place in 2001. The village was a fishing village, and also next to an old salt producing facility. Thirty percent of the present working population are fishermen, 50% artisans (builders etc), 20% labourers and 15% professionals (schoolteachers etc). The older houses are of wood, while newer ones are of cement block, built on sand. The whole area is desert, with no agricultural land and no irrigation. There are a few fruit trees near houses, a few sheep and goats, and 3-4 cows.



Fishermen with their small, fragile boats.

The mined area was not in a productive place, so the main impact on the community has been a greater sense of security for children who might have strayed into the mined area.

The **main beneficiary of clearance** is the Aden Refinery Company, which is constructing a large housing estate (2,600 houses) with an estimated value of \$11 million as compared to an estimated landmine clearance and land release cost of \$382,994 (only 3.5% of the value of the completed houses and facilities). The land around the village is government land. The housing estate has destroyed the grazing land the village used to have. However, the community has benefited from the asphaltting of village roads, employment in the oil company, a bus to take students to university, classes for the school and contribution to the medical clinic.



Foundations for 2,600 new houses beside Al-Farsi village

Local people are also asking for street lighting, a bus system to get to town and drinking water for the school.

There is a local NGO (Al-Farsi Social Welfare Institution) led by local people concerned for the welfare of poor people within the community. It was officially registered in 2004 and uses anonymous donations from within and outside the community. Those who can (about 120 families) pay in 100 YR per month. The main objectives of the Association are to improve the livelihoods of the poor in the community and to improve the education of local people, especially girls. It would be possible for this NGO to administer government or donor projects that benefit the less well-off in the community.

The main development opportunities for the village are:

- a) The establishment of a fisheries association, and the acquisition of sea-worthy boats, equipment and facilities
- b) Sewerage project
- c) School

Case study of Mohamed Naser Salem Al-Hamaty

Mohammed was 38 at the time of the incident in 1994. He is married with six children.

“I was driving my car in “Karesh” when I hit an anti-tank mine. The mine exploded and my car was completely destroyed. I was injured in my legs and hands. I cannot walk on my right leg, and I have not worked since the incident. No body is helping me. I am looking forward to assistance to begin my own business and generate decent income for my family. I do not know of any association helping mine victims or survivors.”

Am-Jarba (Lahij governorate)

Am-Jarba is a small town on the main Aden-Sana’a road about five minutes drive from Lahij. It is a low-altitude, medium-impact site. The single, small minefield is in the middle of town in an active, built-up area. The mines were planted during the 1994 civil war, causing fear and anxiety among children and grown ups.

The area was cleared of mines in 2005. After demining, peace and calm returned to the inhabitants of the village. People started utilizing the area for building houses, as a road, a playground and for herding animals. The land is privately owned, and the landlords have plans for building houses on the area, with a rental value of 3 million YR per year. This can be compared to the landmine clearance and land release cost of \$104,085 (20.4 million YR), suggesting that the total cost of demining would be covered after about seven years.

There is high unemployment of both men and women, as the town is in transition between rural (without agriculture) and urban (without employment) states. Am-Jarba is located in the vicinity of Saber City, the future capital of Lahij.



The cleared minefield, showing the paths across it

The women interviewed said *“When the demining team came to the village, we provided all kind of help to make their mission a success.”*

The priorities identified for the

development of the village by women were:

- a) A workshop for tailoring clothes.
- b) A reliable and adequate water supply.
- c) A permanent playground for the children

Other priorities identified by village leaders were a medical centre and affordable housing.

Ofeini (Abyan governorate)

Ofeini is a nomad community of 12 families about 40 minutes drive from Abyan town along desert tracks. The nomads live as separate families in rudimentary “settlements”, and herd camels and sheep/goats, and keep bees (their main cash income). One of the main forages is *Sesbania sp*, which is an introduced species. The area is owned by one sheikh, who allows the nomads to graze the area free of charge as long as they don’t make any permanent settlement. The area is suitable for livestock and crop production if there is good flood water or a reliable water supply.

The area was a battleground during the civil war, so there was a lot of unexploded ordnance, which has been cleared and destroyed. The one small minefield was cleared in 2005.



A nomad family in Ofeini

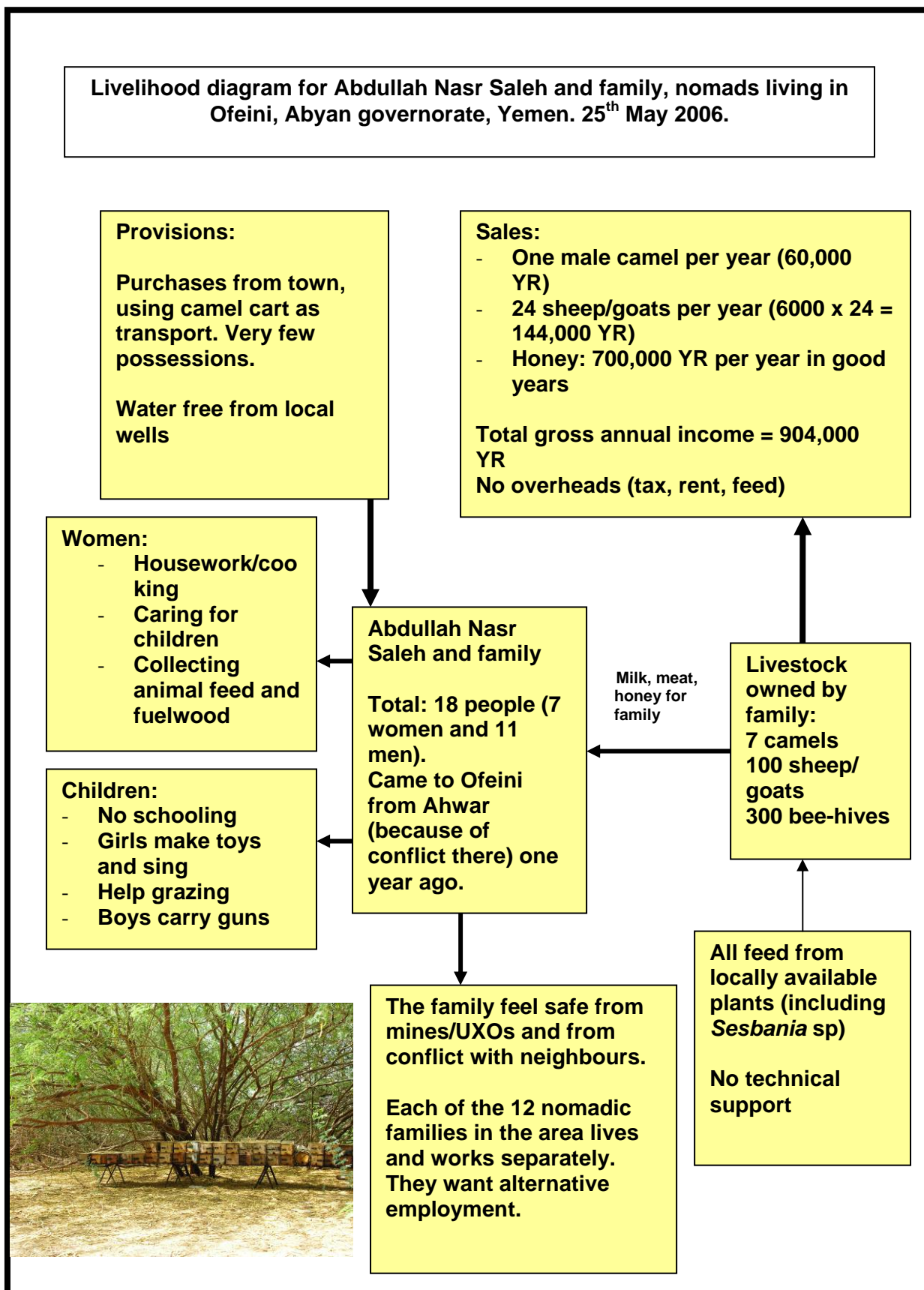
The nomads have moved into the area since it was made safe, and are making a good living. However the children are not in school, and there is a lack of employment for men and women for those years when the climate is against them.



Nomad women in their “home”

Ofeini has experienced shortage of rains and floods during the past seven years. If rain or floods are adequate in future years, the landlord will cultivate the land with crops – perhaps displacing the nomads who have no security of tenure. An alternative plan is for the sheikh to develop the area for the breeding of quality livestock (sheep, goats and camels). The gross income of one family was 904,000 YR (750,000 net income). For 12 families this might be about 9 million YR per year, this being about 12 times the total estimated landmine clearance and land release costs ($\$3586 = 707,856$ YR).

Figure 11 – Livelihood diagram for Abdullah Nasr Saleh and family



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Geneva International Centre for Humanitarian Demining

Livelihoods Analysis of Landmine Affected Communities in Yemen

On behalf of the
Yemen Executive Mine Action Centre
Volume 2: Annexes 1-11



Geneva, November 2006

Authors

**Barry Pound, Adrienne Martin,
Dr Abdul Qadr and Dr Abdul Wahed Mukred**

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Annex One: Terms of Reference

Landmines and livelihoods

Socio-economic study of the benefits of de-mining in Yemen

Introduction

The Natural Resources Institute has been invited to submit a proposal to the Geneva International Centre for Humanitarian Demining (GICHD) following a request from the Yemen Executive Mine Action Centre (YEMAC) for assistance in a post-clearance socio-economic study of previously mine-affected communities.

The overall goals of the study will be to:

1. Assess the overall socio-economic returns from mine clearance investments through a livelihoods analysis of the landmine impacted communities that are now cleared of mines and other explosive remnants of war (ERW); and
2. Enhance the capacity of YEMAC to conduct future assessments of socio-economic benefits from mine action

Secondary benefits might include: a) An assessment of the community Landmine Impact Scores as a tool for identifying impact and determining priorities for action; b) Advice on how to design and conduct on-going socio-economic surveys relating to ERW; c) Advice on integrating social differentiation within LIS survey protocols; d) Advice on enhancements to YEMAC's M&E system; e) A preliminary assessment of complementary development initiatives for mine affected communities.

The tentative timetable for the study is from 1st March to 31 May, 2006, based on one month each for (i) pre-survey activities, (ii) survey, and (iii) analysis and reporting. This may be modified based on discussions between YEMAC, GICHD, and NRI.

The number of villages to be surveyed depends on the trade-off between depth and breadth of the study, but may need to consider a lower number than the 25 suggested.

YEMAC will supply or coordinate all resources from within Yemen, while GICHD will play a supporting role in terms of resource mobilization, reporting to donors, contracting and payments, and will assign a GICHD Task Manager to the project. GICHD may also assist with economic analysis if there are adequate data to support this.

NRI will provide expert advice and assistance on the survey design, development and testing of data collection instruments and processes, training of local surveyors, and the analysis of data.

The approach

The survey will be a team effort between YEMAC, GICHD, NRI and the communities selected for study. The team will be guided by a Project Steering Committee.

NRI will balance the need for reliable, practical information on which short-term decisions can be made and conclusions drawn on the programme's cost effectiveness, with longer-term capacity development objectives.

The approach will draw on our experience in Yemen, and on approaches used for livelihood surveys conducted in Afghanistan, Moldova, Sudan and elsewhere for a variety of purposes. However, it will be tailored to the cultural circumstances of the country, and the specific purposes of the study.

A full understanding of the context of the study will be developed through an initial visit to Yemen (and, if necessary, to Geneva) to meet with stakeholders at central, regional and local levels, including visits to a small number of affected communities. This will help to clarify how the study results will be used (and therefore the type of information needed) and who at local level are most affected, positively and negatively by the demining programme (and therefore need to be included in the survey).

At this stage it is anticipated that three teams of male and female Yemeni staff will be trained to conduct the surveys. A key participant will be the assigned Yemeni socio-economist, who should be present from the first visit of NRI staff, through to the end of the assignment, and actively involved in all steps at both conceptual and implementational levels. The NRI specialists will lead two of the three teams in the field, and it is hoped that the Yemeni socio-economist will lead the other. Communication will be maintained throughout the fieldwork, in order to respond to unforeseen circumstances and opportunities.

The communities to be surveyed will be carefully chosen according to a sample frame that uses criteria developed with YEMAC, and approved by the Steering Committee. The criteria to be discussed might include geographical area, livelihood and cultural variation, the different levels to which communities have been affected by landmines and ERW and the time scale of contamination and clearance. The sample should be large enough to provide viable, representative information for future action, but should also give enough time to researchers to understand the situation in the villages. The sample size will therefore be determined by the variability between villages, and the time and human resources available. It will also depend on the availability and reliability of current, quantitative secondary information about the villages. The study will include representatives from high, medium and low impact communities.

Experience elsewhere suggests that a minimum of two days should be allowed for each village, to enable both qualitative and quantitative information to be gathered. Villagers might be initially suspicious of the survey team, and it will take some time to develop a good rapport, and to understand the unique circumstances and experiences of each village.

Survey Methods

The survey will not use a single household questionnaire as envisaged in the zero draft, but a carefully balanced set of qualitative and quantitative survey tools (e.g. village profiles, focus group discussions, time lines, wealth ranking, participatory mapping, cause and effect diagramming, livelihood kites, household level interviews etc) to build a picture of the economic, social, infrastructural, natural and human impacts of demining within the specific and dynamic local setting of the community in question.

While it will be possible to quantify the costs and benefits of some impacts (e.g. improved access to grazing land), others – such as improved cohesion within the village, or greater confidence in future prospects – are subjective and complex judgments that are difficult to quantify.

The survey will interact with leaders of the community in the first instance, and then with groups of socially-differentiated men and women. The initial visit will help to identify the most appropriate groups. In Afghanistan this was according to wealth (predominantly ownership of irrigated land and livestock) and gender, while in Moldova we used 13 different social categories to develop a complete picture of trends, problems and potential solutions to on-farm, off-farm and non-farm assets and activities.

The survey will elicit from the focus groups their ideas on the main *indicators of change* arising from the presence and clearance of mines in their village. Then the extent of these changes, for example, in asset access and livelihood choices, will be determined on a quantitative and qualitative basis with the groups selected. Problems with access will be explored, together with suggestions for improvement (to include who would be responsible, and what resources would be required). This participatory indicator development, taken in conjunction with the insights arising from individual responses, will contribute to the methodology for future monitoring of socio-economic benefits for mine action.

Individual interviews with households identified by the community as typical of their situation, would also be conducted to provide detailed information. It is our experience that such individual interviews, conducted in an informal setting using a carefully constructed check list, lead to additional, personal insights that don't come up in group discussion. They also provide the opportunity to triangulate information gained from focus group discussions or secondary data. In particular, the need for continued or additional support services will be explored for men, women and children. A feedback session with the community would confirm the main findings from the different tools used, and further confirm the most important positive impacts of demining for that community, and the most important outstanding problems still faced.

Some of the focus group discussions and most of the household level interviews will be collected in formats that allow entry into, and analysis by, SPSS (Statistical Package for the Social Sciences). Economic data will be collected to contribute to an assessment of cost effectiveness.

Following each village survey, the team would meet in the evening to discuss what they have found, to score the situation against an impact matrix, and to identify any methodological questions that have arisen that need to be answered by the NRI survey facilitators.

Activities and timeline by stages, with inputs required from NRI and others

Activity	Main participants	Time input	Timeline
First visit to Yemen to review existing information, meet relevant stakeholders and make initial visit to small number (say 3) villages	<ul style="list-style-type: none"> - Barry Pound - Yemeni socio-economist - YEMAC 	<ul style="list-style-type: none"> - Ten days - Ten days 	March 2006
Development of survey methodology and preliminary impact indicators. Preparation of survey instruments.	<ul style="list-style-type: none"> - Barry Pound - Adrienne Martin - Yemeni socio-economist 	<ul style="list-style-type: none"> - Five days - 2 days - 2 days (by email contact) 	April 2006
Second visit to Yemen: a) Finalisation of methodology and confirmation with Project Steering Committee (including YEMAC Director and UNDP CTA) (3 days) b) Training of 3 survey teams (men and women), including one pilot village survey (8 days) c) Conduct of survey (20 working days)	<ul style="list-style-type: none"> - Barry Pound - Adrienne Martin - Yemeni socio-economist - Project Steering Committee 	<ul style="list-style-type: none"> - 31 days - 23 days - 31 days - 1 day 	May/June 2006
Analysis of survey results (UK-based)	<ul style="list-style-type: none"> - Barry Pound - Adrienne Martin - Yemeni socio-economist (travel to UK) 	<ul style="list-style-type: none"> - 5 days - 3 days - 5 days 	July 2006
Report writing	<ul style="list-style-type: none"> - Barry Pound - Adrienne Martin - Yemeni socio-economist (in UK) 	<ul style="list-style-type: none"> - 5 days - 2 days - 5 days 	July 2006
Approval of reports	YEMAC/GICHD/UNDP/Project Steering Committee	- 1 day	July 2006
Finalisation of report	<ul style="list-style-type: none"> - Barry Pound - Adrienne Martin 	<ul style="list-style-type: none"> - 2 days - 2 days 	July 2006
Stakeholder workshop	<ul style="list-style-type: none"> - Barry Pound - YEMAC/GICHD/wider donor community 	- 5 days	September 2006

Annex Two: Itinerary

Date	Location and activity
15-25 March 2006	Reconnaissance visit, Barry Pound, Abdul Wahed Mukred and Ahmed Alawi. Pilot survey of three communities
4/5 May 2006	Arrival of Barry Pound and Adrienne Martin
6-8 May	Training of survey teams in YEMAC, Sana'a
9 May	Training in the field (Sha'san village)
10/11 May	Survey of 3 villages in Sana'a governorate
12 May	Friday
13 May	Review and travel to Dhamar governorate
14 May	Survey of 2 villages in Dhamar governorate and travel to Dhamar city
15 May	Review of work to date and travel to Damt
16/17 May	Survey of 3 villages in Ibb governorate
18 May	Review of work to date and planning of rest of timetable. (Adrienne Martin leaves to UK)
19 May	Friday
20/21 May	Survey of 3 villages in Al Dhale – travel to Aden
22/23 May	Survey of 3 villages in Aden governorate
24 May	Survey of 3 villages in Lahj governorate
25 May	Survey of 3 villages in Abyan governorate
26 May	Friday
27 May	Survey of extra village in Aden governorate
28 May	Survey team discussions leading to draft conclusions
29 May	Travel to Sana'a
30 May	Feedback to YEMAC, GICHD, NMAC, CARE and SDF
31 May	Barry Pound returns to UK
To June 8	Translation of field materials
June 6-30	Completion of report in UK and submission to YEMAC
August 2006	Presentation of mission findings

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Abdul Fatah	Driver, red YEMAC pickup	733847626	

Annex Four: Livelihood impact assessment training

6 - 8 May 2006, YEMAC training room, Sana'a

Training was given to the male and female members of the three survey teams by the consultants. The training lasted for three days in the classroom, after which all participants tried all the methods in the field (at Sha'san village in Sana'a governorate). The training covered the conceptual basis of the livelihoods framework and its application using participatory methods to obtain both quantitative and qualitative information in village situations. The training was divided into three different themes;

- Developing a common understanding of our task
- Principles, approaches, methods and tools
- Logistics – where how teams and roles.

1) DEVELOPING A COMMON UNDERSTANDING OF OUR TASK

OBJECTIVES of the study are to:

1. Assess the socio economic benefits from mine clearance
2. Enhance the capacity of (YEMAC) staff to conduct similar surveys in future.
 - 2a Assessment of the land mine impact scoring system
 - 2b Use of methods for socioeconomic surveys
 - 2c Make recommendations for improving the M&E system of YEMAC.
3. Assess the potential for development of landmine affected communities.

OUTCOMES of the study

1. Benefits and *other consequences* of mine clearances identified for 27 communities
2. Identification of who has benefited from mine clearance.
3. Capacity of YEMAC staff to conduct surveys improved
4. Recommendations about scoring of communities that will be useful to YEMAC for planning future activities
5. Recommendations for improving the methods and social processes used by YEMAC during surveys, clearance, awareness raising, education and victim support and advocacy.
6. Development opportunities in the surveyed villages and the need for outside support for these opportunities identified.

PRINCIPLES AND APPROACHES of the field work

Who do we think has benefited from YEMAC's work, e.g. victim support, survey and clearance, awareness and education, advocacy?

- Government
- Local people
- Organisations
- Rich people
- Merchants/business people

Victims/survivors and their families
Women and children
Transporters
Craftspeople
Farmers
Shepherds
Fishers
Students
Professional people

Having discussed the objectives and outcomes and the timetable for the work, this afternoon we will look at the methods we are going to use in the survey. But before this, we will go back to something we looked at this morning. We identified some of the people who would be affected by the activities of YEMAC.

Exercise: In 3 Groups, discuss how each of these different types of people in local communities might be affected by the activities of YEMAC, e.g. Survey, clearance, victim support, education/awareness, etc.

GROUP	BENEFITS
Victims and injured & families	<ul style="list-style-type: none"> ➤ Support from centre goes to this group. Socioeconomic support to find employment. ➤ Telecommunications ➤ Enhancing survivors' status. They become more confident and are treated normally. Can do something when people respect them. ➤ Feel safe to go anywhere. ➤ Advocacy helps decision makers become aware of needs to supply support. ➤ <i>Quicker access to medical care. (YEMAC has contract with two specialist hospitals)</i> ➤ <i>Survivors association established to help them and their families. Help them to independent work.</i> ➤ Built capacity and integrate into society.
Women and children	<ul style="list-style-type: none"> ➤ Are aware of the dangerous places ➤ Mine cleaning has most important benefits for them ➤ Advocacy gives them support and development in these areas through decision makers. ➤ <i>Children have increased access to schools</i> ➤ <i>Women collecting water and fuel wood benefit from clearance. Previously afraid.</i> ➤ <i>Awareness of different kinds of mines, explosives etc. and their danger</i>
Transporters	<ul style="list-style-type: none"> ➤ Benefits from clearance as increases access. Cost and time saved. Shorter routes cleared. ➤ <i>Blocked roads cleared.</i>
Farmers and shepherds	<ul style="list-style-type: none"> ➤ Very important group. Cleared areas can be used to start a new life. ➤ <i>Find large areas of land which have regained fertility.</i> ➤ Clearance increases land available.
Construction workers	<ul style="list-style-type: none"> ➤ <i>Were previously afraid to extract building materials. Mines blocked edges of source areas</i>
Fishers	<ul style="list-style-type: none"> ➤ <i>Beaches were mined and blocked access to the sea. Became poor. Clearance allowed better access.</i>
Children Students	<ul style="list-style-type: none"> ➤ Awareness important- dangerous places and how to deal with mines. Reduction of victims and reduction of problems for families.
Business men	<ul style="list-style-type: none"> ➤ Can use cleared areas to make projects, e.g. free zone. Organisations also.

Different groups of people have been considered. What are the overall conclusions?

- YEMAC work has an effect on all categories of people.
- All categories of people can get some benefit.
- Benefits differ for different categories of people.
- People's safety has increased

PEOPLE CENTRED – The method that we are using for the survey is centred around PEOPLE who are the focus of the whole survey.

In the exercise above, we said what we think the benefits might be. In the survey we have to find out by asking people what the benefits are. The answers may be the same or different. We want to find out what people think are the most important benefits for them, and also put a **quantity** on the benefit as well as describing its **quality**.

- People are at the centre of the survey
- We must ask people what they think and know and experience, and how they have benefited. We must listen to the answers and write down what they say, whether positive or negative and **whether we agree or not**.
- Different categories of people have different perspectives and different experiences and needs. Information must come separately from different categories of people.

TOOLS

We will try to show on the board, the sequence of methods we will use. Some are specific to certain categories of people.

PREPARATION

Equipment

- Notebooks
- Pens and marking pens for flipcharts
- Flipcharts
- Camera
- GPS
- Torch
- Stapler
- Tape/pins

Map

- Sketch map
- Survey map

Vehicle

- Fuel

Information from data base

Guidelines from training

Decide on who is doing which task.

Communicate with village - letter of introduction.

INTRODUCTIONS

It is important to introduce the survey very carefully.

- Ask people present to introduce themselves,
- Introduce ourselves
- We are from YEMAC – explain what is YEMAC
- What we are there for – **objectives** of the survey
 - Assess the socio economic benefits from mine clearance
 - Assess the potential for development of landmine affected communities.

(There is potential for support for mine affected communities, but do not raise expectations that there will be financial support.)
- Outline the sequence of the survey and the groups of people we wish to speak to. (General, farmers, women, leaders, children, survivors)
- Explain what the survey will be used for.
 - Report to YEMAC to improve their work in the future
 - Identify potential support to communities
 - Report to donors who give money to YEMAC on cost effectiveness of demining operations.
- The same survey is covering 24 villages in 3 governorates.

TIME LINE: Let us imagine that we have come to the village and have met with a group of people. After introductions, the first method to use is the time line. This is a kind of history of the village or a story of the village. Its purpose is to help understand the overall feeling of people concerning the activities of YEMAC and mine action. The Time line method is used to explore the history of experience with land mines. Ask -

- What was the situation before mines were in place?
- Dates actually put there?
- What was situation when mines were present?
- Coping strategies while mines present. How did they live while the mines were there?
- When were mines cleared?
- Situation after clearance?
- Perception of security/safety. Do they feel safe now?
- Who has been affected by clearance? (which categories, numbers)
- Mine related incidents post 2000?

VILLAGE PROFILE

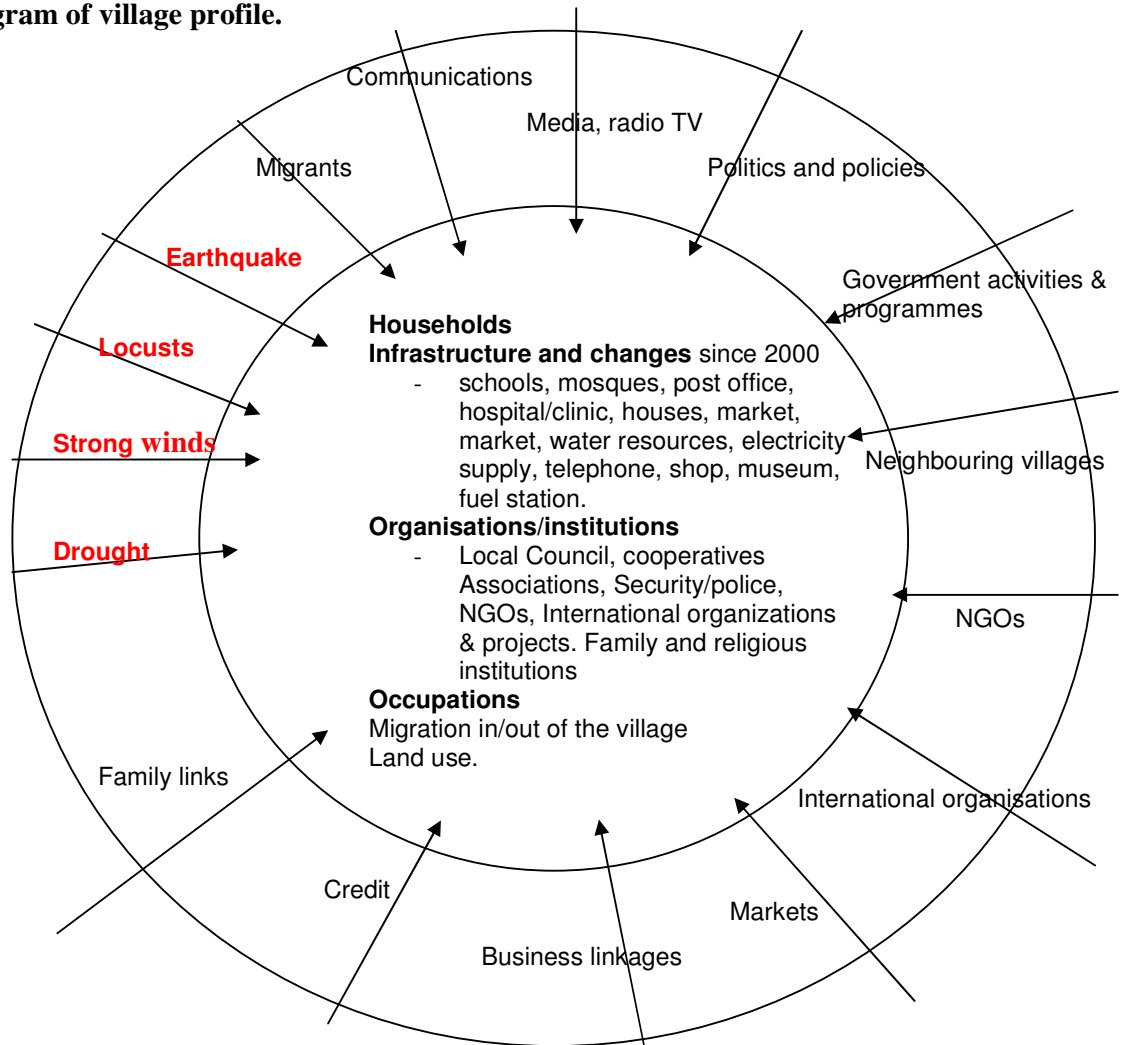
Start with a blank sheet on the flip chart and draw a large circle and a smaller circle inside it. The purpose is to learn something about the village as a whole. (see diagram below).

- **Ask about the households, infrastructure, organisations and institutions, occupations and landuse inside the village**
- **Ask about the linkages with outside.**

Note the distinction between *organizations* and *institutions* – organizations are formally constituted, officially recognized, while institutions are often informal, or part of local culture and social life, e.g. lineage groups, religious affiliations etc. It is important to

identify organizations and institutions as a starting point for building development potential and for creating channels for people to represent themselves to government.

Diagram of village profile.



Include *quality* and *quantity*.

Questions: What if someone from the village asks why we are asking these kinds of questions - what is the connection between the post clearance survey and local institutions? Expectations of something to come will influence the reliability of the answers and information given.

- *Answer:* This can be addressed by proper introduction of the team and careful explanation of the objectives of the study. Communities will be contacted through the local demining teams. The questions are similar to those in the first survey, but this survey is *after* the mine clearance and is asking how mine clearance has affected livelihoods. We must be careful not to raise expectations!!! It is important to talk to various people, not only the leaders.

Before the pilot survey there was a meeting at the prime minister's office with representatives of different governments who expressed some interest in supporting development initiatives in mine affected communities. In addition to the survey, a

representative from the mines organisation in Switzerland is visiting different development agencies in Yemen to explore possibilities of them supporting these development initiatives.

Review of training and tools covered so far.

Mohammed Amrani – presented timeline. Samira – presented the village profile.

Question - Won't I get different answers from different people?

- *Answer:* There is limited time and therefore the time line can only be done once in each community. It is a starting point which begins to generate information. Cross checking, correction and refinement of information comes about through discussion within the group.

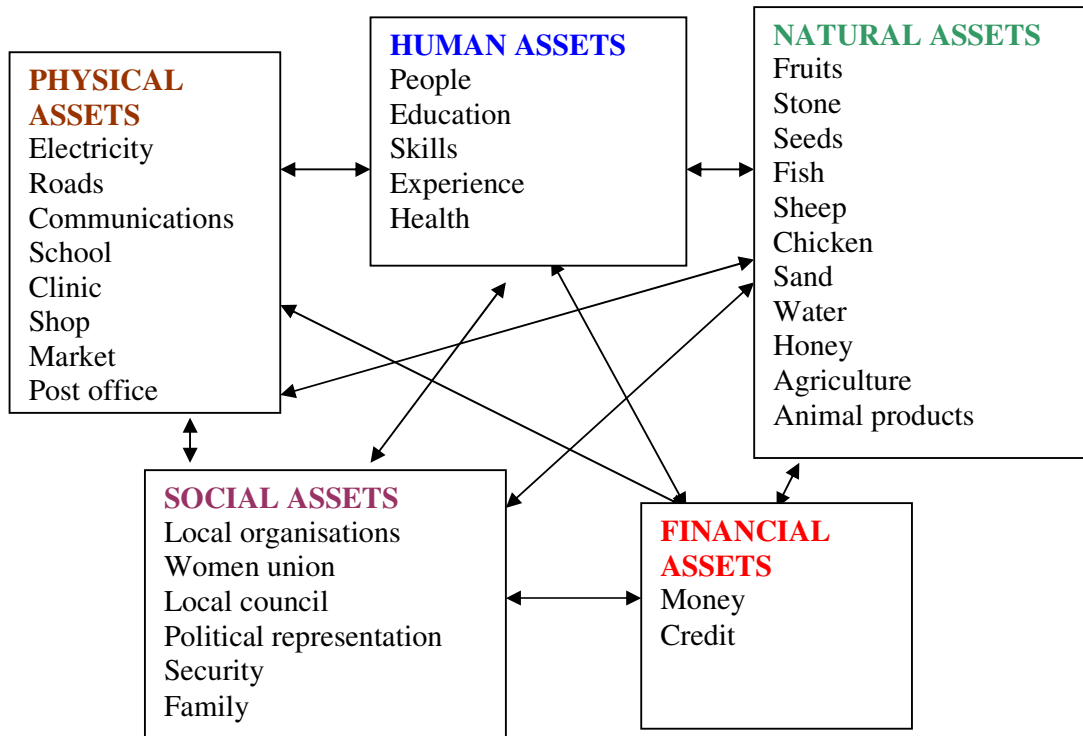
It is important to remember everything and record everything. This is an important PRINCIPLE.

The training today is a mixture of practical and theoretical. The first half hour will focus on the theoretical.

THE LIVELIHOODS FRAMEWORK

We start by brainstorming on all the resources or **assets** found in rural community:

Diagram of assets



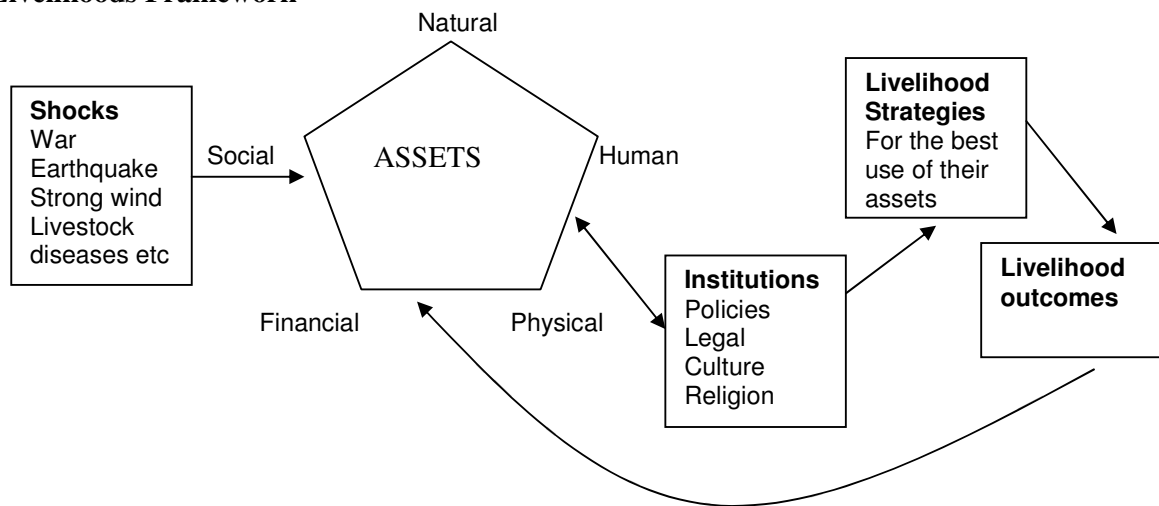
Villages vary in the strengths and weaknesses of each of these assets.

- Different factors influence these **ASSETS**, for example, external shocks that make the community vulnerable – war, earthquake, strong winds, livestock diseases.
- **Institutions policies, legal, culture, religion** influence livelihood assets.
- **Livelihood strategies** for best use of the assets. Livelihood strategies lead to livelihood outcomes or what is actually realised from the strategies. Examples of strategies are, a) migration to earn money (financial asset) to invest in pumps (physical asset) to exploit agriculture (natural asset); b) production of fruit and vegetables for urban market.

Strategies are different for men and women and different for farmers and business people. Land mine survivors have their own strategies. The challenge is to strengthen the weak assets and influence livelihood strategies so that people become better off and improve their livelihoods, e.g. by solving problems of sheep diseases, availability of credit, strengthening local institutions and village leadership etc. In our survey, we will identify weak points and see what opportunities there are for improving areas of weakness.

The livelihoods framework can be used at different levels – community, household, governorate, country.

Livelihoods Framework



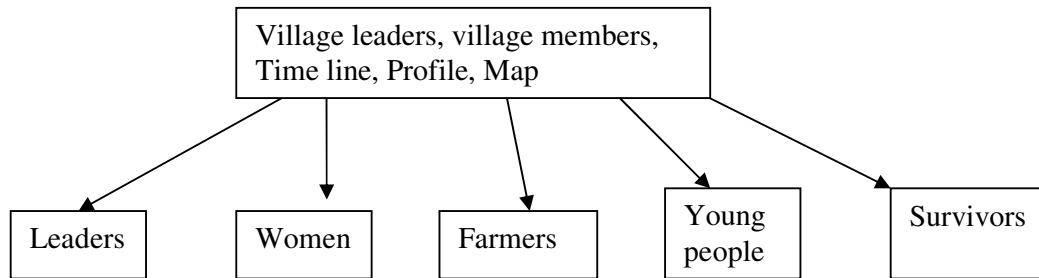
Now we will return to the sequence of approaches in the village. The time line and village profile is used with the first general group of people met in the village. Another tool used with the general group is the village map.

VILLAGE MAP:

Village sketch maps were made with villagers during the Landmine impact survey indicating the mined areas, blocked areas and communication routes. The sketch maps were followed up with technical survey maps showing the exact borders of the mined area. We want to see if there have been any changes in the sketch map in order to guide discussions of the situation before, during and after the mining. We will ask what the cleared areas are now being used for and by whom; the ownership of the land previously and now. We can use previous information and concentrate on new information from the people.

GROUP DISCUSSIONS

These will follow the introductions, time line, village profile and map covered in the first meeting with the group of village members, leaders and cross section of the community.



Note that each of these focus group discussions has a different purpose, with different questions. Together they can provide a balanced view of the overall situation in the community.

PRINCIPLE OF TRIANGULATION: Obtaining and comparing information from different sources and from different groups.

VILLAGE LEADERS

- What local (village) institutions exist? (including welfare institutions)
- What plans are there for village development: who is supporting these plans?
- Are there any local rules and regulations for the management of natural resources?
- Land ownership (tenure) particularly the land cleared of land mines.
- How was land allocated after clearance?
- What was their involvement in activities of YEMAC – survey, clearance, education/awareness, victim support.

WOMEN (explore the views of different age groups in these discussions; also explore the different tasks of women, men, children and old people in the community).

1) What have been the benefits and disadvantages from the activities of YEMAC (Landmine clearance and education)

2) Assets and mine clearance

e. What is the economic return from the use of the assets	d. What is the freed asset used for?	c. How were the rights to use of the land decided?	b. Who is using the freed assets	a. What assets have been made available by mine clearance
- Net income from sale - Value of produce used in the house - Crops, livestock, stone, wood, honey				Land – for crops and livestock

- Opportunity cost of time saved.				Water – wells, springs, streams
- Substitution costs saved				Roads, paths
				Buildings
				Other (wild products etc.)

3. Opportunities for Development

e) WHO SHOULD SUPPORT	d) WHO WOULD BENEFIT	c) THEIR SUGGESTED OPPORTUNITIES	b) PROBLEMS	a)ASSETS/THEMES
				Land (crops, livestock, stones)
				Water
				Roads
				Buildings
				Other
				Other

4) What was the involvement of women in the activities of YEMAC – survey, clearance, education/awareness, victim support.

FARMERS (explore the views of different age groups in these discussions)
Same questions as for women (above)

CHILDREN age 8-15

- 1) What have they heard about mines?
 - a. From their families
 - b. From school?
 - c. From other sources of information?
- 2) Do they know any victims within their age group?
- 3) What difference has clearance made to their lives
- 4) Do they feel safe from the threat of mines?
- 5) Do they go anywhere without any restriction

SURVIVORS

These are like case studies of the survivor and their family.

- Profile of the Survivor – man/woman, age now, age at accident, situation of the family.
- The accident
 - How did it happen
 - Where did it happen
 - When did it happen
 - Support and care
- Did they know before the accident that there was danger
- What have been the impacts on social relationships within family and with the community?
- After accident
 - What support – from family, community, outside (moral support, financial, skills, employment, health care, artificial limbs etc)
 - What work and training.
 - Do they know about the survivors association

- Opportunities for additional support for themselves and their families and other survivors?
- What involvement have they had in YEMAC activities

DOCUMENTATION AND REPORTING

Four stages in the reporting:

- Taking notes in the field
- Discuss together and write report about each village, including conclusions (in Arabic)
- Translating this into English.
- Analyse and draw conclusions and recommendations.

One team member to ask questions and another to write. Listen and write down what the people say using their language - local Arabic

For each meeting remember to record the name of village, date, team, number of people present (men /women) present.

Photograph of group or activity - to tell a story, including social stories.

After the field visit – Team meeting:

- What has struck you most -positive or negative.
- Using the table (next page) for each of the different groups you have talked with list the most important impacts that you have seen; who have they had most impact on and why? List the most important opportunities each group has identified, who are the opportunities for and why (justification).
- Discuss the methods – have they worked as hoped? What modifications are needed
- Consolidate all the notes into one report. Make sure all the original materials are labelled and stored safely.
- Prepare for the next day

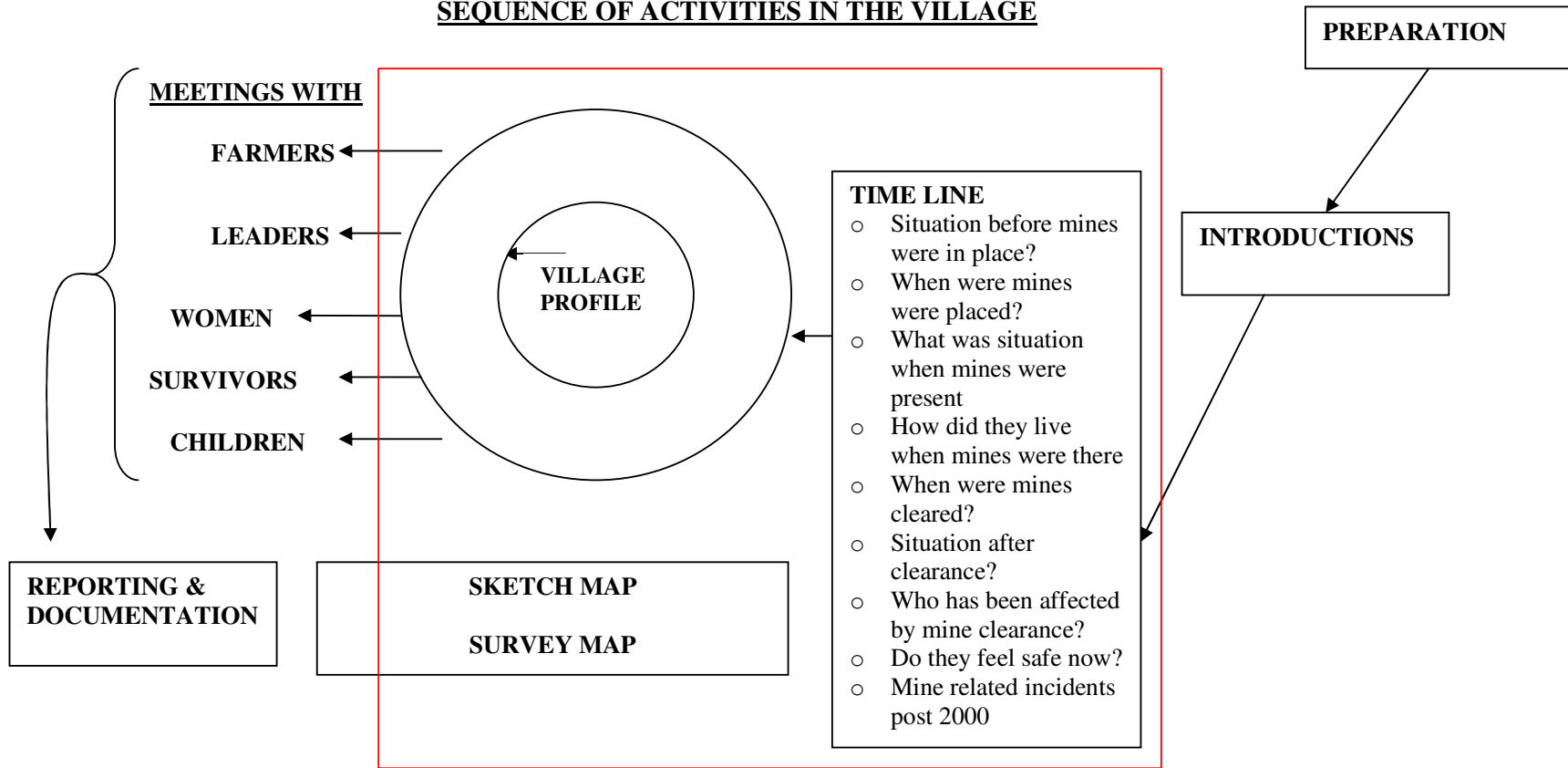
REMEMBER THE PRINCIPLES

- | |
|--|
| <ul style="list-style-type: none"> ○ Listening and learning ○ Participation of people with different perspectives ○ Expectations ○ Triangulation ○ Flexibility ○ People centered and holistic. |
|--|

SUMMARY TABLE OF IMPACTS AND OPPORTUNITIES

WHY?	FOR WHO?	OPPORTUNITIES	WHY?	ON WHO?	IMPACT	GROUP
					1. 2.	FARMERS/
						WOMEN
						LEADERS
						SURVIVORS
						CHILDREN
						OTHER

SEQUENCE OF ACTIVITIES IN THE VILLAGE



Review of training and tools covered so far.

Livelihoods framework (Ghada) and questions for women and farmers discussion groups (Madyan).

On return from the village:

Each team meets separately:

- 1) Each team member to say one or two things that impressed them about the village – either positive or negative, e.g. benefit from the demining, or a weakness seen in the village.
- 2) Using the table (with yesterday's notes), summarise the main impacts and opportunities for each of the different groups you have talked with (farmers, women, children, leaders, survivors)
 - List the most important impacts that you have seen;
 - Who have they had most impact on and why?
 - List the most important opportunities each group has identified
 - Who are the opportunities for?
 - Why have you chosen these opportunities? (justification).
- 3) Were there any problems with the methods – have they worked as hoped? What modifications are needed?
- 4) Consolidate all the notes into one report. Make sure all the original materials are labelled and stored safely.
- 5) Prepare for the next village

WORK IN EACH VILLAGE

DAY 1

Morning - Whole team - Introductions, Time line, Profile and Map. *2-3 hours*

Afternoon - Team divides – to interview SURVIVORS, to interview CHILDREN, to interview LEADERS. .

Make **arrangements** for next day to meet with WOMEN and FARMERS in the morning.

DAY 2

Morning - Team divides for meetings with WOMEN and meeting with FARMERS. *2-3 hours.*

Afternoon – Return and work on the tasks above – ‘on return from the village’

WE NEED TO BE FLEXIBLE

PROVISIONAL TIMETABLE

Governorate	District	Village	Dates
Sana'a	Sanhan	Sha'san	9 May WHOLE TEAM
	Bani Bahloul	Joab	10/11 May
	Arhab	Sha'b	
	Bani Hushaish	Al Jafinah	
FRIDAY			12 May
Review of work to date in morning; afternoon travel through Ma'abar to Wesab Al A'ali			13 May
Dhamar	Wesab Al A'ali	Mazlb	14 May
		Al Sharaf	Travel to Dhamar city
Review of Dhamar work and travel to Damt			15 May
Ibb	Al Nadera	Al Sooba	16/17 May
		Bait Al Ra'ae	Move from Yarim to Damt on the afternoon of the 18 th May
		Bait Al Azani	
Review of work to date and planning for rest of timetable			(Adrienne Martin leaves to UK)
FRIDAY			19 May
Al Dhale	Al Dhale	Al Masharih	20/21 May
		Al Qafleh	Move from Damt to Aden on the afternoon of the 21 May
	Qa'tabah	Habil Al Abdi	
Aden	Al Buraika	Al Heswa	22/23 May
		Al Farsi	
		Amran	
Lahj	Tuban	Al Khadad	24/25 May
		Al Jarba	
		Bir Naser	
FRIDAY			26 May
Abiyah	Khanfar	Ofeani	27/28 May
		Habeel Al Braq	
Travel back to Sana'a			29 May
Presentation			30 May
Barry leaves			31 May

TEAMS

	1	2	3
LEADER	Dr Abdul Qadr	Barry Pound	Madyan Gharama
	Mohammed Amrani	Adel Qasm	Ahmed Al Oudayni
	Ms Samira Moh'd Hassan	Ms Ferdous Sharaf Al Mutawakel	Ms Ghada Mohammed Alwade'e
	Hassan Salem Saa'el	Adel Saif	Ms Adrienne Martin (to 18 th May)
VEHICLE	Pickup (Abdul Fatah)	'Layla Alawi' (Mohammed)	'Layla Alawi' (Abdul Aziz)

Annex Five: Arabic Version of training materials

المقدمة

- اطلب منهم تقديم أنفسهم (التعريف بأنفسهم)
 - عرف عن نفسك .
 - لماذا نحن هنا – الأهداف من المسح .
 - معرفة الفائدة الاجتماعية والاقتصادية من المسح .
 - معرفة إمكانيات تطور المجتمعات المتأثرة من الألغام .
- (هناك إمكانيات لدعم المجتمعات المتأثرة من الألغام ولكن لا تعطيهام أمل كبير في الدعم)
 - (تقسيم المسح والمجموعات من الناس الذين نأمل التكلم معهم بشكل تسلسلي (بشكل عام , المزارعين , النساء , القادة , الأطفال , الناجين)
 - اشرح فيما يستخدم المسح :-
 1. عمل تقرير للمركز التنفيذي للتعامل مع الألغام YEMAC وذلك لتحسين وتطوير عمل المركز في المستقبل .
 2. معرفة الإمكانيات لدعم المجتمعات المتضررة من الألغام .
 3. عمل تقرير للداعمين الذين يدعمون YAMAC بالمال لدعم عملية إزالة الألغام.

خط الزمن

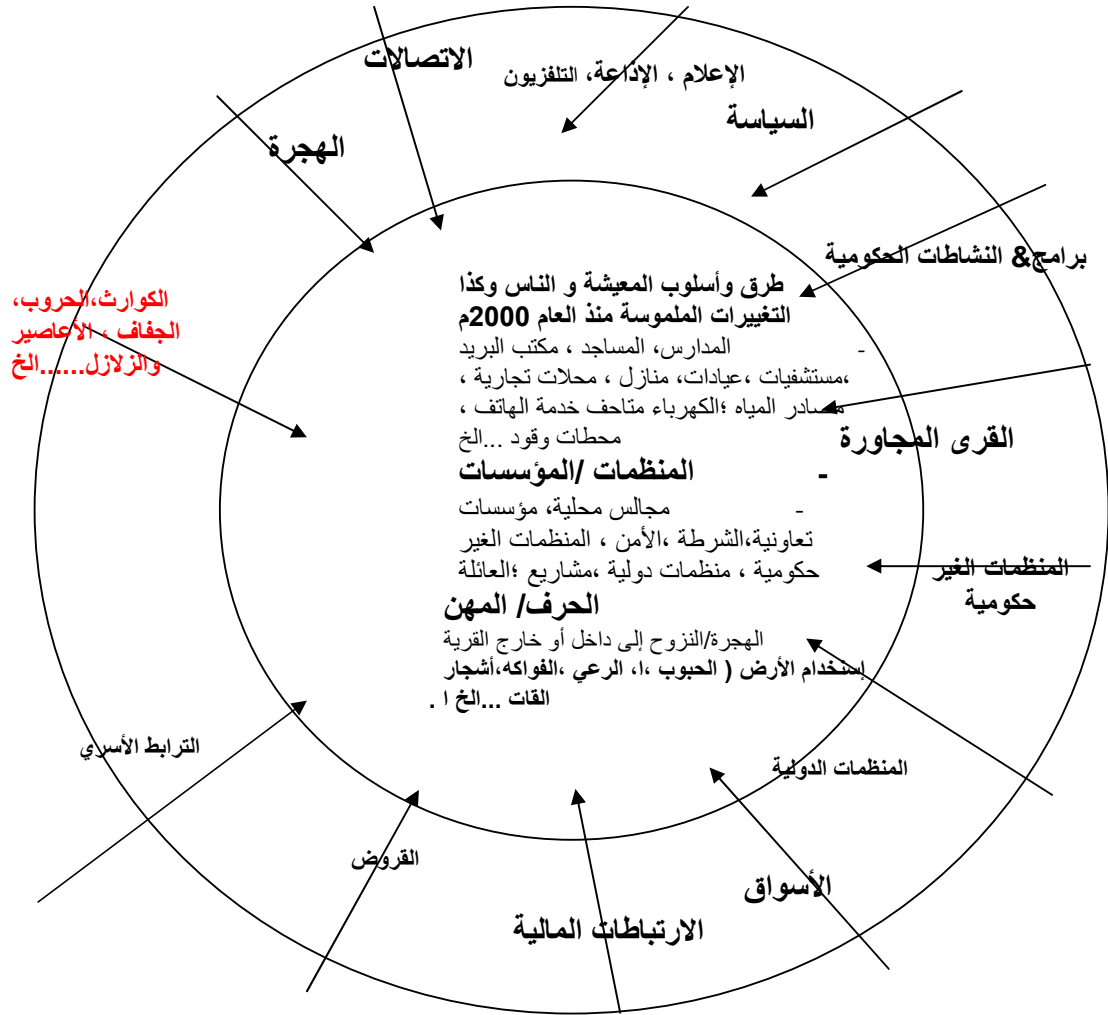
- يقصد به تاريخ القرية أو قصة القرية . الهدف منه تسهيل فهم مشاعر الناس والتركيز على نشاطات YAMAC والتعامل مع الألغام.

- اسأل عن :-
- ما هي الحالة قبل وجود الألغام في هذه المنطقة ؟
- ما هي الحالة أثناء وجود الألغام ؟
- كيف عاشوا أثناء تواجد الألغام في المنطقة ؟
- متى تم تطهير الألغام من المنطقة ؟
- ما هي الحالة بعد تطهير المنطقة من الألغام ؟
- هل يحسون بالأمان الآن بعد تطهير المنطقة من الألغام ؟
- من هم المتأثرين بتطهير المنطقة من الألغام ؟
- الحوادث المتعلقة بالألغام بعد 2000م ؟

خريطة القرية :- للمناقشة بعد أسئلة خط الزمن .

- استخدم خريطة (سكتش) من تأثير مسح إزالة الألغام السابق . هل هناك أي تغييرات ؟
- فيما تم استخدام المساحات المطهرة من الألغام؟ من استخدمها ؟
- لمن كانت ملكية الأرض سابقاً والآن ؟

- الهدف هو معرفة بعض الأشياء عن القرية .
- أبدء بالورقة الكبير ورسم ثم قم برسم دائرة كبيرة وبداخلها دائرة صغيرة (أنظر المخطط)
- أسئل عن (أسلوب المعيشة) ، لبنية التحتية المنظمات و المؤسسات داخل القرية ، أسأل عن الارتباطات والتأثير الخارجية والداخلية للقرية



الاجتماع مع الأعيان والمشائخ :-

- 1- ماهي المؤسسات الموجودة في إطار القرية سواءً كانت محليه رسميه أو غير رسميه مثل الجمعيات الخيرية؟
- 2- ماهي خططهم التطويرية والتنموية؟ ومن الذي يدعم هذه الخطط؟
- 3- هل هناك قانون محلي أو نظام حماية يحكم كيفية إدارة استخدام الموارد الطبيعية المتاحة في المنطقة؟
- 4- لمن تتبع ملكية الأراضي المطهرة هل هي ملكية مشتركة، شخصية، ملكية دولة أم أوقاف؟
- 5- كيف يتم إعادة تملك الأراضي بعد تطهيرها؟
- 6- ماذا كان دورهم في أنشطة البرنامج الوطني للتعامل مع الألغام(يماك) -مسح ، تطهير ، توعية ، تدريب، مساعدة الناجيين - ؟

الإجتماع مع الأطفال (8-15 عاماً)

- 1- ماهي المعلومات التي لديهم لها علاقة بموضوع الألغام؟
 - تم الحصول عليها من الاهل.
 - تم الحصول عليها من المدرسة.
 - تم الحصول عليها من أي مصدر آخر للمعلومات.
- 2- هل من رفقاتهم ومن هم في نفس العمر لهم تجارب خاصه مع الالغام .مما جعلهم يصبحون ضحايا الغام .
- 3- ماهي التغيرات التي حدثت في حياتهم بعد التطهير؟
- 4- هل يشعرون بالامان من تهديد الالغام بعد عمليات التطهير التي تمت؟
- 5- هل يتحركون بحرية وبدون أي قيود؟

اللقاء مع النساء :

1- ماهي المنافع و السلبيات المتوفرة عن نشاطات المركز اليميني للتعامل مع الألغام مثل المسوحات ، والتطهير ، والتدريب /التعليم ، والتوعية من مخاطر الألغام والقذائف التي لم تنفجر بعد وكذا مساعدة التاجين من حوادث الألغام المساعدة والفاعل في عملية تطهير الألغام

ماهي المنافع المتاحة بعد عملية التطهير	من الذي يستخدم المنفعة المحررة	كيفت تقرر حق استخدام الأرض	لأجل ماذا تستخدم المنفعة المطهرة	ماهو العائد الاقتصادي الاجتماعي من إستخدام المنافع
الأرض- من أجل الزراعة أو الرعي				إجمالي الدخل من المنافع المستخدمة في المنزل مثل الحبوب ، الماشية ، و الحيوانات الداجنة ، الحطب/الخشب، الأحجار والعسل
المياه – الآبار-ينابيع ، جداول				- الفرصة المتولدة عن الزمن الذي توفر
الطرق (مختلف الطرق ، المعبدة وطرق المشاة والمسالك أو الدروب المباتي				- تقدير القيم المتوفرة
العديد من الأشياء أخرى				

فرص التطوير والتنمية :-

المنافع والمواد	المعوقات والمشاكل	المقترحات الفرص المستقبلية	من المستفيد	من الجهة الممولة والداعمة
الأرض –حبوب ، رعي ، أحجار.... إلخ .				
مياه				
طرق				
مباتي				
أخرى				
أخرى				

4- كيف كان تفاعلهم مع جميع نشاطات المركز اليميني للتعامل مع الألغام

اللقاء مع الفلاحين:

1- ماهي المنافع و السلبيات المتوفرة عن نشاطات المركز اليمني للتعامل مع الألغام مثل المسوحات ، والتطهير ، والتدريب /التعليم ، والتوعية من مخاطر الالغام والقذائف التي لم تنفجر بعد وكذا مساعدة التاجين من حوادث الالغام المساعدة والفاعل في عملية تطهير الألغام

ماهو العائد الاقتصادي الاجتماعي من إستخدام المنافع	لأجل ماذا تستخدم المنفعة المطهرة	كيفت تقرر حق استخدام الأرض	من الذي يستخدم المنفعة المحررة	ماهي المنافع المتاحة بعد عملية التطهير
إجمالي الدخل من المنافع المستخدمة في المنزل مثل الحبوب ، الماشية ، و الحيوانات الداجنة ، الحطب/الخشب، الأحجار والعسل				الأرض- من أجل الزراعة أو الرعي
- الفرصة المتولدة عن الزمن الذي توفر تقدير القيم المتوفرة				المياه – الآبار-ينابيع ، جداول
				الطرق (مختلف الطرق ، المعبدة وطرق المشاة والمسالك أو الدروب
				المباني
				العديد من الأشياء أخرى

فرص التطوير والتنمية :-

من الجهة الممولة والداعمة	من المستفيد	المقترحات الفرص المستقبلية	المعوقات والمشاكل	المنافع والمواد
				الأرض -حبوب ، رعي ، أحجار.... إلخ .
				مياه
				طرق
				مباني
				أخرى
				أخرى

4- كيف كان تفاعلهم مع جميع نشاطات المركز اليمني للتعامل مع الألغام

اللقاء مع الناجين من حوادث الألغام:

يمثل الناجون وعائلاتهم عينات دراسية، وستكون الأسئلة على الشكل التالي :-

❖ معلومات شخصية عن الناجين أنفسهم :-

- الجنس ذكر/أنثى
- العمر الآن
- العمر وقت الحادث
- الوضع العام للعائلة

معلومات عن الحادث:-

- كيف حدثت؟
- أين حدثت؟
- متى حدثت؟
- ما نوعية الدعم والاهتمام الذي تلقاها بعد الحادثة؟

هل كانوا على علم إن منطقة وقوع الحادث كانت منطقة خطرة؟

هل كان للحادث تأثير على العلاقات الاجتماعية سواءً على مستوى الأسرة أو على مستوى المجتمع؟

بعد الحادث :-

ما هو مصدر الدعم الذي حصلوا عليه من المجتمع ، العائلة ، من الخارج ؟

ما هو نوع الدعم هل كان (دعم معنوي ، مادي ، تأهيل ، توظيف عناية صحية ، أطراف صناعية ، إلخ؟

ما هو نوع التسهيلات الموجودة ؟

هل يعرفون عن المنظمات والمؤسسات المهمة بضحايا الألغام ؟

ما هي فرص الحصول على دعم لهم ولعائلهم وبقية الناجين من الألغام والمتفجرات ؟

ماذا كان دورهم في أنشطة لمركز اليميني للتعامل مع الألغام ؟

Annex six: Summary of findings from the survey of three villages during the reconnaissance visit in March 2006

A. Beer Ahmed (Aden governorate):

Present situation

- Mines were present in agricultural land close to Beer Ahmed town
- There has been loss to the community of up to 70% of the cleared land to Aden University, private housing and the Al Aml government housing scheme
- New road made through cleared area
- Cleared area is a supply of water for the governorate
- Productive farming now started on cleared land by those who can afford the investment
- Many don't have the resources or support to start productive enterprises with cleared assets
- Local public institutions are weak and previous attempts at associations/cooperatives have failed; however private sector is strong
- 50% of adult males are in government employment. Only 10% farmers (30% unemployed and 10% private)
- There has been limited support to survivors

Opportunities

- Rehabilitation of agricultural land, destroyed wells, damaged irrigation channels and diversion structure
- Increase community confidence in their stake in the future of de-mined land
- Increase livestock and bee production through technical and financial support services
- Training and demonstration of the multiple uses of the local "invader" species *Prosopis cineraria*
- Training and business support to survivors
- Build the capacity of local public/community institutions

B. Bait Al-Shawki (Al-Dhale governorate)

Present situation

- Minefields were on mountain land surrounding the dispersed housing of the community
- People still feel wary of entering the area, although this is diminishing with time
- The road of preference from the community to the governorate capital (Damth) is still not open due to mines
- Cleared areas used for grazing, fuelwood, construction stone, apiculture
- Lack of feeder roads, investment capital, water (drought and very costly water supply) and technical support limit the income generating potential of the cleared resources
- There is good community cohesion, but weak public administration
- In contrast to Beer Ahmed, 50% are farmers.

- Good support to survivors (success stories with butane gas business and handicraft training), but also some failures that need alternative support pathways

Opportunities

- A major development project is about to start (The IFAD Dhale Rural Development Project) that could address many of the problems noted above
- Aversion of potential for overgrazing/overcutting leading to environmental degradation of cleared area
- Increased production of livestock (partly through use of *Opuntia* sp) and bees
- Assistance to form associations/groups and to formulate proposals for DRDP and other agencies
- Feeder road access to cleared areas
- Explore alternative productive occupations for survivors (e.g. small grocery stores)

C. Bait 'Oqab (Sana'a governorate)

Present situation

- Mainly dependent on farming (80% of population). But 20% are landless, and many have insufficient land to survive on farming alone
- Cleared land on mountains around the 7 sub-villages. Security is returning, but movement between sub-villages and beyond is still restricted
- Stone, fuel, grazing are main uses of the cleared land
- Those with capital making new terraces with bulldozers (8000YR/hr)
- Fear of overgrazing has seen use of traditional methods of controlling access
- Despite proximity to Sana'a (30 minutes on tarmac road), government services are limited. Also local planning is weak.
- Very strong charity association caring for poor in community
- Survivors unaware of the Survivors Association

Opportunities

- Attract extension/veterinary services and introduction of new fodders
- Put survivors and Survivors Association in contact
- Support local planning capacity to make plans for use of land, particularly for those with few resources

A very clear general message came from all three communities that many agencies make promises, but do not keep them. It is important that YEMAC only promises what it can deliver, and that these initiatives have tangible, rapid impact – especially for the disadvantaged.

Change from impact rating strongly weighted by casualties of landmine accidents to one that emphasises the potential for the development of human, social and natural resources within landmine affected communities. This could comprise two components:

- Attracting improved services (including education, health, agriculture and livestock, communications etc) that were previously disrupted by the presence of mines and UXOs
- Linking to, or stimulating, development initiatives directly targeted towards landmine-affected households, comprising:

- Support to landmine/UXO survivors
- Rehabilitation of assets previously blocked or damaged by landmines and UXOs

Annex seven: Gender and mine impact

Men, women and children have different roles and responsibilities which influence their exposure to the risks from land mines and how they are affected by them. These different roles and responsibilities need to be taken into account at all stages of interaction with communities concerning mines. It is particularly important in this study, which is assessing the impact of mines and mine clearance on different social groups and the implications for information and awareness campaigns.

- ‘Sex’ means the biological differences between male and female.
- ‘Gender’ means the socially and culturally defined identities and behaviours associated with men and women, boys and girls. Gender roles vary from society to society and change over time.

Gender influences the roles, duties, responsibilities, activities, access and control of resources and also the specific needs of women and men – both practical (e.g. saving distance travelled for water, labour time etc.) and strategic (e.g. longer term to change status, e.g. education and skills training).

Gender analysis explores

- The roles and responsibilities of men and women, boys and girls
- Their activities (productive, reproductive, community management and community politics)
- Their access and control over resources
- Their needs – practical (immediate needs connected with their current roles) and strategic (longer term needs to change their status)

1) Roles, responsibilities and activities

<p><i>Productive</i> What roles and activities do women, men, boys and girls play in production and where?</p> <ul style="list-style-type: none"> ➤ Cropping (land preparation, digging, ploughing, manuring/fertiliser, planting, thinning, pruning (trees) weeding, irrigating, spraying, harvesting, threshing, storage, sale.) - for cereals, vegetables, fruit, qat etc, depending what is grown in the village. ➤ Livestock – herding, watering, collecting forage, milking etc. For cattle, goats, sheep etc. ➤ Tending bees, collecting honey. ➤ Collecting/cutting stones ➤ Fishing ➤ Wage labour ➤ Crafts etc. etc.
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<p><i>Reproductive</i></p> <ul style="list-style-type: none"> ➤ Fetching water for home use ➤ Collecting firewood ➤ Washing clothes ➤ Cooking ➤ Child care

<p><i>Community roles</i></p> <ul style="list-style-type: none"> ➤ Community maintenance work (water sources, terraces, paths etc) ➤ Participation in community and local organisations

2) Access and control of assets

Asset (land – irrigated and rainfed; pasture, livestock; crops; water resources etc)	Who owns?	Who makes decisions?

- Did the presence of mines affect the roles and responsibilities of men, women and children?
- Has mine clearance brought any changes in roles and access to assets?

Annex eight: Evaluation of survey methods used

28th May 2006.

Group 1 (Ghada, Ferdous and Samiyra)

Table 1: Assessment of the methods used in the community surveys

Conclusions (on the effectiveness of the method to understand the situation in the village regarding the impact of YEMAC activities and the identification of development opportunities)	Score (1-5)	Method
Important to facilitate our task, but didn't work as well as it should have. Sometimes wanted to make life complicated (e.g. to send security with us)	4	Contacting the community
Good to make people aware what we want to do with them and why we are there	5	Introduction of team and its objectives
Important method, and directly related to our purpose.	5	Time Line
This group (women) didn't use the method themselves, so the score is only from what they have heard from others	4	Community profile diagram
Good method, but maps need to be more accurate (people not used to maps)	4	Sketch Map of community and mined areas
Most important method, but local people are sometimes puzzled by the relationship between some of the questions (e.g. gender role questions) and mines, and don't take them seriously	5	Focus Group Discussions (with women, community leaders, children, farmers/fishermen, survivors)
(Not properly explained in the training.) First impressions can be misleading, and need to observe carefully throughout visit, and be prepared to alter ones opinion as a result of observation	3	Participant observation
Sometimes pictures can tell a story, but not everybody could take the pictures.	5	Photographic documentation
FSD is only for one person who might not be representative of the village situation. Also difficult to find people who are fully cooperative (willing to answer all questions)	4	Other methods used (Farming Systems Diagram, Force Field Analysis ...)
Overall good outcome, with complementary methods	4.5	The effectiveness of all methods together
Very good reflection method, which gave chance to compare between focus groups and other methods, and see the consistency of information, and allowed team members to appreciate the whole picture.	5	Village analysis

Group 2 (Madyan, Amrani, Hassan and Adel Said)

Table 1: Assessment of the methods used in the community surveys

Conclusions (on the effectiveness of the method to understand the situation in the village regarding the impact of YEMAC activities and the identification of development opportunities)	Score (1-5)	Method
Village leaders did not make sufficient effort to get people together	4.5	Contacting the community
Useful method to let people know about the study objectives and methods	5	Introduction of team and its objectives
Full score. Good method. Clear questions for local people to respond to	5	Time Line
- Not suitable method for use with local people, as some of the questions are difficult for people with limited education and literacy - If there are “political” issues raised in the profile, they cause disquiet (needs a very careful introduction, so that people are aware that we are looking at socio-economic issues that include things like the balance of power in the village, and representation in local council etc)	4	Community profile diagram
Given 4 because there is limited time to add the changes to the map (Level One survey maps were not very accurate)	4	Sketch Map of community and mined areas
Confusion between the opportunities for the cleared land, and for the village as a whole. It would have been better to keep them separate as in this analysis (Table 3). FGD with children was usually a waste of time, as they had little knowledge of mined land (isn't that the point!) In some villages didn't find the suitable people for the discussion groups.	4	Focus Group Discussions (with women, community leaders, children, farmers/fishermen, survivors)
80% of the social and economic benefits from cleared land can be seen by eye.	4.5	Observation
Photos support all the work, and good to compare between villages	5	Photographic documentation
Made diagrams in most villages.	4	Other methods used (Farming Systems Diagram, Force Field Analysis ...)
This is an average of all the above scores.	4.5	The effectiveness of all methods together
Good method	5	Village analysis

Group 3 (Dr Qadr, Adel Qasim, Ahmed)

Table 1: Assessment of the methods used in the community surveys

Conclusions (on the effectiveness of the method to understand the situation in the village regarding the impact of YEMAC activities and the identification of development opportunities)	Score (1-5)	Method
In several villages, not enough preparation done. In some cases there was no cross-section representation for the first meeting	3	Contacting the community
In some villages (with 2 out of the 3 teams), there was a mixture between introduction and other discussions – everybody asking random questions Because of weakness of contact, it was difficult to do introductions, and had to do same introduction several times (for each new group of people)	3	Introduction of team and its objectives
Was able to get a lot of information, but with rural people it was difficult to get them to sit down for one hour – especially in the morning. It was easier to do it in the afternoon, during qat.	4	Time Line
Helped to get good information about the context.	5	Community profile diagram
Very useful, but sometimes it was an excuse not to see the cleared area for ourselves (it is important to go to see the area)	4	Sketch Map of community and mined areas
FGDs gave information in detail to complement the general information from the profile.	5	Focus Group Discussions (with women, community leaders, children, farmers/fishermen, survivors)
Helped to validate the information given by people	5	Observation
Was not an independent task for a specific person in the team, so good opportunities were lost to take photos as evidence	4	Photographic documentation
Methods like Farming Systems Diagrams touch on very sensitive issues, that some rural people don't like to answer (e.g. numbers of livestock, income etc)	4	Other methods used (Farming Systems Diagram, Force Field Analysis, review of each village ...)
No additional comments	4	The effectiveness of all methods together

Annex nine: Table Showing Impacts of de-mining in the 25 surveyed communities by Governorate and by social group

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Sana'a						
Sha'san	<ul style="list-style-type: none"> - Fuel, fodder, grazing, stone, communications antenna. - Saving of 50-100,000 on fodder. - 200,000 YR per year income from stone from the cleared area. - Runoff water for qat, fruit trees and food crops. - Sale of livestock 	Safety and feeling of security. Fuel, fodder, run-off water	Recreation, fuel, fodder, grazing	No impact. YEMAC promised compensation (artificial limb) but nothing forthcoming	Grazing, safety	Feel that the area is still unsafe
Bait 'Oqab	New terraces for qat and grapes (by those land-owners able to afford the cost of bulldozer hire);	(no meeting with women)	People are still cautious about entering the de-mined land; grazing; stone mining; fuel wood collection Stone collection; construction of new terraces; grazing and fuel collection	No support or impact of YEMAC	(no meeting with children)	
Joab	<ul style="list-style-type: none"> - Grazing, fuel, stones - Roads. 	<ul style="list-style-type: none"> -Grazing, fuel, fodder. - Run-off water 	Grazing, fuel.	No assistance from YEMAC.(9 cases met)	Safety herding.	

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Jafinah	<ul style="list-style-type: none"> - Returns from planting grapes and qat on approx 800 hectares de-mined areas by 30 landowning households. Potential net annual income from demined area (grapes /qat) 15,000,000 YR. - Increase in land values of demined area from 1000 YR to 50,000 YR per lebna (undeveloped land). - increased area for herding and forage for all villagers (70% own some livestock) - Stone cutting and selling. - 3 wells constructed on demined area to increase irrigated area - Road construction reduced 80% of journey time to local market 	<ul style="list-style-type: none"> - Security - Income from use of agricultural Lands (qat & grapes) for self sufficiency and investment in land development. - Rangelands and fodder collection - fuel wood - New houses constructed near lands to guard land and reduce access time - Road access reducing travel time. -area for recreation 	<ul style="list-style-type: none"> - Security - Agriculture as a major source of income - No explosions after de-mining. 	<ul style="list-style-type: none"> No impact. No support received from YEMAC. 	<ul style="list-style-type: none"> - Security; they started playing and moving freely - No new victims among children 	
Sha'b	<ul style="list-style-type: none"> - Herding in the part of the hill located far away from the military camp. Value - 200 YR x 250 households x 30 days =1,500,000 YR per month. - Water run-off from hillsides channelled to downstream lands for irrigation. - Fuel wood 30,000 YR x 250 households = 7,5000,000 YR annually. -Stones for construction - 10,000 YR for a truck load of stones 	<ul style="list-style-type: none"> - Herding and improved livestock production - Fuel wood collecting - Cutting stones for construction - Water runoff 	<ul style="list-style-type: none"> - Stone and marble cutting 	<ul style="list-style-type: none"> No survivors met. 	<ul style="list-style-type: none"> - Herding and feeling secure They play in the demined area 	<ul style="list-style-type: none"> Do not go to demined area because of the military presence

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Dhamar						
Mazlb	<p>Land not used for crops, as people think mines are still present at deeper levels.</p> <p>Grazing (people let their animals graze freely in the “cleared” area, but do not enter themselves</p> <p>Some use paths through the area, but feel it is still dangerous because of presence of deep mines</p>	<p>Grazing (animals taken to the area and set loose by themselves)</p> <p>Cleared area not cultivated as they are scared of deep mines</p>	-	No survivors met.	Awareness about mines and their dangers	
Al-Sharaf	<p>Access to land for grazing. Land is not used for cropping as there is no feeling of security so far.</p> <p>Collecting Stones for house construction (one truck load worth 10,000 YR)</p>	<p>Increased area for grazing animals for all 7 families in community</p> <p>Small area of cleared land cultivated (3 households)</p> <p>An increased feeling of security in the last 2 years as no accidents, but they require more information on de-mined areas.</p> <p>They fear to cultivate the land as they suspect the mines are deep.</p>	<p>Grazing area</p> <p>Collecting Stones</p>	<p>No benefits.</p> <p>The survivor could not read the mine information materials she was given as she is illiterate</p>	<p>Herding animals</p> <p>Some are still afraid to enter the demined areas.</p>	

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Ibb						
Bait Al-Ra'ae	Stone (permission required from land owners) Grazing (open to all in community) Cutting fuel wood Net value of stone = 1 million riyals per year	Herd animals, but watch them from a distance, as still afraid Stone cutting	Still not confident about safety of land (especially for cultivation) Area used for cutting stone and herding sheep and goats	No benefit (survivor helped the demining team)	Herding (but still afraid of previously mined areas)	Do not go to previously mined areas as still afraid
Bait Al-Azani	Grazing area increased Fuelwood Road access reduces time and distance travelled Construction of buildings	Increased area for grazing Fuelwood collection - reduces reliance on purchase Fodder collection Cleared roads connect them to neighbouring villages and urban centres Saving lives of innocent people. Mine clearance has made people feel safer but no one has yet planted on the cleared land.	Roads Grazing	No benefits	They feel safe when herding Recreation on the de-mined area	
Al-Soobah	Access by road to district centre and all local villages. Agricultural land.	- Feel more secure. - Herding on rangelands along de-mined roads - Fuel wood - Stones for building houses and terraces	Felt more secure after mine clearance. Walking or de-mined land with the de-miners, built confidence. The safe use of the road	Safe movement	Move freely	Safe herding without fear

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Dhale						
Bait Al-Shawki	Road to Damt still not cleared of mines; explosion in well after clearance. Only 19 families directly affected by clearing land, but others have better indirect access to mountain land; stone, honey production, fuel wood collection, grazing.	(No interview with women)	People still scared, but this is fading; herding of animals, fuel wood collection	Support for artificial limbs, tailoring training and start-up of butane gas business		
Al-Qafleh	Agriculture Grazing Fuelwood Access by roads Building of guard posts for qat fields	Fuel wood (good quality – also women from neighbouring villages came to collect) Grazing animals Fodder collection Feeling of security Qat (done by men only)	Grazing Fuel wood collection Agriculture (qat in particular) Wild birds	No assistance received	Herding, fuelwood, recreation	Herding, fuelwood. Feel more secure.
Habeel Al-Abdi	- Herding - Fuelwood. - Fodder - Paths for access to grazing - Buildings	Herding of sheep and camels - more animals and milk Fuel wood -save money on butane gas. Paths to neighbouring villages Houses near agricultural land (benefit to land owners and labourers) Stones for construction of houses and school.	Living security a	Artificial leg (1) No support received (2 &3)	After de-mining they feel safe and go freely for herding and fuel wood collection They know many things about mines from the de-miners and the awareness team	

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Masharih	<p>Agriculture - cereals and qat (on 25% of de-mined area).</p> <p>Herding in cleared rangeland (75% of de-mined area)</p> <p>Fuel wood collection</p> <p>Paths to neighbouring villages.</p> <p>Stones for construction (net value last year 100,000 YR)</p>	<p>They feel safer after de-mining.</p> <p>Herding on range lands for sheep production</p> <p>Fuel wood cutting for household use</p> <p>Landowners benefited from agriculture (grain and qat) to meet household needs.</p>	<p>Agriculture</p> <p>Herding</p> <p>Stone cutting for construction</p>	<p>No support received (twins)</p> <p>Artificial limb was too heavy. (Mariam)</p>	<p>After de-mining they were less scared and more confident when moving and herding in the demined area.</p> <p>Herding</p> <p>Agriculture</p> <p>Pedestrian road – short cuts</p>	
Aden						
Beer Ahmed	(farmers and community leaders were met jointly)	<p>Feeling of security; Herding of animals; collection of fuelwood</p>	<p>Cultivated land (but mainly used by newcomers and influential military persons)</p> <p>Water supply to Aden (uncontrolled drilling of deep wells)</p> <p>Residential areas (private and for Aden Free Zone [El Aml housing complex])</p> <p>University of Aden campus</p> <p>Road connecting Bir Ahmed to Al Lahj</p>	<p>No support apart from income from social fund of 3000YR/month</p>	No meeting with children.	

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Farsi	<p>Fishermen have received no benefit</p> <p>Houses have destroyed the village grazing lands (they have to graze in Al Heswa or buy in fodder). Many people have sold their animals.</p>	<p>Many women unaware of mines. However, they recognise that clearing the mines has improved security</p> <p>Women used to herd animals, but this is not possible now that the grazing lands have been taken over by government housing</p>	<p>Main beneficiary of clearance is the government (the Aden Refinery Company) who is building 2,600 houses near to the cleared area (cost, with facilities, of 11 million dollars)</p> <p>Safe construction of main road (Aden Al Buraïqa) and bridge.</p> <p>Also asphaltting of internal roads, employment at the ARC, bus for students and a temporary clinic have been indirect benefits to the community</p>	<p>No support, no knowledge of survivors association.</p>	<p>Know about mines and do not feel afraid anymore</p>	<p>Did not know about mines</p>
Amran	<p>Security</p> <p>Herding (by nomads)</p> <p>Collection of fodder grasses</p> <p>Collection of fuel wood</p> <p>Roads to various destinations</p>	<ul style="list-style-type: none"> - Feeling safe - Savings in the cost of water and fuelwood - Herding of animals - New roads saving time - Income for nomads from selling livestock and fuelwood - Area for recreation and dancing. - Selling of plots of cleared land to private individuals for construction etc 	<p>Safety for villagers, but also for nomads</p> <p>Potential for cultivation if rains are good (wheat, fodder, vegetables and sorghum)</p> <p>Access (e.g. road to Hodeida)</p> <p>Sale to investors (under dispute with government)</p>	<p>No support</p>	<p>Awareness of mines</p> <p>Play football in de-mined area (boys)</p> <p>Dance at ceremonies in de-mined area (girls)</p>	

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Heswa	<p>(Farmers and fishermen)</p> <ul style="list-style-type: none"> - Cultivation of crops (fodder production – by 20 families) - Grazing of livestock by 10 families - Road access to sea shore for fishermen (c. 400) improved greatly - Fuel wood collection (3 families) - Security <p>Income for one typical farming family:</p> <ul style="list-style-type: none"> a) Fodder production: Loss of 4,000YR/year b) Fuel wood transport: Profit 144,000YR/yr c) Camel sales 100,000YR/yr <p>Total income for one family= 240,000YR/yr</p>	<p>Safety – no longer scared.</p> <p>Husbands use shorter route to the seashore</p> <p>Individuals (often outsiders) have purchased the cleared land</p> <p>Access to land for herding, fuel wood and fodder collection</p> <p>Access for collection of Palm tree materials for (for vinegar and handicrafts)</p>	<p>Land dispute over ownership of de-mined area</p> <p>Outsiders using and occupying de-mined area</p> <p>Aden Free Zone has taken over part of the de-mined area</p>	No support given	Awareness about mines	Security
Mus'abain	<ul style="list-style-type: none"> -Grazing of livestock -Sale of land -Road access and through roads to - urban centres -Construction 	<ul style="list-style-type: none"> -Security and mine awareness -Grazing of camels and donkeys (taken to the area by girls) - Roads save time and effort. -Land has been confiscated by Ali Dirham 	<ul style="list-style-type: none"> - Security and freedom of movement - Roads (including a main ring road) - Rising land values, enabling people to sell land at a good price - Land development for housing 	None	Awareness	Herding of livestock

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Lahij						
Am-Jarba	No farmers	Road to go to and from College, and other villages Safety from fear Disputes over construction of housing project.	Road (cars and pedestrians) One house has been started on the cleared site Recreation (children)	Hospital care (paid for by father of survivor)	Awareness about the dangers of mines	Freedom from fear of mines
Al-Khudad	Fuel wood collection from the wadi after floods Crop production Grazing Income of one family from the cleared land is 765,000 YR per year from livestock and 5,000 YR (net of labour and costs) for cotton	We are not scared now Crop cultivation Fodder collection on cultivated land; herding elsewhere Employment as daily paid labourers Fuel wood collection from wadi	Safety from UXOs and mines in village, wadi and agricultural land Growing of crops Herding of livestock	None	Awareness of mines Safe movement and recreation	Did not know about mines Fuel wood collection; jasmine flower picking, herding of livestock, cutting of fodder

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Beer Naser	Herding Road access Drinking water (for village and city of Aden) Jobs with the water company	Security Herding Road access Building/construction of benefit to landowners only. Benefits have been limited. Negative effects have been land disputes and loss of grazing to construction. Increased reliance on purchased fodder - 4000 YR per month for 5 sheep/goats	Security Roads Water supply Jobs with the water company. Negative effects were an increase in land related disputes.	No victims met	Security Herding	
Abyan						
Ofeini	Grazing (sheep, goats, camels) by nomadic families Bee-keeping for honey Return per family per year = 904,000 YR.	Grazing (sheep, goats, camels) by nomadic families Bee-keeping for honey Collection of Sesbania pods Fuelwood collection Safe access to grazing areas and wells	Safe to roam freely (mines and UXOs cleared) Landlord allows nomads free access to area Crop production when there is rain or spate floods	No victims	-	-
Amsura	- Grazing - Fuel wood collection -Run-off water	Water collection in a tank for distribution to the village Fodder and fuel	- Rangeland - Fuel wood cutting - Water storage - Water harvesting Collection of stone	No support from YEMAC (he was injured in battle with the British, not by a land mine)	Awareness Herding of sheep (boys)	

Governorate and community	IMPACT					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Habeel Barak	<p>Herding for all community – animals increased by 10% after de-mining.</p> <p>“The feeling of peace is the most valuable return”</p> <p>Houses –temporary houses for Bedouin on de-mined area.</p> <p>Roads – improved access, shorter distance and time</p> <p>Cement factory under construction</p>	<p>Herding goats, sheep and cows.</p> <p>Security to walk freely</p> <p>Road open for pedestrians - community, neighbouring villages and Bedouin.</p> <p>Stones (8000YR per truck load) cut by landowners for houses and cement factory.</p>	<p>Cement factory built with private investment, bringing youth employment.</p> <p>(Land belongs to 2 tribes from outside the village who have documents supporting claim)</p>	None	-	Security

Annex Ten: Table of Opportunities for development in the 25 surveyed communities by Governorate and by social group

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Sana'a						
Sha'san	Water tank on cleared hillside, medical unit for community	Remove military camp, water harvesting dam, school for adult literacy, asphalt road to hillside, community charity organisation	Boreholes and dams for irrigation, monthly salaries for families of dead victims and for survivors	-	-	Intermediate school for girls Secondary school (being constructed by government)
Bait 'Oqab	(No separate interviews done with men and women): One narrow road still requires survey and clearance (Nagd Al-Salaf); need to revive traditional range management practices (Hema) and raise local awareness (especially among girls and women) to avoid overgrazing and erosion; organise planting of adapted seeds and seedlings for fodder; improved animal husbandry and animal health (veterinary unit, training of para-vets); some social welfare projects could be channelled through the highly effective local charity (Asad Al-Kamel); new terraces for poorer members of community; planting trees on terrace risers to reduce erosion (and provide fuel)			Charity for victims and their supporting families; resources to enable survivors to start projects to provide income on sustainable basis.	(No interview with children)	
Joab	Plant cereals Demine remaining areas	Demine remaining areas and provide assurances areas are demined. Asphalt roads.	Irrigation pumps, water harvesting structures, dam. Training institute, school, medical unit.	Medical unit, jobs, small projects.	Clear mines	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Sha'b	<ul style="list-style-type: none"> - The relocation of the camp to allow people to utilize the rainwater runoff from the hillside and the whole hill for herding and fuel wood cutting. - Establish a rural water supply project from a clean area to improve the health of the local community which is affected by stagnant sewage water. 	<ul style="list-style-type: none"> - Relocate the Military Camp to another area outside the district. This will improve water harvesting and benefit owners of land in the lower parts of the hill, and will provide an additional area for all the community who herd animals and collect fuel wood. 	<ul style="list-style-type: none"> - Relocate the military camp. - Investment in factories and workshops for stone mining as a source of income for the local community. Return on investment is quick and will provide stones for construction. - Relocate the Sana'a sewage project, and establish a decent rural drinking water supply project. 	<ul style="list-style-type: none"> No survivors met. 	<ul style="list-style-type: none"> Rehabilitate and expand the school. 	
Al-Jafinah	<ul style="list-style-type: none"> - Create/ establish Farmers associations to access government support, bank loans and agricultural machinery - Construct water diversions for forage growth - Provide six artesian well pumps - Asphalt the road 	<ul style="list-style-type: none"> - Asphalt the road - Grow alternative crops, e.g. sorghum - Drill wells, construct cisterns and drip irrigation units 	<ul style="list-style-type: none"> - Create Agric. Associations. - Maintain roads 	<ul style="list-style-type: none"> - Conduct further operation to improve sight to enable him to return to school - Provide an artificial limb - Get monthly assistance or salaried job 	<ul style="list-style-type: none"> - Expand the school - Mosque - Medical unit 	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Dhamar						
Mazlb	<ul style="list-style-type: none"> - Water supply for irrigation through the provision of deep boreholes and dams - Deep ploughing of soil to ensure that danger of deep mines is not present, so that the land can once more be used for crop production - Asphaltting of the road (presently very bad condition) 	Dig the land to 2 metres.	-	No survivors met.	-	
Al-Sharaf	<ul style="list-style-type: none"> - Water construction project (diversion or small dams for harvesting rainfall) - Bring security through YEMAC work and awareness campaigns - Drinking water project – the water source is far away - Primary school - Literacy classes for women and girls 	<ul style="list-style-type: none"> - To improve security they require more information on the de-mined area and de-mining of the uncleared area - Renovation of land/terraces to improve water infiltration and grass growth - Drinking water supply project - School nearby - Adult literacy 	<ul style="list-style-type: none"> - Water supply project - Irrigation project 	Further medical treatment and psychological care. Family is in debt & cannot afford treatment	<ul style="list-style-type: none"> Primary School - the current school is far Water supply project Electricity supply 	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Ibb						
Bait Al-Ra'ae	<ul style="list-style-type: none"> - Land reclamation for agriculture (potential income from land = 25000 YR per year) - Tractors - Wells - Water tanks for drinking water - Asphalt roads to cleared area - School - Medical unit - Vocational training centre for women 	<ul style="list-style-type: none"> - Increase awareness of women about status of de-mining - School, especially for girls (could be built on de-mined area) - Medical unit - Training course in sewing and literacy for adult women - Pump for irrigation and drinking water - House construction (on de-mined land) 	<ul style="list-style-type: none"> Rehabilitation of crop production on terraces in/near cleared area Improve confidence of all village people about the safety of the area for all purposes Construction of dams to harvest water for crop irrigation or digging of tubewells 	<ul style="list-style-type: none"> Medical unit Support to survivors 	<ul style="list-style-type: none"> Primary school 	<ul style="list-style-type: none"> School for girls
Bait Al-Azani	<ul style="list-style-type: none"> - Solve land disputes by transferring ownership of demined land into Awkaf (charitable endowment) and create a community recreation garden or sports club - Rainwater harvesting structures and irrigation network - Water tank at top of the hill for drinking water for village. - Medical unit - School for girls - Extension centre 	<ul style="list-style-type: none"> - Warning signs, bridges and pavements on roads. - Water project for irrigation (pumps, dams, water harvesting.) -Clear mines from Jebel Ali Sa'eed 	<ul style="list-style-type: none"> -Rural water supply project -Support the association Establish similar associations -Water structures, small dams, repair traditional irrigation canals -Literacy campaign -Medical unit -Girls School 	<ul style="list-style-type: none"> Contact with survivors association for support 	<ul style="list-style-type: none"> School Play ground or garden Mosque 	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Soobah	Build constructions for water harvesting and crop irrigation to increase crop production - Reactivate and support the extension centre with funds and staff- - Drinking water supply project. - Cultivation of freed agricultural land (potential income from land in Al Bayadha and Al-Ma'kad) 56,250 YR and 187,500 YR)	Water supply project to ease shortage of water. Electricity supply Request de-mining of remaining areas	Water supply project to address scarcity of drinking water and water contamination Irrigation project Request de-mining of remaining affected areas	Water supply project Electricity supply	Water supply project	
Al Dhale						
Bait Al-Shawki	Develop links with the Dhale Rural Development Project (IFAD)	(No separate interviews with men and women): Local regulations and awareness raising (bye-laws) for good range management; introduction of locally adapted seeds and seedlings to range lands; fodder supplements (including <i>Opuntia</i>); butane gas to replace fuel wood; establish agricultural extension and veterinary services; train para-vets; improve local breeds through cross breeding; improve animal husbandry; introduce modern bee-keeping; provide resources to develop agricultural activities; mine more stone from high areas; establishment of local co-operatives; planting of fruit trees; road construction to de-mined area; medical facilities for village (promised by government but unfulfilled)		Female survivor was given sewing training but did not take to it. She wants capital grant to start a small shop in the village		

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Qafleh	Irrigation; tractors; seeds Extension advice. All-season road between village and main road. Medical unit. Basic and secondary schools. Complete electricity project.	Primary school for girls beyond 6 th grade, with female teachers. Deep wells for rural water supply near to houses Medical unit in the village Connect electricity	-	Support for survivors (medical help training and financial support)	Intermediate and secondary schools Water supply project Completion of electricity project	School for girls with female teachers
Habeel Al-Abdi	Drill deep wells in the de-mined areas and build terraces Alternative roads to save time Construct private houses School Medical unit	Drill deep wells. Electricity. Establish a community association to help build houses in de-mined fields	Intermediate and secondary schools Water constructions	Get a regular income from a job or assistance Capital to start trading or establish a shop Getting artificial limbs	Intermediate and secondary school (current schools are located far away)	
Al-Masharih	Improve agriculture and utilise more of de-mined area. Build structure (dam) for water harvesting and conservation Water supply project Medical unit	Veterinary care for improved animal health Water supply project for household needs & to reduce diseases. Electricity project Asphalted road	Extend the primary school from 4 th up to 9 th grade. Schools are far away Build water conservation structure	Provide medical/psychological care for twins Provide cost of medicines for Mariam	Extend the primary school up to 9 th grade Build water conservation structure	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Aden						
Beer Ahmed	Soft loans for agricultural machinery and livestock; Rehabilitation of wells, irrigation canals and water diversion structures; stop the mining of gravel and sand for construction; technologies for fodder production, vet services or train local para-vets * The area has good stands of <i>Prosopis cineraria</i> which could be used for various productive purposes - animal feed (pods); fodder; charcoal; furniture-making.	Potential for using land for cultivation (however low income means they would need land distribution programme and loans for equipment and land reclamation); employment; establishment of local associations; support for handicrafts; rehabilitation of buildings; training in livestock management and bee-keeping	(jointly with farmers)	Conduct a survey of landmine victims; conduct training needs assessment of survivors, and provide relevant training; help male and female survivors to start appropriate activities - Sale of merchandise from a vehicle; small shop; fattening livestock	No meeting with children	
Al-Farsi	<ul style="list-style-type: none"> - Improve the boats (size, strength of boats) and their equipment (nets, motors) so that they can fish further from the shore. - Transport for fish - Refrigeration facility for fish catch - Sewage facilities - Medical unit - Extension of school - Cemetery - Playing grounds - Street lighting 	<p>Water and electricity at reasonable prices</p> <p>Better working hours and less working at weekends</p>	<ul style="list-style-type: none"> - Street lighting - Bus service - Drinking water - Support for poor families (through the Al Farsi Social Welfare Association) 	Assistance to start business to generate income	<ul style="list-style-type: none"> - School extension - Playground for football - Market - Street lighting to the Little Aden Bridge 	-

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Amran	<p>Training in the use of computers and other office equipment that is there</p> <p>Water supply for irrigation to enable crop production (for nomads)</p> <p>Drinking water in cleared area (for nomads)</p> <p>Housing for nomads</p>	<p>Boreholes for irrigation for crops</p> <p>Distribution of land in transparent fashion</p> <p>Housing and school for nomads</p>	<p>Survey of land and redistribution to community and nomads in an equitable way</p> <p>Fishing cooperative to improve the livelihoods of fishermen</p> <p>Secondary school – or transport to school</p>	<p>Fishing boat for survivor</p>	<p>Garden or recreation centre for children</p>	
Al-Heswa	<p>(Farmers and fishermen)</p> <p>Stop selling land to outsiders</p> <p>Medical centre</p> <p>Secondary school</p> <p>Sewage treatment system</p> <p>Training centre for women and girls</p> <p>Recreation area for children</p>	<p>Medical centre,</p> <p>Secondary school,</p> <p>Sewage,</p> <p>Training centre,</p> <p>Recreation area.</p>	<ul style="list-style-type: none"> - Resolve ownership of cleared area to the benefit of the local community - Plan for the village, with all services and roads - Employment for graduated youth - Use the Fishermans Cooperative Association and the community social welfare organisation for the development of projects with local benefit - Fish market/fish canning factory and refrigeration plant for fish - Medical centre - Sewage treatment system (and use water for palms) - Houses for community members 	<p>Support to survivors to start their own income-generating businesses</p>	<p>-</p>	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Mus'abain	Reduced cost of fuel Medical unit	Stop the confiscation of land by Ali Dirham Sewage system to reduce disease Medical unit	Local charity organisation that could assist with support to the poor Medical unit Sewage system	No survivors in the village.	Recreation park	
Lahij						
Am-Jarba	-	Housing (for the staff of the College); housing for immigrants Workshop and training in tailoring for income generation Water supply Cheaper medical care Playground for children	Building houses (benefit to private and municipal landowners). Private landowner hopes to build 25 houses. Rent would be 3 million YR per year <i>(N.B. Am-Jarba is within the planned area for Saber City, the new Lahj capital)</i> Employment opportunities for men and women as unemployment of both is very high	-	Fencing for playground so that the land is not lost to private development	-
Beer Naser	- Drill deep wells for irrigation - Solve dispute on land ownership - Association for housing - Medical Unit	Drill wells Asphalt road. Education program Training in sewing	Solve the dispute on land otherwise land will not be utilized – will help investors, community and government Build a medical unit	-	Build a play ground to make better use of their time instead of chewing qat.	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Al-Khudad	<p>Resolution of land disputes between those who received land in the agrarian land reform and original owners</p> <p>Sewage project</p> <p>Improvement to drinking water supply</p> <p>Compensation to house owners who suffered from flood damage in 2006.</p> <p>Soil and water conservation for wadi banks</p>	-	<p>Charity organisation in village that could assist development projects for poor members</p> <p>Sewage project to reduce disease</p>	None	Medical centre	Girls school.
Abyan						
Ofeini	Employment (alternative to land-based income, especially in bad years)	<p>Schooling for children</p> <p>Places for settlement</p> <p>Electricity supply</p>	<p>Livestock breeding programme supported by credit and technical assistance</p> <p>Short-duration crops</p>	-	School	
Amsura	<p>Connect electricity</p> <p>Build water reservoir (study completed)</p> <p>Post office</p> <p>Preliminary court</p> <p>Sewage project</p> <p>Premises for the Sports Club</p> <p>Asphalt internal roads</p>	Re-instatement of the medical unit	Improvement to the status of the village and upgrading of facilities (as a town)	-	Electricity and sewage system	

Governorate and community	OPPORTUNITIES					
	Farmers	Women	Community leaders	Survivors	Boys	Girls
Habeel Barak	<p>Drill deep wells</p> <p>Drinking water supply project</p> <p>Government assistance to solve land dispute to broaden access to stone & marble cutting</p> <p>Medical unit.</p> <p>Electricity</p> <p>Bigger school</p>	<p>Literacy classes</p> <p>Drinking water supply project</p> <p>Drill wells for agriculture and herding.</p> <p>Electricity</p>	<p>Irrigation canals to rehabilitate agricultural lands.</p> <p>Village lacks basic needs and infrastructure (Medical unit, water supply project, electricity)</p>	-	-	<p>Build a secondary school</p> <p>Expand the current school</p> <p>Water supply project</p>

Annex Eleven: Survey data from 25 communities in Yemen

May 2006

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Sana'a Governorate

Sha'san community

Sanhan District, Sana'a Governorate

Date of survey: 9th May 2006

Summary: Sha'san

Sha'san is a medium-sized, high altitude, low impact village, within 30 minutes drive of Sana'a on a main road. The village has good agricultural land, mostly growing rainfed qat, fruit trees and food crops. The village is dominated by the Sheikh and has no community organizations for social welfare or community governance. The cleared area is communal land, originally used for grazing and fuel wood collection. It was mined during the Revolution (1967). Afterwards, there were attempts by villagers to demine it, with some loss of life, and some used it for grazing despite the dangers, with consequent loss of life, injury and loss of animals. The total number of victims in the village is 5. Three died instantly, one died of a stroke after four years and one survives to this day (see Case Study). The land was eventually cleared by YEMAC (2000-2004), but many villagers still feel insecure and avoid some parts. There have been no accidents since clearance.

The main impacts are the increased use of the land for grazing, fuel wood collection, fodder collection, stone cutting, and water harvesting.

Opportunities for the improved use of the cleared land include: re-assure community members of the safety of the land, construct water tanks on the land, provide better access roads to the land and remove the military camp.

Opportunities for the village include boreholes and dams to provide irrigation water for qat, food crops and fruit trees, provide a medical centre, build an intermediate school for girls and provide more support to survivors and families of dead victims of landmine accidents.



Introduction meeting: Sha'san

Participants in the meeting were representatives of different segments of the local community. The participants in the meeting were as follows:

1. Sheikh Saleh Hager

2. Saleh Mohamed Murshed (Citizen)
3. Mohamed Saleh Hager (University Student)
4. Saleh Ahmed Al-Haj (Farmer)
5. Hadi Al-Sawany (Military person from the village)
6. Ali Mohamed Ali (Military person from the village)
7. There were also more than 10 children

Mr Amrany explained the purpose and objectives of the mission and the organization supporting the mission. YEMAC's role was highlighted, being the national center for mines in the field of awareness raising, helping victims and the process of demining.

The Sheikh welcomed the mission and expressed his willingness to cooperate in the same manner as when the first teams arrived for demining.

One citizen (Saleh Mohamed Murshed) expressed his fear saying that "many people are still reluctant going to some sites". However, this fear is gradually fading away. The fear is mainly because members of the local community are still not confident that the area was really cleared. He stated that he is reluctant because he was affected by mines. He lost 35 head of goats and sheep as a result of mine explosions before the year 2000.

Similarly another citizen (Ahmed Saleh Al-haj) expressed the same fear. He also herds animals and is still reluctant to enter the area for herding animals.

Mr. Amrany commented that an official certificate was handed over to the Sheikh stating that the area is cleaned from mines.

The son of the Sheikh said that "Yes, the de-miners came to our area. The first team came in the year 2000. The groups started work till the work was completed in Herwe mountain in the direction parallel to Sha'san. However, we are not sure if the other side of the mountain is cleaned."

The Sheikh said "in that area individual mines (type m1) were planted in 1967".

The Sheikh demanded drilling of wells to practice cultivation of food crops for self-sufficiency needs. He also expressed needs for compensation for victims in the form of regular salaries on a monthly basis for both for dead or injured victims.

Time Line: Sha'san

1. *When were mines were planted in the area?*

Mines were planted in 1967. The planting took place all at once. The mines were planted without our knowledge. After planting mines, we were told and the road was blocked to prevent reaching the mined area.

2. *After knowing that the area was planted with mines, how were your lives changed?*

The mined areas were previously used for herding animals. After we came to know the planting of mines our lives was changed. However, there were other areas for herding animals in the east and west of the village.

3. *Why did you continue herding animals when you knew about mines?*

The fact is that the mined area was rich with fodder and fuel wood, many herders risked their lives to collect fodder. Cases of explosions and deaths were common.

4. *When the area started to be demined?*

In the year 2004

5. *How is the status of the community after demining is over?*
Yes, the area was cleaned from mines. However, the surrounding area such as (Al-Gob) in the opposite direction of the demined area is still not cleaned.
6. *The remaining areas are safe from your perception?*
Yes, but please note that some sites (entrances) are still not used.
7. *Did your lives was changed after demining?*
Yes our lives changed. We are using the demined areas for herding animals, fuel wood cutting and safe recreation.
8. *Is agriculture a recent activity in this area? (This question was raised when team members noticed growing of qat at the hill top).*
No, agriculture is an old activity in the area
9. *Have the mines vanished? Do you feel safe?*
Yes the mines are not there any more. However, there are surrounding areas where we are still scared to go.
10. *Were all of you affected by mines?*
Yes, all of us were affected by mines. All village members have animals and they use fuel wood.
11. *How many houses in the village "Sha'san"*
150-300 houses
12. *How many inhabitants in the village?*
3000 persons.
13. *The land belongs to whom?*
The land is community owned. However, the water canals and Marahek are privately owned.
14. *Who is using the demined land?*
The land is used by every body in the village.
15. *What crops do you expect to grow?*
We do not cultivate this land.
16. *Were there any incidents after the year 2000, after the first survey was over?*
No incidents took place. However, an explosion took place while the teams were demining the area.

Comment:

1. After this, Mr. Ali Dahman said that there is agricultural land beside the demined area. However, it is not cultivated because it is located far away
2. The alteration in the map was an asphalted road recently constructed from the District centre to the village after the first survey was conducted.

Table 1 - Time Line Chart: Sha'san

Period	Situation
Before 1967	The area used to be rangeland for herding animals and fuel wood cutting.
After 1967 . After the 70 days embargo. The mines were laid	Herding animals became dangerous. Herding animals and fuel woodcutting moved to the east. That is a big area. During dry seasons, rangeland in the mined areas was better for herding. Herders took the risk then. There were casualties. The affected people are mainly community members who had animals
2004 Demining started	Demined areas are safe and people free going into the demined areas. No explosion of mines took place after the year 2000 except the explosion of a mine on one "YEMAC" employee while demining.

Village profile: Sha'san

A. Internal Factors affecting the Village:

- No of houses in the village:* 300 houses
No of inhabitants: 4000 persons
No of schools: One basic school (primary). Another school is under construction.
No of Mosques: Three old and small mosques
Is there any medical unit? No
Telephone services: Yes, surface and mobile phones.
Electricity: Yes, central and adequate service.
Gas Station: No
Local Council: Not available. There is one member of the local council.
Police Station: Not available.
Is there an association? Not available.
Is there a Rural Water Project? Yes, but the project is weak.
Internal migration: Yes, there is mutual migration among villages.
Is migration because of drought? No

B. External Factors affecting the local community in the village.

- Is the government giving you enough attention in terms of development projects?* Yes, there is a water project implemented by contractors from the Ministry. The cistern was constructed and the water tank was erected on the hilltop. This is a new Rural Water Project. However, it was not completed, despite the tendering being finalized.
Are there any non governmental organizations? Not available.
Are there any investors in the area? No
How are relations with surrounding villages? The relations are close and there are family ties as a result of marriage among villagers.
Are there any markets? No
Where do you do your marketing? In Sana'a and Dar Selm. There was a market before, but anymore.
Where do you get your income from? From land, herding animals, agriculture and employment with the government. No immigrants.
Do you get loans or credits? Yes, we get credits from the bank to purchase water pumps or tractors. Sometimes we apply for a joint loan. The interest rates are high compared to

the case when you pay cash. If the land is cultivated to its full capacity, we will cover the whole of Sana'a.

Is there a water diversion structure or dam project? There is the idea of a water diversion structure. However, this is still a dream.

Are there Radio, TV and newspapers services? We hear the Radio; we watch TV and the newspapers are bought in Sana'a.

Are there any political parties? Yes there are political parties and there are premises of these parties in the area.

Did any catastrophes take place in the area? No

Did drought cause people to move out of the area? No. Droughts are not severe

Was there any mass spread of diseases? No, however, a rumour was spread about bird flu. We were forced to kill chickens in the village. This was a false alarm.

Was there any attack by locusts? No. If locusts come we will eat them.

Meeting with leaders (Sheikh): Sha'san

A meeting was organized with Sheikh Mohamed Saleh Hager (the son of the Sheikh) and Sheikh Ali Saleh Kasem (retired from the army and Sheikh in the village).

Both Sheikhs demanded the drilling of wells for agriculture production. There are no organizations in the village, neither for men or women. There are demands for associations now. There was one association created for purchase of some cloth and covers for the "Dewan" in the village. The government constructed the Dewan and the village members purchased the furniture.

"Zakat" is collected and paid to the district. They say that "Zakat" is then used for projects and road construction. We in the village did not get the benefit from "Zakat" which we pay regularly. Our plans are ambitious. We need a university if we can get. Local councils are located in the district. They seldom come to the village.

The Demined Area is a community property. The community benefits from the demined area. They want us to hand over the demined area. This is impossible. The demined area is the property of the community. It is used for herding animals and fuel wood cutting by all community members. We must say that the demining of the area is the only project we benefited from. We need more projects like this one. People suffered a lot from mines. They lost their animals during herding. Local people lost their loved ones. Many became invalids.

We demand the construction of water structures such as a small dam for water harvesting.

There was a question on whether there are areas planted with mines in addition to the demined area. The Sheikh's answer was no.

There was a question about the uses of the demined area. The Sheikh said "the hill is mainly used as range land and fuel wood cutting so far. Several animals were killed while being herded. In one case more than four cows and tens of goats, in other case (in 1998) two goats were killed by mines plus one man injured (Abdulla Abdo) plus one man injured from Al-Haima.

Later in the same day a meeting was organized with Sheikh Saleh Husain Hager (the father). The Sheikh said “we are now following the expansion of the school and we have a water construction project (small dam) from the government. The budget is already committed in the Ministry. The government covers the school expansion”. The Sheikh added, “as far as crop production is concerned farmers have their own plans. Every farmer grows the crops he requires based on his own interest. Agriculture depends on rainfall. The “Herweh” hill is community owned. Every one has his own water canals for runoff water. The Sheikh said “Rangeland is open for the whole community. Sometimes we close the rangeland for herding cows only and after wards we open the range for other animals”. The beneficiaries of the rangeland are members of the whole community. Every household keeps animals and herds them in the hill.

There was a question about the collection of “Zakat”. The Sheikh said “Yes, “Zakat” is collected annually; it goes to the local council”.

Before mine planting the area was not for agricultural production; it was rangeland for herding and fuel wood cutting. The rangeland is also divided as per the runoff canals. Every land owner downstream has his own canal for diversion of rain water as run off to his own land.

Meeting with Women: Sha’san

A meeting with women was held in the Sha’san village in a house of a female mine survivor.

Age group of participants in the meeting was 17-70 years. No of participants: 22 females.

- Most women stated that the most important benefit from demining is the feeling of safety and security about themselves and members of their families.
- Some women said “We climb the hills, herd animals and we keep away from sites of potential danger or threat to our safety.
- One woman said “we used the demined land for herding animals and collecting fodder, fuel wood. Those who benefited maximum from demined lands are animal herders and the military people living in a camp located up the hill. Some women do herd animals.
- One woman said, they did not benefit from demining the upper part of the hill because they cannot go there because of a military camp.
- One woman said that because of rainfall, mines were buried deep in the soil, and they cannot be seen anymore.
- One woman said “ the benefit from demining is the feeling of security for us and for our children”
- Some women said “ the asphalted road was constructed by the government for the military camp”
- All women said “we know the location of mines; that is why we do not cross the mined areas.”
- One woman said “The first victim of mines is my sister, that was long time ago before the era of president Ali Abdulla Saleh” We never knew about mines then.
- Some women said “the water canals where run off takes place after rains benefit landowners located downstream”
- Some women said “Saba Phone Company laid down Cables on the hill”

- Some said “we cannot walk in demined lands. We are not sure if demining was effective”
- Some women said “the wadi is full with forages and grasses. If we did not get grasses in our area we go to neighbouring areas. That is why people come to us and prohibit us from collecting grasses from their areas.
- One woman said “my sister was on the border of “Joab”area when a mine exploded on her. This was long time ago”.
- Some women said “there are people in the village who still do not know that the hill was demined”
- One woman said “We did not hear about mine explosions for the past four years”.
- Most women said “There was no problem in herding animals before demining. The lower parts of the hill were enough for herding animals”
- One woman said “During the rainy season the area for herding in the hill side is protected to allow weeds to grow afterwards herding is allowed”
- All women said “the demined area in the hill is open for herding by everybody”
- One woman said “nearly seven women herders benefited from the demined fields”
- One woman said “we used to herd animals during the rule of Al-Hamdy. Afterwards mines were planted”
- Some women disputed about whether mines were demined during Al-Hamdi rule or after.
- All women said “We did not have any knowledge on mines except information given to our children at school”
- One woman said “my uncle used to de-mine fields through his own efforts. He managed to dig out more than 30-40 mines. However, he got killed by a mine explosion. This took place long time ago”
- Some women said “the military camp has been on the top of the hill since the pre revolution era”
- One woman said “the top of the hill is kept for the camp. All weapons are there including houses and small rooms”
- All women said “the mines were around the camp not over it”
- Most women said “after demining the camp remained as it used to be without expansion”
- All women said “the demined areas on the hill became road for pedestrians and herders. Before demining the herder used to walk on the earthen road”
- One woman said “we have land in the demined areas on the hill but we could not cultivate this lands because of the fear from mines”
- Some women suggested the construction of a small dam for water harvesting for the benefit of the community.
- One woman suggested construction of a school for combating illiteracy. Many women want to learn how to read and write
- Some women suggested asphaltting the road to the top of the hill for cars to reach the higher location on the hill.
- Most women said “the camp is useful because it protects us”
- One woman said “all hills are having camps on them not only in our case”
- Most women said “most demined lands are not cultivated because we are not confident about clearing of mines”

- One woman said “you should have brought with you government agencies such the Social Fund and Social Welfare Fund and the Ministry of Education to solve our problems”
- Some women said “if all areas are demined, we will consider this a sign of departure of devil”
- One woman said “The well off people in the village do not help anybody. They take government funds for their own benefit”
- Most women said “There is no cooperation in the village. No body helps another. We want the government to help us. The companies should also help us such as the Chinese company”
- All women said “there is no charity organization in the village”
- One woman said “Even the farmers association of Sanhan did not help us”

Meeting with Farmers: Sha'san

At the beginning of the meeting with farmers, the objective of the survey was highlighted. The role of YEMAC was explained. The history of demining was also illustrated. Three farmers were present in the meeting. These are: Saleh Mohsen Al-Saedy; Hameed Hamoud Al-Udhaiby and Hamoud Ali Farhan. Details of discussions are summarized in the following table:

Table 2 - Benefits and impacts -Farmers: Sha'san

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land: a hill used as range land and fuel wood cutting + cutting stones for sale	All members of the village	The Sheikh	Animal herding (cows, sheep and goats, donkeys)	A total of 50.000 to 100.000 YR was saved after demining 200.000 YR is generated annually from cutting stones.
Uses of water: During rainfall, the runoff forms floods which flow downstream for irrigation of arable farmlands	Land owners			Qat, fruit trees and food crops are grown in the village
Animal production is a major activity of households in the community.	All villagers			Animals are sold in the nearby markets. The number of animals in the village is around 4000 heads
There is self sufficiency in milk production. Bee hives are owned by only one farmer.				50% of food production comes from cultivation of crops. The remaining is purchased from the market.
No roads available				
Other things: An antenna was erected for local telecommunication. It is possible to construct water construction at the lower parts of the demined hill.				

Table 3 - Development Opportunities - Farmers: Sha'san

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Demined land: Herding Stone cutting Fuel wood collection	No problems encountered	-----	Local community members	
Health Issues	No medical unit	Provision of a medical unit	Local community members	Government Local Council
Animal vaccination	No problems	-----	-----	-----
Other issues:	-			

Community members positively interacted with demining staff				
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Meeting with Men/Women Survivors in Sha’san

Case No (1): Name: Aliah Ali Saleh Mohsen (Female; Divorced; 41 years old. Age at the time of the incident: 15 years. Marital status at the time of the incident: Married)

Aliah was collecting fuel wood on the hill side which was later demined. She heard a sudden explosion. When she recovered she realized that she lost one left leg. She did not faint. She realized what was going on. People asked her to drink some water. They believe, drinking water help preventing the victim from dying. She was rushed to the Al-Thawra Hospital in Sana’a. Aliah was also had burns in different parts of her body because her clothes caught fire after the explosion. The burns were severe and complicated her situation further. Upon arrival to the hospital, Aliah saw several much more severe cases than her case. She thanked God for the harm she suffered from. “It could have been worse” she said. Her father played vital role in helping her recover. He took care of all the costs such as medical treatments, purchase of an artificial leg and repair of the artificial leg when repair is required. Aliah’s father used to warn her not to go to that part of the hill to collect fuel wood. But she ignored the warning. That is why she was to blame for the incident.

The only external support she got was treatment from the hospital and 10 YR from President Al-Hamdy. No training was given to her. The victim knew about “YEMAC”. She said that they came to her six months ago and promised compensation such as an artificial leg. She told them that she wants one of the red cars as compensation for her leg. “That was a joke”, she said. So far she has received no compensation.

Aliah has created a small savings group. She collected 200,000 YR when her turn came. With that money she was able to launch a small business in the village. She expanded her buying and selling in the village to the extent that she was able to construct a small and beautiful house. Her nephew helped her. She sold all her gold and generated 200,0000 YR . She deposited this amount in the NCB as fixed deposit to benefit from the interest rate generated. However, the Bank is now closed because of bankruptcy. Aliah is surviving with her injury with a high morale and good spirit for the past 26 years.

Meeting with Boys: Sha’san

Age Group: 8-13 years. Number of Children in the meeting: 8 children (boys)

- Children said that they knew about mines through their parents.
- All children know the mined areas and the demined areas through the signs located in the area.
- Children do not go to the mined areas because of the fear of mine explosion.
- Two of the children participating in the meeting are animal herders. They do not come close to mined areas.
- All children feel secured now. They go to the mined areas without any fear.
- Children stated that herding in the mined areas is prohibited.

- One child participating in the meeting said that he dropped out of school because the teacher was tough with him.
- One participant said that troublemakers at school are discharged from school.
- Some said that sometimes herders leave animals grazing in mined areas, despite the fact that they know the dangers of mines in these areas.

Meeting with Girls: Sha'san

Age groups: 9-15 years.

- All girls stated that they heard about mines.
- Girls are aware about warning against coming close to mine areas by their parents.
- Girls were warned against going up the Herwa hill to mined areas.
- One girl said "When girls go out to nearby areas where Areas are mined, they are warned by elderly people who pass by or who notice their movement".
- Most children heard about two young boys, who found a mine on the road and tried to open it then exploded, one kid lost his eye and the other lost two fingers of his hand.
- Children heard about demining. They used to see demining staff passing to and from the mined areas in their red cars.
- "We still feel scared to go into demined areas. We feel the demining might not be complete" children said.
- One child said "when we herd our animals and they go into mined areas, we just let them till they come back on their own"
- Although our parents tell us the land is demined, we still find people who tell us that demining is still not over. We get scared and do not enter the demined areas."
- There are positive impacts of government efforts such as:
- Asphalted the road.
- Rehabilitation of the school
- Provision of chairs to the school
- Provision of doors to classes
- The government is constructing a new basic and secondary school
- One girl said "I and girls my age study at home because there is no intermediate school for girls. We go for exams to a school in a neighbouring village called Bait Al-Shateby"
- We hope that an intermediate school for girls is constructed in our village.

Impressions about the village: Sha'san

- It was easy to talk to people
- People do not trust that the land is cleared. The YEMAC team members attributed this to the Sheikh not sharing the information
- Women were interested more than men and more than what we expected
- The survivor met was self reliant and built her own house
- The Sheikh had not informed the men
- After the Sheikh knew there was no support coming, he tried to play with the information
- Planning in the village is weak. Good informal relations but poor external links.

Table 4 - Conclusions: Sha'san

Categories	Impact	Beneficiaries	Why?	Opportunities	Beneficiaries	Why?
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Farmers	- Herding, fodder collection - Fuel wood cutting	- All livestock owners -Women	The area is hilly and can only be used as rangeland	Construct water reservoir at the top of the hill. Cultivation of some crops at the hill top	All village members Farmers and land owners	The hill is suitable for pumping of water
Women	- Herding - Security	Women herders + relatives of victims + the community	All participants agreed on this	Construct of a small dam Asphalt the road on the hill.	All farmers and those who have property in the demined area.	This will save financial resources and save time for those having properties in the demined area.
Leaders	- Herding - Security	Most inhabitants The community	- Major source of income - Source of stability	- Rehabilitate school - Construct medical unit - Expand asphaltting the road.	All inhabitants All the community	Improved health conditions Improved education Secure water from the hill
Survivors	-					
Children	Herding Security Security	All livestock owners All society Children	Additional income Good life Some children are herders	School for girls (intermediate and secondary) Secondary school is a priority	Girls attending school Children	Improved education of girls Prevent dropping out of school and early marriage of girls.

Sha'b Community

Arhab District, Sana'a Governorate

Date of survey: 10-11th May 2006

Summary: Sha'b Community

The Sha'b community in Arhab district is close to Sana'a. It is comprised of four scattered villages (Al-Rawdha, Al-Kasaba, Awmarah and Uzlat Sha'b), all of which utilise the demined area. Mines were planted in the area in 1978, blocking grazing land and areas for fuel wood collection and stone cutting and making it difficult to rehabilitate run-off channels for water collection. The village was designated as medium impact in the LIS.

The village population is 4,500. The majority rely on agriculture, growing qat, cereals (barley, wheat, maize), pulses, grapes peaches and vegetables and raising animals. Food crop production is insufficient for household needs. Around 10% of employees work for the government. Prior to the Gulf war migration to other countries for work was common, but this has since declined.

Village services include schools, a medical centre and limited communication facilities. The village used to rely on underground sources of drinking water, but these are now unsuitable for drinking because of contamination by sewage water from Sana'a. There are few development initiatives or businesses in the area and no NGOs or international agencies operating. The nearest market is in Sana'a. However, social links between villages are strong.

Several [mine related] incidents took place after the year 2000 and there were several casualties both human and animal. Utilisation of cleared land is limited because of uncertainty whether demining is complete and because the area was taken over by a military camp. Women were not given information that the areas were demined.

The main impacts have been the release of land for herding, fuel wood collection, stone cutting, and water channelling for irrigation, benefiting livestock owners, farmers and community members.

The main suggestion for development of the demined land was to reduce the area occupied by the military camps or move them to another area outside the district, so that the hillside could be fully utilised. Opportunities identified at village level were a project to create a new rural drinking water supply from a remote and clean area and to divert the sewage to a remote uninhabited area. The children mentioned the need to rehabilitate the school and construct additional ones.

Introduction: Sha'b Community

The team left Sana'a around 8:30 for Arhab district, arriving at the village of Al-Rawdha, Jebel Suma'a. The meeting with the local community took place in the village. About twenty persons representing the different segments of the local community were present. At the beginning, Mr. Al-Amrany introduced himself and the team to the gathering. Then he asked every one to introduce himself in the presence of the Sheikh of Al-Rawdha village, Mr. Mohamed Ali Al-Udhary.

Mr. Al-Amrany and the team explained the objective of the visit and the role of "YEMAC" in the survey, awareness raising and demining of affected areas. The most important observation recorded by the team during the introduction was the fact the demined area in Herwe hill and Safra'a is an area used by several villages scattered over a wide area. These villages are Al-Rawdha, Kasaba, Awmarah and Uzlat Sha'b. Therefore, the movement from one village to another and gathering the members of these local communities would be a big task to fulfil.

Time Line: Sha'b Community

A meeting was organized immediately after the introduction. An elderly person in the meeting was asked when mines were planted in the area. The answer was 1978. The mined area was [previously] used as rangeland for herding animals, collecting fuel wood and as a stone cutting area. It was also a source of water runoff to downstream agricultural lands. However, because of land mines it was impossible to utilize it in any activity.

After demining, why is the area not utilised?

One participant said – “*Firstly, we are not sure if demining is completed. The de-miners did not inform us officially that their task was over. Secondly, we could not utilize the area because the military camp located up the hill took over the area after demining and declared it a military zone*”.

One participant in the meeting said, “*there are areas which were not demined. These are: Jebel Suma’a Al-Rawdha. The area in Awmarah Jebel Al-Safra’a however, is demined and we saw the de-mining team working there and we are sure that the area is definitely de-mined*”.

Can Jebel Al-Safra’a Awmarah be used for herding animals, fuel wood collecting and stone cutting?

Mr. Ali Mukbel said “*Yes, it can be used. However, after demining, the military camp took over the area and transferred it into another camp in Suma’a hill.*”

A question was asked about the ownership of the demined area.

Mansour Al-Udhary is a farmer in the village. He said, “This area belongs to the four villages. It’s considered the border of the four villages.

Village Profile: Sha’b Community

Internal Resources / Factors affecting the lives of the village.

- The population of the village is 4,500 inhabitants.
- The number of houses is 400. Sha’b Arhab area is comprised of four villages located far away from each other.
- The drinking water supply used to be available from underground sources. However, the Sana’a sewage water has affected underground water and rendered it unsuitable for drinking. Local people are reluctant to use underground water for drinking purposes. They feel the water is contaminated.
- Government employment of local people is weak. Around 10% of the population are government employees in the army and police. The majority of local citizens are farmers and animal owners.
- School boys in areas affected with mines terminate their studies at secondary school level. Afterwards, they go to work in agriculture and animal herding.
- A small portion of teachers are from the local communities. The majority are from outside areas.
- The area relies heavily on the cultivation of qat, cereals (barley, wheat, and maize), pulses, grapes peaches and vegetables.
- Cultivation of food crops covers only 20% of the household needs. The balance is covered from purchase of food stuff from the market.

External factors affecting life in the village:

- There were two dams in the area, constructed by the government. However, Sana’a sewage took over the two dams and transformed them into sewage reservoirs. This led to the contamination of underground water and the spread of insects and mosquitoes.
- The representative of the area in the local council did not do anything for his community and did not follow up any projects to the area.
- Limited coverage of telecommunication activities.

- There was intensive migration from the area to outside the country. This had positive impacts on the local community. However, after the Gulf war, many migrants returned home. Currently, there is only one migrant. He has limited resources to help.
- The spread of malaria, typhoid and other diseases is evident in the village. This was attributed to the dumping of sewage water in the area.
- There are schools and a medical centre.
- The community does not feel the impacts of development in their area.
- Links between villages are strong and people have relatives and common families because of intermarriages.
- There are no NGOs in the area.
- No international agencies are working in the area.
- Marketing of products takes place in Sana'a markets.
- Businesses are lacking in the area.
- The conditions required by the credit bank forced them to give up hopes of applying for loans.
- Locusts invaded the area several years ago. However, local people ate locusts before they attacked crops

Meeting with Village Leaders: (Sheikh Taher and Hemiar Al-Udharu) Sha'b Community

The future recommendations can be summarized as follows:

- o We demand a clean source for drinking water as a substitute to the current sources of water, which are contaminated with sewage water which passes at the foothills of Jebel Al-Samagh.
- o The hill can be a source of additional income to the local community, through stone and marble cutting.
- o Sewage water can be pumped in big pipes beside the dams to avoid contamination.
- o The digging up of fertile soil and taking it to other areas for qat cultivation is a dangerous practice and could lead to erosion and loss of fertile soil for ever.
- o Underground water is available especially after the dumping of sewage water in the area, however, the water is not suitable for drinking. It is suitable for irrigation.
- o We did not notice demining in Al-Samagh hill. We saw demining in Al-Safra'a hill.

[It could be inferred that demining of Al-Samagh hill took place from the unseen side - from the direction of the camp entrance.]

Meeting with Women: Sha'b Community

- When mines were planted in the area, there was a feeling of fear when coming closer to the mined area.
- When mines were in the area, our lives were normal except for the feeling of fear when we come close to the mined areas.
- We did not [know] when the area was demined. However, when we started seeing soldiers going up and down the hill and we started seeing herders with their animals moving around in the area, we realized that the area was demined.
- We know that there are no more mines in the area, but we still feel scared and cannot come closer to the mined area.
- We still do not feel secure because there are other areas not demined.

- Several [mine related] incidents took place after the year 2000 and there were several casualties both human and animal.
- We herd animals and collect fuel wood from areas located at the bottom of the hill and at the middle. Areas higher up the hill became military camps.
- The area is community property for herding, fuel wood collecting and water runoff for the land owners located downstream.
- There are more than 100 houses. Nearly all households own animals. However, the numbers of animals vary from one household to another.
- Cows are owned by some households. Milk from cows is used for the family.

Table 5 - Benefits and impacts -Women

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	All local population	By local community members who are the owners of the rangeland	Herding Fuel wood Cutting stones	Income to the community members Livestock
Stones for construction				Stones for building houses

Table 6 - Development opportunities - Women

Assets/Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Water during rainfall	The presence of the camp affected run off canals which used to be for irrigation	Relocate the Military Camp to another area outside the district.	Land owners located at the foot hills.	The Government

Meeting with Farmers: Sha'b Community

- 20 farmers participated in the meeting.
- Ali Ahmed Mohsen is a farmer. He said that the benefits which the community was deprived of as a result of mines were:
 - o The runoff canals for floods after rainfall could not be rehabilitated because of the dangers of mines.
 - o Animal herding was affected drastically
 - o The cutting of stones was stopped.

Table 7 - Benefits and impacts -Farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of freed assets
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Land				
For herding	50-70% of the households own livestock	Herding is open to all community members as per local traditions	For herding animals	200 YR x 250 households x 30 days = 1,500,000 YR per month
For fuel wood	250 households benefit from fuel wood	Fuel wood collection is open for all community members as per local traditions	For fuel wood collecting	30,000 YR x 250 households = 7,500,000 YR annually.
Water	50% benefit from run off canals	Local traditions	For irrigation	
Stones for construction	Local owners		Stone mines	10,000 YR for a truck load of stones
Area of mined area From local people's perspective	Sama'a 500 x 1500 [metres] Al-Safra 800 x 700 [metres]			

Table 8 - Development opportunities – Farmers

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Land for: - Herding - Fuel wood - Stones - Runoff canals	The presence of camps on both hills	Jebel Suma'a: The top of the hill where the camp is located should remain for the camp. Outside the fence should be allowed for local community people Jebel Al-Safra'a: The Military should hand over the hill for utilization by local people.	All local population	Ministry of Defence through the local council and the Parliament representative in the area.
Water	- Agriculture is affected - Spread of diseases - Water pollution because of stagnant sewage water	Create a new rural water supply project from a remote and clean area until the problem of Sana'a sewage project is solved through diverting the sewage to remote uninhabited areas in Al-Jawf direction.	All local population	Concerned Government Agencies

Meeting with men/women Survivors: Sha'b Community

None were met in the village

Meeting with Children: Sha'b Community

The number of children present in the meeting was 7 boys and 7 girls.

What have they heard about mines – from families, school and other sources? Yes, we have heard about mines. We heard that there are mines in the Ha'a [??] hill. We were warned by our parents and by the school teachers not to come closer to the mines area.

We are continuously warned at school and at home not to pick up any metal objects to play with.

Do they know any victims within their age group? There were no children among mine victims.

What difference has clearance made to their lives? Do they go anywhere without any restriction?

After demining we go there and play (boys). After demining we do not go there because of the presence of military people in the area.

Do they feel safe from the threat of mines? Yes, we are aware of the demining teams. They come with dogs to search for mines. We come back home on government buses which pick us up from the entrance of school to the village.

Opportunities?

- Rehabilitation of the existing school.
- An additional primary and secondary school.

From Al-Rawdha, Awmarah, Al-Kasaba and Bait Al-Udhary.

Table 9 - Conclusions – Sha’b

Categories	Impact	Who is the beneficiary	Why
Women	Herding and improved livestock production Fuel wood collecting Cutting stones for construction. Water runoff	Livestock owners (>100 households) All the population in the area (area is communal property) Women in the village Landowners downstream	The demined area is suitable for herding and fuel wood collection
Local Community Leaders	Stone and marble cutting	All the population in four villages	The areas are suitable for mining of marble and stones if properly utilized
Farmers	Herding in the part of the hill located far away from the military camp. 200 YR x 250 households x 30 days =1,500,000 YR per month Water run-off from hillsides channelled to downstream lands for irrigation. Fuel wood 30,000 YR x 250 households = 7,5000,000 YR annually. Stones for construction - 10,000 YR for a truck load of stones	Land for herding is open to all community members of the four villages as per local traditions. Land owners on the lower part of the hill Fuel wood collection is open for all community members Stone collection is open for all community members	Households have animals and they require additional area for herding. 50-70% of the households own livestock; the numbers per household vary from 2-4 heads up to 15 animals.
Children	Herding	All the children (M&F) Everybody	They feel secure

Survivors	N/A		
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Table 10 - Opportunities: Sha’b Community

Categories	Opportunities	Who is the beneficiary	Why
Women	-The camp negatively affected the utilization of the hill, e.g. the water run off canals which used to be for irrigation. Relocate the Military Camp to another area outside the district	Owners of land in the lower parts of the hill, where demining was completed and all the community who herd animals and collect fuel wood.	Improving water harvesting will have a positive impact on the local community. Herding and fuel wood cutting will become possible from the additional area.
Local Community Leaders	- Relocate the military camp. - Investment in factories and workshops for stone mining - Relocate the Sana’a sewage project, and establish a decent rural drinking water supply project.	All the population in the area	Stone and marble cutting can be a source of additional income to the local community. Return on investment in stone cutting is quick and will provide stones for construction. Health of local community members will improve and land will not deteriorate more.
Farmers	The relocation of the camp will allow people to utilize the rainwater runoff from the hillside properly. It will allow people to utilize the whole hill for herding and fuel wood cutting in both locations. Establish a rural water supply project from a clean area.	All the community All the community	This opportunity will help improve the livelihood of the local community in herding, water harvesting and fuel wood collecting. The health of the local community is affected by the stagnant sewage water of Sana’a in their area.
Children	Rehabilitate and expand the school.	Children in the villages	Repair of the school and opening new classes will encourage children (especially girls) to continue schooling and improve the education of younger generation.
Victims	N/A		

Major impressions of the team about Sha’b /Arhab: Sha’b Community

1. The number of military people in demined areas on the hills.
2. People are not satisfied about the presence of military personnel in the camps overlooking the area.
3. Lack of impact of “YEMAC” in awareness raising among local communities.
4. Absence of Civil Society Organizations in the area.
5. Around 70% of the local population are farmers and livestock owners. Employees account for 10% only.

6. Young people drop out of schools after secondary education. They go to work in agriculture.

Joab community

Bani Bahlool District, Sana'a Governorate

Date of survey: 10th May 2006

Summary: Joab

Joab is a medium-sized, high altitude village of approximately 5000 people (about 400 households). Of these 1000 are old, 2000 middle aged and 2000 children. Approx 90% are classed by them as poor. All are farmers (even if they have other jobs). 200 are in the military and another 100 in other employment (e.g. school teachers etc). The village is an agricultural village, despite being only half an hour from Sana'a. Only 10% have salaried employment; the rest are land/livestock owners and/or labourers (working for cash) or sharecroppers (working for a proportion of the production). Agriculture is limited by lack of water and, previously, by the presence of landmines. We were told that there are no production problems with either crops or livestock. Both animals and crops are important, with crops being predominant. Only 30% of staple food needs come from their land. 70% is purchased.

Crop land (including that in the cleared/mined mountain areas) has private land titles that go back over generations and each person knows their land. Grazing area is communal. Thus all have access to grazing land, but only a proportion to crop land. Surprisingly all the large livestock is owned by only 10% of the households.

The village is a medium impact village according to the Landmine Impact Survey score. Of the 7 minefields, 2 are cleared, one is in the process of clearance, 4 are yet to be started. Village people themselves cleared some of the mined land (they had no training), and made tracks through that land to get to terraced crop land.

Introduction: Joab

Representatives of the local community welcomed the survey team. Present at the introductory meeting were:

1. Sheikh Abdul Lateef
2. Ali Ahmed Saleh Abdo
3. Ali Bin Ali Anwas
4. Affaf Hussai Abdo
5. Ahmed Saleh Husain Hatem
6. Abdulla Bin Abdulla Saleh
7. Ahmed Ali Al-Mazamy
8. Faisal Saleh Ahmed

The team members introduced themselves and were acquainted with local representatives of the village during the opening ceremony. During the ceremony, highlights were given on the objective of the survey and the links between the survey and the previous activities carried out in the village by "YEMAC". It was said that the objective of the mission is to get acquainted with the situation of the community after demining was completed. The needs of the local community with respect to demining will be investigated in a participatory manner. Results of the survey will be submitted to "YEMAC" management for further follow up with potential donor agencies and the government. Attention will be given to the status of male and female victims. How they are surviving and what are their needs? What are the success stories of survivors, which

can be disseminated to victims in other areas? Among the objectives of the survey, the assessment of potential development opportunities that can be recorded in the targeted village and developed further into budgeted projects or interventions.

Time Line: Joab

The meeting devoted for time line of Joab village was attended by the following persons. They were considered representatives of the village:

1. Sheikh Abdul Lateef
2. Ali Ahmed Saleh Abdo
3. Ali Bin Ali Anwas
4. Affaf Hussai Abdo
5. Ahmed Saleh Husain Hatem
6. Abdulla Bin Abdulla Saleh
7. Ahmed Ali Al-Mazamy
8. Faisal Saleh Ahmed

1. How were you living before planting of mines?

The area was safe and people used to live in a normal way. They practiced agriculture and animal production. Crops such as: sorghum, barley, vegetables were cultivated under rainfed conditions in the area.

2. How did you live during the period when mines were planted?

No body was able to go up the Herwe hill where mines were planted. People could not herd their animals anymore in the mined area. There were several victims from exploded mines from among local community members and also livestock of local households.

3. What is the situation after demining?

We feel safe and secure. From now on we will be able to utilize the rangeland more efficiently. There are still several sites that require demining.

4. When do you expect to complete demining of the remaining sites?

After six months.

5. Who are the beneficiaries from demining?

Those who own livestock, landlords and those who collect fuel wood.

6. When was demining completed?

In March 2004.

7. How was your reaction with de-miners and the National Program for Dealing with Mines.

We developed good links and positively reacted to the National Program. Even though no awareness campaigns were organized in the village at the beginning of the campaign.

8. What is the number of casualties?

5 to 10 deaths (M&F) + one victim who lost his leg + five slight injuries.

9. To whom the demined land belongs?

The demined land belongs to concrete members of the village. Herding animal is a communal activity. There is still a military post above the "Herwe" hill.

Village Profile: Joab

A. Resources in the Village:

What is the number of Schools? One School basic and secondary with two shifts (morning and evening)

What is the number of houses in the village? 300 houses and the population is 5000 inhabitants.

Do all inhabitants in the village benefit from demining? Yes all citizens in the village benefited because they work in agriculture and raise animals and collect fuel wood for cooking.

Are there any stores? Yes

Are there any sources for drinking water? Yes, there are sources but they are not adequate. We require more water reservoirs.

Electricity. There is a central electrical service from Sana'a.

Telephone service. Available.

Petrol stations. Not available, but the petrol station is located a nearby place.

Roads. There are roads to the village.

Is there any medical unit? Not available. In case of sickness, we go to Sana'a. There are cases of severe diseases like cancer. Eight years ago, there were 8 cases of cancer, which resulted in death.

Is there any sewage service? No sewage service available. Instead, we have pits.

We need pumps for pumping water from wells. There were 16 wells in the village. However, they were covered with soil after floods. We were relying on irrigation from wells in practicing agriculture. We demand diversions to retain floods and recharge underground water.

Is there any association or political organizations in the village? Not available

Human rights organizations (Social affairs, poverty). Not available. The social welfare fund support is limited and does not exceed 2000YR every three months.

Offices for political parties: Political parties available but without offices.

Local Council: There is a member in the local council from the village. However, our problems are not solved by the local council.

Projects in progress. There is a school under construction. Expansion of existing school.

Income generating projects. Not available

Why don't you cultivate your lands? No tube wells available. We rely on rainfall.

What skills do people in the village have? Agriculture, herding animals, employees, stone carving, construction workers and drivers.

B. External factors affecting the village:

Do local people interact with politics? Yes in a very positive and intensive way.

Communication, TV and Radio. Available in different forms.

Were there any catastrophes in the village? No. However, drought affects the lives of people frequently and sometimes more than once a year.

Links with neighbouring villages. Very strong links. There are social links through marriage among villagers from neighbouring villages.

Loans and credits: Not available

Financial links to sponsor projects. Not available except by the government.

Markets. Not available. There was a market; however, it was closed long time ago. It used to be called Tuesday Market.

NGOs: Not available

Programs and activities planned but not implemented. The dam and the medical unit.

How do you follow up projects? We follow up projects, but without success.

How many inhabitants under the poverty line? All those who rely on agriculture (drought is evident).

How many farmers in the village? All citizens in the village are farmers. Military 200, teachers 200, other institutions 200,

On what do local people rely: agriculture or herding animals? But, because of drought, people sold their animals.

Who will use the land after demining? Every person knows his property. The demined land is a community property.

Meeting with Village Leaders: Joab

Are there any institutions in the village? No

What are your development plans and who is supporting these plans? We have a plan to construct a dam however, this plan never materialized because of negligence. No body is supporting us.

Was there any restriction on the use of lands planted with mines? There was no ban. Therefore, there were victims among herders.

Is the hill community property for the village only or for neighbouring villages? The west side belongs to Sha'san village. The eastern side belongs to Joab village.

What role you undertake during the survey and demining? We provide assistance to the demining teams. We provide them with the required information about the area. We must say that, the awareness teams never came to our village.

Have you heard about the association of survivors from mines? No we haven't at all.

Some brothers requested to construct an institute in the village. How do you consider this request?

The village is heavily populated more than other neighbouring villages. Therefore, a training institute will help improving skills of young people and will contribute in reducing unemployment in the area. We think the request is valid and urge you to convey this request to donor agencies.

What is the population of the village? 4000 to 5000 inhabitants.

How many people having the highest number of animals? 10% of inhabitants are having animals in the village. Ninety percent do not have because of drought. Some herders do not have land and they live on sharecropping arrangement. They cultivate land of others and give portion of the yield to the land lord.

Mohamed Saleh Auwah demanded a water project and schools because the population is high. He also demanded the construction of a medical unit. Did you officially apply for these projects? Yes we applied for these projects but there was no response so far.

Meeting with Women (7 women): Joab

- One woman said:- Thirty years ago a mine exploded on my mother, while she was collecting fodder for the cow in "Herwe" hill. She died instantly. It was found that three mines exploded on her.
- One woman said:- Mines exploded on two men and three women in Herwe. Two women died, the third one lost her leg. This was thirty years ago. One woman said:- My daughter lost two legs in a mine explosion. This happened thirty years ago. My daughter is now married to a man who lost two legs in a mine explosion before thirty years.
- Some women said:- We use to go to Herwe to collect fuel wood long time ago, we were reluctant to climb the hill to collect fuel wood because of mines. However, now we go freely up the hill to collect fuel wood after demining the area.

- Some women said:- About ten women herders are now herding their animals in the demined area.
- An elderly woman said: The camp above the Herwe hill was established since the early days after the creation of the Republic (immediately after the 26th September revolution). The camp protects the village.
- Some women said:- The government is doing what it can, but the problem is in the people themselves. They are self-centred and like only themselves. They think of their own benefit only and do not wish prosperity to others.
- One woman said:- A charity organization comes from Sana'a to the village. They distribute donations (regular salaries) for the needy. My name is in their lists but I do not get help because some people in the village said to them that I do not deserve the assistance. I do not know the title of the charity organization.
- Three elderly women said (70 years):- We cannot go Herwe hill for herding or fuel woodcutting even if there was gold in the hill. Our lives are not cheap. We are not sure that the area is demined completely.
- One woman said:- I go to Herwe to the demined site and herd my animals. Several other women do the same thing.
- Some elderly women said:- The fuel wood and fodder in Herwe are the best in quality. But we cannot go there because of mines. We do not believe that the area is completely demined.
- Some women said:- Four years ago, two women went for fuel woodcutting in the area of Herwe . A mine exploded on them and they died instantly. They were 14-15 years old.
- Even military people do not dare go to Herwe because of mines.
- Some women said:- Some women are not aware of demined areas.
- A woman said:- I use wool of sheep after cutting and cleaning it for making warm covers to protect us from the cold weather.
- Some women said:- There are women in the village who are engaged in tailoring and making clothes, and making belts for sale in the village.
- All women said:- We do not know from were the deminers come from. We think they must be representatives of the government. We pray for their safety because they do a good job and at the same time a dangerous job for us.
- Some women said:- They do not allow their children to go the Herwe for herding because of mines.

Table 11 - Benefits and Impacts in Joab: women

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets?
Land: Herding Fuel wood Fodder grasses	Women herders and owners of cows and sheep	No body decides; property is communal	For all the population of the village: Herding, Fuel wood, Fodder collection.	Self sufficiency in ghee, milk, meat, wool
Water: after rainfall is	Women herders	No body collects	Village community	Provision of water for

harvested in small depressions for animals				animals
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Table 12 - Opportunities in Joab: women

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Stones	Fear of potential mine explosions	Insurances from the Government that areas are demined Make roads asphalted.	All members of the village community	The Government

Table 13 - Meeting with Farmers: Joab (7 farmers)

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	- Herders 40% - Agriculture 30% - Fuel wood cutters 30% - Those who cut stones	As per the agreed upon documents of ownership (basaer)	For herding For agriculture For fuel wood For construction of buildings	- Saving of fodder cost for 2000 head of livestock - Saving of cereals cost 30% - Saving of fuel wood cost 10% - Saving of butane gas cost
Water	All the local community	Different uses of water in the village + drinking water for livestock and irrigation of agricultural land.	For irrigation of land + provision of drinking water for animals and people.	Improve the quality of crops and livestock Provision of drinking water for the community
Roads	Local community	Roads for herding and carting of stone	Roads for pedestrians and animals	Reduce loses of livestock.

Additional notes outside of meetings:

1. How many livestock are herded on the cleared land at a time? 2000 heads
2. Do livestock suffer from diseases? No
3. What is the cost of a cow? Sheep? Goat? A cow is 120,000 YR, A sheep is 20,000 YR and a Goat is 7,000 YR.
4. What is the area for herding? 4 km².
5. How much is the annual income per family from agriculture? 500,000 YR - 1,000,000 YR when the season is good wand the land is used in an ideal way (rainfall , tube wells and good seeds)
6. What is the cost of construction of one (large) house? 5,000,000 – 10,000,000 YR of which about 1 million is for local stone (50-100 loads at 10,000 YR per load).

Meeting with men/women Survivors: Joab

Men survivors: Joab

Case No (1): Mohamed Ahmed Rageh

Mohamed is 60 years. He has 13 children and is without any source of income. He lost of one leg in an explosion on the hill fifteen years ago. He received no assistance. He has heard of an Association to help mine victims, but does not have means to reach this organization. They do not come to the village at all. He cannot travel, and can hardly afford the basic food for his children.

Case No (2): Hamoud Awaidhah

He is 60 years of age and received a head injury

Case No (3): Abdulla Saleh Abdo
He is 40 years old and his left eye was injured on Herwe Hill.

Case No (4): Hamoud Aidha
35 years of age. Knee injury. He cannot bend his leg.

Case No(5): Ahmed Abdulla Wahhas
He is 75 years of age now, but was 50 years at the time of the incident on Herwe hill (in 1975). He was rushed to the hospital. Afterwards he received no support what so ever.

Case study (6): Abdullah Ahmed Al Hubaishi
He lost 25 goats, 10 sheep and 2 cows in one landmine incident in the mountains (all his livestock) 15 years ago. This made him poor, and up to now he doesn't own any livestock.

Women Survivors: Joab

Case No (1): Fathia Abdulla

Age at the time of the incident was 12. She is now 25 years.

"I was herding my animals on Herwe hill 13 years ago. The mine exploded among the animals. Four died and I was injured in my leg. I still suffer and feel pain when I walk or stand on it. My body was badly affected and deformed as a result of the explosion. After the incident, nobody helped. When I grew up I got married to a person who was much older than me. No body wanted to get married to an injured woman. I do not know of any organization helping mine victims. No body provided me with any assistance"

Case No(2): Hania

She died six months ago as a result of hypertension and diabetes. She was 45 years old. When she was injured, she was 10 years old. Her story was highlighted by her brother as follows: "My sister was 10 years old. She was herding animals 33 years ago. A mine exploded and killed 10 animals. She lost her left leg. She was rushed to the hospital. Nobody helped us neither in the village nor outside. She died six months ago. We never heard about any organization looking after mine survivors, nor did we hear about YEMAC"

Case No (3): Habshi

At the time of the incident she was 10 years old. She is now more than 40 years. She is living in Sana'a since she got married. Her mother highlighted her story. She said "My daughter was collecting fodder in Herwe. The mine exploded on her. She lost her left leg. She was 10 years old then. We took her to the hospital. No body helped us. We took her to the artificial limbs hospital. While there she used to visit the hospital for medical care .A person who lost his two legs in another incident elsewhere saw her. He then got married to her. They lived together in Sana'a. They have 7 children. Her husband is working in a hospital. In this hospital, she managed to get an artificial leg. We never heard about any organization looking after mine survivors, or about the center you came from.

Meeting with Children: Joab

Participants in the meeting:

- | | |
|----------------------------------|----------|
| 1. Ahmed Abdulla Ahmed Al-Shaekh | 9 years |
| 2. Yahya Mohamed Ali | 10 years |
| 3. Mohamed Ahmed Saleh Al-Gomaly | 14 years |
| 4. Mohamed Abdulla Saleh | 13 years |
| 5. Saber Mohamed Ahmed Nawas | 14 years |

What information do you have on mines and from where did you get this information? From our relatives and from our teachers at school.

Are there any students who were affected with mines? No

What changes occurred after demining? Feeling of safety and security.

Do you feel secure after demining? No

Why? Because mines are dangerous.

Do you move around freely without restrictions? We cannot go up the hill

Why? Because we are banned from going up the hill by our parents.

Impressions from the village: Joab

- Bad relationship between women.
- Many different leaders in the village, with competition between them.
- Focus on pumps for crop irrigation.
- Local people are scared of clearing by themselves.
- Large return from agriculture (for those with a lots of land)
- Nobody following up on village projects (dam, training institute, pumps etc.,)

Table 14 - Conclusions – Joab

Groups	Impact	On Who	Why	Opportunities	For Who	Why
Farmers	Herding Fuel wood	- 30% of population - 70% of population	Few owners of animals	Plant demined lands with cereals De-mine the remaining areas	Land owners All village population	Land ownership law Only 30% of cereals comes from ag. Land (70% is purchased)
Women	Herding Fuel wood	40% of women 70 % of women	Most women herd animals	- De-mine all areas for security and safety - Asphalt the road	All community members	-Feeling secured - Facilitate herding and movement
Leaders	Herding Fuel wood	30% owners of livestock 70% collect fuel wood	The only activity to satisfy needs. Create income for purchase of essential needs	Provide pumps for irrigation Create income for purchase of essential needs	Farmers Land owners Jobless members of the community	To improve crop production Improve the livelihood of farmers Create job opportunities and new skills
Victims	----- ---	----- --	----- ---	Medical unit Medical care Training Jobs Small projects	Survivors invalids	Provide medical care Because they are poor and no body helps.
Children (boys and girls)	Security Herding (M&F)	All children in the village	Safety	Clear the area from mines	Children of the village	Free movement and feeling security

Bait 'Oqab

Khawlan District, Sana'a Governorate

Date of survey: 22nd March 2006

Village Profile: Bait 'Oqab

Bait 'Oqab is an Uzla located in Khawlan District, Sana'a Governorate. The targeted area is a rural area and many activities of the local community are related to agriculture production of cereals and pulses under rainfed conditions. Qat and grapes are grown under supplementary irrigation. Vegetables are said to be cultivated under irrigation. However, the prevailing drought during the past three years has led to reduction of the cultivation of irrigated crops. The village is very old, having been established at least 1200 years ago.

The mining of underground water and the drought has led to drop of under ground water level to as deep as 800 meters. Many wells are dry and farmers cannot afford to drill wells to the mentioned depth.

The history of land mines in the area goes back to the early sixties, and associated with the civil war during the presence of the Egyptian forces. Land mines were laid on the hill slopes overlooking the wadis where agricultural production is practiced. Nearly all hill slopes which were sites for grazing of animals and fuel wood collection were planted with land mines of different types. Most of the land mines were planted by the Republican Army and the Egyptian forces to protect their positions located on the tops of the surrounding hills.

Table 15 - The history of Mahallat 'Oqab Bani Bahlool.

Stage	Mining Activities	Duration (years)	Coping strategies of local community
1	Before land mines	Before 1963	Local communities used to practice agricultural production in the wadis. Animal production relied heavily on herding on hill slopes. Fuel wood cutting was based on shrubs located in range lands. Animal herding was looked after by young boys and girls. Fuel wood cutting was the responsibility of women. Hill slopes were also mined for construction stones. Hill slopes and range lands were sites for water harvesting structures to divert run off water to lands located downstream in the wadis.
2	During land mines	1963-2004	A feeling of horror spread among community members from possible contamination of mines. This was further aggravated after cases of mine explosion and casualties among community members. Herding of animals on hill slopes ceased after the spread of casualties among animals in affected range lands. Roads cutting across hill slopes to neighbouring communities became dangerous to pedestrians and animals. The number of animals raised by holds was drastically reduced. The cutting of stones was terminated in heavily affected sites. Fuel wood cutting was affected because of the fear of mine explosions.

3	Demining	2004-2005	Demining covered Gabal Dhahr Al-Himar so far.
4	After land mines	2005 - 2006	The feeling of security is increasing. However, caution is still prevailing. Movement from one site to another through shortcuts resumed. Herding is gradually resuming. Stone cutting is back in the cleared area. Fuel wood cutting is gradually taking place. There is still one narrower road affected by anti tanks mines which require survey and demining (Nagd Al-Salaf) There is a fear from overgrazing and over cutting of shrubs and trees if proper arrangements are not made to sustain the utilization of local resources. Revival of traditional local regulations (Hema)

Table 16 - Profile of 'Oqab Bani Bahloul

Available Resources:

Resources	Status
Schools	There are two basic schools (mixed schooling) There is one secondary School (mixed schooling) The number of schools is not adequate in the area. There is a need for separate schooling to reduce drop outs among female students. The location of some schools if far away from villages which affect the timely arrival of students as a result of lack of transport.
Medical Units	Lacking
Electricity	Weak and does not cover all villages.
Water supply	Not available so far. However, signs of resumption of the water supply project are evident. The well has been drilled, and they are waiting for the water to be reticulated to homes
Roads	There is a highway. However, lateral roads to villages are earthen.
Telephone services	Good
Water Structures	Only one and there is a need for more.
Vet. Services	Not Available
Extension Services	Not Available
Cooperatives	There is one in irrigation equipments but not active
Charity Org.	There is one Charity "Asad Al-Kamel" very active and highly praised by the community because of its genuine services to the needy ion the community. The main resource of the charity is the monthly fees as contribution of community members to the charity.

Discussions with community members available in the meeting also revealed the following:

The total inhabitants of 'Oqab Bani Bahloul are about 7,000:

Farmers	80%
Land less	20%

The % Gov. Employees = 10-15 %. Nearly all of them are farmers.

Table 17 - Distribution of community members according to land ownership:

Size of land ownership (Libna = 44 m ²)	%
More than 500 libna	10
300-500	10
100-300	20
50-100	50
Less than 50	10

It must be noted however, that the above estimates of land ownership were collected in the meeting and might require more verification on the basis on accurate statistics. Farmers with land ownership less than 300 Libna cannot live on agriculture production (crop and livestock) alone. They require additional sources of income such as work with the government, work in the agriculture sector as paid labour, private business such as driving a car (truck or taxi etc.).

The drought and the continuous drop in the underground water levels created additional burden to many farmers. This was coupled with the increase in cost of production which affected the cost of production of agriculture products including qat. According to participants in the meeting, if rains will not fall in the coming season, the situation of farming will be further aggravated.

Table 18 - Problems related to the development of demined areas from community perspective: Bait 'Oqab

A. Deterioration of Range lands as a result of overgrazing and over cutting of shrubs and trees

Despite the fact that rangelands were preserved for the past forty years as a result of mines. The demining might increase the pressure on these fragile eco systems might rapidly lead to severe deterioration of water sheds and rangelands as a result. Potential solutions suggested were as follows:

Solutions	Responsibility
1. Revive and strengthen the still applied range management traditional system (Al-Hema) in the rangelands	Local Community Leaders+ Members
2. Increase community members' awareness on the importance of sustainable herding and fuel wood cutting (with emphasis on women and young girls.)	Local Leaders + School teachers + Imams in mosques + National Media
3. Organize campaigns to plant seedlings and seeds of valuable grasses and shrubs before the rainy season and link that to the Hema System in the area.	School children + teachers + Agriculture Office + Gov. Nurseries

B. Limited Numbers and Low productivity of Livestock in the area

The long duration of land mines in the local rangelands has made these areas not accessible to herders and animals and fuel wood collectors. This "protection" of rangelands has led to improvement of the vegetative cover of both grasses and shrubs.

The demining will probably lead to resumption of herding and the possible increase of livestock. The current situation of livestock is characterized by low productivity and the spread of diseases and parasites among animals. To increase the productivity of livestock it will be necessary to adopt innovative measures aimed at improving animal management, animal feeding and animal health.

The following potential solutions were derived at during discussions with those participated in the meeting held in the premises of the local community.

Solutions	Responsibility
1. Establish veterinary unit in the area to serve farmers when they require inspection of their animals	Agriculture Office + Local Council + NLMC
2. Train farmers to become par vets.	Ag. Office + Local Council + NLMC
3. Increase awareness of farmers and livestock owners on the improved methods of animal management. (animal sheds, isolation of deceased animals, cross breeding , control of internal and external parasites etc.)	Ag. Office + Local Council + NLMC
4. Revive extension services in the area	Ag. Office + Local Council + NLMC
5. Introduce new fodder species into the area such as cactus <i>Opuntia</i>	Research + Ag. Office + Local Council + NLMC
6. Control the slaughter of female and small animals	Governor + Ag. Office + Local Council + NLMC

Meeting with local leaders: Bait 'Oqab

Agenda:

1. How mines affected the community
2. Services currently available to the local community, and local institutions
3. What community plans exist, and how these relate to the rehabilitation of land after demining. What are the decision-making processes in the community

1. Local community members are convinced that the direct impact of mines on the community are as follows:

- Animal herding was directly affected because some households were forced to sell their animals as a result of limited grazing lands
- Fuel collection: the areas with mines deprived community members from collecting fuel wood and planting new trees and shrubs
- Lack of feeder roads made it difficult to move from one village to another because of the potential danger from mines

2. There are electricity services, schools, and major highway and telephones. However, these services do not cover all villages in the area. The services are only available in the major villages.

3. There are ideas and plans for land reclamation developed by the community. These can be summarised as follows:

- Cutting stones for construction of houses and other premises
- Construction of terraces on the hill slopes
- Use of cleared land for herding animals and fuel wood collection

However, present terrace construction is dominated by richer private landowners who have the resources to hire bulldozers (at 8000YR/hour). Most community members cannot afford this from their own resources and would need external assistance. Local leaders say that they would like to make new small terraces for community members, with trees (for wood) on the terrace risers to protect from erosion.

There is good community cohesion and cooperation between households – with the Sheikh coordinating everything. They use the old rule that if something happens to one member of the community, then everybody contributes to help them. There is a top-down system of governance (government and community). This reflects a lack of capacity at grassroots level to organise, articulate and implement local plans (except from the local charity – see below).

There is a strong community charity organisation which is run by volunteer members of the community with some limited help from Social Affairs. This collects about 300YR/family per month, and is used for supporting poor families with food, clothes and schooling costs. Also supports community football team with kit and balls. The charity leaders (local Sheikhs from sub-villages) meet regularly to discuss needs and plans.

There are no formal farmer cooperatives. All farmers market their produce individually.

The previously mined rangeland is for the exclusive use of the village, but is open to all from the village without restriction on the number of animals. However, the land is rested until it is in good condition before people are allowed to enter with animals.

The local leaders have more confidence in donor projects than in government services, but so far no donors or NGOs have come to the village. When asked about what the community could contribute to land rehabilitation they said that their capacity was low. This would need further careful facilitation as without local contribution any scheme is likely to fail.

Qat is becoming less profitable due to the high cost of water. It is still the most profitable option against the warm hillside, but on the open wadi grapes are better (frost tolerant).

Discussion on wealth during qat session with Sheikh and community members:

Nobody goes without dinner, as the combination of a good (although seasonal) market for labour and a strong charity association allows even poor families to survive. No women work as such, but they “help” others and receive goods in kind (sugar, flour etc). The community charity is organising literacy classes for adult women at the moment.

Discussion with survivors of land-mine accidents: Bait 'Oqab

Case study 1: Huria Hatem Hamoud

Huria is a woman in her forties. She was affected by a land mine which led to partial cut of her hand. The incident took place during the seventies and led to twisting her hand which affected her daily work. When we met her we understood that she is looking for

help to her and to her family. She has an elderly husband who is not working any more in agriculture and five young boys.

Case study 2: Hasan Ali Saleh Al-Kol

Hasan Al-Kol was affected by a mine which led to losing one of his legs. An artificial leg was fitted when he was in Egypt a long time ago. This was replaced locally by another leg which proved not suitable. Mr. Hasan is using wooden support during his movement. Discussion with Mr. Hasan revealed that he wanted a project to sustain his life.

Case study 3: Saleh Azzam Manea Al-Shamy

Saleh Al-Shamy lost his eyes as a result of mine explosion in 1978 when he was 18 years. He is now blind and lives on charities and the support of his two brothers. He expressed the need for a small business (micro credit facility) to start his own business together with his wife and small boys.

Note: We asked the Sheikh and community members if there would be resentment from other community members if landmine survivors are assisted by YEMAC/YLMSA. They assured us that there would be no resentment as they are deserving of the support.

It was clear that the survivors did not have contact with the Survivors Association, and we gave them the telephone contacts for the Association.

Al-Jafinah Community

Beni Hushaish District, Sana'a Governorate

Date of survey: 10-11th May 2006

Summary: Al-Jafinah

Al-Jafinah in Beni Hushaish District is a large village composed of a number of small dispersed settlements. It has grown considerably since the 1980s, to its current population of over 3000 inhabitants. It is approximately 45 minutes by road from Sana'a.

Agricultural activities are the basis of livelihoods; few people are employed outside the village. Grapes and Qat are the main sources of income for the majority of households. The community is one of a number of closely linked neighbouring villages belonging to the Beni Hushaish. Most agricultural lands, including the demined areas, are privately owned. The village has reasonable access to services. There is no market in the village.

The village was mined more than 40 years ago. It was classified as high impact in the Land Mine Impact survey. Three mine survivors were met; A 60 year old man who was blinded in one eye forty years ago and a brother and sister who were injured as children 15 years ago while playing with a mine. Two of their siblings were killed in the same accident. None of the victims had received support or help. No mine related accidents have happened since 2000. The land was demined in 2003.

Community interaction with the demining teams was limited. While some farmers reported assisting the demining teams in locating mined areas, most other groups were poorly informed on the demining activities and the status of the cleared land.

The main impacts have been the release of land for cropping of qat and grapes, for grazing of livestock and collection of fodder and extraction of stone for the construction of houses. Three wells have been constructed in the cleared area. The main social impacts have been to make people feel more secure. Roads have been opened through the demined area to neighbouring villages.

Opportunities identified were the construction of water storage and delivery structures, drip irrigation units, water pumps, the cultivation of sorghum, and accessing agricultural machinery through bank loans to develop agricultural land. Opportunities for the wider village included asphaltting of the road and construction of a second school.

Introduction: Al-Jafinah

An introductory meeting with community members was held in the school yard.

Participants:

- | | |
|--------------------------------|-------------------|
| 1. Khaled Ali Mahmood Nagi | Sheikh of village |
| 2. Mohamed Ali Algalal | Military person |
| 3. Hadi Bin Ali Al-Hashidy | Farmer |
| 4. Atef Mohamed Atef | Farmer |
| 5. Al-Haj Hamed Mohamed Ubaiah | Shepherd |
| 6. Basheer Yahya Mohamed Hadi | Labourer |
| 7. Adel Mohamed Ali Ubaiah | Merchant |
| 8. Marzook Rezk Nagi | Farmer |

A subsequent community meeting in the Sheikh's house reached a total number of 30 persons.

Time Line of Al-Jafnah

How was the situation before planting of mines?

People were very poor as a result of limited resources and poverty. The situation in the village was calm and normal. The number of houses was limited in comparison with the current time. The population was also less then.

How was the situation during mining of the areas in the village?

People lacked calm and peace for a long time. Despite this, land planted with mines was used carefully. Whoever enters expects not to come back as a result of the mines threat. However, the demining project came very late.

When did mining take place? The demining teams came in 2003.

Status after demining took place? People started feeling peace and calm, roads started to be opened to neighbouring villages through a demined field. We have plans to use again the agricultural lands when we are able to cultivate the land and have the required resources. We will bring soil to the demined fields and transform them into agricultural lands. Some [other] lands are suitable for agriculture; however these lands are located at higher elevations. However, the time might come when we will cultivate these lands.

Did mine incidents take place after the year 2000?

No incidents took place since 2000. We did not find any explosives, mines, fuses etc. If we find any of these we will report to your HQ.

To whom do demined fields belong?

Mined areas belong to their private owners or to those owning downstream land to which water run-off from the mined areas is channelled (Marahek). This is a local arrangement of land ownership in the area. Some lands are privately owned as per the documents of the land owners.

There were few settlements scattered around the village before the year 1980. However, after 1980 most villagers moved to build new houses because of the improvement in livelihoods of local community members from agriculture in the village. The expansion took place in the northern direction of the village.

Village Profile: Al-Jafinah

Resources Available in the Community:

- Number of schools: One [primary school] + one Secondary
- 14 Mosques
- Approximately 300 Houses
- 3000 inhabitants (may be more!)
- The village is made up of scattered settlements.
- There are small shops in the village with little merchandise available.
- Telephone service is available.
- Electricity is available.
- Medical unit in the village: Available
- Petrol Station: Not available
- Land: Most agricultural lands are privately owned. Al-Marahek or the surrounding area of land from which water run-off is channelled to cropped land downstream is considered as part of the same landownership. These areas were previously mined. Al-Marahek is currently used as rangelands or cultivated agricultural lands.
- Agricultural activities are the main basis of livelihoods. Sources of income are from agriculture (grapes and qat). *“We are well off because we have qat and also grapes”*.
- There is some internal movement of households within the district only. This is mainly because agriculture is the major activity of community members. Only 15 community members are employees or rely on sources outside the agriculture sector. 1% of local community members depend on government jobs

External Sources affecting the local community: Al-Jafinah

- There is non completed water diversion structure in the area. A US organization provided the village with a rural water project 25 years ago. The project failed and currently there is no water in the well of the project. Currently, every one has his own artesian well and pumps water from his own well for domestic purposes.
- There is a non completed asphalted road.
- The community is one of a number of neighbouring villages belonging to the tribal group – Beni Hushaish.
- No projects implemented by NGOs.
- Projects provided by the Government: One water structure (dam) project, and the asphalted road project, which is currently idle.
- Markets: There are no markets in the village. Marketing of products from the village is done outside the area in other markets The major market is in Al-Hatarersh. Local products such as grapes are marketed in different markets in Yemen.
- Local members of the community are members of Associations outside the village. Village community members are members of the Sa’awan Agricultural Association.
- Location of the local council: Not available in the village but available in the district.
- No catastrophes, disasters or wide spread diseases happened in the area.
- There is no migration from the village to outside the country
- Telecommunication is available but with modest coverage.

- Links with other villages: Very good and strong links; families are related to each other. Land is also shared with neighbouring villages and intermarriage is common among the neighbouring villages.
- Cooperation in the village: There is strong cooperation among community members and households in the village. This is a tradition especially in the case of illness, poverty and weddings.
- Zakah is collected by the Ameen, who in turn disburses part of it to poor households; the remaining part is paid to the Governorate.

Meeting with the Al-Jafinah Village Leader

Name: Sheikh Khaled Ali Hamoud Nagi

Tell us about the village and the ideas or needs for the village.

We have many ideas for the village. We need projects for the village. Projects did not get implemented in our village. We have a project to formulate an association in the village. The failure was a result of lack of trust among village members. There are honest people who are willing to cooperate and few members of the village who are not willing to cooperate. Village inhabitants have lots of ideas for development activities.

“Problems in the village are solved on the basis of local tribal traditions. In case problems became complicated, we refer them to the district or the court. We are bound with traditional laws and norms and Islamic principles to solve most problems in the village.”

If we want to do something in the village, we ask people to donate as much as they can. For example, if we need to construct a mosque, we collect donations from village members as per their abilities, without enforcement of any laws.

Land property (ownership): Lands are privately owned in the village. This ownership goes back centuries ago. Land owners have documents supporting their ownership.

Communication campaigns in the village: Those who were engaged in demining came straight to the area. They did not consult the Sheikh. After they completed demining they left the area. As far as the support to victims is concerned, there was no support or help what so ever.

Meeting with Women: 10 May 2005 Al-Jafinah

The meeting was held in the house of a well off family in the section of the village near to the Sheikh's house. The meeting started with 23 participants and expanded to 40. There were about 15 active participants covering both young and older women.

Benefits from the activities of YEMAC:

- Peace and Calm. People (men and women) used to get scared from wars, mines and from military planes.
- Availability of an area for herding animals.
- Availability of an area where fuel-wood can be collected.
- Availability of an area for recreation.
- Availability of an area where fodder can be collected.

Most people benefit from these activities.

Relationship with YEMAC?

- There was fear and [people were] suspicious of the de-miners.
- Some were considered kidnapers
- Some [people] thought they were looking for diamonds.

“Later we heard from our husbands that these people will de-mine the area surrounding the village. De-miners used to put a sign after clearing an area of mines before moving to another area”.

“There is no God but Allah who protects people and things”

Table 19 - Benefits and impacts – women

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
<ul style="list-style-type: none"> - Agricultural Lands (Qat + Grapes) - Range Lands and collection of Fodder. - Houses - Lands for collecting fuel wood and fodder - Road 	<ul style="list-style-type: none"> - 300 landlords in Al-Dhahra - 4 landlords in Al-Hamra 	<p>After Mushraah (arguments) with the Sheikh and have a land ownership document (Baseera), afterwards courts and then they fight with each other.</p>	<ul style="list-style-type: none"> - Grapes - Qat - Peaches - Goats - Sheep - Cow - Houses in Al-Hamra - Houses in Al-Dhahra 	<ul style="list-style-type: none"> - Grapes and Qat are sold and self sufficiency at home - Revenues from selling (money for drilling of wells and construction of houses) - Because of cash revenues we were able to cultivate land and develop it. - Construct new houses near their lands to keep eye on the land and reduce time and transport.

Development opportunities

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Agricultural Land	<ul style="list-style-type: none"> High cost of tractors Drilling of wells High cost of diesel High cost of soil 	<ul style="list-style-type: none"> Land reservoirs (Cisterns) Pipes Drip irrigation units Cultivation of sorghum instead of qat Asphalted road 	<ul style="list-style-type: none"> Landlords of Al-Dhahra Landlords of Al-Hamra All the people in the village (security, herding, fuelwood) Mohamed Basher (owner of Dhahban market) 	<ul style="list-style-type: none"> On themselves The Government

Meeting with farmers: (11th May 2005) Al-Jafinah

The discussion was held in the house of one of the farmers owning land which has been cleared of mines. 6 men and 2 boys were present, in addition to the Sheikh.

Participants:

1. Sheikh Khaled Nagi
2. Ahmed Ali al-Naggar
3. Ahmed Husain Hagda
4. Ali Saleh Al-Naggar

5. Mohamed Mohamed Ali Karkadah
6. Sheikh Saleh Ahmed Sheikh
7. Ahmed Mohamed Al-Arkada, Chairman Jafinah Centre.

Demined lands and affected lands belong to the landlords or private owners. Every land owner knows the area and location of his land or marhak or manshar. After demining took place, the landownership was revised and land was divided among land owners according to the original documents they have. Land boundaries are marked by the water channels and marker stones. [The Sheikh said there were no problems, although the previous day the women had mentioned a conflict over land.]

Land and livestock distribution - A poor family has about 50 libna, a medium family around 100, and a rich family 300-400 libna. Some poor people have sold their land. The cost per libna varies according to the condition of the soil. (60,000 – 90,000 YR) 10% of families in the village own sheep and 60-70% own cows.

Textbox 1 – Benefits form cultivating cleared land

Benefits from cultivating cleared land

30 families have benefited from actually cultivating the cleared land. Not all these families are living in Al-Jafinah – the land was owned and inherited from way back and it depends where the owners are currently living. The land actually planted is approximately 5,000 libna. The majority of this land was cleared land, although two small sections were previously cultivated. The cost of the land BEFORE demining was 1000 YR per libna, but after demining it increased to 50,000 YR.

The cost of developing 1 libna¹ is around 50,000 YR for Qat and 65 - 70,000 YR for grapes. Grapes are more expensive to establish than Qat because of the need for supports and trellising. Cuttings were taken from their own fields. Both grapes and Qat begin to yield in the third year after establishment, coming into full production within five years. The selling price of the developed land is around 150,000 YR per libna.

Production costs (mainly irrigation) are higher for Qat than for grapes. Diesel costs for irrigation were said to be high and rising. The fuel costs reported were 10,000 YR per year per libna for Qat and 5,000 YR for grapes.

1 libna of grapes can provide a gross annual income of 10,000 YR and 1 libna of Qat, 20,000 YR. Of the annual gross income, around 80% is needed to cover production costs, leaving a 20%-30% net margin; however this is also needed to cover capital maintenance and replacement. Net annual income per libna is around 2,000 YR for grapes and 4,000 YR for Qat.

Benefits gained by local community members after Demining: Al-Jafinah

- Agriculture: Land reclamation by land owners. The main benefit has been from crops. “We greatly benefited”.
- Herding: Access to the cleared range area is open. All community members benefited from availability of rangelands for herding of their animals. *Thanks to*

¹ 1 Libna = 40 square metres.

demining, otherwise we would have left the area and migrated to Saudi Arabia and the Gulf Countries.

- Stones: Stones became available again and stone cutting flourished again. Jobs were created and an additional source of income became available.
- Fuel wood cutting: Not much benefit gained as a result of limited rainfall and prevailing drought. Firewood is less important since the availability of butane gas ovens replaced fuel wood.
- Bee hives: No bee hives are available in the village except in the Al-Kawm [area] which is not demined yet. *After demining of this area we will be able to get honey and rare bees.*
- 3 Shared wells are available in the demined areas. Without these wells we would have been unable to develop agriculture.
- After demining we were able to construct an earthen road in a participatory manner. This road was cut from land owned by community members to serve the common cause and benefit the village members.

One farmer said: *If I have a piece of land with an area of 200 meters. How I can reach this land to cultivate it and irrigate it if there is no road. We can say that the availability of a road reduced 80% of the time to reach Adhran and back.*

Number of households who benefited from demining: Around 30 households.

Table 20 - Benefits and impacts – Farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Agriculture Herding Stones	Land Lords All villagers	Previous ownership	Agriculture Herding Cutting stones	Potential net income from demined area (grapes /qat) 15,000,000 YR per year. Increased yield Animals Fuel economy Cutting and selling stones
Wells (Three wells) in Khadhm Handhal	10 persons in the village	Belonging to their ownership	Wells	Increased agricultural area.
Transport roads Pedestrians	All village members	All decided to open roads for the benefit of the village	For cars and pedestrians to other areas outside the village	Reduce distances and time

Table 21 - Improvement and Development opportunities (Farmers) Al-Jafinah

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Agricultural Lands	No soil in it. soil is brought from other locations	Provide Ag. Machinery Loans from CAC bank(without interest)	All members of the community, since they are Agriculture Producers.	From the Ministry of Agriculture, public works, planning and development, Donor agencies
Water	Drilling deep Differences in water quality	Provide six artesian well pumps	All members of the community, since they are Agriculture Producers.	Same as above
Roads	No constraints	Asphalt for all the village		Same as above
Herding	Limited fodder because of drought	Water diversions are required		Same as above
Buildings	No constraints			Same as above

Note: The major benefit of the local community from demining is the feeling of security.

Participation in YEMAC work? *“We used to lead and direct de-miners to the locations of mines and bombs. People used to enquire about people coming in red cars. We used to say that these people came for demining.”*

Meeting with survivors: Al-Jafinah

Bani Hushaish, Mahal Hagar Beshr, Wadi Regam, Al- Jafinah village:

Case No (1):

Saleh Hamoud Bin Husain Nagi is aged around 60 years. He is married with four children, two of whom are already married. He was 21 years old when he was affected by the mine. *“I was herding animals, walking when I felt the mine explosion”*. The incident took place in Dhahrat Al-Gash, nearly 40 years ago. The victim did not get any assistance or support or care from anybody.

Did the victim know the dangers of the mined area? He did not know the danger of the affected area. *“After the incident, I remained at home for a long time without any help or support from any body. Once somebody recorded my name, however, I did not get anything.”*

He lost his left eye completely, and some parts of his body. He depends on [his own agricultural production]. He cultivates grapes and qat. He never heard about the corporation or association, which is taking care of mine victims. He requests a monthly salary or a job.

Case No (2):

Fatema Marzouk Ahmed Nagi (Female, age 20 years; age at the time of the incident: 5 years) and her brother.

Case No (3) Fathi Marzouk Ahmed Nagi (Male, age 24 [+] years, age at the time of the incident: 11 years - attending the 4th primary class.) The family are farmers and land owners growing Qat and Grapes. Their social status is average/middle class. The family has 7 boys alive, one of whom is a mine victim. They have also two daughters (one of whom is a mine victim)

Information about the case: They were herding animals in Dhuhtrat Al-Fash (a mine field). Fatema said “... we found a mine and hid it from our mother, who was washing clothes. We brought the mine to our home. We arrived home at sunset. Next day in the morning we started playing with it beside our home. We were holding the mine in our hands. I was holding it with my right hand which I lost after the incident. My brother was hitting the mine with a metal handle; my sisters were watching us from a distance. One died instantly, the other one died the following day. I lost half of my arm from the elbow and my brother lost his left eye. Our neighbours rushed us to the hospital in Sana’a. I remained in the hospital for a month. Fathi went to Jordan for 15 days; thereafter he left to Jordan for two months”.

The two victims were aware about the area (Dhahrat Al-Fash); the location of an old camp in the area. However, they were not aware of mines. Moreover, they did not know what mines look like. Similarly, they did not know that the mine is a deadly weapon and a very dangerous tool when played with.

How has the incident affected their lives?

- Their social life was not affected. Both of the victims practice their lives normally. Both of them work. Fathi works in agriculture. His father (the Sheikh) trained him in agriculture. Fatema works at home and in vacations she herds animals.
- Fathi got moral support from his friends. They stopped going to school as he did [to keep him company at home].
- Fatema did not get any support for her condition, such as an artificial hand.
- Fathi did not have any information about any association looking after mine survivors or victims.
- Fatema heard about an association of demining; the representatives of this association came to the village three years ago (2003).
- Fathi would like an association supporting mine victims or survivors to help him retain his vision so as to enable him complete his studies at school.
- Fatema wishes to get an artificial hand and a source of income such as a monthly aid.

Meeting with Children: 10th May 2005 Al-Jafinah

Al-Jafinah village/ Bani Hushaish District / Sana’a Governorate.

We met with the eldest class from the primary school, girls and boys from 10-13 years old - 18 boys, 25 girls. At the beginning, we gave them an idea on the nature of our task and the activities of “YEMAC” during demining before we came to them.

- Do you know anything about mines? We did not know anything about mines. We never saw mines.
- Did anybody give you an idea about mines in the area? We never had information about mines. We used to see employees from the mine centre working in the nearby areas.
- Have any of your friends been affected by mines? The children of Marzouk. Two died and two were injured. A mine exploded on them 13 years ago. The two injured told us about the incident which happened to them.
- Did you get the security and peace when playing or going freely to demined areas? - We play in these areas now and we move around freely.

- Were you able to enter the mines area before demining? - No we were not able. Our parents used to warn us from entering the mined areas. One girl said that she herds animals in the demined fields now.
- Do you know the name of the demined areas? - One girl answered No! Another one said the name of one area. A third girl named [another] area. The boys said Al-Gumaimah and Khatm Handhal.
- What are the things that we can do in the demined areas? - One girl answered “construct a school or a medical unit”. Another girl said” construct a school or a medical unit” The boys said “ construct a school or mosque or a medical unit”
- Were there any incidents after the year 2000? - No, there were no incidents since. However, we found strange objects such as small rockets, bombs in Al Hamra and Jumaimah and Qa’a Al-Madhrab and Sheib Al- Shareiah and Nagd. We left these objects where they were. Some were taken by us to play with. - A small object such as a mine was left in a site where explosives are used to cut stones. - A girl found a bomb in Al-Garn but she dropped it as she said.
- Did anybody tell you that this area is cleaned from mines? The answers varied between No and some said that one military person said that they came to clean mines.

Participants in the meeting were pupils of fifth grade in the primary school.

Their names:

1. Husain Hasan
2. Ahmed Mohamad
3. Bassam Ahsan
4. Ameen Ziady
5. Tahany
6. Daleela

Things that impressed the surveying team in Al-Jafinah. (11th May 2006)

- People are cooperating with each other.
- Innovators
- Realistic in asking for projects.
- No much interaction with “YEMAC” as a result of a prolonged time lapse between planting mines and demining.
- They have resources which [support their rural livelihoods] or it could be that we met the well off people only.
- No harmony in data collection between males and females.
- Internal problems were not mentioned to the team.

Table 22 - Conclusions - Bani Hushaish / Mergam Village/ Al-Jafinah

Group	Impact	On Who	Why	Opportunities	For Who	Why
Farmers	Planting grapes and qat in some demined areas	30 landowning households	- Because it is cultivable land. - Because of high return	Create/ establish Farmers associations	Land owners and all members of the community	- Without associations no support can be granted from

Herding and forage	All villagers	Higher returns	Construct water diversions for forage growth	who are agricultural Producers	the Government
Stones	3000 households	- cutting and selling stones	Provide six artesian well pumps		- To access bank loans and agricultural machinery
Wells	All villagers	-Water provided to increase agricultural area	Asphalt the road	All the community	
Road construction reduced 80% of journey time to local market	10 people in village.	- Reduced distance - Reduced time			

Women	<ul style="list-style-type: none"> - Security - Roads - Agricultural Lands (qat & grapes) - Rangelands and fodder collection - Houses - fuel wood 	<ul style="list-style-type: none"> - All Community members -Landlords 	<ul style="list-style-type: none"> - Reduced time - Source of income and self sufficiency at home - Revenues from selling used to cultivate and develop land. - New houses near lands to guard land and reduce time and transport. 	<ul style="list-style-type: none"> - Asphalt the road - Grow alternative crops, e.g. sorghum - Drill wells, construct cisterns and drip irrigation units 	<p>All the village</p> <p>Land-owners</p>	<p>To reduce the burden of purchase from outside the village</p> <p>Ensures important income from agriculture.</p>
Leaders	<ul style="list-style-type: none"> - Security - Agriculture 	<ul style="list-style-type: none"> - All community members - Land lords 	<ul style="list-style-type: none"> - No explosions after demining. - Major source of income 	<ul style="list-style-type: none"> - Create Agric. Associations. - Maintain roads 	<p>All the village</p> <p>All the village</p>	<p>Without associations no support can be granted from the Government</p>
Children	<ul style="list-style-type: none"> - Security - No new victims among children 	<ul style="list-style-type: none"> - Children and village - Children 	<p>Feeling secure, they started playing and moving freely.</p>	<ul style="list-style-type: none"> - Schools - Mosque - Medical unit 		<p>For expansion</p> <p>Because they are far from hospitals</p>
Survivors				<ul style="list-style-type: none"> - Conduct further operation to improve sight - Provide an artificial limb - Getting monthly assistance or salaried job 	<p>Survivor (Fathi)</p> <p>Survivor (Fatima)</p> <p>Survivors (Fatima and Saleh Hamoud)</p>	<p>The operation is important to enable him to return to school</p> <p>Compensate with monthly salary to help them to cope.</p>

Dhamar Governorate

Mazlb community

Wesab Al A'ali District, Dhamar governorate

Date of survey: 14th May 2006

Summary: Mazlb

Mazlb is a small (150 population in 18 households) village about 3 kms from the District town of Wasab Al A'ali. It is a remote, high altitude village (c.2400msl) that depends on terraced, rainfed agriculture (livestock and field crops – mostly sorghum). It is classified as medium impact in the Landmine Impact Survey. There are open water tanks and old wells, but no pump irrigation or boreholes. The place is too high for qat, so the main cash crop (not grown extensively) is garlic. There are quite a lot of trees (Eucalyptus, and local species that are cut for browse). There are no formal institutions in the village.

There are two “cleared” minefields from over 20 years ago. Despite the fact that officially the areas are declared clear by YEMAC (in 2003), **local people are afraid to enter the areas** and just send their livestock into the area without shepherds. They are also afraid to use the paths that cross the area. They believe that the mines are buried deeper (maybe up to 1 metre) than the 20cm standard that YEMAC clears to, thus they are afraid to plough the area for crops. Men and women are aware of the mine situation; nonetheless better communication between the de-miners and the community would result in a clearer understanding, and better use of the resources.

There has been one accident since the Level 1 survey (one woman killed in 2001).



Introduction: Mazlb

Upon arrival of team into Mazlb in Wesab Al A'ali District, Dhamar Governorate a meeting was organized with representatives of the local community.

Present in the meeting were:

1. Ali Abdo Qa'ed Al-Nawy
2. Abdo Mohamed Qa'ed Sa'adan (The son of the Sheikh)
3. Shaef Ahmed Shanea
4. Manna'a Ahmed Shanea

The team introduced its members. After the introductory speeches and the welcoming protocol, the objectives of mission were highlighted. It was said that the team came to this village to get acquainted with the conditions and the socioeconomic aspects of the life of the local community. The team also highlighted the fact that the visit was to understand the plans of the local community on how they will utilize the demined areas. It was also made clear that this visit is part of the process of demining and the potential actions for utilization of demined areas will be collected from the local community and handed over to the YEMAC in Sana'a.

Time Line: Mazlb

Before planting of mines: Lands were cultivated with food crops.

After planting of mines: Land was deserted because of planted mines. Community members were scared in the hillsides and at the top of the hill. Several cases of mine explosions took place, which complicated the situation and led to further feeling of uncertainty.

How people coped with the situation? People were scared after the incidents took place and people got killed or injured. The feeling was similar among men, women and children. The planting of mines took place during the growing season and people did not know about these mines. The explosions took place while people were cultivating their land and there were several cases of death and injury.

When the area was demined? We do not know when the area was demined. We recognized that there were signs in the land. When we inquired, we were told that a team came to the area. People did not know whether the area was demined or not. They are still scared from using the area for agriculture. There were more than 60 people killed and unknown number of animals.

Who were affected by mines? All the community members. There is a belief that mines are still posing threat to community members in the suspected areas.

What type of incidents took place after the year 2000? After the year 2000 there were no incidents. The last incident took place in the year 2000.

Who are benefiting from demined areas? No body.

Why? Because we do not have means to cultivate the land, and mainly because we are still scared. The mines are still located deep in the soil.

How did you interact with "YEMAC"? We helped them and guided them to all dangerous areas. We interacted with them positively.

How was the land used after demining? The land was used for herding only. Because of the presence of mines at deep locations; therefore the land was not used for agricultural purposes.

To whom does the land belong? The land belongs to several people. There is more than one landowner. The land belongs to the whole village (14 households)

Table 23 - Village Profile: Mazlb

A meeting was organized with members of the local community in the village. The objective was presented to the gathering as follows “the purpose of the visit was to link the effect of mines on the livelihood of the community members, and the search on how the community can be supported after demining”.

A. Internal factors affecting the lives of the community:

Facilities available in the village	Status
Number of schools	Not available. One very far
Medical unit	No
Number of houses	25-30
Population	110 inhabitants
Trade units	Grocery kiosk
Water supply projects	No
Electricity	No
Telephone	Yes
Wells for drinking of water	No
Petrol Station	No
Local Council members	No
Associations	No
International organizations	No
Projects	No
Salaried employees	No
Jobs	Only in agriculture
Emigration	Intensive because of mines
Emigrants outside the country	No
Internal migration	No
Land use	Cultivation of food crops and herding animals because of drought.

B. External Factors affecting the lives of the community in the village.

Facilities provided	Status
Roads	There is one major road (Dhamar – Husainia) but still not completed.
Medical units and school	No
Links with neighbouring villages	Good linkages and there are family ties.
NGOs	No. If the government did not reached us, how about others.
Markets	There is one at a distance of 25 minutes walk. But the road is bad.
Financial links and transactions	No
Credits and loans	No body available to provide loans.
Household links	Very strong
Cooperation among village members	Very strong
Communication media	No
Telecommunications	Yes
Internal migration	No
Disasters like wars, earthquakes	1980 and 1982
Purpose of growing food crops	Food and fodder. However, because of drought, grains for food are limited

Meeting with Village Leaders: Mazlb

There are no village leaders (very small village)

Meeting with Women: Mazlb

A meeting was held with 6 women in the village.

Present in the meeting were: Mennah, Nabeela, Nagma, Taebah, Gawhara, Warda.

- The women said that the demined areas are those areas which were painted with white paint. These sites are located in: Al-Haiga, Al-Tewal, Al-Shams. Bab Hedad and Haima. These areas are used as range lands for herding animals only.
- We leave the livestock to go into these areas for herding and we monitor them from a distance. Although this was risky for animals, we managed to keep the animals by that way because of scarcity of clean (without mines) rangelands in the area.
- We realize the work of de-miners when we hear explosions. We understood later that these explosions are from collected mines. After demining the white signs were signals of demined fields.
- We are scared to cultivate our lands because we think that the equipment of de-miners cannot discover mines located deep in the soil. Ploughing the land requires that the plow goes deep into the soil. We discovered a mine in Hagra two years ago while we were doing land preparation. We handed over the mine to the government.
- Al-Tool and Al-Haija is a private property of the Sheikh. Other sites are the property of many people who account for 70% of the village population.
- Land ownership in the area has been left unattended for long time. Therefore it is difficult to identify land ownership. We need to measure the area by using a meter and identify land owners on the basis of the documents they have (Basaer)
- We were reluctant to go into the demined areas because of the feeling of insecurity.
- What we need is to dig the land to a depth of two meters and de-mine the area. This is important to cultivate the land and grow crops in it.
- The demined area was agricultural land before planting of mines. We used to grow sorghum, wheat, barley, pulses. Therefore we can repeat the cultivation of the mentioned crops when we are sure that the area is demined.
- Since the planting of mines a total of 8 women and 3 men were killed.
- The signs with red (x) used to scare us. These signs are warnings of mined areas.
- We couldn't ask about the de-miners or from where they came from.

Meeting with Farmers: Mazlb

Major activities in the village are agriculture and animal herding.

The mikhlaf (district) has one Sheikh. No of centers in the mikhlaf is 9 -10

The total number of cows in the village is 20 cows.

What type of assistance do you expect from "YEMAC"? We expect ploughing the land to a depth of two meters to make sure that the area is clean from mines.

Table 24 - Benefits and impacts - Farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	Animals graze the land	There are documents with farmers supporting their ownership	For herding animals	Grazing the range land reduces the dependence on purchase of fodder

Water	Not available			
Roads	For walking through	No body	For walking through	They are still scared of using paths in the demined areas.

Notes:

- The interviewed farmers acknowledged the role of “YEMAC” in demining. They said that several teams used to come and stay for several weeks working in the demined areas in “Mazlb”. However, the demined area is still not being used in the cultivation of crops.

Table 25 - Development Opportunities: Farmers

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Land	Shortage of water	Drill deep wells Provide pumps Construct water structures	All the local community	We expect support from the government.
Water	Same	Same	Same	Same
Roads	The roads are rigid	Asphalt the road	All the local community	We expect support from the government.
Buildings	-----	-----	-----	----

Meeting with men/women Survivors: Mazlb

The only survivor was in Sana’a at the time of the visit

Meeting with Children: Mazlb

- One boy said that children are aware about the red pick-ups which come to the village from Sana’a. These are the de-miners.
- One boy said that there are mines in the soil and the dogs sniff these mines before they are lifted by de-miners.
- Most children in the meeting confirmed that there was a public awareness campaign organized in the village one year ago. He said that they were shown different types and shapes of mines and they also mentioned where in the village these mines are located.
- One participant said that mines are found in “Mazlb” and in the military camps where the army is present.
- Most children said that they heard about mines from their schools.
- Most children said that they are still scared from demined areas.
- Most children said that they do not go to demined areas because they are far away and there is no need for them to go there.
- Some boys said that they participated in hanging posters about mines during the campaign. These posters illustrate the types and shapes of mines.
- Some children said that one pregnant woman was herding animals when she hit a mine and was killed instantly.
- Some children said that a girl was herding animals in a place called Al-Sharaf when a mine exploded and she lost one of her leg.

Table 26 - Conclusions - Impacts and Opportunities after demining of Mazlb:

Categories	Impact	Who is affected	Why?	Opportunities	Who benefits	Why?
Farmers	Herding and paths for pedestrians	Most village inhabitants	Current benefit herding The only access used by farmers	Create means for making it more safe Drill deep wells and construct dams and repair roads	Land owners All citizens in the village	They still feel that mines are present deep in the soil Because of low rainfall, scarcity of water and bad roads
Women	Herding (NB herders do not enter fields)	Women herders	It is the only benefit from the demined land	De-mine again deeper	70% of village members (land owners)	They still feel scared
Leaders	No leaders					
Children	Nothing					
Victims	None interviewed *					

*Note: There was only one survivor in the village. However, he was in Sana'a during the survey.

Impressions from Mazlb

1. Security. Still worried about the safety of the land (especially from deep-buried mines)
2. Women poor, but clean.
3. Not enough people to give information.
4. Very small village, people not in their houses.
5. No benefit from the land apart from grazing, as they are afraid to use it for crop production.

Al-Sharaf Community

Wesab Al A'ali District, Dhamar governorate

Date of survey: 14th May 2006

Summary: Al-Sharaf

Al-Sharaf is a very small village with only 7 families located in a remote high mountainous area, about 4 km from Wesab Al A'ali. The village has few services and no active associations or organisations working there. The area was originally mined because of an army camp which was positioned on the village land during the early 1980's. It was classified as medium impact in the Land Mine Impact survey. Demining took place in 2004, and there have been no mine related accidents since then.

The local economy depends on cultivation of crops – sorghum, pulses and garlic, and rearing of livestock (mainly by women and children), but with important cash income from the men's work outside the village. The main assets affected by mining were cultivated lands, estimated at around 25% of the village total and some access paths.

The benefits from demining have been the greater utilisation and access to grazing land and stone collection. Although the community feels more secure after the demining, they are still not confident to cultivate the land as they believe there are mines deep in the soil. They feel the need for further information on the areas cleared.

Suggestions for further development of the demined assets were for demining of a remaining mined area, further information on the already demined area, renovation of the land and terraces and small dams for harvesting rainfall. Village level development suggestions were for a drinking water project, a primary school near to the village, adult literacy classes and electricity supply. The survivor met required further medical treatment and psychological care.

Introduction: Al-Sharaf

The meeting with local community members was held in the village of Sharaf. First, [the team introduced themselves to community members; then the community members introduced themselves to the survey team. A representative of the survey team highlighted the objective of the survey. He said that the survey team would like to know how local community members are surviving after demining the area and how they can be assisted to utilize the resources generated after demining in a rational and sustainable manner. It was made clear that the team does not have readily available projects or ideas. The team would like to listen to members of the local community and assess their needs with respect to the demined areas.

The representatives of the local community were:

1. Ahmed Fara Qa'ed farmer
2. Mohamed Ahmed Saleh. farmer
3. Mohamed Ahmed Far farmer
4. Mohamed Shamsan Mohamed Qa'ed student

10 women also participated in the meeting. The meeting was thus a joint meeting (men and women).

Time Line: Al-Sharaf

The meeting started by the team asking about the lives of the local community before mines were planted. The community representatives stated that their lives were normal. They used to cultivate the land with sorghum, barley, pulses and garlic. Agriculture was the main source of income for the local community.

When were the mines planted? “The mines were planted in the early nineteen eighties”.

How were their lives affected from when mines were planted until demining took place? “After mines were planted, we never cultivated the land. We never enter the mined areas. The area was left as rangelands for animals and big ruminants. Many animals died because of mine explosions. Similarly, human beings were affected as well as donkeys.”

Local people were forced to migrate to Saudi Arabia and to major urban centres in the country. No help was extended by anybody. Many migrants returned to the area after the gulf war in the early 1990.

“There used to be a military post in this area called the 23 Battalion. When there were clashes between the military camp and the front we were forced to leave our village for other areas or to go to urban centres.”

The women said that they are still afraid of some places even after demining. “During the demining period, we noticed that several groups of men used to come in red pick-ups, accompanied by dogs. We came to know that they were able to dig out several mines. Some say only two, others say more.”

“the demining team did not remove all the mines. They only picked out two, but didn’t clear all the places. They put signs where there were mines and did not return. They came with their map, but didn’t ask us about other places where we think there are mines”.

“The demined areas are not yet cultivated. People are still reluctant and feel insecure”.

“We used to accompany the demining teams. They always walk with maps and they record everything on their maps.”

“The “Shagab” [Shejem?] area is still not cleared from mines. We told them to clear the mines there, but they said “It is not documented in the maps we have”. Until the year 2003, three areas remained uncleared from mines. The awareness campaigns were inadequate.”

[NB. The information was conflicting. Some said there were campaigns; others said there were no awareness campaigns. Some say that they received papers with information about mines. Others were not aware.]

In general local people are still scared. And they did not cultivate the land since demining was done. The area remains as rangeland for herding animals. People want campaigns to be convinced that the area is definitely demined.

Were there any incidents of mine explosions since the year 2000? Nothing has happened.

Assets affected – previously cultivated land was affected, belonging to all the households in the village. Some paths to cultivated areas and grazing were also affected. There was no real effect on firewood since the land was not forested. The area planted with mines was estimated to be 25% of the total land of the community in the village.

Village Profile: Al-Sharaf

The first meeting was organized with members of the local community in the village. The objective was presented to the gathering as follows “the purpose of the visit was to link the effect of mines on the livelihood of the community members and the search on how the community can be supported after demining”.

Table 27 - Internal factors affecting the lives of the community: Al-Sharaf

Facilities available in the village	Status
Number of schools	There is a secondary school in Usa’ab Al ‘Ali, but the primary school is very distant
Medical unit	No
Number of houses	7 houses
Population	120-140 inhabitants
Trade units	Grocery, Kiosk
Water supply	Located far away (two hours walking round trip)
Electricity	No
Telephone	Yes, located three km away
Wells for drinking water	No
Petrol Station	No
Local Council members	One, but he did nothing so far
Associations	No
International organizations	No
Projects	None. No contact with the Social Development Fund or other social programmes.
Government employees	No
Jobs	Only in agriculture (family labour)
Work outside the village	Intensive because of mines. Petty trading (vegetables and other goods) and laborers
Migration outside the country	No
Migration into the community	No
Land use	Cultivation of food crops (sorghum) and herding animals (goats, sheep, cows – 1-5 per household) because of drought. Cultivation of garlic once a year.
Mosques	Only one
Size of animals held in households	In best cases one cow. 5 sheep
Land ownership	Land is considered private property, as per the documents of land owners.
Food security	Based on cereals but not enough for the household needs
Credit	They do not feel the need for credits. Their lands are small.
Disasters	No disasters happened so far
Zakat	Paid to the “Ameen” who hands it over to the government.
Tribal links	Not effective and do not help them.

Meeting with Village Leaders: Al-Sharaf

[This was such a small village that the village leaders were the same people as attended the general meeting and the farmers' discussion]

Meeting with Women: Al-Sharaf

11 women present

- "Before the mines were planted we used to cultivate all the land around the village growing sorghum, barley, fenugreek, mustard, peas, and broad beans. We had enough for our needs".
- "We lived with the mines in a permanently frightened state, and we were forced to buy the grain and other foods we needed instead of cultivating crops."
- "We never stopped cultivation of crops. We cultivated nearby lands. "We sometimes sent the sheep for grazing into the fields or places that were mined. If they hit mines and exploded, we *knew it was not safe*"
- "Yes, we were told that the area was mined, but we did not know where exactly the mines were. When a mine exploded we became sure that the area is planted with mines."
- "The surveying teams first came about 6 years ago. Then they came two years ago with their equipment and they demined the area. They dug big holes all over the place and then left. We were not told whether the area was safe or not and we do not know where exactly the demined areas are".
- There was some written information provided, but since none of them could read, they did not understand it.
- "We started feeling more secure in the last 2 years, because there have been no mine explosions since the area was demined." There have been no accidents from mines after the year 2000.
- We have more than 100 pieces of land for cultivation, but we are not sure if these lands are clear from mines.
- The areas which were affected by mines were estimated at about 50% of the total agricultural land area in the village.
- 4 people from the village have been killed by the mines.

Benefits: Al-Sharaf

- 2 small areas of cleared land belonging to 3 related families have been cultivated with sorghum this year for the first time; the rest is used for grazing and access only. [However, these areas were the site of the army camp and hence unlikely to have been mined]. The Shejem area is not cleared or used. There is no wood or stones on the cleared land, nor is it used for water harvesting.
- Grazing on the cleared land is exclusively for the owners of that land. All 7 families have sheep and goats and one or two cows; the largest has 10 sheep/goats.
- "Although the livestock have benefited from the increased grazing area, the benefit is not great as before the mines were laid. There were more grasses then. The damage to the structures and absence of cultivation has reduced water infiltration and so the grass growth is poor".
- The potential benefits if the cleared land was utilised are indicated by yields from the unaffected village land. A large terrace (**jerba**) can yield between 150-200 kg. Sorghum is produced for home consumption although small amounts may be occasionally sold. Sorghum sells for 500-580 riyal for half a **tomani** (approx 3-4 kg?)

Opportunities identified: Al-Sharaf

The development opportunities identified were for:

- A village drinking water supply. This is a priority
- A school to be built within easy reach of the village
- The mined land has not been cultivated for 20 years. Some areas have been damaged by water erosion and broken terraces and require repair and reconstruction. This is expensive. Labour costs are 1000 R per day with food. They would like support for rehabilitation of the cleared land. They are ready to contribute: “We did not try to renovate the land because we are not sure it is cleared. We can do it by ourselves if we are sure it is clear. We can cooperate to repair the land.”
- Literacy classes, for women and older girls.
- The status of the ‘cleared’ land is still in doubt. One woman explains that the de-miners can only detect mines to a depth of 20 cm, but the mines in their area are deeper than this. They feel fairly confident to walk over the land or graze sheep on it, but not to dig. “When we come to plough, it will explode!” She heard the noise of the metal detectors as the de-miners worked on the land. They were not told which places were clear. There have been no accidents, but they are afraid to try. In the years immediately after the mines were laid, accidents happened when people walked on the land, but later on, explosions occurred when people tried to cultivate. One woman described her daughter’s accident which happened just before the demining took place (see survivor interview). “We did not interact with the demining teams or “YEMAC. The de-miners came and did their work without telling us where the demined areas are. It is not appropriate for women to go after men to ask for information”. The survey and demining teams were all men. The women do not think the men were properly informed either, since many were out of the village.
 - They want verification and information on the land areas that have been cleared
 - They want the remaining mined area to be cleared and to be told it is cleared.
 - They would appreciate assistance to renovate the land

Gender division of labour: Al-Sharaf

Women do nearly all the agricultural activities. “We weed, thin plants, prepare beds around plants, strip leaves, cut grain heads, cut fodder, thresh grains, store grains, look after animals, milk cows etc.” Land preparation is the task of men only.

Table 28 - Gender division of labour: Al-Sharaf

Agricultural work	Who works
Remove stones	Women
Plough	Men
Break clods	Women
Make lines	Men
Manure	Women
Sow	Women
Make irrigation bunds	Women
Thinning	Women
Weeding	Women
Harvesting	Women
Threshing	Women
Winnowing	Women

Herding/grazing livestock	Women, girls, boys
Collecting grasses	Women
Fetch water for the house	Women, girls

Table 29 - Benefits and impacts - women

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land – 2 small areas cultivated with sorghum.	Three households	Based on traditional ownership	Cultivation of food crops	For family use only
Animal herding	Seven households in the village	Animals graze on the owners' land	Grazing animals	Increased grazing but grass not as much as prior to mining.

Table 30 - Opportunities for Development: Women

Assets/Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
land	Feeling insecure because of mines	Create awareness about the safety of the demined areas - verification and information on the land areas that have been cleared	All members of the community	Government
	There are areas which were not cleaned from mines	Clearance of the remaining mined area	All members of the community	Government
	Reclamation of demined lands which was destroyed because of floods and rainfall and not being used for a long time	Renovation of the damaged land	All members of the community	Government
		Village drinking water supply	All members of the community	
		A school to be built within easy reach of the village	Children	
		Adult literacy classes	Women and older girls	

Meeting with Farmers: Al-Sharaf

- Nearly all those who were in the meeting heard about “YEMAC”. An institution dealing with mines. They acknowledged the significant support of the centre in demining activities.
- There is a need for further awareness campaigns to ensure that all areas are clean from mines.
- Awareness on the types of areas and the meanings of colours is very low, if not absent.

- There were no victims of mines after the year 2000. There are no survivors or invalids because of mine explosions [NB but see later interview] The victims of mines are dead people.
- The demined area is agricultural land devoted to herding animals. Every body is using this land as rangeland. People own the land and the property owners are members of the community. As far as cultivation of land is concerned, people are still scared.
- The economic return from agriculture is minimal to land owners.
- Fuel wood cutting is not practiced, because there are no shrubs or trees in the rangeland.
- There are no roads.
- There are run off water canals.
- Stone cutting from the mountains is used for house construction and terraces. Stone cutting saves people from buying stones from outside areas.
- Future plans for utilization of lands can be achieved by constructing dams for the benefit of the whole community in Sharaf and Mazlb villages.
- We also need a water supply project.
- We want an electricity project.
- We need a primary school for our children.
- There is no clean water in the village.

Table 31 - Benefits and Impacts- Farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land for herding	All households in the village	Land ownership and use are known. No need for other decisions	So far, for herding. It is not yet used for cultivation because of fear.	Herding takes place once every 10 days. No fuel woodcutting. No shrubs and trees
Stones	All	According to landownership	For house construction and terraces	A load is 10,000 YR if they purchase from outside the village

Table 32 - Development Opportunities - Farmers

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Agricultural lands	The community is feeling insecure because of mines located deep in the soil preventing cultivation of land. - Scarcity of water and limited rainfall prevents cultivation of lands.	Continue awareness campaigns through YEMAC Construct a water diversion or small dams for water harvesting of rainfall	All community members	Government and YEMAC
Water	The source of water supply is far away (two hours walking)	Establish a water supply project for the Sharaf and	All community members	Government, Agriculture Fund, USAID

		surrounding villages.		
Schools	The primary school is located far away from the village	Construct a school to serve more than one village	Children of Sharaf and neighbouring villages	Government
Illiteracy Campaigns	Because of illiteracy among women and young girls	Establish classes for literacy campaigns near the village	All women in Sharaf and neighbouring villages	Government

The participants in the meeting feel that they interacted with the demined team in a positive manner. However, they need more awareness campaigns to make them more confident and more secure.

Meeting with men/women Survivors: Al-Sharaf

Case No.(1): A female survivor: Fatima Ali Ahmed

- Fatima is now 15 -16 years old. The accident happened when she was 10 years old, in 2000 before the YEMAC team came for the mine clearance. The incident took place while I was digging a plot of land to prepare for planting. It was around 4 pm in the afternoon.
- Her mother was working some distance away from her, when she heard the explosion and saw her daughter was injured. She was injured in her leg. Her mother wrapped her leg up; it was bleeding. She was given first aid in the village and was rushed to Sana'a after.
- Her father took her to Thawra hospital in Sana'a. She got adequate care in the hospital where she stayed for 2 months. Her foot was badly injured, but the doctors managed to save it.
- The family bore all the costs. The family had to get loans from relatives. They rented a vehicle for 20,000 Riyal. "We paid for her treatment ourselves; they made many operations. We ought to continue her treatment - she still needs another operation and physiotherapy, but our economic situation doesn't allow this. The costs totalled more than 1 million riyal. We still owe money from the loans we took."
- We used to hear that the area was planted with mines. However, I was not aware about the mine in that particular place.
- The mother wishes somebody could help her daughter to complete her medical treatment because she still suffers pain and needs exercises and a further operation. "My daughter needs psychological care and support". She is depressed and permanently nervous. She stays at home alone and doesn't want to go out and mix with other girls or women.
- The family did not receive any outside support. "Following the accident some pamphlets with drawings were distributed warning us about mine explosions written in English and in Arabic". Neither Fatima nor her mother is able to read.
- "I didn't hear about the victims association. I wish anyone could provide the means for her to have physiotherapy, another operation and psychological counselling".

Case No (2) and (3): Interview with Ahmed Ghaleb Mohamed Hizam, the husband/father of the two victims:

- Hagera Hasan Mohamed Hizam Age (50 years)
- Saleh Ahmed Ghaleb Mohamed Hizam Age (24 years)

There are 16 members of the household/family. Males: 3, Females: 6, Grandsons: 6, Mother.

The main source of income is agriculture, but they cultivate crops in small quantities because of the prevailing drought. The balance of food is purchased from the market.

My wife was a victim of a mine, which exploded on her while she was weeding. She died instantly. The mine explosion was in 1983. My son was at home when a shot hit his head and killed him instantly. My family did not get any help from anybody. My house was destroyed by the military. The whole four-story building was demolished. The death of my son and my wife as well as the destruction of the house had a negative impact on the remaining members of my family. My sons then were children, and I had to raise them up by myself. I was not able even to have another wife.

As far as interaction with “YEMAC”, we provided assistance when they were working here in the village. We did not hear about the survivors’ association.

Meeting with Children: Al-Sharaf

Participants in the meeting were:

1. Nashwan Qa’ed
 2. Sultan Qa’ed
 3. Salah Ali Ahmed
 4. Riham Mohamed Fara.
 5. Ahmed Ali
- We never heard about mines till the demining team arrived in the village.
 - We came to know from our parents that some areas were planted with mines and that we should stay away from these areas.
 - Lands with mines are not cultivated.
 - The mined areas are not used.

Do you feel safe after demining?

- Somewhat, but we are still afraid. We did not enter yet the demined areas.
- Our lives after demining became better. We are able to herd animals in the demined areas.
- The number of animals per household ranges from 2 – 20 heads. The number of cows is ranging from 1-3 in every household.
- We wish there was a school and a water supply project. There is no clean water in the village.
- We do not know if any children were affected by mine explosions.
- The children in other villages are better than this village. They have electricity and water supply. There is no telephone in the village.
- There is one survivor in the village. She is a 15 years old girl. A mine exploded on her and she became disabled eight years ago.

Table 33 - Assessment of the major impacts and opportunities of demining in Al-Sharaf

Category	Benefit	Who is benefiting	Why?	Opportunity	Who would benefit	Why?
Farmers	Grazing land	Land owners (all	There are grasses	Water construction project (diversion	Owners of the	Shortage of rainfall

	Collecting Stones	the village members)	in the land Stones for house construction	or small dams for harvesting rainfall) Bring security through YEMAC work and awareness campaigns Drinking water Primary school Literacy classes	demined land All community members All community Children of Sharaf & nearby villages Women and girls	prevents cultivation of lands No feeling of security so far Water source is far
Women	Grazing land	All the community members (7 families	Increased the area for grazing animals	- Improve information on demined area - Demining of uncleared area - Renovation of land/terraces - Drinking water supply project - School nearby - Adult literacy	All citizens of Sharaf village	- To improve security - To improve their livelihood - To improve water infiltration and grass growth. - The distance to the source of water is long. - School is very distant from village
Leaders	Herding Collecting Stones	All the community members (Sharaf)	- Land suitable for herding - Because stones are available	- Water supply project - Irrigation project	All the community members	Increase animal production The source of water supply is far
Children	Herding animals	All the children	Because they are close to where they live	Primary School Water supply project Electricity supply	All the village children	The current school is far There is no electricity supply project.
Survivor	No benefits			Further medical treatment and psychological care.	Survivor and family	Family in debt & cannot afford treatment

Team impressions from the survey of Sharaf

1. The information about what they own is not correct. They try to say they have less than they have.
2. No institutions in the village.
3. They have fertile lands but they are still poor.
4. No body works for Government Civil Service or in the Army.
5. Lack of education.
6. One migrant outside Yemen.
7. High level of poverty.

Ibb Governorate

Al-Soobah Community

Al Nadera District, Ibb Governorate

Date of survey: 16th May 2006

Summary: Al-Soobah

Al-Soobah is a small village of around 450 inhabitants. It is a high altitude village in Al Nadera district, producing irrigated and rainfed crops and raising some livestock – cows and sheep. Agricultural production is limited by poor water availability and around half of the households have members involved in government employment. Village establishments and services are limited.

Mines were planted between 1978 and 1982 along the road leading to Damt and Al-Nadera centres. This disrupted local movement and trade and created fear. Al-Soobah was classified as a low impact village in the LIS. Demining was carried out in 2003. Villagers reported that one area and a house were still to be cleared. 2 young male survivors of land mine accidents were met. The first suffered injuries after entering a mined area, the second while playing with a metal object. These incidents – the last in the village, occurred around 2000/2001. The level of mine awareness among women and children was high.

The main impacts of demining are the safe use of the road, access to markets and the district centre and all local villages, improved feeling of security when travelling, herding animals or cutting fuel wood. The main opportunity identified for the demined land was the construction of water harvesting structures for crop irrigation. This would encourage cultivation of freed agricultural land. They also requested demining of remaining affected areas. For the wider village, the needs expressed were for a drinking water project; for support to the extension centre and for an electricity supply.

Introduction: Al-Soobah

The meeting took place in the village of Al-Soobah in Al-Nadera district, Ibb governorate on the 16th of May 2006. Mr. Amrany introduced the team members and explained why the team was visiting the village. He said the purpose of the meeting was to conduct a study on the impact of mines on the livelihood of the people in the village and how people are coping now with the demined area. He added “we are also here to assess your needs; we do not promise anything, but we will record your priorities and hand them over to the concerned authorities in “YEMAC”.

The following members of the local community attended the meeting:

- | | |
|---------------------------------|---|
| 1. Tawfeek Saleh Ba-bakr | Security officer |
| 2. Mused Ismail Ba-bakr | <i>Adl</i> of the village [Justice/Judge] |
| 3. Mansour Ba-bakr | Security officer |
| 4. Sadeq Abdul Rab Ba-bakr | Teacher |
| 5. Mohamed Abdulla Ba-bakr | Student |
| 6. Majed Mohamed Mused Al-Badwy | Student |
| 7. Fahd Khaled Ba-bakr | Student |
| 8. Hameed Mansour Ba-Bakr | Student |
| 9. Mohamed Saleh Ba-bakr | farmer |

10. Hizam Abdulla Al-Awlaky	Retired Person
11. Mohamed Saleh Abdulla Ba-bakr	Officer
12. Salah Mohamed Fadhel	University student
13. Abdo Ali Thabet	Retired employee / Farmer

Time Line: Al-Soobah

The mines were planted during the period 1978 to 1982. Mines were planted along the road leading to Damt and Al-Nadera centres. The mines were planted in the road, not in the agricultural lands. Before mines were planted, the area had a weekly market called “the Thursday Market”. People used to feel secure and safe.

During planting of mines and immediately afterwards, the markets were cancelled. People became afraid in their villages and while going to other areas. A parallel narrow road was made as an alternative to the mined road. This facilitated movements to and from the area. The beneficiaries of demining are the community members living near the road or travelling on the road. After the year 2000, there were no victims.

Table 34 - Village Profile: Al-Soobah: Internal and External Resources in the village

Facilities	Status
Population	450 inhabitants
Houses	120
Schools	Two – Primary and Secondary
Medical unit	Available, but without a doctor and without a laboratory. No running costs. Two nurses (f) and a male nurse.
Water resources	No water supply project. There is a spring from the mountain. Water is scarce and long queues to get water.
Electricity	Not available
Telephone	There is a battery telephone
Local Council	There is an active representative
Cooperatives and associations	Not available
Post office	Not available in the whole village. Some houses are connected
Police Station	Not available
Development projects	Not available
Demined area uses	Road for cars and pedestrians
Migrants	One in the US and four in Saudi Arabia and a business man in Sana’a. He built a mosque in the village.
Employees	50% are employees with the government - Military and Ministry of Education.
Markets	Al-Nadera and Qa’taba
Credit	The Agricultural Credit Bank is of no use. The interest is high and to get a credit or a loan you have to spend lots of time and pay big interest.
International NGOs	Not available
Extension centre	Yes, but not working
Dams and water structures	Not available

Meeting with Village Leaders: Al-Soobah

- After the area was cleared of mines, we felt more secure. Before, we used to warn our children against going to the mined areas.

- One participant in a meeting said that when he was herding animals, he used to walk over big stones. He witnessed a case when a mine exploded on one person and killed him instantly.
- A participant (Military).in the meeting said that the demining team did their job efficiently and professionally. “We felt this when they were here”.
- A teacher said, “There used to be a feeling of insecurity. However, the situation changed when I walked in the demined area in the presence of deminers who built confidence in me”.
- Some areas are still planted with mines. These are Jebel Setr and someone’s house. These areas were not included in the demining program. The owner of the house is present in this meeting. The terrorists set fire to his house and planted mines in the house.
- There are no associations or cooperatives in the village.
- The primary school was built through local efforts and donations in 1979.
- Local people in the village are not aware of any development activities in the village.
- There used to be orchards and fruit production in the village. However, the scarcity of water led people to dig out all the trees from the orchards.
- The demined area was private property. However, after demining, the area was transferred into a major road for the use of everybody.
- All local people participated in the demining exercise. We helped the demining teams. We are grateful to them and their wonderful work.
- The random drilling of wells in the neighbouring village of Dhi Al-Durub led to scarcity of water in our village.

Meeting with Women: Al-Soobah

A meeting was held with women. A total of 11 women from different age groups were present.

- Women heard that mines were planted in the eighties when the front was active.
- Mines were planted in the road for vehicles. When cars passed over the mines, they exploded.
- We knew that mines explode when cars pass on them. To explode, they require heavy weight. The mines are different from those aimed at people.
- Land overlooking the demined areas in Al-Maka’ad and Al-Bayadhah is only suitable for herding animals and fuel wood cutting.
- We used to herd animals and cut fuel wood with caution. Now we feel more secure.
- Several incidents took place. Many cars exploded. The government constructed another road after the unification of the country.
- The road was for pedestrians, donkeys and animals. Attempts to drive cars in this road failed because of mines. As a result, traffic was shifted to the new road.
- The work of women is collecting fuel wood, fetching water, herding animals. In agriculture, women weed the land, harvest grains and store grains in the houses after threshing.
- Husbands instruct their wives and daughters to do certain activities in the field.
- If men are available in the household, they help women in agriculture. Men take care of ploughing land (using animals or tractors) and planting of seeds.
- Women in the village cooperate with each other in collecting fodder and harvesting of sorghum grain as well as sorghum and maize stalks.

- Women are responsible for preparation of meals at home. Women also look after children and washing clothes.
- Women do not have any activities with “YEMAC”. They used sometimes to prepare tea for the de-miners.
- There is a house full of mines. We request the de-miners to come and clean the house from mines.

Table 35 - Benefits from cleared lands: Women, Al-Soobah

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	Land owners (agriculture) All the community (herding)	Land owners community	Agriculture Herding Fuel Wood cutting	Herding Fuelwood Stones
Roads	All the community in the area			
Stones	Bani Ba-Bakr 31 households approximately	Land owners Community members after permission is granted from land owners	Stones for building houses and for terraces Stone cutting is open for the village members	Stones for building houses and for terraces Stone cutting is open for the village members

Table 36 - Development opportunities for the village: Women, Al-Soobah

Assets/Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Land located at the lower parts of the demined area	Shortage of rainfall	Utilise water from the spring	All village members	Government
Water	Shortage of rainfall	Utilise water from the spring	All village members	Government

Meeting with Farmers: Al-Soobah

Eight farmers were present in the farmers meeting.

- The drying out of the spring (the only source for drinking water) had drastically affected the local community in the village. They were forced to fetch water from long distances. The people in the village request drilling a well for a water supply project, not only for this village but also for neighbouring villages. A request has been submitted through the local council. Efforts are underway to follow up on the approval of this project.
- After the clearing of the land from mines, it will be used for traffic and the sides of the road for herding animals. Some land can be cultivated near the demined road. It belongs to one citizen in the village. If this land is cultivated it can yield

average of 50 – 100 kadah (one kadah = 45-50 kg) grains. The cost of kadah is 2000-3000 YR.

- The area of Al-Bayadha can be used to construct a petrol or butane gas station because of its ideal location on the cross roads, very close to the main road connecting the capital of the district.
- Another participant in the meeting said Al-Bayadha used to be a traffic road and now it is a pedestrian road only.
- Another participant said that only part Al-Bayadha area can be used for agriculture production (mainly cereals). If irrigation is used , the yield can be 20-25 kadah of grains. 22.5 kadah x 2500 YR = 56250 YR can be generated annually.
- One farmer suggested the construction of a small dam for water harvesting and irrigation of crops in the area.
- Another farmer in the meeting said that Wadi Bana runs down not far away from the village. If water can be pumped from the wadi, people will be able to grow more crops.
- Farmers in the meeting requested support to the extension centre in the village. The extension centre is nearly empty because of lack of resources. The activities currently conducted are personal initiatives of the extension agent in the centre.

Table 37 - Benefits of demining in Al-Soobah (Farmers)

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land Main Road	All the local villagers and all travellers from Al-Nadera to Qa'taba. The road also connects to the district centre	Mainly main road with limited agricultural land. Ownership is well known and does not need decisions		
Agricultural land	Owners	Owners are known	For food crop production	If there is adequate rainfall it can give up to 50 kadah annually (3000YR/kadah)
Land for construction And agriculture (Al-Bayadha)	Owners	Owners are known	Cultivation of food crops and pulses	If there is adequate rainfall it can give up to 30 kadah annually (3000YR/kadah)

The total income from crops grown in demined fields if cultivated in the future are:

1. In Al-Bayadha : A total of 22.5 kadah of grains can be harvested . 22.5 kadah x 2500 YR= 56,250 YR
2. In Al-Ma'kad: A total of 75 kadah of grains can be harvested. 75x 2500 YR = 187,500YR

Table 38 - Development Opportunities for cleared land: Farmers

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Agricultural Land	Shortage of water for irrigation	Construct dams for water harvesting and irrigation	Land owners	Government Agriculture Fund
Water	Water from the spring became scarce and contaminated	Establish a water project for drinking. Attention should be given to the spring	All village members	Government
Agricultural Extension	The extension centre has not been working since 1983. The extension agent functions based on his own initiatives.	The centre should be supported with funds and additional staff to provide services to the area in a good manner.	All village members	Government and donor agencies + FAO

Meeting with men/women Survivors: Al-Soobah

Case Number (1)

Humaid Ibn Mansour Ba-Bakr, aged 17 years.

Age at the time of the incident: 12 years

Location of incident: Al-Soobah (Al-Ma'akad)

Type of explosion: anti personnel mine.

Type of injury: Broken thigh bone and flesh wounds.

- I was aware that area was dangerous, yet I was careless and entered the area.
- After I was injured, I was rushed to the hospital where I got first aid. Afterwards, I travelled to the Kingdom of Jordan for medical treatment, at my grandfather's expense.
- I have never heard about the survivors association. However, I heard about the mines centre in Sana'a and the demining teams who came here three years ago.
- The demining team launched awareness campaigns on the dangers of mines and on "YEMAC". They gave us their telephone numbers for emergencies.
- I am a student attending the secondary school.
- I want to get married, but the expensive dowry prevents us from getting married.
- I am currently a full time student. I do not help my father in any way.
- I wish there were projects for electricity, water.
- I love watching TV.

Case Number (2)

Abdo Saed Mohamed, aged 11 years.

We were playing with a strange object in the village when it exploded. I was hit in the stomach. I was rushed to a hospital in Sana'a for medical treatment. My friend had his hand cut. He was also rushed to the hospital. He now lives in Al-Nadera.

Meeting with Children: Al-Soobah

A meeting was held with children. There were 12 boys and two girls. Among participants, there was a survivor of mine explosion.

- Yes, we heard about mines.
- Our relatives and parents warn us always against mines and areas planted with mines.

- People from YEMAC' came to our village, gave us information about mines, and showed us examples of mines. They warned us against playing with strange metallic objects.
- Yes we know about demining. We saw de-miners working in the area with their equipments and sniffing dogs.
- Before demining, we never used to move around freely. Whenever we used to go anywhere, we use to walk on the tracks of cars in the road to avoid contamination with mines.
- A child said he found a strange object, which appeared to be a bullet. He gave it to his father.
- Another boy found an object. He threw it away to avoid explosion.
- One boy said" I was working in my fathers' field. I noticed an object while I was making a fence from thorny branches to prevent animals from entering our field. I called my father about this object. It appeared like a mine. My father called an officer who called military persons to come and take it away.
- We herd animals as a group. We cooperate or take turns in herding the animals of the village.
- The total sheep and goats in the village is about 50-60 goats. There are about 5 cows.
- The least number of animals owned by a household is 2, one cow and a donkey.
- Two girls said "we used to herd animals without fear. When de-miners came and made coloured signs, we got scared from the signs, when we used to go out herding animals".
- "After demining was completed we herded animals without any fear", the two girls added.
- The girls in the village take care of herding animals, fetching water and fuel wood collection. The girls use pipes to suck water into plastic containers, put them afterwards on donkeys and bring water to their houses.
- The girls get orders to do things from their mothers.
- The girls said "If our father asks us to help in the field we do that"
- All participants agreed on the fact that their support to 'YEMAC' was in a form of dissemination of awareness to others on the dangers of mines.

Major Impressions generated from the survey in Al-Soobah in Al-Nadera/ Ibb:

- Children and women were familiar with different types of mines. This indicates high degree of awareness among them.
- Shortage of water, despite the location of the village near Wadi Bana.
- No coordination and support to each other among local people with respect to development activities in the village.
- The village was hit with a killer decease, which led to the death of 13 persons in a week.
- There is a site which was not included in the demining program. This is the house of Tawfeek Ba-Bakr.
- The area was a strong hold of political conflicts in the seventies and eighties. This caused strong differences in views and negatively affected their resources and social abilities.
- There are two important governmental offices. These are the extension centre and the medical unit.

Table 39 - Impacts and Opportunities after demining of Al-Soobah:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
farmers	Access by road to district centre and all local villages. Agricultural land.	All the community Landowners	People depend on the road	-Build constructions for water harvesting and crop irrigation -Support the extension centre with funds and staff -Water supply project	All the village community Farmers in the village and the neighbours	Increase crop production Reactivate the extension centre to provide needed services Drinking water is fetched from far away.
Women	Herding Fuel wood Stones for building houses and terraces	All the community Landowners (31 households) and community members	The availability of range lands along the demined road	Water supply project	All the community	Shortage of water Electricity is essential for modern life
Leaders	The safe use of the road	All the community	The road is a vital means for linking to other areas	Water supply project Irrigation project	All the community	Scarcity of drinking water and water contamination There is a need to improve livelihoods
Children	Safe herding Safe movement	Children Children	Children participate in herding Children move from one site to another	Water supply project	All the community All the community	Meet the basic needs for water and reduce diseases
Survivors	Safe movement	Victims		Water supply project Electricity supply	All the community All the community	Meet the basic needs for water and reduce diseases Electricity is needed for modern life

Bait Al-Azani Community

Al Nadera District, Ibb Governorate

Date of survey: 16-17th May 2006

Summary: Bait Al-Azani

Bait Al-Azani is a very old, established village of around 2,700 people. It is a high altitude village, producing sorghum, maize, beans, qat, tomatoes and potatoes under irrigation and rearing cows and sheep. Some rainfed crops are grown, but the area is suffering from drought and is vulnerable to soil erosion and floods. The agricultural resources are not enough to meet the needs of the population; up to 60% households have employment outside the village.

The village was mined around 1980 during the conflict between north and south. The presence of both anti-vehicle and anti-personnel mines brought insecurity and accidents including several deaths and loss of livestock. Bait Al-Azani was classified as a low impact village in the LIS. Two male survivors were met; one injured in 1982 the other in 2000. Both were interested in compensation and medical treatment.

Village services and communications are reasonably good and the village is within medium distance of a market in the district centre. External agencies have been active in the village. A strong local cultural association founded by members of the village, played a useful role in facilitating the work of the demining teams. Demining was carried out in 2004 and 2006, but some uncleared areas still remain. One incident occurred after 2000, but none since the start of demining. Mine clearance was said to have saved lives and made people feel safer, but they still experience some fear. The main benefits have been the opening of roads and increasing the area for animal grazing, collection of firewood, fodder and stone. No one has yet planted on the cleared land.

The opportunities identified for the demined land, were a water supply project to extend irrigation and ploughs to cultivate the land. Another idea was for a community project such as a sports ground or garden. Road safety could be improved through warning signs, bridges and pavements. They would like demining of the whole affected area. For the wider village, a drinking water project was prioritised. Other ideas were a medical unit, a mosque, renovation or construction of a school, especially for girls; a literacy campaign and extension centre.

Introduction: Bait Al-Azani

A meeting was held in the village of Bait Al-Azani in Al-Nadera, Ibb Governorate. The meeting started with the representative of the survey team introducing the members of the team and asking the participants in the meeting to identify themselves. He then highlighted the objective of the survey which is aimed at getting acquainted with the local community and how they are surviving after demining the area in the village. It also covers issues such as the impact of demining on the lives and well-being of the local community. The representative added that the survey team would listen to what the local community members had to say on their plans to utilize resources after demining. He concluded by saying that the team is not a donor agency, but rather a fact finding mission. The findings of the team will be presented to "YEMAC" in Sana'a for further follow up with donor agencies. Participants in the meeting were more than sixty

persons [including one woman]. The following names are a representative sample of the audience.

- | | |
|---------------------------|--|
| 1. Nageeba Al-Ma'amary | General Secretary of the Local Council. |
| 2. Abdo Ali Qar'ah | Chairman People's General Congress Party. |
| 3. Aref Al-Zamzamy | Planning Department (PNCP) |
| 4. Ahmed Saleh Al-Azani | Social figure |
| 5. Saleh Qaed Shedewah | Prominent figure |
| 6. Abdulla Nagi Shedewa | Sheikh and poet. |
| 7. Ali Abdul Al-Azani | Sheikh of the village |
| 8. Omer Al-Dewaily | Public relations in the Wadi Bana Cultural association |
| 9. Abdul Lateef Al-Usaimy | Social figure |
| 10. Mohsen Omer Saleh | Farmer |
| 11. Hamed Al-Azani | Farmer |
| 12. Saleh Naser Al-Azani | Farmer |

Time Line: Bait Al-Azani

- The village was established 700 years ago by our great grandfather.
- Before planting of mines, local people were living a normal life, practicing agriculture and animal production and managing their resources in a very efficient and sustainable manner.
- After planting of mines, the situation changed drastically. Peace was not evident anymore. Several incidents happened, including the explosion of two anti truck mines under two cars, and there were several deaths.
- Demining took place in the year 2004 in the mined area called (Lakamt Fawz). And the second demining was just 20 days ago in (Tabbat Minsamah)
- The remaining area to be cleared from mines is called Jebel Ali Sa'eed. It is located midway between Bait Al-Azani and Katan villages.
- After demining, life became better and we feel safer. However, we still feel scared because of the psychological impacts we have [lived with] for many years.
- The benefits of the demined lands are animal herding and the opening of previously closed pedestrian and vehicle roads.
- The psychological impact will fade away with time.
- The whole village was affected by demining efforts.
- During the year 2000, one incident happened when a car exploded. Sheikh Abdulla Nagi Shedewa was involved in the explosion, but survived.
- There were no changes in the map which was developed by the community during the previous survey.
- The demined areas are mainly used for animal herding and fuel wood cutting. They are also traversed by pedestrians.
- All community members in the village use the demined area.
- Part of the demined agricultural area belongs to land owners as per the land ownership documents supporting the ownership.

Table 40 - Village Profile: Bait Al Azani: Internal Resources in the village:

Facilities available in the village	Status
Number of schools	Two schools (Primary and secondary)

Medical unit	No
Number of houses	139 houses
Population	2700 inhabitants (150 households)
Trade units	Small shops
Water supply projects	There is a water supply but unsuitable for drinking
Electricity	Yes
Telephone	Yes
Wells for drinking of water	Yes. A business person donated a pump and a water tank for the water supply project
Petrol Station	Two stations
Local Council members	Female (General Secretary of the local council) active member.
Associations	Wadi Bana - Cultural Association
International organizations	OXFAM - Organization doing surveys for potential assistance in livelihood interventions
Current projects	No
Employees	Most village members are employees, but outside the village (60%). Average income 1000 \$ annually.
Jobs	In the village - only in agriculture (family labour) Jobs related to certain skills are not in the village
Migration	Yes, especially during the conflicts with the government before unity. Migrants went to the USA, GB, Saudi Arabia
Internal migration	Yes
Land use	Agricultural crop production
Mosques	Only one
Numbers of animals held in households	In best cases one –two cows. 10-20 sheep
Land use	Agricultural production and animal herding.
Food security	Based on cereals, but not enough for the household needs. Balance is purchased from markets
Credit	The payment of interest on credit contradicts Islamic Principles. Therefore many do not apply for credit
Disasters	No disasters happened so far But there is soil erosion and floods affect the land in Wadi Bana area
Zakat	Paid to the “Ameen” who hands it over to the government.
Diseases	Chicken pox is now spreading in the village
Conflicts	In the early eighties
Communication	Yes Radio, TV and newspapers.

External factors affecting lives of the village: Bait Al Azani

- There are government services.
- No NGOs in the village
- Oxfam conducted a study.
- There are neighbouring villages
- There is a market in the centre of the district.
- Most local community members are employees (60%)
- No interaction with banks because of interest.
- There are family ties in the village.
- Conflicts took place in the early eighties.
- Floods eroded agricultural lands.
- There is some drought during the current time.
- Chicken pox is spreading in the village.

- Telephones are available.
- Communications are available.
- The high cost of energy products affected the lives in the village.

Meeting with Village Leaders: Bait Al Azani

A meeting was held with two community leaders. These were:

1. **Ali Abdulla Al-Azani** Sheikh of the village
2. **Abdulla Nagi Shedewa** Prominent figure in the village.

The following are the major issues recorded in the meeting.

- There is a cultural association extending from Damt to Saddah. There are active members in the association. The founders of the association are from Bait Al-Azani village.
- The association has several activities on awareness campaigns on the dangers of mines, and on health and environmental issues.
- Proposed ideas for the development of the village are the provision of a rural water supply project; water supply for irrigation; a literacy campaign; renovation of the existing school or construction of another school.
- There is a need for a medical unit and a school for girls to promote girls' education.
- The resource management issue is complicated in the village. There is increased population and agriculture cannot meet the needs of the local population.
- The farmers pay Zakat at a rate of 10% of the produce. Zakat is paid to local authorities or prominent figures that are supposed to hand it over to the concerned authorities in the government.
- There is a need to construct water structures and small dams and repair the traditional canals for irrigation.
- The demined areas belong to the owners of these areas as per the land ownership documents they have.
- The local community interacted positively with the demining teams. They participated in meetings, campaigns and provided assistance when required.
- The Wadi Bana association coordinated all efforts of assistance extended to the demining teams

Meeting with Women: Bait Al Azani

11 women were present for the discussion which was hosted by the wife of the village Sheikh. The mines were placed about 22 years ago during the Harb Al Monatiq Al Woosta – the conflict which took place in the territory between the south and the north. The discussion started with remembering those who were killed or injured because of mines. The mines also took areas out of cultivation. People who had other lands concentrated there; others had to buy cereals from the market.

The women said that they weren't really informed that certain areas were cleared. They mentioned one area specifically which has not been cleared and still has red markers – Jebel Ali Sa'eed. This land slopes to the valley bottom, and the lower areas are used for grazing sheep. This area potentially could be developed if they were sure it was cleared – for growing barley, wheat, and sorghum. As yet, no one has planted on the cleared land. They don't want to sacrifice themselves. 6 years ago there was a lot of rain and a

sudden flood of water, which brought the mines to the surface. There were problems after this.

The benefits of mine clearance have been the saving of lives of innocent people. People had been killed by mines in Bait Sarem and Al Jowdera (in Bait Al Azani) and Wadi Qatun which is shared between Bait Al Azani and the people of Al Qatun. An example is Al Sumaim's son who was injured 20 years ago and lost his right hand (he is now aged about 25) He is a teacher in Taiz and not present in the village now. (We gave her the number of the Survivors Association to give to her son).

“Ahmed Themah and 3 people; a woman, her husband and child from Dhy Raas were killed in the same car travelling on a track off the main road. He was visiting the village for the first time for many years as he had been in Saudi Arabia. He was driving his new car.”

“Ahmed Shedewa's car was blown up, but he survived.”

“Rassam Zaif's car was blown up into two pieces and he was thrown so high into the air by the explosion that that he could see people on the way to a wedding in the next village”. He also survived.

Other benefits are feeling secure and collecting firewood and grazing sheep on the cleared area. “We were grazing sheep there before, but were losing a lot of animals before the clearance. Now we don't lose sheep”. The cleared grazing is shared with another village. The goats and sheep benefit from the grazing. The majority of households keep small numbers of animals for home use; only one family has larger numbers. Only about 10 houses do not have cows. “The forage available in the cleared area depends on the rainfall, so we can't really estimate the additional benefit of forage from the cleared land. The risk from drought is as significant to sheep and goat production as the mines. We have suffered a lack of rainfall in the last three years”. The cleared land could potentially be used for cropping, but they still do not consider it safe. 5 very poor households use only firewood, but others use firewood as supplement to bottled gas. Firewood is used in biscuit making.

Another benefit is that explosions which damage the land have stopped after demining. The road to Al Nadera was also cleared of mines”.

Irrigated crops grown in the village include sorghum (dura), maize, beans, qat, tomatoes, potatoes. The latter two crops are more recently introduced and are mainly grown by men. They sell qat both inside and outside the village. Tomatoes and potatoes are sold in the village and in Nadera and Damt. Dura is planted as a winter crop. It has a long growing season (180 days). Most families produce enough dura for their own consumption (depending on family size) but they buy additional wheat and bread flour from the market. Dura is used for **aseeda** (porridge) and biscuits. The rainfed crops are millet, barley, wheat and peas grown on the hillsides.

Occupations and sources of income in the village – some sell sheep and goats, some migrate for labour, work in the army, work as teachers, drivers, or work on others land. Women generally do not have other sources of income - 1% do tailoring. Most girls study until the end of secondary school. They don't easily find jobs after this. Even men

with university degrees can't find jobs. There is an Institute in Al Nadera but travelling there and back costs 100 Riyal which is too much for the family

The drinking water source is far away (Al Kowla, approximately 10 km) – about 2 hr round trip by donkey. Sometimes water is brought by vehicle from another village, because their water supply is salty. A lorry tanker of water costs 2, 500 YR.

An outside organisation worked in the village about 5 years ago and three years ago the village had electricity installed. In addition to lighting, electricity is used for washing machines and refrigerators by some households. Oxfam UK also conducted a household survey.

Table 41 - Gender roles: Bait Al Azani

Ploughing (machines and animals)	Men
Manuring	Women and men
Fertiliser application	Men and women
Planting	Women
Weeding	Women
Spraying	Men
Irrigation	Men and women
Harvesting	Men and women (hired labour or machine)
Threshing	Women
Guarding crops (qat)	Men (overnight)
Cleaning and storage of crops	Women
Grazing	Girls and boys
Feeding animals	Women
Watering animals	Women
Milking	Women
Fetching water	Boys and girls
Collecting wood	Women

Relationship with YEMAC *“We guided them to the mined area and the school students helped the awareness group with distribution of brochures. The teachers helped the awareness group in giving lectures.”*

Opportunities:

- For the road – they would like to have road warning signs and bridges, and pavements to walk at the sides of the road.
- They want a water project to increase the water for irrigation, especially for forage grasses. They need engineers to survey the availability of water
- They need pumps to deliver water.
- They want dams to store the rainwater over the dry season.
- They need ploughs to cultivate the land.

Table 42 - Benefits and impacts: Bait Al-Azani - women

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Roads for cars	All the community		Communication and access to urban	Security Because the road is

	members		centres and other villages	narrow and dangerous
Animal herding	All community members	Open	Donkeys Cows (90% own) Goats and sheep in every household	For fetching water (donkeys); milk production, gee production and fattening animals for slaughtering or sale.
Fuel wood cutting	3-4 houses are benefiting from fuel wood cutting	Landowners	For cooking (10%)	
Fodder collection	All community members	Land owners	Fodder for animals	
Stones	Land owners	Purchase	House construction	Reduce the reliance on purchase from outside the village

Table 43 - Opportunities: Bait Al Azani - women

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Road	No bridges or pavements or warning signs	Make signs Construct bridges	School children	World bank Roads Project
Herding	Little fodder because of drought	Irrigation water supply project Invite an engineer (hydrology) to survey	All community members	Government
Fuel wood cutting	_____	_____	_____	_____
Lands	Land not cultivated because of lack of irrigation water No deep wells No tractors	Require pumps to deliver water and ploughs to cultivate the land.	Land owners	Government
water	Shortage of water	Dams and water harvesting from rain	Land owners	Government

Meeting with Farmers: Bait Al-Azani

A meeting was held with farmers in the village. The following are the major points raised in the meeting:

- After demining, the main benefits are related to the use of land for agricultural production, fuel wood cutting and herding animals.
- The benefits from lands go to the owners of the land.
- The decisions on land use are made by the landowners as per the landownership documents of the landowners.
- The demined area is used for agriculture, animal herding and for fuel woodcutting.
- There are no direct socioeconomic benefits. The demined area has roads connecting different parts of the village and leading to other villages. Some

roads are shortcuts for cars and pedestrians. Owners of this land can use it for construction of house, or trade the land as real estate in the future.

- Before planting of mines, animal numbers used to be high. However, after planting of mines the animal numbers decreased drastically because of the limited grazing areas left.
- The resources and benefits are mainly related to grain production and animal herding.
- The major problems are mainly related to land disputes which arose lately.

Future opportunities suggested for Bait Al-Azani were:

- Transformation of the demined areas into a recreation garden or club for the village community.
- The beneficiaries are the local village community members.
- The Government can financially support these efforts in the future opportunities.
- Concerning water, it would be advisable to construct water diversions and small dams to conserve water. This project can be also supported with an irrigation network.
- There is a big need for construction of additional school for girls and a medical unit.
- The local community interacted positively with demining teams whenever they were in the village. They also provided the required information about the area. The Wadi Bana cultural association played a big role in facilitating the work of the demining teams throughout the period spent in the village.

Table 44 - Benefits and impacts: Bait Al-Azani

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land for cultivation, herding and fuel wood cutting	3% of the local community members	Land ownership documents	Herding, agriculture, fuel wood cutting	Currently the return is negligible Before mines, animals were kept in big numbers. After planting mines the number of animals drastically reduced
Roads	All community members	Agreed upon norms	Roads	Short cut and time saving
Buildings	Land owners	Because it is located in their lands	Construct private houses	.

Table 45 - Development Opportunities: Bait Al-Azani

Assets/ Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Grains/ Herding	Land disputes	It can be transferred to Awkaf Establish a priority project for the community – e.g. recreation area, gardens, club	All the community members	Government and donor Agencies
Water	No problems	A water tank can be erected at the top of the hill for the whole village Water construction for rainwater harvesting Irrigation canal construction	All the community members	Government and donor Agencies
Roads	No problems	Nothing	Nothing	Nothing
Buildings	No problems	School for girls Medical unit Extension centre Sports club	All the community members	Government and donor Agencies

Meeting with men/women Survivors: Bait Al Azani

Case Number (1):

Ahmed Bin Ahmed Al-Rukaihy.

- 55 years old.
- Married with 12 children. Six (M) + Six (F)
- I was driving my car to Al-Nadera in Al-Gawl Al-Dakhili Gargarat Bait Al-Azzani when an explosion happened to my car. I was injured, some parts of my body were affected, I became deaf and became mentally sick. My whole life changed.
- This happened in 1982.
- I was not supported or helped at all.
- The incident affected my life and I lost the only means for generating income (my car).
- I have never heard about the survivors' association.
- I request that somebody looks at my case and compensates me for losing my car in the explosion.

Case Number (2):

Abdulla Nagi Shedewa

- Age 35 years; Age at the time of the incident 30 years.
- Married with four children. Three (F) one (M)
- I was walking on the road when I saw a car entering the mined area. I asked the driver why he was entering this dangerous area. He said, "if there were mines, they would have exploded on me". I told him to come back in the same direction. I went in the car with him when he reversed the car, but he did not

reverse in the same direction. I heard a big explosion and lost consciousness. When I awoke I realized that I was injured and had become deaf. I was psychologically affected and suffer up till now.

- I did not get any support whatsoever.
- The incident took place in the year 2000.
- I knew about the danger of the area.
- I was affected because of the explosion. I am trying to cope with the situation.
- I request compensation and medical treatment. I also request demining the whole affected area in the district.

Meeting with Children: Bait Al Azani

A meeting was held with a few children in the village. The results of the meeting are as follows:

- Information about mines was from parents and relatives.
- A team of people with uniform came to the school and explained to us the types of mines and their danger. This was three years ago. They gave their telephone numbers and asked us to contact them if we came across mines.
- We work in the village in agriculture and animal herding.
- The de-miners gave us pamphlets on mines and warned us against mines. After the incident in Al-Mashama we realized how dangerous mines can be.
- No child of our age was a victim of mines.
- We go to demined area for animal herding and for recreation.
- We used to feel scared when we came close to the areas where mines were planted. After demining however, we feel secure and not afraid anymore.
- Concerning opportunities, most children in the meeting said that they wished for a school, or a mosque, or a garden or a playground where they can spend time exercising or playing sport.

Main impression of the team on Bait Al-Azani:

- The presence of Nageeba Al-Umary, the General Secretary of the Local Council was a positive sign.
- The presence of the Wadi Bana Cultural Association was evident in the area.
- Previous experience with development agencies may have led the women to expect practical assistance from outsiders and influenced their cooperation and the information given.
- There are still areas which were not demined.
- There is chicken pox in the village
- The employees in the village are nearly 60%.
- Local community members are expecting to get government assistance for the area.

Table 46 - Impacts and Opportunities after demining of Bait al-Azani:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why?
Farmers	- Grazing area increased - Fuelwood - Road access	All community members	-The demined area is only suitable for herding and fuel wood	- Rainwater harvesting structures and irrigation network	- Landowners	

	- Buildings	landowners	cutting -Reduces time and distance travelled	- Water tank at top of the hill - Use demined area for a recreation club - Medical unit - School for girls - Extension centre	- All community members in the village - Children/ girls	The current water supply is not suitable for drinking (% fluor is more than 8%)
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Leaders	Roads Grazing area	All community members	Saves time	-Rural water supply project -Support the association Establish similar associations -Water structures, small dams, repair traditional irrigation canals -Literacy campaign -Medical unit -Girls School	All community members in the village	The association succeeded in many aspects
Women	Roads Grazing Fodder collection Fuel wood Stones for house construction	All community members Landowners	It is the only road connecting them to neighbouring villages and urban centres Reduces reliance on purchase	- Warning signs, bridges and pavements on roads. - Water project for irrigation (pumps, dams, water harvesting.) -Clear mines from Jebel Ali Sa'eed	All community members in the village Landowners.	The water supply is not suitable for drinking (% fluor is more than 8%)
Children	Herding Recreation	All community members	They feel safe when herding The area is overlooking the wadi	School Play ground or garden Mosque	Children Youth Males and females In schools	- The children go to neighbouring villages for attending schools - Because

						the population is high in the village
Survivors	-	-	-	Contact with survivors association to support them with required means	Survivors	For medical treatment and seeking compensation

Bait Al-Ra'ae

Al Nadera District, Ibb governorate

Date of survey: 16/17th May 2006

Summary: Bait Al-Ra'ae

Small, medium impact village (20 large households – population about 150) at 2,387metres altitude. 3 kms from the District capital, Al Nadera, which has good facilities and good wadi agriculture (maize, qat, sorghum, fruit, some vegetables). Bait Al-Ra'ae in contrast, has no irrigation and few crops were planted this year due to a failure of rains.

The village has a reticulated water supply (although this doesn't work all the time), electricity supply and telephone, and several village members have mobile phones and televisions.

There are approximately 60 local cows in the village (most households own at least one cow). There are also about 100 sheep and goats, but these are owned by only 4 households. There are few chickens. There are a lot of trees (fil-fil, acacias, eucalyptus and others). Households are large, with often three or more nuclear families living together (see Farming System Diagram). There is a culture of cooperation between families and between households, and we found the village very friendly and open with their information.

Villagers are still not confident of the safety of the minefields. This is partly out of habit (the minefields are 20 years old), and partly because of lack of information and convincing demonstration of their safety for all purposes (especially cultivation).

Many of the houses in the village are built at least partly with attractive green local stone brought from the cleared minefields on the small hills immediately behind the village. This means a considerable saving on importing stone from outside the village (1-1.5 million for a large house compared to 5-6 million riyals – see economic evaluation).

The large size of the houses and abundant material possessions (mobile phones, cars, televisions...) cannot be the result of production from the village dryland fields. Most households also share fields with families in the wadi for growing qat.

Introduction: Bait Al-Ra'ae

The survey team introduced themselves. We are here to conduct a study on the impacts of mines on the lives of the local community in the village. We are` also here to highlight the role of YEMAC in the whole process of survey of the affected areas and demining these areas. We are also here to understand your role in the demining process, and how you dealt with the planted mines and how your life was affected. We came to know the benefits gained after demining. We are also going to study your needs. We cannot promise anything. We will record your situation in an objective manner and report that to the concerned authorities in Sana'a. Present in the meeting were:

1. Fathi Saleh Al-Rae

2. Basem Ali Nagi
3. Nagi Saleh Nagi
4. Wadea Musleh Saleh
5. Saleh Mohamed Nagi
6. Ahmed Bin Ahmed Al-Ba'awa
7. Hisham Mohamed Nagi Al-Rae
8. Mohamed Ahmed Saleh Al-Rae
9. Galal Saleh Nagi Al-Rae

Time Line: Bait Al-Ra'ae

- The demined area used to be used for cultivation of agricultural crops, herding animals and cutting stones.
- Mines were planted in 1982.
- During the period when the mines were there, some exploded killing three men in the village at different times.
- A mine or a strange object exploded 18 years ago killing 9 people.
- Cows were killed in a mine explosion. After this, animals were kept away from the area.
- Mines were cleared during the period 2003-2004.
- Local community members said they are still scared going into the demined area. However, they use the area for herding animals and cutting stones.

Table 47 - Village Profile: Bait Al-Ra'ae

A. Internal factors affecting the lives of local community in Bayt Al-Raa'ee

Facilities available in the village	Status
Number of schools	Not available
Medical unit	Not available
Number of houses	20 houses
Population	250 inhabitants
Trade units	Small shop
Water supply projects	From a pump in Al-Nadera
Electricity	General supply
Telephone	Available (Mobile and stationed)
Wells for drinking of water	Not available
Petrol Station	Not available
Local Council members	One member from the village
Associations	There was one but not functioning
International organizations	Not available
Projects	Not available
Employees	Not many
Jobs	Agriculture, herding, cutting of stones
Immigration	Intensive to urban centers and major cities
Immigrants outside the country	Three
Internal migration	To cities and urban centers
Land use	Cultivation of crops, grazing lands and mines for stones
Mosques	One

- The major type of animals is sheep. The cost of a sheep ranges from 7000-15000 YR.
- There are around 60 cows in the village.

- Donkeys are used for fetching water, butane gas tanks, food items, land preparation. There are about 15 donkeys in the village.
- Cows are kept for milk production, preparation of yogurt and gee. Bulls are kept for land preparation.
- Cost of calves ranges from 15.000 -20.000 YR
- Cost of cows is about 80.000 YR.
- Sorghum and maize are the major types of crops cultivated.
- Cost of a sack of grains (16 kg) = 2000 YR.
- The harvested grains are not enough to feed the household all the year (only 50%). Grains are purchased from local markets or groceries (wheat or flour)
- Rainfall is the only source of irrigation.
- Construction of dams is the solution for harvesting water for irrigation. Drilling of tube wells is another option. Local members did not know the cost of drilling wells and installation of water pumps.
- The demined lands are owned by local community members. Stones cannot be cut from private land. We have to take permission before we cut stones. Herding animals is open to all community members.

B. External Factors:

Type of factor	Status
Roads	Promises for asphaltting roads
Political parties	Only the ruling party
Radio TV	Available
Neighbouring villages	Available and there are strong ties among villages
NGOs	Not available
International NGOs	Not available
Markets	Sunday market in Al-Nadera
Financial transactions	Not available
Credits	Not available
Development projects	There used to be one for central highland areas but it was terminated before we got anything from this project.
Family links	Very strong in the village and among neighbouring villages
Disasters	Drought during this year (no planting of crops)
Jobs	Agriculture, cutting stones, herding animals.
Private sector	In construction and cutting stones
Women	Housewives, school girls. Women participate in more than 70% of agriculture activities.

Meeting with Village Leaders: Bait Al-Ra'ae

The meeting with community leaders and Sheikhs took place in the village:

- There are no associations in the village.
- There are no plans for development in the village, and there is no support.
- There is a local traditional system for land ownership and land dispute. This traditional law was inherited from generations after generations in the village. People hold documents supporting their land ownership.
- The demined lands are private property. However, herding animals is open to the whole community. Cutting stones is permitted upon request from members of the local community only.

- Demined land is returned to the original owner as per the documents of ownership submitted.
- The role of the demining team was surveying and identifying affected areas and subsequent demining these areas. Awareness campaigns in the community and help to the survivors were among the programs of the demining teams.
- Awareness campaigns were organized in the main centres.
- The community leaders and members of the local community extended help and assisted the team since the launching of the demining program.

Meeting with Women: Bait Al-Ra'ae

Participants in the meeting were 14 women, from 20 to 70 years.

- The women did not feel any benefit from demining. “We did not know why they were coming and going to and from the village. We did not know if the area was demined or not. Because whenever they come they do not talk to us or explain what they are doing in our village. They used to dig posts with red colors or white colors. We did not know what these colors mean. Therefore we kept on feeling scared from the areas planted with mines”. All participants in the meeting confirmed that no body created awareness among them on mines.
- An old woman (70 years old) said that before mines were planted they used to herd animals and cut fuel wood in the surrounding areas. They used also go for recreation. However, after planting of mines before nearly 30 years, they never dare to go to that area.
- A woman said that they go to the mined area to herd animals. They let animals to enter the area and watch them from a distance.
- Some said that many animals were killed, because of mine explosion while grazing fodder. However, since ten years, no explosion took place in the area and animals were killed.
- Women said that animal herding is the responsibility of children. Women feed and milk cows and goats.
- Some women said that the areas planted with mines are the best rangelands. There is plenty fodder and grasses growing in these areas. When rain falls, the area becomes even greener. Men do not cross these areas. They walk on the stones located on the borders of the area.
- The mined land is the property of the village citizens. Most of the community members own land in the mined area. The area is open for herding to all community members. Stone cutting in the border of the mined land is the property of landowners.
- Many men in the village work in stone cutting and construction of houses. They work as paid labour.
- Women in the meeting gave accounts of different members of the society in term of division of labour. They said that “women take care of house work such as cooking, washing cloths and feeding cows. During rainy season they collect fuel wood. Men prepare the land for cultivation and they cut stones. Girls go to school and carry out some house work. During the rainy season, girls herd sheep and cows. Boys go to school and after they return, they herd animals”.
- A woman said that they cultivate crops if there is rainfall, if there was no rainfall, they do not practice agriculture. They depend only on rain in agriculture.

- A woman said that every house has a water meter. Water supply is reaching every house in the village.
- Women said that every household has at least one cow. There are households with more than one cow. Four households in the village own sheep. Other households do not own sheep but own at least one cow.
- Women stated that they extract ghee from cow milk. Therefore they do not buy these items from the market or groceries. They however, purchase chicken and wheat from the market in Al-Nadera city.
- One woman said that few men work with the government as employees. Most village male members work in the village.
- Women confirmed that people in the village are cooperative and help each other in nearly all occasions such as weddings, birth and death.
- One woman said that all houses in the village have modern gas ovens. However, during the rainy season, women go out for fuel woodcutting and use the traditional ovens instead.

When women were asked about the potential development opportunities, their answers were as follows:

- We need a school. Our boys and girls travel a long distance to Al-Nadera to attend schools. The long distance led girls to drop out from schools.
- If the area was demined, we could have used the demined area for construction of a school, a medical unit or houses.
- There is a primary school and intermediate school in the neighbouring village. Our children go to these schools. However, when they go to the secondary school, they have to travel to Al-Nadera, which is located far away. This results in dropping off from schools especially among girls.
- Some women said that they want a medical unit because when any one got sick, they have to travel to the hospital in Al-Nadera and that is far away. If a person does not have money for renting a car, he or she is in big trouble. Moreover, there are no cars for renting at night.
- There is one woman who could use the injection for women in the village. She is not qualified but she acquired this skill while she was watching nurses in the hospital in Al-Nadera.
- When this woman was asked about this skill, she said that she came to know it from watching nurses in the hospital. Now she injects women for money if the patient can afford paying for the service or free of charge if the patient cannot afford to pay.
- Another woman added that women in the village deliver babies without any assistance from qualified nurses. There are no qualified mid sisters in the village. In case of complicated delivery, the pregnant women are rushed to the hospital in Al-Nadera.
- Some young women in the meeting said they wish if there was a training course in sewing and tailoring.
- An old woman said, if we have a school in the village we would have enrolled in schooling. Many women in the village wish to learn how to read and write.
- One woman said that they need a pump for irrigation and drinking water.
- Some women said that they want the government to construct a school in the village. According to these women, this is the most important request and a priority.

At the end of the meeting, some women said the following story: “Before 12-13 years some kids found a strange object on the hill, they did not know what it was. They carried this object to the village. About eight children gathered to play with it. When they started playing with the object, it exploded and killed all of them”.

Table 48 - Impacts of cleared lands – women: Bait Al-Ra’ae

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Herding sheep and cows in the rainy season	All village members	The area is open for herding no need for decision	Herding	Herding of animals in the rainy season only
Stone cutting	Land owners	Land owners	House construction	

Table 49 - Development opportunities for the village – women: Bait Al-Ra’ae

Assets/Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Construct school	Land is not demined yet	De-mine land Construct school	Village members and neighbouring villages	Government
Construct houses (land owners)	Land is not demined yet		Village members Land owners (80%)	Land owners

Table 50 - Meeting with Farmers: Bait Al-Ra’ae: Impacts of cleared lands – Farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	Land owners	Every one has his own land	Herding animals, fuel wood cutting and stones for building houses	50% of stones for housing 10% fuel wood 50% of the total needs for food grains not only from demined area
Roads	Herders + women during fuel wood cutting (all community members)	According to the official documents	For fuel wood cutting and herding and for construction of houses	To meet the community members needs

Development Opportunities for cleared land: Farmers

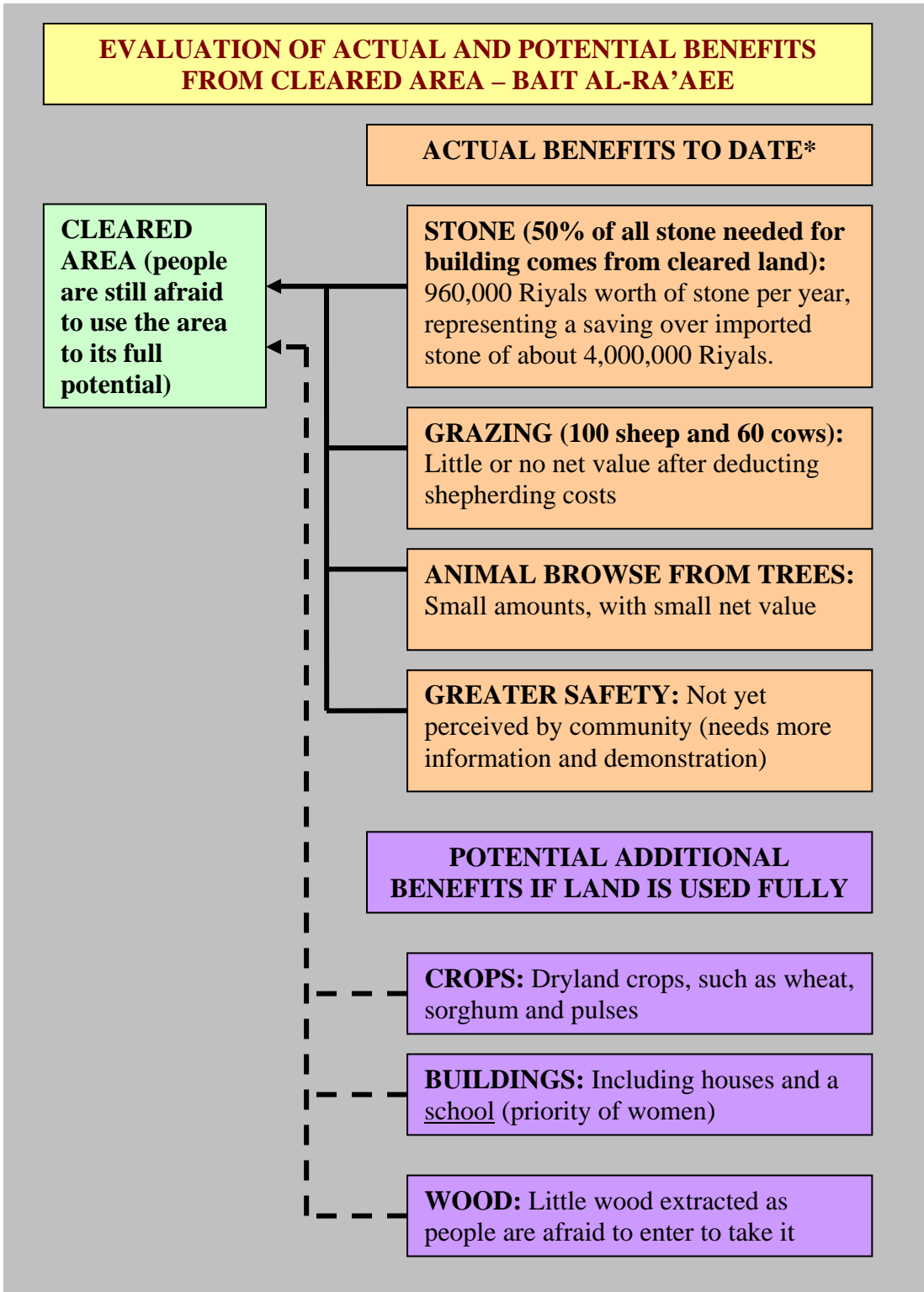
Assets/Resources	Constraints and Problems	Solutions and Opportunities	Who will benefit?	Who should support?
Land	Land is compacted Shortage of water	Provide tractors Support land reclamation	All community	Government or any potential donor

		Drill wells	members	
Water	Reliance on rainfall Shortage of drinking water	Drill wells Build water constructions and dams	All community members	Government or any potential donor
Roads	Rough and narrow roads	Asphalt the road Build new roads to reach the land	All community members	Government or any potential donor

Development Opportunities for the village: Farmers

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
School	Negative response of the local council and the huge number of children traveling long distances	Construct at least one school	Village community and neighbouring communities	Government
Medical Unit	Negative response of concerned authorities	Construct a medical unit	Village community and neighbouring communities	Government or any other donor agencies
Vocational training institute for women	Improve the livelihood of the community	Construct a training institute	All women in the community and neighbouring villages	Government or any other donor agencies

Figure 1 – Evaluation of Actual and Potential Benefits from cleared area- Bail Al-Ra'ace



Note: People had already started to use these resources even before mines were cleared, with tragic consequences (see case study of survivor).

Income from stone from cleared area: Bait Al-Ra’ae

Approximately two houses are built in the village per year (people build their houses over a number of years as resources are accumulated). Approximately half the stone used comes from the cleared area (some – of different colours and textures from outside

the village). Thus the following calculation is made on the basis of the building of the equivalent of one house.

To build a medium sized house requires about 3000 stones. This is equivalent to 100 tractor loads, each of which costs 10,000 Riyals. Thus the value of the stone extracted is 1 million riyals.

5 men at 800 riyals per day can extract 15 tractor loads in one day. Thus the labour cost for 100 loads is 26,666 riyals. Add to that fuel, tractor hire, hammers etc, and the costs rise to a total of about 40,000 riyals.

The net income is therefore $1,000,000 - 40,000 = 960,000$ riyals.

However, if that stone had been imported from outside the village, it would have cost 5 million riyals. Therefore, by using local resources, they have saved around 4 million riyals.

(Note that the value of local stone, and the quantities needed for building a house are consistent with information obtained from Joab village in Sana'a governorate).

Potential income from crops: Bait Al-Ra'aee

The following assumes that people will be confident in their ability to cultivate the land safely. It assumes a cropping area of 2000 sq m (one fifth of a hectare). It assumes that wheat or similar crop will be grown, with an average yield of 1 tonne per hectare under dryland conditions. A price of 125 riyals per kg was obtained from the village.

The gross income from cropped land would therefore be:

$$125 \times 1000 \times 1/5 = 25,000 \text{ riyals}$$

Figure 2 – Farming System diagram for one farmer in Bait Al-Ra'aee Village

FARMING SYSTEM DIAGRAM FOR ONE FARMER IN BAIT AL-RA'AE VILLAGE

Farmers name: Saleh
Mohammed Nagy Al
Raa'ee
Village: Al Raa'ee
Governorate: Ibb
Date: 16th May 2006.

FAMILY EXPENSES
Main expense is purchase of
50% of staple food from the
local market Al Nadera)

- ADDITIONAL FAMILY INCOME**
- Sometimes works as a labourer for other farmers
 - One son is in military
 - Other son has a small shop in the village

LIVESTOCK

The local cows are hardy,
and Saleh reported that
there are no problems
with them. A grown cow is
worth about 80,000 riyals

I cow is owned by Saleh
1 cow is owned by his
father, and 3 more cows
owned by his brother.

Calves are sold to
purchase items for the
house

HOUSEHOLD
2 families
Total 22 people

CROPPED LAND

400 libna are shared between 6
families. His own share is about 50
libna. The land is dryland (no
irrigation), and has not been planted
this year due to lack of rain. They have
problems with caterpillars (gudami),
for which they spray. The crops are:

- Potatoes
- Sorghum
- Wheat
- Barley
- Maize
- Pulses (Adas)

All crop products go to the house.

COMMON LAND
(includes some of the
cleared land)

This is used as a source of
stone, grazing, wood and
browse.

Manure

Straws, stover and other crop by-products

Meeting with men/women Survivors: Bait Al-Ra'ae

Case Number (1): Yahya Ali Saleh Al-Raa'ee

- Age at the time of the incident was 25 years.
- The social status: middle class
- Currently, he is employee in the attorney general office.
- The incident was during cutting stones in "Ras Musaionea".
- The whole thing was an adventure for generating necessary funds.
- The incident took place on the 16th of August 1998.
- He did not get any support.
- He was aware about the potential dangers of the mined area.
- The injury did not affect Yahya. On the contrary, it gave him more reason to struggle for better life.
- His right leg was amputated from under the knee and there are metal pieces in the left leg.
- He did not hear about the survivors association.
- The future opportunities are building of hospitals and support of survivors.
- Yahya said that he helped the demining team and showed them around during their visits to acquaint them with the areas planted with mines.
- The total numbers of victims of mine explosions are 9 or 10 victims.

Meeting with boys (7): Bait Al-Ra'ae

- We heard about mines from community members.
- We keep to the bottom of the hill and stay away from the top of the hill. This is because of the dangers of mines.
- There were no victims from among children.
- We feel safe after demining but we are still feeling scared.
- Yes we move freely without any restrictions.
- The demining teams came to the centre but not to the village.
- We request a construction of a basic school



Meeting with girls: Bait Al-Ra'ae

- We heard about mines from our relatives and from the village. The school did not tell us about mines.
- There were no females at our age affected with mines.
- We do not feel safe. We re still scared of mines. We do not go to the mined areas because we are not sure if demining was completed.
- We request the government to construct a school for us in the village and spare us the efforts of travelling long distances to neighbouring village to attend the school.

Impressions from the survey of Bait Al-Ra'ae

- All the women, young and old mentioned a school as first priority for the village.
- Everybody was helpful and open with information
- They are still afraid to use the potential cleared area to its full potential.
- However, they are using the cleared land for some purposes – stones / grazing.
- They used the mined area before and after clearance at the same level of use.
- Women have no idea that the area is cleared. Not enough awareness for all people in the community.
- No crops being grown in the village due to lack of water.
- People live in good houses with good facilities due to growing qat in their wadi.

Table 51 - Impacts and Opportunities after demining of Bait Al-Ra'ae:

Categories	Benefit	Who is affected	Why?	Opportunities	Who benefits	Why?
Farmers	- Stone Cutting - Herding animals	All community members	Stone are used in construction (50%) Saving of 10% of fodder cost	Drill deep wells Construct primary school	All community members in the village	Shortage of water The current school is far away
Leaders	- Stone Cutting - Herding animals	All community members	Stone are used in construction (50%) Saves 10% from fodder cost	Construct training institute Construct medical unit	Women in the community All community members	To train women No medical unit in the village
Women	Herding	All community members	Stone are used in construction (50%) Saves 10% from fodder cost	Construct school Construct medical unit	Children in the village No medical unit	No school in the village No medical center in the village
Children				Construct a school	All children in the village	No school in the village
Survivors	Stone cutting	All community members	Stones are used in construction of houses	Construct school Construct medical unit	All community members All children in the village	No school in the village No medical center in the village

Al-Dhale Governorate

Al-Masharih Community

Al-Dhale District, Al-Dhale Governorate

Date of survey: 20th May 2006

Summary: Al-Masharih

Al-Masharih is a small village in Al-Dhale district, with 120 households and 700 inhabitants. It is situated at medium altitude and has reasonably good access to local markets. Agriculture (sorghum, millet, maize, pulses and qat) and animal rearing are the major activities and income sources in the village. Employees constitute only 9% and few depend on government jobs. Services are limited - drinking water is poor and there is no electricity. Although family relationships are close, there are no local development initiatives or external organizations active in the village. Socially marginal groups are living in the village and work as labourers in cropping and herding.

The village was on the border between north and south Yemen which led to the intensive planting of mines from the 1970's until the mid eighties. There were around 38 victims from mines or shooting and many animals were killed. There were incidences of mine explosions after the year 2000. Demining in the area took place between 2002 and 2004. The village was classified high impact in the Land mine impact survey. Mines have drastically affected the village's development opportunities. Two cases of survivors were met; a sixty year old woman and a young man whose father and aunt (twin brother and sister) had become so psychologically disturbed following their accident that they have to be restrained indoors. Both accidents occurred in the 1980s.

The main benefits from demining have been the use of the land for herding animals, fuel wood collection, stone cutting and agricultural production – cereals and qat. Demining opened paths to neighbouring villages. Children were less scared and more confident when moving and herding in the demined area. The survivors had not received benefits.

Opportunities included building a structure for water harvesting and storage, a drinking water supply project, a medical unit, veterinary care, an electricity project, asphalted road and an expansion of the primary school. Medical and psychological care is needed by the survivors.

Introduction: Al-Masharih

The meeting took place in the village of Al-Masharih in Al Dhale district in Al-Dhale Governorate. Present in the meeting were the representatives of the local community in the village. The survey team introduced themselves to the gathering and explained the type of information they would like to collect from the local community. The objectives of the survey were also highlighted to the local community. The following representatives were recorded from among more than twenty participants in the meeting.

- | | |
|-----------------------------|-------------------|
| 1. Abdu Mused Ahmed | Farmer and herder |
| 2. Mohamed Hadi Saleh | Farmer and herder |
| 3. Moqbel Saleh Ahmed | Farmer and herder |
| 4. Saef Abdul Mohsen | Farmer and Herder |
| 5. Ali Ahmed Ali Al-Suraimy | Farmer |

6. Ali Ahmed Al-Mahmudy	Retired person
7. Abdul Hameed Mohamed Abdulla	Student
8. Mohamed Ali Sheikhan	Farmer
9. Ibrahim Abdu Mohamed Qa'ed	Engineer
10. Abdulla Kasem Haidara	Farmer
11. Ahmed Ali Ahmed Al-Suraimy	Farmer
12. Ahmed Saleh Ahmed	Farmer
13. Mohamed Hadi Saleh	Farmer
14. Mohamed Abdulla Al-Suraimy	Farmer

Time Line: Al-Masharikh

Before planting of mines, the village was an ordinary rural area. Agriculture is the major activity of the local people in the village. Crops grown in the village are sorghum, millet, maize, pulses and qat. The area is very ancient and its history goes back more than 500 years.

Mines were planted over a long period starting in 1972, and from 1974 till the mid eighties. The first mines were anti tank mines, later on the mines were anti individuals. After the planting of mines in the area, people's lives changed totally. A feeling of insecurity was evident everywhere. The fact that the area was a sensitive border area led to the intensive planting of mines. This complicated the situation even further.

Local people became scared for their property, families and for their own lives. The total number of victims was more than 38 from mines or from shooting from across the border. The number of animals killed because of mines exceeded 4 cows and tens of sheep and goats. Several households migrated from the village because of the security situation. Others were forced to sell their animals because of the dangers of mines and the scarce rangelands remaining in the area after planting of mines.

Demining in the area started in 2002 till the end of 2004. Demining teams from "YEMAC" were responsible for the whole process of demining. Local people appreciated the humanitarian role of "YEMAC" in clearing the area of mines and restoring peace in the village.

Table 52 - Village Profile: Al-Masharikh

Internal Resources in the village

Facilities	Status
Population	700 inhabitants
Houses	120 houses
Schools	One school
Medical unit	Not available. The nearest in Sanah (18 km)
Water resources	There is a well in the wadi. However, water is contaminated by the sewage from Ibb and Taz.
Mosques	
Electricity	Not available despite promises during election campaigns only.
Telephone	Mobile telephone.
Local Council	
Cooperatives and associations	
Shops	Small shops or groceries

Post office	Not available
Police Station	Not available
Development projects	Not available
Demined area uses	Herding animals, fuel wood cutting, stone cutting and agricultural production
Immigrants	To the area as labourers
Migrants	Four families left because of mines. After demining they returned to the village.
Family links	Very strong
Markets	The nearest market is few kilometres away from the village. There are several weekly markets in the area.
Credit	Not available
Extension centre	Not available
Dams and water structures	Not available
Local NGOs	Not available

External Factors:

Facilities	Status
TV and Radio	Only radio Available, no TV because no electricity
Internal immigration	Few
Government activities	Limited
Disasters	Drought only
Links with neighbouring villages	Strong ties and family links and marriages among families in different villages are common. Before 1990 ties were weak because of borders and politics.
Social Welfare Fund	Yes but limited
Local Council	There are representatives in the local council
Political parties	The ruling party, The Socialist Party, Weak presence of the "Islah" party
International NGOs	Not available

Meeting with Village Leaders: Al-Masharikh

- Development projects are very weak. There is a promise from the government of an electricity connection in two months time.
- There are no local initiatives from the community.
- Plant protection is a problem. No government service in plant protection.
- Tree preservation is a matter of traditional legislation, prohibiting cutting green trees
- Land ownership is private except for a certain percentage of the land. 50% of the demined land is public property (community)
- The Role of local leaders in the demining process? - All local community leaders and members participated in the campaign of demining.
- Survivors - there are two tragic cases of twin brother and sister. They are psychologically sick and live miserably in two separate rooms with chains and locks on their hands.

Meeting with Women: Al-Masharikh

The meeting with the women took place in the village. There were about 10 women present. The age group ranged from 20 to 55 years. The following points summarize the meeting.

- Before planting of mines, life was safe and we felt secure.
- After planting of mines we could not go to the wadi.
- We could not herd our animals or collect fuel wood because we were afraid.
- The area was cleared from mines two years ago.
- Thank God, because of demining, we feel safe now.
- All demined land owners benefited from demining.
- There were incidences of mine explosions after the year 2000.
- Areas planted with qat were planted with mines. Therefore, we were not able to enter qat plantations.
- In the past few years, we started cultivation of crops and qat.
- The minimum number of sheep owned by an average household is 4-5 goats and sheep. Large numbers of animals died in a record time this year because of a strange disease.

Table 53 - Gender roles: Al-Masharih

Land preparation	Men
Weed control.	Women and hired labour (female)
Harvesting and cutting of stems.	Men, women, or hired labour
Fetching water.	Women and girls
Housework.	Women and young girls
Herdling	Boys and girls and hired labour

- Our husbands instruct us about agricultural activities.
- We ask our husbands to go out to the field and do agricultural work sometimes.
- We work in our fields by ourselves. No cooperation among women in the village.
- Water is fetched from the wadi on donkeys.
- We did not participate in 'YEMAC' activities in the village.
- The marginal segments of the society are living in an area close to the school. They herd animals for fees. Sometimes they come to get Zakat. Female marginal segments of the society help in agriculture. They are paid for their work.

Table 54 - Impacts of demining: Al-Masharih women

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	All community members in the village for herding and fuel wood cutting and agriculture. Herding labourers	Decisions have been made long time on the communal use of rangelands (traditional systems)	Herding Fuel wood Agriculture	Sheep for household use and for sale Agriculture for household needs Fuel wood for the household

Table 55 - Development opportunities for the village: Al-Masharih, women

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Sheep	Disease caused death of sheep	Provide veterinary care	All village members	Government
Water	Water pollution Malaria and other Diseases such as kidney problems	Water supply project	All village members	Government
Roads	The road is not asphalted - travelling is a problem	Road asphaltting project	All village members	Government
Electricity	No electricity	Connect the village with an electricity project	All village members	Government

Meeting with Farmers: Al-Masharih

Meetings with farmers were held in two sites of the village. There were four farmers present in the first meeting. The following issues were highlighted;

- The demined area is about 25% of the total agricultural area in the village.
- This area can be utilized for agriculture if there was a source of water. Rainfall is scarce nowadays.
- The demined area utilized for agriculture is about 25% of the total demined area. The remainder is rangeland.
- We require the building of a small dam for water harvesting. We know where this dam can be built. We need support from the Agricultural Fund in the Ministry of Agriculture and Irrigation.
- The approximate number of livestock in each village is 1200 heads of sheep, goats, donkeys and some cows.
- Fuel wood collection is open for the village members. Similarly herding is open to all community members.
- The demining of the area provided the village with short cut roads to neighbouring villages.
- Stones in the demined area are used for construction by village members only. We save money by using our own stones instead of buying stones from outside the village.

A similar meeting was organized with farmers in a neighbouring area called “Kurudh” which belongs to Al-Masharih village. The issues raised in the meeting were almost the same as in the case of the main village.

Table 56 - Benefits of demining: Al-Masharih, farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Demined Agricultural land cultivated 25%	75% of the community	Ownership is already known	For growing rainfed crops (sorghum, millet, pulses)	Documented separately
Cultivable land if reclaimed	Same	Same	Same	Same

Range land for herding	All community members and neighbouring villages	Open for community	Animal herding	Documented separately*
Range land for fuel wood cutting	All community members and neighbouring villages	Open for community	Cooking fuel wood	Documented separately*

Table 57 - Estimates of benefits from cereals cultivation: Al-Masharih

Cereals cultivation	YR
Households cultivating cereals= 80 Average annual return from land = 15 Kadah Cost per kadah = 1800 YR. Total cost of cereals per year = 80 x 15 x 1800 = 2,160,000	
Net return = 2,160,000 – 720,000 =	1,440,000

Table 58 - Estimate of return from herding: Al-Masharih

Details	YR
No of house holds = 240 The village and the neighbouring village herd daily with average return = 50 YR Return of herding from two villages = 2 x 50 x 365 days x 240 = 8,760,000 There are three villages herding at a rate of 4 times per month. The number is 240 households Return from herding for three villages per year = 3 x 50 x 4x 12x 240 = 1,728,000	8,760,000 1,728,000
Net income for the five villages =	10,368,000

Table 59 - Estimates of return from Qat cultivation: Al-Masharih

Details	YR
No of households benefiting from qat cultivation= 120 households Average annual return from qat cultivation = 300,000 YR. Total return for all households = 36,000,000 YR	36,000,000
Total annual cost of production (irrigation + land preparation+ chemicals and fertilizers + without tax= 150,000 YR. Total costs of households per year = 150,000 x 120 = 18,000,000 YR.	18,000,000
Net income from Qat = 36,000,000- 18,000,000 =	18,000,000

Table 60 - Estimates of return from cutting stones: Al-Masharih

Details	YR
Average number of houses built annually = 2 houses No of stones used in constructing one house = 1000 Load of a truck = 100 stone Cost of the truck load = 10,000 YR. No of stone loads per year = 2 x 1000 / 100 = 20 loads Cost of stones used annually = 20 x 10,000 = 200,000 YR.	200,000

Cost of labour and transport of stones = 60,000 + 40,000 = 100,000 YR	100,000
Net income from stones = 200,000 – 100,000=	100,000

Table 61 - Development Opportunities: Al-Masharih, farmers

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Demined Agricultural land cultivated 25%	Shortage of rainfall makes agriculture difficult	Build a water structure for rain harvesting	All village members	Government and Agriculture Fund
Cultivable land if reclaimed	Same	Same	Same	Same
Range land for herding		Water supply project		Government
Range land for fuel wood cutting		Medical unit for the village		Government

Meeting with men/women Survivors: Al-Masharih

Case Number (1):

Name: Mariam Muthanna Elewah.

Age (now): 60 years. Age at the time of the incident: 40 years.

Mariam was herding animals when she stepped on a mine, which exploded. She lost her left leg from above the knee. Her left hand was severed and her right leg was injured. Her son was with her when the incident occurred. The son called his father who rushed his wife to Aden Hospital. She was well looked after. When she returned home, her husband took good care of her. He used to carry her, wash her and do everything to please her and comfort her. Similarly, her sons and daughter helped her to overcome her disabilities. The husband died eight years ago. She gets aid from SWF. Three thousand YR is the amount of aid every three months. Her children help provide for family needs.

She is suffering from bone pain and has to purchase medicine on a regular basis. The aid is not enough for the medicine. She does not want anything except buying medicine. She misses her husband so much. She said her husband was so close to her. She doubts if there is any body like him. She got an artificial leg, but it was too heavy for her. She did not use it since. She cannot do much work. She can clean where she sits or prepare her blanket.

Case Number (2):

Name: Hadi Saleh Ahmed Al-Fakeh

Age (now): 45 years. Age at the incident: 27 years.

Hadi is psychologically sick since the incident. His son explained what happen to his father. My father was going to the field with two of his friends when a mine exploded on them in a place called “Haig Tughlub”. One was killed in the incident and my father was badly injured. The injuries were in the head and in the stomach. He was rushed to the hospital where he got medical treatment. Upon his return to the village he was more or less normal. My father was affected in his brain because of the explosion, the doctor in Taz said. Since then, he suffers from his nerves and cannot control his behaviour. We had to tie him up in the house to avoid attacks on our neighbours. When he is not

suffering, he appears normal. However, when he is affected he becomes very dangerous. He could attack others violently. He might destroy crops unintentionally. He can do unexpected things. He does not remember afterwards what happened.

The son did not go to school because of the case of his father. His aunt is a twin sister to his father. She suffered a nervous break down when one of her brothers was killed by a bullet and when she knew about her twin brother and since then she is out of her mind and has the same strange behaviour. She does not speak to anyone. The son, Mohamed wishes his aunt could be cured, as well as his father.

The twin siblings are tied with chains in two separate rooms. Their life is miserable and the situation in the two rooms is horrible. The whole survey team pledged to help these twin brothers in any way possible.

Meeting with Children: Al-Masharih

The meeting with children was organized in a way to have a mixed gathering (boys and girls). The following is the summary of this meeting.

- The children in the village knew about mines and their dangers from their parents and from the school. When awareness campaigns came, they were given lectures at school and in the village.
- Children were scared of areas where mines were planted. However, after demining, the feeling of children improved. They became more confident in their movement when they go to the demined area for herding.
- Children watch TV.
- There are two local channels available. The satellite broadcasting is not known. Girls have bad impressions about Satellite channels. They say the channels broadcast naked women.
- Activities carried out by boys are related to plant protection, irrigation, picking qat, delivery of qat to the markets, herding animals.
- Girls' activities are mainly related to housework, herding animals after school.
- The overall feeling of children is joy after demining. Although, some of the children indicated that there is still one area not cleared of mines, the Sheikh in the meeting disqualified this statement by saying and confirming that all areas are clean. These are rumours, he said.
- The children strongly expressed their need for a primary school (9 classes).
- Currently the school in the village has four classes (grades).
- Girls are the most affected because they are not allowed to travel to neighbouring village to attend the higher classes. The drop out of girls is high in this village.
- The willingness of children to continue schooling until the secondary level is evident from talking to children and parents.

Impressions from visiting Al-Masharih Village:

1. The impact of demining in the village is evident everywhere.
2. The effects of mines and the location of the village on the previous border of what used to be North and South Yemen, have drastically affected the development opportunities for more than two decades.
3. Thanks to the income from qat - otherwise, the life of people in this village could have been miserable.

4. The location of the village on the border until the year 1990 led to the killing of 37 persons from the village alone.
5. There is a feeling of peace in the village. This led to utilization of resources after demining.
6. There is high dropout of girls from the fourth grade. This is mainly because the school is located far away and girls are not allowed to go to remote areas.
7. There are two cases affected by mines. They are twins (brother and sister). They are tied with chains and locked in two rooms.
8. Local people in the village are highly dependant on agriculture. Employees constitute only 9%.
9. Few local people depend on government jobs.

Table 62 - Impacts and Opportunities after demining: Al-Masharih

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Farmers	Agriculture (on 25% of demined area)	Land owners	Additional income from reclamation of land	Build structure (dam) for water harvesting and conservation	All community	Improve agriculture and utilise more of demined area.
	Herding in cleared rangeland (75% of demined area)	All community members	Range land	Water supply project	All community	Water is not enough and polluted
	Fuel wood collection			Medical unit	All community	They travel long distances to the hospital
	Short cut paths to neighbouring villages.	Land owners				
	Stones for construction					
Women	Herding	All community	Range lands for sheep production	Veterinary care for improved animal health	All community	High levels of animal disease and death.
	Fuel wood cutting	All community	People use fuel wood in households	Water supply project	All community	For household needs & to reduced diseases.
	Agriculture	Landowners	Agriculture to meet household needs.	Electricity project Asphalted road	All community	High cost of travel because of bad roads
Leaders	Agriculture	Land owners		Extend the primary school from 4 th up to 9 th grade	All community	Schools are far away
	Herding	All community	Availability of stones for construction	Build water conservation structure	All community	Water is not enough Rainfall is little
	Stone cutting					

Children	Herding Agriculture Pedestrian road	All community members and neighbouring villages	Range lands Short cut paths	Extend the primary school up to 9 th grade Build water construction	Girls in particular	Girls are not allowed to travel out the village to continue education and so drop out.
victims	- No benefits received (twins) - Artificial limb was too heavy. (Mariam)			Provide medical care for twins and for Mariam	The victims twins Mariam	Their situation is miserable Mariam does not have support

Al-Qafleh

Qa'tabah District, Al-Dhale governorate

Date of survey: 20th May 2006

Summary: Al-Qafleh

Al-Qafleh is a small village (600 population in year 2000) with 4 minefields to the N, W and E of the village. The altitude is 1319 metres (mid-altitude). The houses are small, built of blocks and there is a lot of rubbish. It is 15 minutes to Qa'tabah town and less than one hours drive to Al- Dhale, the District capital. The community is predominantly agricultural now although in the 1960s – 80s a lot of able-bodied men migrated to Kuwait, Saudi and the Gulf.

The village was on the frontier between North and South, so has known conflict for some time.

There is no village council. Everything is decided by the Sheikh, who then convinces the local Council to support his projects. The village started in 1986 to try to get electricity for the village. They now have all the installations, but still no electricity. The community contributed 1 million riyals towards building a 6-class school in 1997 (it would now cost 5 million). They built it to roof level, and the government put the roof on. The Sheikh collects an agricultural tax of 900,000 from farmers, equivalent to 5000 riyals for every 100,000 YR of income from the land. He sends this to the government as revenue, and he collects a salary of 9000 from the government for this.

Water comes from hand-dug wells (some of which have become salty), and a deep borehole (480 metres) which cost 5 million to dig (10,000 riyals per metre) and 6 million to equip. Charge for water from this borehole is 1500 riyals per hour.

The land was partly (20%) cleared of mines by the community by itself, using rakes to locate the mines. The other 80% was done by YEMAC.

The cleared area is mainly used for collection of fuelwood, grazing and the hunting of wild birds. Since the access roads have been made safe, some 20 terraces of qat have been established (see economic evaluation). The irrigated land is owned by 5% of the population. However most of the population benefits from good returns to qat in one way or another (labouring, selling etc). There is also immigrant seasonal labour (some of whom settle in the village). People (including the Sheikh) are still wary of going into the cleared areas.

Introduction: Al-Qafleh

The survey team greeted the hosts, introduced themselves one by one, highlighted the methodology of the work and explained the objective of the mission, as follows:

We are here to:

- Get acquainted with the impacts of mines on your lives.
- Highlight the role of the Mine center in Sana'a "YEMAC"
- Learn from your experiences on the utilization of the demined areas in improving your livelihood.
- We do not promise any magic interventions to improve your livelihoods.

- We will assess your needs with respect to demining the area and report that to the authorities in “YEMAC” for further action.
- We will conduct interviews with five categories in the farming community:
These are: Farmers, leaders, women , survivors and children (boys and girls)
The hosts introduced themselves and greeted the mission. Fourteen persons were present in the meeting. Among them were:
 1. Ahmed Musaed Rubaid
 2. Ahmed Saeed Ali Ghurairy
 3. Abdul Salam Abdulla Musaed
 4. Abdul Razak Ahmed Musaed
 5. Abdull Mutahanna Al-Ghurairy
 6. Yahya Qasem Nasher
 7. Mohamed Ali Ahmed Al-Ghurairy
 8. Abdulla Muthanna Musaed Rubaid

After this introduction, the surveying team divided themselves into small groups and launched interviews with different categories of the community in the village.

Time Line: Al-Qafleh (15 farmers, including the Sheikh)

The mines were planted in 1982.

Before this, the local people were living a safe life practicing agriculture, herding animals and collecting fuel wood for their local needs.

After planting of mines in 1982, the life of local people changed drastically. The feeling of insecurity became evident. The incidences of mine explosions started to increase and the feeling of security got worse and worse.

The demining started in the year 2005.

After demining, people started to feel better more secure and started to utilize the demined area for agriculture, herding animals and for fuel woodcutting.

The demined area consists of 5% agricultural land, which belongs to land owners in the village and the balance is rangeland, which is considered community property.

After the year 2000, there were no mine explosions. However, several victims are still alive (five) before this year.

Table 63 - Village Profile: Al Qafleh

A. Internal Resources in the village

Facilities	Status
Population	900 inhabitants
Houses	100-120 houses
Schools	One, built by the community
Medical unit	Not available
Water resources	From the village and neighbouring villages
Mosques	One
Electricity	There is a project but not working for the past two years
Telephone	Mobile only
Local Council	There is one representative in the local council
Cooperatives and associations	Not available. Small projects are implemented through cooperation
Shops	Three small groceries
Post office	One
Police Station	Not available

Development projects	Nil
Demined area uses	Herding animals and fuel wood cutting and roads for pedestrians
Immigrants	Intensive, because of mines
Family links	Strong
Markets	Not available , the nearest market is Qa'taba city
Credits	No information about the credit bank.
International NGOs	Not available
Extension center	Not available
Dams and water structures	Not available
NGOs	Not available

B. External Factors:

Facilities	Status
TV and Radio	Available
Internal immigration	Yes, many come to the village to work in the season
Government activities	Nil
Disasters	Nil
Links with neighbouring villages	Strong and supported by family ties and marriages.

Meeting with Village Leaders: Al Qafleh

Following are the major issues raised in the meeting:

- There are no associations or cooperatives in the village.
- There is an electricity project established 20 years ago. The project is about to be completed. (The posts and wires are already in place)
- The plans of the community in the village started with a school, which was built at the expense of local community members. The government built the roof of the school.
- All projects are centralized; we cannot follow up any project in the village.
- There are traditional rules governing the management of natural resources. Every one in the village knows his property and traditional regulations are still practiced.
- Agricultural lands are private property. The mountains are the property of the community and open for herding and fuel woodcutting.
- The demined land is utilized for agriculture, herding and fuel woodcutting.
- Stones are not taken from the demined area. The quality of stones here is inferior. We bring good stones from far away.
- The awareness team came a week ago and distributed aid to the survivors and victims

Meeting with Women: Al Qafleh

The total number of women in the meeting was 10 women, aged from 20 – 65 years.

The meeting took place in the Sheikh's house.

The meeting started with available opportunities in the village. The results of discussions were as follows:

- The de-miners came to the village a while ago and camped here for almost a year. They were removing mines in the mountains. We used to see them always. Our husbands and our children used to help them in identifying locations of mines. Two months ago, we were told that, this area was cleaned from mines. After this, we started feeling safe and secure. We started herding our animals without fear for the animals and for ourselves. We also started collecting fuel

wood from the same area. The wood of this area is considered the best fuel wood. Women from neighbouring villages come to collect fuel wood from our area.

- The demined areas are the property of most community members. However, all members of the society are allowed to herd animals and collect fuel wood. Similarly, cutting stones is also allowed to community members.
- Before demining, we used to herd animals by ourselves. We used to stay out of the area and let the animals to enter the area. After demining we allowed our children to herd animals on their own.
- There is one primary school in the village till the sixth grade. After this, the children go to another school in a neighbouring village. The schooling there is mixed and the teachers are males. In our case, we cannot allow that our daughters go to mixed schools. They are not children anymore. Similarly, we do not accept that male teachers give lessons to our grown up daughters. We demand that a basic school to be built in the village and supported by female teachers to educate our daughters. Everybody in the village wants girls to have adequate education. The dropouts of girls after the sixth grade are high in our village.
- Every household in the village owns 4-5 sheep. Many in the village own more than 20 heads of sheep. The animals are sold to meet the urgent needs for qat cultivation or purchase of diesel. Qat is the major source of income in the village. The Qat is important to all. Those who own land or those who work in qat fields benefit from this crop. The daily wage of laborers in qat cultivation ranges from 600 -1000 YR. Animals are sold to pay for qat or to purchase other necessities.
- Qat cultivation is the sole responsibility of men. Women participate in the cultivation of other crops. Activities such as harvesting, weeding, collecting of leaves in sorghum, thinning in sorghum is among the activities carried out by women. Herding, fuel woodcutting and housework is the responsibility of women in the household.
- Most households in the village own gas oven. This is mainly because, parents used to be annoyed about the safety of their children in areas planted with mines. Therefore they gave up the use of fuel wood. Instead, they purchased gas ovens. After demining, every body returned to collecting fuel wood because of its quality and because of the high cost of butane gas.
- We have lots of problems with drinking water. Water in wells of the village is of bad quality. There is one well with good quality drinking water. However, it is located far away. The household has to have a transport means to reach the well. We have donkeys to fetch water from that well. This takes a lot of our time and the time of our children. We have also make long queues to be able to get a donkey load. This is frustrating and time consuming. We need to drill a well for a rural water supply project in the village or close by.
- There was an electricity project in the village three years ago. However, the project terminated before connecting electricity to the houses of the village. Apparently, the whole story proved to be part of an election campaign propaganda. Individual households have their own small generators. Those who cannot afford have to wait for the government to fulfill its promises.
- About ten women have their sewing machines and work as tailors. They charge 600-700 YR to do a dress. A Palestinian woman who used to be a trader trained

the women locally. Whenever she used to come to the village, she used to train one or two women making clothes.

- The daughter of the Sheikh was the first to master the skill; she in her turn trained others in the village.
- Women need a medical unit in the village. Currently, in case of illness, the patient has to be rushed to the hospital in Al-Dhale or Qa'ataba or sometimes to Aden or to Sana'a.
- Every household in the villages comprises 20-25 members (extended family). The father is in charge of everybody. If he dies, the older son takes over. If brothers do not agree then the inheritance is divided among the extended family members and every one lives on his own.
- There is a family of "marginal" locally called "Akhdam". The family consists of a husband and wife with six children. The husband is ill, and the wife works for a living. She is a salesperson in cloths and women's stuff. The children go to school and play with our children in the village.

Table 64 - Meeting with women: Benefits from cleared land: Al Qafleh

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Fuel Wood	All village members	Land owners (open for every body)	Fuel wood for cooking	Save the cost of butane gas (500 YR/can)
Herding	All village members	Land owners (open for every body)	Herding animals (Sheep and Goat)	Save the cost of purchased fodder
Fodder gathering	All village members	Land owners (open for every body)	Fodder for cows	Save in the cost of purchased fodder for cows
Security	All feel secure	Open for every body	Free movement and fuel wood cutting.	Herding, fuel wood cutting and fodder collecting

Meeting with women: Development opportunities for the village: Al Qafleh

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Wells	Financial means	Drill deep wells for drinking water and household needs	Land owners	Government and community members
Electricity	Government do not support electricity	Convince government to connect electricity to the village	All village members	Government and community members
School for girls	Financial means	Convince the government	All village members	Government and community members
Female teachers	Financial means	Convince the government	All village members and girls	Government

Table 65 - Meeting with Farmers: Al Qafleh

Benefits from cleared land

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land: Agriculture and herding animals and fuel wood cutting	All members of the community	As per the supporting documents of land ownership	Herding, fuel wood and agriculture	Saving 50% of the fodder cost. Saving 70% of the fuel wood need. Saving 20% of the food grains needs. Good income from qat
Roads	All members of the community	As per the local traditions	Herding and fuel wood cutting	To save time
Houses	Owners of agricultural lands located beside the demined areas.	As per the local traditions and laws	For building guarding posts	Provide protection for agricultural crops (qat)

Development Opportunities for cleared land in Al-Qafleh - farmers

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Land Grains and fuel wood	Irrigation, extension, tractors, seeds, deceases	Drill deep wells Build Water constructions (dams)	All members of the community	Government or any donor agency
Water	Shortage of water Salinity of water High cost of drilling wells High cost of diesel	Drill deep wells Build Water constructions (dams)	All members of the community	Government or any donor agency
Roads	There is no road connecting the village with the main road especially in the rainy season	Make the road asphalted to the village	All members of the community	Government or any donor agency
Buildings	No medical unit No basic school No secondary school No electricity	Construct medical unit Construct basic and secondary schools Complete the electricity project	All members of the community	Government or any donor agency

Meeting with men/women survivors: Al Qafleh

Case Number (1): Rahma Abdulla, age: 45 years

- She said: “Fifteen years ago a mine exploded on me while I was collecting fuel wood. My leg was amputated from under the knee. At that time I was an orphan. I only had a brother. My brother rushed me to the hospital in Dhamar were I got medical care. I was transferred to Sana’a to get artificial leg. I remained 40 days before I could get the artificial leg. The cost of treatments was borne by my

brother. The cost of the artificial leg was donated by the hospital then. Now, after 15 years I feel pain because the leg needs to be changed”.

- She did not know who sent the request for exempting her from paying the cost of the leg. She, however, considers them good people and wishes to thank them.
- She added: “I am responsible for eight children. Five were born before the incident and three after. Three of my children are married and live on their own. My husband is sick and not working. I cannot work or collect fuel wood. However, two of my children work in qat fields and they get 500 YR per day. They cover our needs.
- She said” Four years ago, a woman came from Aden and said that she will help me, but I haven’t seen her since. I wish that somebody helped me to get another artificial leg. I can’t walk around as before and I feel pain. I can’t afford buying another artificial leg. At the time of the incident, I did not know about mines, or where they are located. I never heard about the survivors association or “YEMAC”

Case Number (2): Omer Mohamed Thabet, Age 40 years

Age at the time of the incident, Omer was 33 years old. He is now married with eight children.

“I was herding when the incident occurred in Lakamat Al-Karameed. This happened in 1999.

I was rushed to Aden and underwent an operation. I was aware about the dangers of mines, but I did not expect the explosion. My right leg was amputated below the knee. After the incident, I felt depressed and dependant on others. I did not get any assistance whatsoever. I knew about the department of victims (survivors) in “YEMAC”. I need anything to help create my own business and depend on myself”.

The survivor was given the address of the survivors association in Sana’a for further contacts.



Case Number (3): Fadhl Nagi Sa’adan; Age: 35 years and married with five children
Age at the time of the incident: 16 years

“I was herding animals in Al-Zubairiah in 1998 when a mine exploded on me. We were aware of the danger of mines. I was rushed to a hospital in Ta’iz for medical care. I paid for my medical treatment. After the incident, I felt that I am not a complete man anymore. However, I was able to overcome this feeling. Thanks to my family who helped me to overcome my problems. I eventually got married afterwards. I did not get any support. I did not get any facilities after the incident. Yes, I need any help to assist me live on my own”.

The survivor was given the address of the survivors association in Sana’a for further contacts.

Meeting with Children: Al-Qafleh

Boys:

- We knew about mines. We are aware that we should not come closer to mine fields.
- We were told not to play with strange metallic objects or unknown materials. This information and lectures was given to us by the awareness team from “YEMAC”
- There are no kids our age affected by mines. There are however, people older than us affected by mines
- After demining, we are able to move around freely, we are able to herd animals, collect fuel wood, and go for recreation.
- We ask for some projects such as intermediate and secondary schools, electricity and water supply project.

Girls (seven girls and a boy): Age group: 10-14 years.

The meeting took place in the Sheikh’s house.

- We got the information on mines from the village and from our parents.
- We got the information on mines from the school
- No body at our age was a survivor of mines or killed by mines.
- We go to the demined areas for herding and for playing.
- We feel secure and safe. We are not afraid any more.
- The boy said: “One week ago, some people came to our school and talked to use about mines and their danger. They said that we should not play or use stone to break the strange objects because they might be mines. They showed us photos of different types of mines. We go to school in the morning. The girls herd animal at this time. When we come back home, we go herding and the girls go to school in the evening”.
- The girls asked for a school for girls, with female teachers. This is important for them to be able to continue schooling. “Our parents do not allow us go to mixed schools”, they said

Major impressions from the Al Qafleh village:

- Local people get the perfect benefit from clearance – huge income from Qat (7 millions YR/Year) after costs.
- Every body gets an income from Qat (labour, selling etc..)
- Survivor got no support from any side.
- People are impressed by YEMACs work.
- No women know their age or the age of their children.
- They located mines by themselves using a rake.

- Was a poor village before qat and before clearance now building houses and buying cars.
- Women and children are very friendly.
- All decisions taken by Sheikh, but cooperates with other villagers.
- Good cooperation between village members to implement some projects (e.g. school, water supply)

Table 66 - Impacts and Opportunities after demining in Al Qafleh:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Farmers	Herding Fuel wood Agriculture	Local community	The demined area is suitable for the three activities	Drill deep wells Build water construction	All community members	The shallow water is salty Drilling of deep wells is expensive
Women	Herding Fuel Wood	Local community	The area has good quality fuel wood and fodder	Drill deep wells Build water constructions Build a school for girls	All women in the village	The fetching of water is from long distances No school for girls
Leaders	Herding Fuel Wood	Local community	_____	Complete the electricity project Medical unit	All community members	Local people have consensus on these priorities
Children	Herding + security	All children	Children herd animals and need space for playing	School for girls	All girls in the village	There is no girls school in the village
Survivors	No support was extended to them	Only one man	_____	Provide artificial leg to the survivor	Survivors from mines	To help them move easily and help one man to undergo an operation

Qat Production in Al Qafleh:

Irrigation for Qat is from wells . The time to irrigate a girba is 20 hours.

The cost of irrigation per hour is 1500 YR. Thus the cost of water is 300.000 YR annually.

Cost of labor = 30.000 YR annually.

Fertilizers` and pesticides = 200.000- 250.000 YR annually.

Cost of labor for picking qat= 100.000 YR annually

Total costs = 630,000 YR

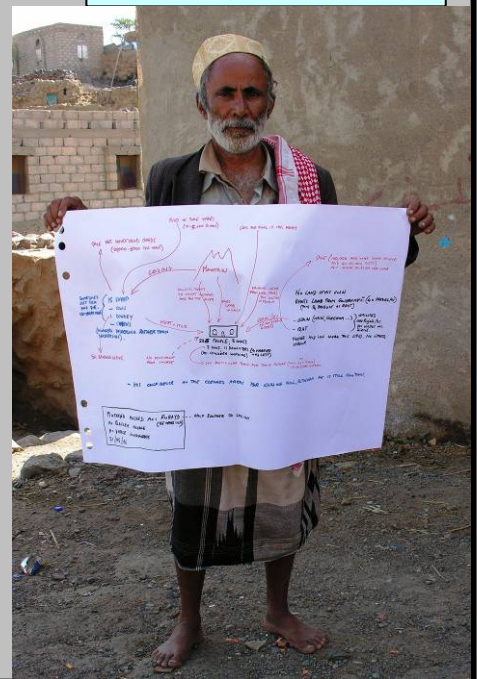
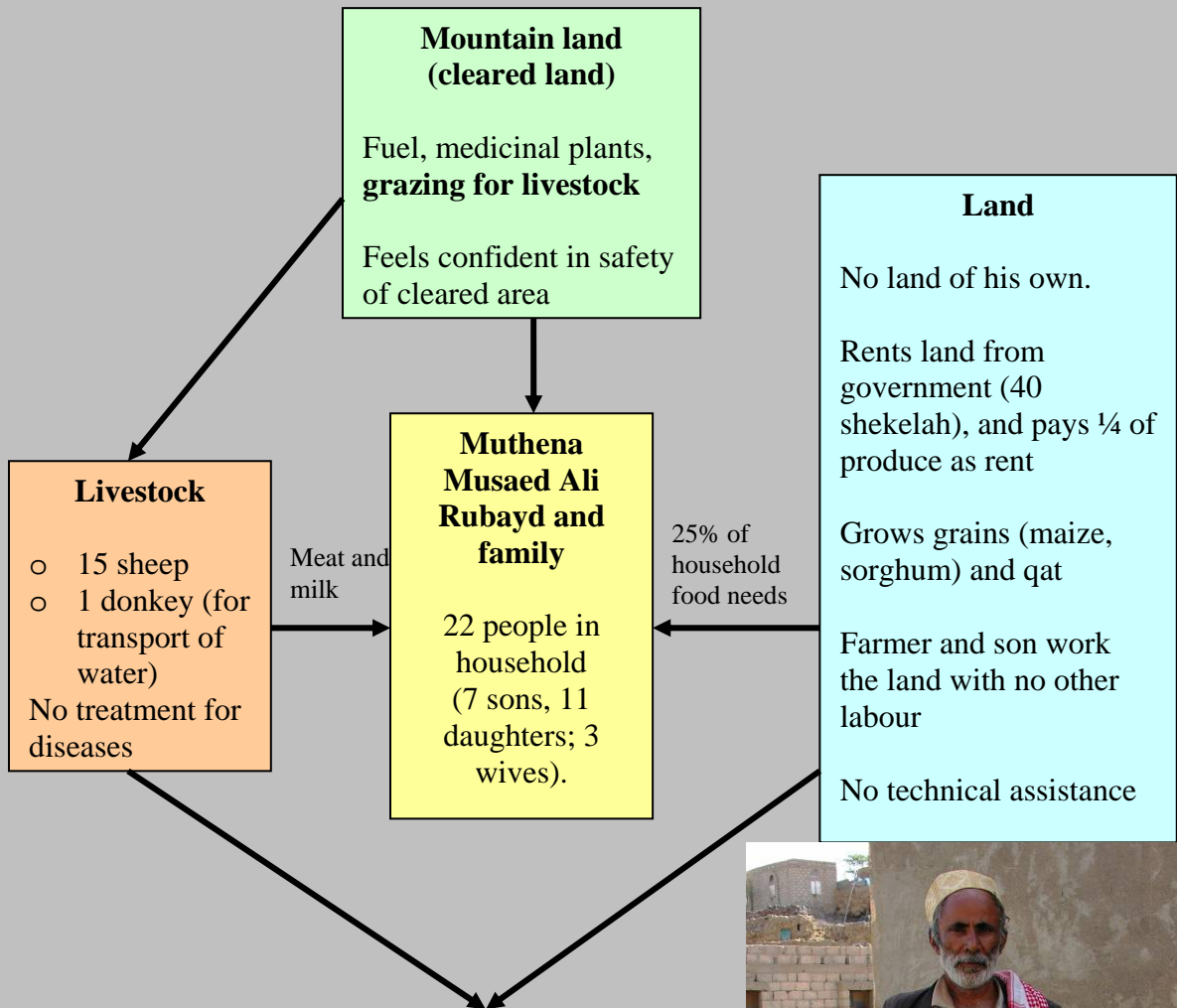
The total income from one girba of qat is 1.000.000 YR annually.

Thus the profit (net income) from one girba is 370,000 YR.

There are 20 girba in the demined area, with a total annual profit of 7.4 million Yemeni riyals (but much less in bad years).

Figure 3 – Farming system diagram for Muthena ali Rubayd, Al Qafleh village, al Dhale governorate

Farming systems diagram for Muthena Ali Rubayd, Al Qafleh village, Al Dhale governorate: 21st May 2006.



Bait Al-Shawki

Qa'tabah District Al-Dhale governorate
21st March 2006

Arrival in Bait Al-Shawki. The land-mine affected land is in the mountains surrounding the community, as is being pointed out by community members

Table 67 - The history of Bait Al-Shawki (time line).

Stage	Mining Activities	Duration (years)	Coping strategies of local community
1	Before land mines	Before 1982	Agriculture production Collecting of fuel wood by women Herding animals by young girls and boys Stone mining for construction by men
2	During land mines	1982 - 2002	Fear of local community to go to range lands where land mines were planted. Casualties among women and men as a result of land mines explosion Less herding of animals in range lands Reduced number of animals in households. More pressure on neighbouring range lands as a result of overgrazing and fuel wood cutting. Deterioration of local tourism. Deterioration of agricultural lands planted with mines (10 ha)
3	Demining	2002-2005	
4	After clearing the area from mines	2005- up till now	- People are still scared. However, the feeling is fading away. Since the area was cleaned, no incidents of mine explosions took place. - Herding of animals is gradually increasing in the cleaned areas - Fuel wood cutting started to increase and local people are afraid from possible over cutting. - Difficulties in cultivation of the agricultural land which was cleaned from mines (10 ha) due to lack of funds, water, inputs and support

Profile of Bait Al-Shawki:

Resources Available in the Community: Bait Al-Shawki

- One unified school M&F mixed schooling.
- One Secondary school M&F mixed schooling.
- 5 mosques
- Earth rough roads
- Lack of a rural water supply project.
- Lack of electricity
- No medical unit.
- No water structures and diversion weirs to control floods.
- High illiteracy rates among men and women.

- High drop of girls from school as a result of mixed schooling.
- No cooperatives or Farmers associations.
- No NGOs among men or women.

External Sources affecting the local community: Bait Al-Shawki

- Weak or non-existence of government services. The Al-Dhale Governorate is a fairly new administrative entity. Efforts should be made with the Governor and the Agriculture office to give due attention to the provision of extension and vet services to areas affected by landmines through their regular programmes. This includes the possibility of establishing an extension and vet unit serving these areas.
- The Al-Dhale Rural Development Project will be launched in the coming few months, serving the Governorate in different aspects of rural development. Special attention will be given to rainfed areas and range management as well as livestock improvement. It will be of vital importance to establish links, and to draw their attention to landmine affected areas as a priority for their support.
- The area is predominantly qat growing area. Limited cultivation of food crops.
- There is a water shortage in the area. The price of one hour irrigation is 3000 YR (partly due to high diesel price due to remoteness).
- The area has been subjected to severe drought for the past three years. This led to severe reduction of fodder and high cost of qat production.

Local community member jobs and sources of income: Bait Al-Shawki

- Government employees 20%.
- Private jobs : 15%
 - o Car owners
 - o Shop owners
 - o Carpenters
 - o Engineers
 - o Construction workers
- Farmers 50%
- Migrants 5%
- Unemployed 10%

Status of members of local community affected by land mines:

- Approximate numbers of deaths caused by land mines in Bait al-Shawki and neighbouring villages reached 10 persons.
- The number of injured is 14.
- The most vulnerable members of the community were women and young boys (mainly herders and those who collect fuel wood)
- The affected persons were provided with first aid after injury through the efforts of local community members.
- The land mine victims association helped in providing artificial limbs
- A male injured person who lost one of his legs was helped through the provision of a small capital to start his own business in butane gas.
- One injured male person who lost one leg managed to get an artificial leg to practice his regular life in agriculture.
- Two females were helped with sewing training (see Case study)

Table 68 - Problems from local community perception: Bait Al-Shawki

A. Range lands deteriorating due to overgrazing and over-cutting for fuel wood

Potential solution	Responsibility
1. Set up local regulations for range management in cooperation with the local community	Local council, local community leaders and community members
2. Increase awareness among community members on the importance of rational utilisation of range land resources with emphasis on women and herders	Agriculture office, local rural development projects, schools, religious leaders in mosques, and local council with National Land mine Committee.
3. Organise campaigns to introduce locally adapted seeds and seedlings of shrubs and grasses to the range lands during the rainy season	Agriculture office, Dhale Development Project extension service, local council, schools, community members and National Landmine Committee
4. Introduce fodder supplements such as <i>Opuntia</i> cactus, and train women on how to utilise this crop as fodder for animals	As for 3 plus research (ARA)
5. Arrange contacts with the Butigas company to facilitate the provision of butane gas to the area	Local council, NLMC and the Butane Gas Company

B. Low productivity and limited numbers of livestock and bee hives in the area

Potential solution	Responsibility
1. Establish an extension and veterinary service unit to serve the village and the surrounding areas	Agricultural office with Al-Dhale Development Project
2. Train local community members as para vets	Agricultural office with Al-Dhale Development Project, plus local council and NLMC
3. Improve local breeds through cross breeding with animals from neighbouring villages	As for 2
4. Improve animal management practices (housing, isolation of sick animals, control of internal and external parasites etc)	As for 2
5. Introduce modern bee hives and train farmers in their management	As for 2
6. Introduce new fodder species such as <i>Opuntia</i> cactus	As for 2

Discussion with a group of seven farmers: Bait Al-Shawki

The mine-fields surround the village, and are located on the dryland hillsides, not in the irrigated wadi where qat is grown almost exclusively². Farmers are **not confident** that all mines have been removed, and their “main” road to Damt is still not safe from mines. The participants said that the first team of de-miners did not work well, but the replacement team has been much more diligent.

The mines were planted in discreet areas. Consequently the number of direct beneficiaries is relatively small (19 families having land where mines were planted). However, the mountain tops are extensive, and affect the whole community.

² The area Sheikh told us that even though the profit margin on qat is small, it is about the only irrigated crop that makes a profit – the others make a loss. This is because diesel supply to this remote village is very expensive.

The British Ambassador (a woman) came to the community, and promised to build a dam, but nothing has come of it.

Farmers are not formed into groups, but they do state that there is cooperation between them, and that the village is cohesive. 90% of families are poor, and have no support or funds of their own to spend on inputs. There are no water sources.

Farmers' priority would be to support agriculture first, then a clinic and support for children to attend secondary school and University.

The demined area is now in use, including for:

- Stone for building
- Fuel wood collection
- Livestock production
- Honey production (continued from before)

The farmers don't see how they can improve beyond this without government support from the Ministries of Agriculture and Health.

They need help (e.g. from YEMAC) to form an Association that would be more likely to get money from the government or from projects.

They were promised a hospital in 2004, but the Health Ministry didn't have budget, and postponed it to 2005 and then 2006.

Status of the local community before mines: Bait Al-Shawki

The situation was normal, especially the feeling of security, and practicing agriculture, herding and fuel wood collection.

After mining: Bait Al-Shawki

The situation became worse as a result of Civil War which led to laying mines. People lost security in doing their normal business. The economic impact of mines was reflected in the following:

- Collection of fuel wood and herding of animals was drastically reduced and in some cases terminated
- The limited rainfed land is located at the tops of the hills, and could not be used for agricultural production
- Roads connecting nearby villages and shortcuts to Damt were disconnected
- The casualties which took place as a result of mines led people to get scared and feeling insecure

Situation after demining: Bait Al-Shawki

The participants agreed that some feeling of security among local people after demining. This was evidenced by their cultivation of land and collection of wood and herding of animals both at the top of the hills and the hill slopes. Women started going to the rangeland, and it appears also that most victims were women. One participant said that he is still scared by previously mined areas despite demining. This is mainly because he witnessed casualties during demining among the demining teams. In one of the most affected areas, there was an explosion in the same area (Ulaiba) and after

verification with other members of the community on the validity of this case it appears that this explosion happened in an abandoned well which was covered with soil. An animal fell into the well, which had not been demined. An investigation was carried out by YEMAC into how this mine was missed.

As far as agriculture is concerned, participants said that they are able to cultivate the land that was demined on the top of the hills. However, they cannot do any reclamation because of limited resources, and the local community leaders cannot help.

Looking at the percentage of qat cultivation in the area compared to other crops it was possible to calculate average income from crops and from qat. It appeared that the cost of irrigation can be recovered easily from growing qat, contrary to other irrigated crops. It also appeared that the cost of production is twice as much as that of qat. The calculation was based on the cost of diesel to run the pumps and the total hours required for irrigation. The cost of production of one feddan of qat = 100,000 YR. The sale is 200,000, giving **100,000 YR profit** per year. In contrast food crops production costs will be 90,000 YR, and the sale will bring 12 bags of sorghum = 33,000, meaning he **loses 57,000 YR** per year.

Opportunities and benefits for local community after demining: Bait Al-Shawki

1. Mining stones for construction from higher areas
2. Members of the community are able to herd animals and collect fuelwood again
3. Beehives increased
4. Raising animals became possible after herding was revived

Who can help and support these opportunities: Bait Al-Shawki

Establishment of local cooperatives, which were a total failure because of lack of support from relevant agencies.

Several local leaders urged the government to establish medical and veterinary units and to construct diversion dams, planting of fruit trees, training of beehive keepers, and provision of care to bees. These are considered to be of high priority in solution of their problems.

How can land located in upper parts of the hills be reclaimed?

Participants suggested construction of a road to reach this high land in order to reclaim the land. The road has been destroyed as a result of mines, and lack of maintenance.

Land reclaimed from mines is not suitable for qat growing because it is rainfed.

Local participants drew a sketch map identifying areas infected with mines. The number of local communities affected by mines were highlighted, and the roads connecting communities drawn. Eight houses related to Bait Al-Shawki were put on the map. The number of households was 19, distributed in these houses (N.B. Bait Al-Shawki is made up of scattered houses).

Discussion with survivors of land-mine accidents: Bait Al-Shawki

Case study 1: Ms Nagat Mohammed Muthanna Saleh

The information below is from the survivor's family as she was away at the time of our visit. The woman lost the lower part of her leg four years ago whilst herding the family's five sheep in the mountains along with other herders. She was given a prosthesis. She is a 25-year old illiterate woman from a poor family who are landless. She has never married.

She was given training in sewing using a machine by the Yemen Landmine Survivors Association. However, she has never taken this opportunity up (unlike a second female survivor from the same community who we met at the Survivors Association in Sana'a where she is an important staff member). At present she seems depressed by her situation, and is being cared for by her (poor) family. She receives no money.

We suggested various other professions (teaching was ruled out as she is illiterate), such as child minding, caring for the sick and elderly, crop or livestock product processing, but the response was lukewarm.

We asked for the family's suggestions. They want a monthly cash payment, or assistance to start a small shop. This would need a kiosk (which the local council say they will supply), and start up capital to buy the initial stock. It appears that there is a need for such a shop in the vicinity.

Case study 2: Mohammed Saleh Mosleh Al-Shawki

He is a member of Bait Al-Shawki. He became a victim of landmines, losing one leg below the knee and one of his eyes. He was helped with an artificial limb, and he is now living a normal life and practices apiculture as any other normal person.

Case study 3: Abdo Mohammed Al-Shawki

This man lost one of his legs in a landmine explosion and was supplied with an artificial leg. The Landmine Survivors Association in Sana'a provided him with modest capital to purchase 50 butane gas tanks to start his own business in the village. This gave him additional income, and helped him and his family to live independently of local or external charity.

Habil Al-Abdi Community

Qa'tabah District, Al-Dhale Governorate

Date of survey: 20th May 2006

Summary: Habil Al-Abdi

Habil Al-Abdi is a large village at medium altitude with a population of 3,000 inhabitants. Mines were planted during the early 1980s creating fear, causing deaths and injuries and loss of livestock and preventing access to rangeland. The area was classified as medium impact and was demined in 2003-2004 and 2006. The village is returning to normal. There was one case of a mine explosion after the year 2000, killing a girl aged 13. Three survivors were interviewed, 2 men and a woman, injured between 20-30 years ago. They all requested assistance in finding a job, or enterprise, or other source of support. Children's awareness of mines is high, from interaction with deminers and the awareness teams and information from school.

People depend on agriculture – growing sorghum, millet and qat which is the main source of income and raising livestock (sheep and camels). Livestock are particularly important for landless households. Male and female labour from marginal groups is employed in agriculture. Village services include a primary school up to 6th grade, private water supplies, some electricity, and small shops. There is a market 3 kilometres away. There are strong family linkages in the village, but no community associations or development initiatives and no active external development organisations. They benefit from the social welfare fund.

All community members and some neighbouring villages were said to have benefited from demining. The demined area is used for herding, fuel wood cutting and house construction. Some landowners have granted access to marginal groups to settle near the agricultural land. Opportunities identified were for deep wells and terraces for agricultural production, intermediate and secondary schools, a medical unit, alternative roads, electricity, and a community association to help build houses in demined fields.

Introduction: Habil Al-Abdi

The meeting in the village of Habil Al-Abdi in Qa'tabah District of Al-Dhale Governorate took place on the 20th of May 2006. The survey team was welcomed by the prominent figures. The team introduced its members one by one and then got acquainted with the gathering. The survey team explained the purpose of the survey and highlighted the objectives of the visit. The team representative said that the survey to be conducted during the two-day visit would cover five categories in the community; interviewing farmers, leaders, women, survivors and male and female children. The objective of the survey was to understand the status of the community and their sufferings from mines and how they utilize the resources generated from demining. The team would also assess the needs of the local community. This would not be a guarantee for potential projects, but rather a careful assessment of potential opportunities, which will be followed up by 'YEMAC' in Sana'a. The team leader said that no promises could be given at this stage of investigation.

Present in the meeting were more than 30 people representing the village community. The following names were recorded:

1. Faisal Ali Saleh Al-Shargi	Sheikh of the village
2. Omer Saleh Al-Shargi	Farmer
3. Saleh Mohamed Ahmed Rageh	Farmer
4. Mutea Ali Saleh	Student
5. Ammar Mohamed Saleh	Farmer
6. Mohamed Haza'a Al-Shargi	Farmer
7. Faez Abdulla Ismail	Student
8. Nabel Ali Saleh Al-Shargi	Student
9. Hadi Ahmed Saleh Al-Shargi	Military
10. Ahmed Mohamed Saleh	Student
11. Ahmed Abdu Fadhel	Military
12. Hadi Qa'ed Al-Mansoub	Military

Time Line: Habil Al-Abdi

- The situation in the village before planting mines was normal and calm. People used to go to their work in agriculture without any problems.
- Mines were planted during the early 1980s.
- "When mines were planted our lives were changed dramatically. We were terrified to the extent that we were not able to walk, even in areas where no mines were planted. We were expecting mines to explode anywhere."
- The area was demined during the period 2003-2004 and 2006.
- The situation after demining is returning to normal, since the demining program was launched.
- All community members benefited from demining including community members of neighbouring villages.
- There was only one case of a mine explosion after the year 2000. A girl aged 13 years died instantly after a mine explosion.
- The demined area is used for herding, fuel wood cutting and can be used for stone cutting.
- Rangelands are community property. However, runoff canals leading to lands located downstream are private property.
- The agricultural lands are owned by land owners. They have documents supporting the land ownership.

Table 69 - Village Profile: Habil Al-Abdi**Internal Resources in the village**

Facilities	Status
Population	3000 inhabitants
Houses	150
Schools	Primary school
Medical unit	Not available
Water resources	Private wells
Mosques	One
Electricity	The project is in progress. Wires were connected
Telephone	Mobile only
Local Council	There is a representative of the local council from the village
Cooperatives and associations	Not available
Shops	Small kiosks and shops
Post office	Not available
Police Station	Not available
Development projects	Not available
Demined area uses	Herding animals, fuel wood cutting, stone cutting, agriculture
Immigrants	Into the village from outside, working in agriculture
Family links	Strong
Markets	One market located three kilometres away.
Credit	Not available
International NGOs	Not available
Extension centre	Not available
Dams and water structures	Not available
NGOs	Not available

External Factors:

Facilities	Status
TV and Radio	Available
Government activities	Social welfare fund
Disasters	No disasters except drought. Wars in the late seventies and early eighties
Links with neighbouring villages	Strong and there are family ties

Meeting with Village Leaders: Habil Al-Abdi

Present in the meeting were the following:

1. Faisal Ali Al-Shargi - Sheikh of the village
 2. Ahmed Abdu Fadhel Al-Laith – Military person
- There are no associations or cooperatives in the village.
 - No development plans in the village. There is a follow up for the electricity and a water supply project.
 - No official rules on resource management. Every one is free on his own property. We pay Zakat to the government.
 - Land is privately owned. Every one has his documents supporting his land ownership.
 - After demining, agricultural lands were returned to their owners. Range land is community property.

- We provided assistance to the demining team for the whole period of their stay in the village. The assistance covered participation in campaign, showing around, surveys, help to victims and survivors households
- The cost of drilling a well is 8-10 million YR.
- The cost of irrigation is 1250 YR/ hour
- There are 8 tube wells in the village.

Meeting with Women: Habil Al-Abdi

The meeting with women took place in the village. The following is the summary of the major issues raised in the meeting.

- Before the planting of mines women used to collect fuel wood. In 1982 the mines were planted by the front. The front remained two years till they were expelled by the government.
- “After planting of mines we were not able to go the mined area. We used to let the animals enter the area and we watch them from a distance. We lost lots of animals because of mine explosions.”
- One woman was riding a donkey to go her son in the field with breakfast. She fell from the donkey and hit a mine. She died instantly.
- The mines were not only anti individual, but also anti tank and vehicle. Several cars exploded because of mines.
- A tractor was damaged when a mine exploded. Luckily, the driver was only slightly injured.
- We used to walk on stones in the mined areas.
- We do not have water supply or electricity projects in the village. The distance to the nearest well for fetching water is 2-3 hours. If a woman does not have a son, she goes to fetch water by herself.
- The hill slopes with mines are areas which provide runoff water during rainfall. We benefit from water harvesting off the hill slopes.
- The village is made up of several families. The biggest family is Bait Al-Shargi. They consist 50% of the total population of the village. The other 50% is made up of four families.
- The hills where mines were planted are owned by Bait Al-Shargi
- Fuel wood is used in the kitchen for making a fire when butane gas is not available or we run out of cash to buy a gas tank. The market where we buy gas tanks is located far away.
- The demined areas cannot be used for cultivation of crops. These areas are suitable for animal herding and fuel wood cutting.
- We heard that mines can remain in the soil for hundreds of years and still explode.
- Women in the village are not educated. In the best cases, girls in the village completed 6th grade of schooling.
- No classes are available as part of literacy campaigns.
- Local people started to build houses in the demined areas.
- Labourers from outside the area, mainly from Zabid have already started building their own houses after permission was granted from the landowners.
- The demined areas are the property of Bait Al-Shargi. After demining, the area returned to Bait Al-Shargi.
- Herding, fuel wood cutting is open to all community members.
- People in the village do not cooperate well. They cooperated in building a two classroom school.

- The school was expanded till the sixth grade. The school is a mixed school for boys and girls.
- The intermediate school and the secondary school are located seven kilometres away (1.5 hours walking distance)
- Women in the village raise chickens for meat and eggs.
- The major income is coming from qat cultivation. However, there are households who do not own land. They rely on animal production to meet their needs.
- The wage of a labourer from the Zabid ranges from 700-1000YR/day.
- The cultivation of grains (sorghum, millet) follows the following sequence.

Table 70 – Meeting with women: Habil Al-Abdi

Practice	Gender	Cost of hiring labor (YR)
Land preparation (tractor)	Men, boys or hired labour from zabid	700-1000
Planting of seeds	Men, boys or hired labour from zabid	700-1000
harvesting	Women or hired labour	700-1000 or 50% of the grains
Making bundles of fodder	Women or hired labour	700-1000 or 50% of the grains
Threshing	Women or hired labour	700-1000
Cleaning	Women or hired labour	700-1000
Collecting grains in sacks And transport to the house	Women or hired labour	1000 for transport
Grinding of grain to make flour	Grain mill	
All stages of qat production	Men or hired labour from zabid	
Spraying qat, irrigating qat, picking qat, delivering to market	Boys	
Herding animals	Boys and girls	
Feeding cows	Women	
Milking cows	Women	
Housework	Women and girls	
Fetching water	Boys (with donkey)	
Collecting fuelwood	Girls	

- Wages of hired labour range from 700-1000YR. for cultivation
- Monthly salary for guarding, 3000-4000 YR.

Table 71 - Benefits from cleared lands: women, Habil Al-Abdi

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Herding	All village members and surrounding villages	Without a decision -herding is open for all	Herding sheep and camels	More milk more animals
Fuel wood	All village members and surrounding villages	Without a decision – it is open for all	Cooking	Saving money from using butane

				gas
Roads	All village members and surrounding villages		Pedestrian roads	Short cuts to neighbouring villages
Buildings	Land owners and labourers from Zabid	Permission from landlord granted to the labourer Land owners build their own houses	For living	Close to agricultural lands in the wadi
Stones	All village members and surrounding villages	Open for all	Construct houses and School from these stones.	

Development opportunities: Women, Habil Al-Abdi

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Herding	_____	_____	_____	_____
Water	Shortage of funds prevents drilling of wells	Wells	All community members	Government
Roads	Not asphalted	No suggestions Roads here cannot be asphalted		
Buildings	Construct a house cost lots of money	Establish an association to help build houses in demined fields close to the wadi	Land owners	The Association membership will be from community members. Support from within the village

Meeting with Farmers: Habil Al-Abdi

A meeting with farmers was organized to discuss problems and opportunities related to the demined area and to the village. Present in the meeting were:

1. Haid Haza'a Yahya Al-Shargi
2. Mohamed Rageh Al-Abdi
3. Al-Haj Saleh Ismail
4. Nagi Mohamed Al-Shargi
5. Ismail Nagi Ali
6. Faez Abdulla Ismail

Benefits from cleared land - farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets

Agriculture Fuel Wood Herding	All community members	Land owners No decision system - open for community	Herding fuel wood	Fodder for animals 1000 YR per month savings from butane gas
Water /springs	_____	_____	_____	_____
Roads	All herders	Open as a road for herders	Road for herders	Saved time and distance
Constructions (Buildings)	Saleh Ali Laith	Private property	Area was abandoned when mine exploded and then returned after demining	Saved him building another house

Development Opportunities for cleared land: Farmers, Habil Al-Abdi

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Herding Fuel Wood	No problems	No proposals for improvements	All community members	Government or donor agencies
Water	No roads for machinery in these areas	Drill wells or build terraces	Ali Mohamed Murshed and Bani Laith	Government
Roads	The roads are not suitable here	Alternative roads can be built to save time for community members	All community members	Government
Buildings	The demined areas are small	Private houses can be built	Owners	Private property
Others		Local people want roads, wells, school and medical unit	All community members	Government

Meeting with men/women Survivors: Habil Al-Abdi

Case number (1);

Name: Mohamed Ahmed Nagi. Age (now): 45 Years. Age at the time of the incident: 21 years

Family status: very poor family.

We were travelling to a military camp in a car. With me, there was Ahmed Saleh Al-Shargi who died in the explosion. There was also his nephew, who was not hurt. My right leg was severed and I had some burns in my body.

The explosion took place in Wadi Dashed in 1982

I did not get any support after the incident.

We were not aware about the mined area. If we knew about it, we would have not entered it.

The incident did not affect my family or my status in the society. I was treated badly by my father and brothers.

I got an artificial leg from "YEMAC". However, I did not get any financial support from the Social Welfare Fund (SWF) despite the fact that many normal well-off local people are listed in the support program.

I would like to have a job or practice trading. I do not have the capital to start my own business. I wish I could have my own grocery or a small shop in the village.

Case Number (2):

Name: Ahmed Kasem Ahmed Sheirakah. Age (now): 45 years. Age at the time of the incident: 17 years. The family status is weak and poor

I was going to my uncle in Belad Al-Hawki in the direction of Dhoran / Anes when a mine exploded after I stepped on it. I was injured in the left leg and different parts of my body.

The incident did not affect my status, neither was my family affected.

I did not get any support after the incident.

I have never heard about “YEMAC”

I would like to get a regular salary or aid to enable me to live decently.

Case Number (3):

Name: Fatema Ahmed Nagi Yahya Al-Shargi Age (now): 40 years. Age at the time of the incident: 20 years

“I was going to another village with my daughter. A mine exploded when I stepped on it”.

She was injured. However, her daughter was not hurt. After the incident, her husband left her and got married to another woman. Later on, he took her children because she could not raise them after the incident. Since that time she has lived on charity from local people. She cannot do any job. She did not get any support from any official authorities in the village or outside the village.

Meeting with Children: Habil Al-Abdi

A joint meeting involving male and female children was organized in the village. The following points were the major issues raised:

- Children used to feel insecure when they passed near the mined fields.
- After demining the same children go freely for herding and fuel wood cutting.
- When the de-miners came and stayed in the village for a long period we came to know many things about mines.
- The awareness groups came to the village to conduct meetings and distributed pamphlets and newsletters on the dangers of mines.
- The awareness teams told us not to play with strange objects. We should report what we saw to the military and de-miners in the area.
- The people in the village helped in awareness campaigns. They told us about the dangers of mines. They told us if we entered a mined area, we should return in the same direction and should step on the same foot prints.
- Teachers at school also gave us information about mines.
- An incident happened to a 15 years old girl when she hit a mine and exploded. She died instantly. This happened two years ago.
- After demining we feel safe and go everywhere freely.

What children do in the village in addition to going to school?

Boys:

- Spray qat with chemical
- Irrigate crops
- Pick qat leaves

- Deliver qat to the market.
- Plough the land
- Plant seeds
- Herd animals in summer vacations
- Some go to the mountains for herding animals.
- Some go to fetch water on donkeys

Girls:

- After noon we work at home and herd animals.
- We go for a walk into the demined lands.
- We herd animals
- We collect fuel wood.
- We do not practice agriculture.

Impressions from the survey of Habil Al-Abdi village.

- Local people are not cooperating.
- No interest in the role of the survey team, despite highlighting the objectives and the importance of the survey.
- High expectations for getting projects and support from the Government through the survey team.
- They do not trust the demining of some areas. Despite this, they are happy with the demining in general.
- The Sheikh could not be met. He was travelling abroad for medical treatment.
- The cooperation among community members is absent. No Association or cooperative organization in the village.
- Most areas are grown with qat. One libna of qat gives a net profit reaching 200,000 YR annually.
- There is a feeling among local community members that the government is not giving them the attention they deserve.
- Despite the high population density, there is only one primary school.

Table 72 - Impacts and Opportunities after demining in Habil Al-Abdi village:

Category	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Farmers	Herding Fuel-wood Paths Buildings	All village members and neighbouring villages Herders Landowners	Fodder and savings on gas. The areas are hilly, suitable only for herding and fuelwood Access to grazing	Drill deep wells in the demined areas and build terraces Alternative roads to save time Construct private houses School Medical unit	Land owners All village members	They rely on qat production. And the drilling of a well is expensive = 10,000,000 YR
Leaders	Living	All village	They left	Intermediate	All village	The current

	Security	members and neighbouring villages	their houses in the mined area	and secondary schools Water constructions	members and neighbouring villages	intermediate and secondary school are located far away.
Women	Herding of sheep and camels Fuel wood Paths to neighbouring villages Buildings Stones	All village members Land owners and labourers from Zabid. Landowners	More animals and milk. The best fuel wood is from the demined area. Save money on butane gas. Landowners give permission to labourers Houses built close to agricultural land. For construction of houses and school.	Drill deep wells Electricity Establish an community association to help build houses in demined fields	Land owners All village members Land owners	Drilling of a well is expensive. Electricity project was not completed Constructing a house cost lots of money i
Children	Herding Fuel wood	All village members	Herding is the task of children. School children used to move in demined areas on stones	Intermediate and secondary school	School children	The current intermediate and secondary schools are located far away.
Survivors	Artificial leg (1) No benefits (2 &3)	Survivor 1 Survivor 2 Survivor 3	-----	Getting a regular income from a job or assistance Capital to start trading or establish a shop Getting artificial limbs	Survivors themselves	They do not have roles to play in agriculture They can't afford purchase of artificial limbs

Aden Governorate

Al-Farsi

Al-Buraiqa District, Aden Governorate

Date of survey: 22nd May 2006

Summary: Al-Farsi

Medium-sized, low impact village (1500 people in 2000, but thought to have increased greatly to the present size), at low altitude (sea level) on the coast close to Aden city (20 minutes by main road) and to Al-Buraiqa (5 minutes). The village was close to major military activity during the civil war, so there are minefields surrounding the village, on the coastline and near the strategic bridge to Al Buraiqa. Mines were anti-tank, not anti personal, so that most victims were killed outright. Only one survivor found (and interviewed). The village was a fishing village, and also next to an old salt producing facility (Iranian people from before the British – hence the name of the village).

The older houses are of wood, while newer ones are of cement block, built on sand. The whole area is desert, with no agricultural land and no irrigation. There are a few fruit trees near houses, a few sheep and goats, and 3-4 cows.

The **main feature, and main beneficiary of clearance**, is a large housing estate under construction in several blocks for the national oil refinery company. The land around the village is government land (was private before the revolution, then nationalised, then bought with compensation to former owners by the government (130 million riyals for 3.3 million sq m). The housing estate has destroyed the grazing land the village used to have. However, the community has benefited from the asphaltting of village roads, employment in the oil company (15 people), a bus to take students to University, classes for the school and contribution to the medical clinic. Local people are also asking for street lighting, a bus system to get to town and drinking water for the school.

The village has good relations with the Aden Refinery Company, and the Chairman, who is a member of the Local Council, seems to be a benefactor for the poor in the village.

Areas on the coastline next to the main Aden – Al-Buraiqa road were mined, as was the area next to the bridge. Demining has allowed these areas to be safe for construction of roads, the new bridge the new housing estate and any buildings near the road.

There is a local NGO (Al-Farsi Social Welfare Institution) that is led by local people concerned for the welfare of poor people within the community. It was officially registered in 2004, and uses anonymous donations from within and outside the community. Those who can (about 120 families) pay in 100 riyals per month.

The main objectives of the Association are to:

- Improve the livelihoods of the poor in the community
- Improve the education of local people, especially girls

The activities of the Association include:

- Assistance with medical fees
- Help for expenses – e.g. mending nets for local fishermen
- School books
- Burial expenses

They are hoping to get \$US7000 from the World Bank “Small Grants Programme”.

Many people (150 families => 30% of families) depend on fishing for their survival. In the village, roughly:

- 30% fishermen
- 50% artisans (builders etc)
- 20% labourers
- 15% professionals (schoolteachers etc)

The fishermen are poor, and have very small, old boats which are hand driven (no motors). They are confined to close, coastal waters. They don't have their own transport or refrigeration facilities, which sometimes means that produce is wasted.

We visited the Aden Refinery Company in the afternoon, and spoke to Ibrahim Khalaf – the Public Relations officer, and two engineers (one of them Eng. Salem Abdulla³ Salem, who is the one in charge of the housing project). The oil company was given the land by Al-Farsi village as the land near the refinery is not suitable for housing. At the time of receiving the land they didn't know there were mines nearby! However the company that won the tender to put in the foundations knew about the mines and worked closely with the de-miners. It was vital that the mines were cleared, and the engineer said that “anyone who lives on that land or visits it will benefit from the clearance of the mines”.

They hope to build 2600 houses on the 200 hectares assigned to them, on plots of 16 x 22 metres. Each house will cost about \$US20,000 to build, plus facilities costing about the same again. The project is on standby for the moment as they are looking for a source of finance.

When it goes ahead they will “sell” the houses to employees by taking from their salaries over a period of years. As well as the houses, they will put in telephone and good electricity, water and schooling.

Introduction: Al-Farsi

The survey team introduced themselves to the gathering. Later the representatives of the community introduced themselves. The representative of the survey team highlighted the objectives the mission.

The team stressed the fact that the team will collect data and assess needs without any commitments to development interventions and development projects. The team will submit results of the survey to “YEMAC” for follow up.

Present in the meeting were:

- | | |
|------------------------|--------------------------------|
| 1. Hasan Mohamed Ahmed | The chairman of the area. |
| 2. Omer Ali Omer | Chairperson of the association |

3. Husain Abkar Haza'a
4. Abdo Mohamed Amran
5. Naser Ali
6. Khaled Ali Hasan

Time Line: Al-Farsi

The life of people before planting mines was normal. People used to herd animals and collect fuel wood from the surroundings.

After planting mines, local people became scared and insecure.

Demining took place in the year 2001. After demining the area, an adjacent area was transferred into a housing project for the Aden Refinery Company. The area belonged to the family of "Daheisa". It was purchased (actually given free of charge by the government) by the refinery for the housing project.

Table 73 - Village Profile: Al-Farsi

A. Internal Resources in the village

Facilities	Status
Population	Not recorded
Houses	630
Schools	One Basic school
Medical unit	A rented office has been converted into a temporary medical unit
Water resources	Available
Mosques	One
Electricity	Available
Telephone	Available
Local Council	One Representative in little Aden (Al Buraiqa)
Cooperatives and associations	Housing Cooperative (Association) Al-Farsi Social Welfare Association
Shops	Small grocery
Post office	Not available
Police Station	Available
Development projects	Housing project
Demined area uses	Housing
Immigrants	Intensive to the area
Family links	Strong
Markets	Not available
Credits	Not available
International NGOs	Not available
Extension center	Not available
Dams and water structures	Not available
NGOs	Al-Farsi charity association

B. External Factors:

Facilities	Status
TV and Radio	Available
Internal immigration	Intensive
Government activities	Not available
Disasters	No
Links with neighbouring villages	Yes, strong

Political parties	Yes but from homes
Spaces for recreation	Not available
Sport clubs	Not available

Additional information: Al-Farsi

- The secondary school is in Little Aden. A bus was rented to carry boys and girls to the secondary school.
- No facilities for storage of fish.
- The area is made up of: 30% fishermen, 20% employees and casual labor, 50 % skilled labor and craftsmen.
- Local people used to raise animals and herd them in the area. However, the construction of housing projects prevented herding. Many local people started selling their animals. The cost of fodder is expensive in the market.

Meeting with Women: Al-Farsi

- Some women in Al-Farsi said they had not heard about mines. Others said that they heard about mines and the demining teams from “YEMAC”, but the sites where mines were planted are located far away.
- The demined area belongs to the government. The government established housing projects there.
- We do not benefit anything from the demined area. We want the government to provide electricity, water supply at reasonable prices. Currently, many houses are without electricity and water. People cannot afford payment of fees for services (water, electricity). Some connect from their neighbours. The cost is 1000 YR per month for half a day electric supply only. Similarly, some pay 1000 YR for water supply part of the day only.
- Many women in the village are employees in the Municipality. They work daily even on Thursdays. The salary is 9000 per month. The work starts at 06:00 am and continues to 11:30 am. Then we take a rest and have lunch and return till 17:30 PM. The municipality insisted that we work even on weekends. They said, if you do not then resign from your jobs. The weekends are important to us to be with our families and children.
- Our husbands work as casual labor in carrying stones, iron and cement in buildings. They work with the private sector.
- Some of our men are not working.
- The boys and girls collect plastic containers and sell them in the village. The money they collect is used to buy food and fish for the families.
- The government built a school four years ago. Only four classes. The higher grades go to the city in little Aden. The school has only one morning shift.
- Some of the community members raise animals. They herd them in Al-Heswa. Our area is not suitable for herding. We buy fodder from the market to feed our animals. The cost of a bundle, green fodder is 50 Rials. The cost of a dry bundle is 100 Rials.
- We sell a goat for 3000 -4000 Rials, and we buy what we need from that money.

Meeting with women: Impacts from cleared lands in Al-Farsi

What assets have been made	Who is using the freed	How were rights to land use decided?	What is the freed asset used	What is the socio economic
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available by mine clearance?	assets?		for?	return from use of the freed assets
Security	All community members			
No benefit From demined lands				

Meeting with women: Development opportunities for the Al-Farsi

Assets/Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
	The land is of no use. On this land housing projects will be built			

Meeting with Farmers / Fishermen in Al-Farsi: Impacts

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	Local community	Land was handed to the owners who sold it to the housing cooperative	Little use to local community	There is no return. It used to be used as range land
Wells				Wells cannot be dug. The underground water is saline
Roads	Roads have been constructed to give access to new housing estate			
Construction Houses	The housing cooperatives of the Aden Refinery Company	According to the owners documents	To construct houses for the workers in the refinery	There is no return to the village. The houses are for the refinery [N.B. the Refinery will provide facilities, which should also benefit the local community)

Meeting with Farmers / Fishermen: Development Opportunities for cleared land, Al-Farsi

Assets/	Constraints and	Solutions &	Who will	Who should
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Resources	Problems	Opportunities	benefit?	support?
Sea	No fishing equipment available such as seaworthy boats, nets, engines	Establish a fisheries association Provide good quality boats and equipment	All fishermen in the village (30%)	Government or non government organizations
Water (sewage water)	No sewage facilities in the village Spread of disease and mosquitoes	A sewage project	All community	Government
Construction	The school is small There is no medical unit (the temporary one is not working); No pharmacy Shortage of teachers	Construct school Construct a medical unit. Provide an emergency ambulance.	All community	Government or non government organizations
Markets	No market available	Build a market for fish and other goods	All community	Government or non government organizations
Cemetery	There is no cemetery	Allocate a space for a cemetery	All community	Government or non government organizations
Playground for children	No playing grounds	Allocate space for playing grounds	All community	Government or non government organizations
Lights	No lights on the roads to the bridge	Erect electric poles	All community	Government or non government organizations

Meeting with men/women survivors: Al-Farsi

Case Number (1): Mohamed Naser Salem Al-Hamaty, age 50 years (age at the incident: 38 years). Status: Married with six children.

“I was driving my car in “Karesh” when I hit an anti-tank mine. The mine exploded. My car was completely destroyed. I was injured in my legs and hands. I cannot walk on my right leg since the incident. This happened on the 10th of July 1994. I have not worked since I lost my car. No body is helping me. I am looking forward for assistance to begin my own business and generate decent income for my family. I do not know of any association helping mine victims or survivors”.

Meeting with Children: Al-Farsi

The meeting with children was organized in a way to hear girls and boys separately.

- The girls said they never heard about mines in the village. Some girls said that the mined area is located far away from the village. Girls do not go there. A girl said she did not know about mines or about who cleaned those mines.
- The boys (who were older) said that they knew about mines. Some people came to the school and gave them lectures. They warned them against playing with strange metallic objects.
- Some children died after playing with strange metallic objects in the village after the civil war in 1994. The names of the two children are: Salah and Omer Yahya Saghir.

- After demining the boys do not feel afraid any more.
- The boys opportunities are:
 - o Build a school
 - o Level a playground for football.
 - o Build a market.
 - o Install poles for lights on the road to Little Aden Bridge.

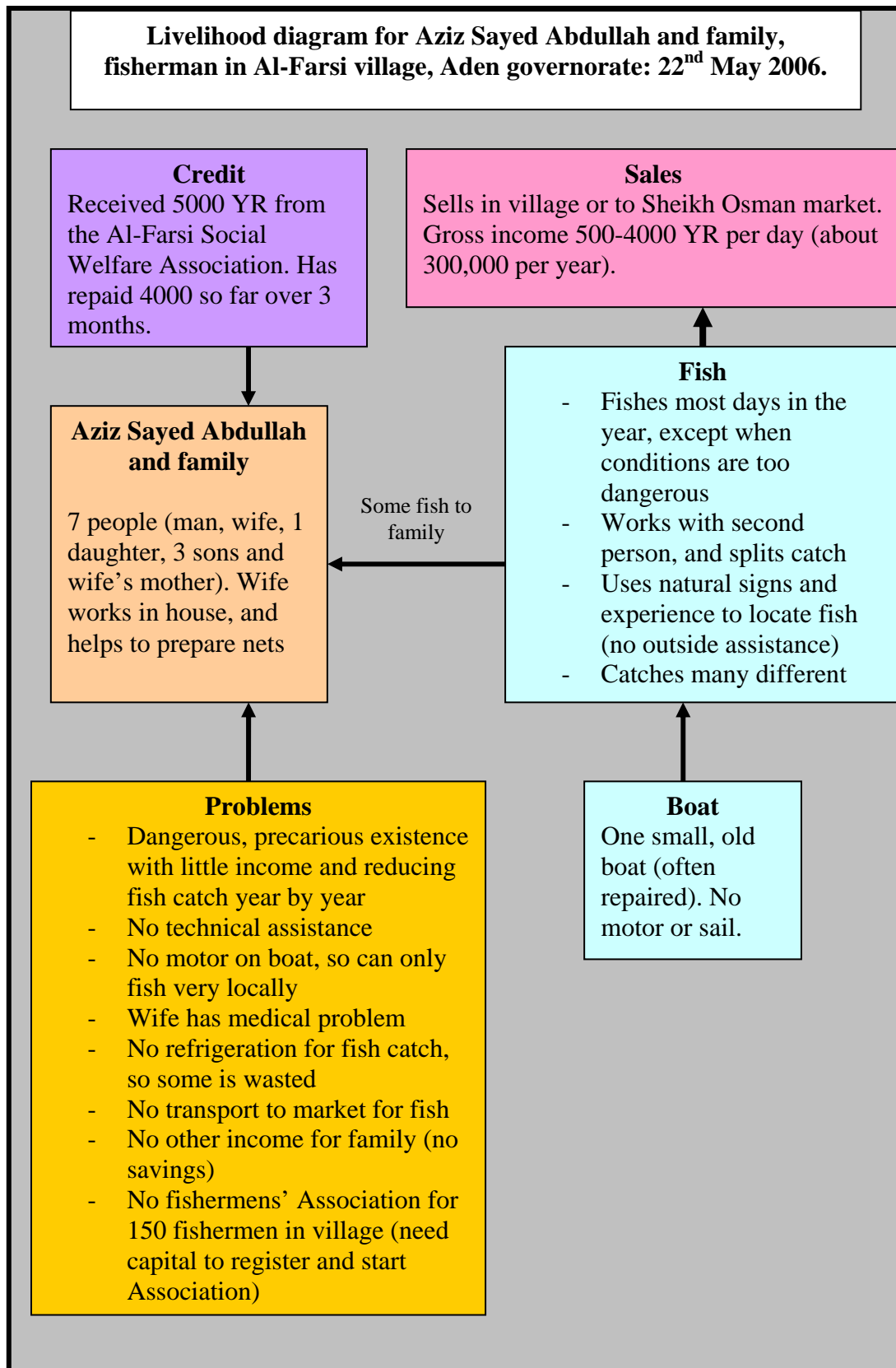
Impressions from surveying Al-Farsi Village:

- Poor community
- Women and children know little about mines.
- The sea is main resource for income.
- Fishing equipment is old and unsuitable for longer trips.
- The village has an active “social welfare association” to help poor in community.
- The new housing (oil company) destroyed the grazing land.
- The main beneficiary from clearance is government (oil company housing + roads + bridge)
- The local people appreciate the relationship/ support of the chairman of the oil company.
- Many women and men work as daily waged cleaners in Aden / Al-Bouraiika
- Fishing is a very dangerous, precarious work for little financial reward (see diagram)

Impacts and Opportunities after demining in Al-Farsi:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Fishermen	No direct return	-----	The demined area is not used	Provide modern equipment for fishing Provide transport Provide lighting Provide cold storage for fish	All community members	Old equipment of fishing No transport No lights to the village No storage facility for fish
Women	Security	Women and children	Felt secure after demining	Reduce cost of electricity and water Create job opportunities	All community poor women	High cost of connecting water and electricity Women are out of work
Leaders	Herding Recreation area	Few people herding Village is expanding rapidly		Build a school Medical unit Lights of the road Fishing equipment Transport	All community and fishermen	No basic and secondary school The secondary school is located far No lights for the road to the bridge No medical unit No fishing equipment No transport from the village to town
Children				Build a basic and	All	No primary school

				secondary school Foot ball Playground Recreation area	children in the village	No playground No recreation area in the village
Survivors	-----	-----	-----	-----	-----	-----



Al-Heswa

Al-Buraiqa District, Aden Governorate

Date of survey: 22nd May 2006

Summary: Al-Heswa

Large, high impact, low altitude village comprising farmers, herders, fishermen and government employees located on a major road between Sheikh Othman and Buraiqa. Demining took place in 2001, after which the community started feeling more safe, cultivation of crops revived, herding of animal continued and going to the sea shore using the short cut roads resumed.

Introduction: Al-Heswa

The survey team met representatives of the local community in Al-Heswa village. The representatives of the local community welcomed the team and introduced them selves to the survey team.

- | | |
|-----------------------------|--------------------------|
| 1. Samy Abdulla Bady | Fisherman |
| 2. Ahmed Saeed Noman | Employee |
| 3. Ali Salem Zuhair | Fisherman |
| 4. Nofal Mohamed Saleh | Lawyer |
| 5. Mohamed Saleh Saeed Buri | Prominent figure |
| 6. Mohamed Abdulla Amer | Farmer and mine survivor |
| 7. Ali Mohamed Sheikh | Fisherman |
| 8. Nabeel Hadi Fadhl | Employee |
| 9. Hashem Saeed Salem | Farmer wet lands |
| 10. Saeed Abdo | Farmer |

Time Line: Al-Heswa

The village was having a normal life before planting of mines in 1994 civil war. The village comprises of farmers, herders and fishermen. The village is located on a major road connecting Sheikh Othman with Little Aden (Buraika). The location of the village gave it a comparative advantage. The major activities of the village are cultivation of crops whenever there is rainfall or floods from Wadi Al Kabeer in Lahj.

The location of the village near the seashore gave an opportunity for fishing. Finally, the presence of a dense flora in Al-Heswa gave rise to recreation and the production of products from the naturally growing fan palms in the delta of Al-Heswa.

The local community members knew about mines after the civil war in 1994. They came to know after two incidences of mine explosion and explosion of a shell. The results of these incidents were three victims who were killed in the village. This led local community members to feel scared and reluctant to go anywhere in the village. Herding of animals stopped, cultivation of crops was terminated collecting fuel wood ceased. Fishermen started using alternative roads to go for fishing after realizing the road to the shore was planted with mines.

The demining of the area took place in the year 2001. After demining, the life of the local community was changed. They started feeling more safe, cultivation of crops

revived, herding of animal continued and going to the sea shore using the short cut roads resumed.

Table 74 - Village Profile: Al-Heswa

A. Internal Resources in the village

Facilities	Status
Population	10,000
Houses	2500
Schools	Two basic schools, one old , the other new
Medical unit	Available with a Doctor and two nurses
Water resources	Available
Mosques	Two
Electricity	Available
Telephone	Available
Local Council	One Representative
Cooperatives and associations	Fisher men cooperative (association) recently established
Shops	On the main road
Post office	Not available
Police Station	Not available
Development projects	Not available
Demined area uses	For roads, herding sand cultivation of crops
Immigrants	Few in the village from outside. Four in Saudi Arabia from the village
Family links	Strong
Markets	Not available. Outlets for selling vegetables and fruits on the main road.
Credits	Credits were used to purchase boats, but not anymore because of interest rates
International NGOs	Not available
Extension center	Not available
Dams and water structures	Not available
NGOs	One charity organization for fishermen

B. External Factors:

Facilities	Status
TV and Radio	Available
Internal immigration	Few
Government activities	The Aden Free Zone
Disasters	The civil war The flash floods in 1982
Links with neighbouring villages	
Political parties	Yes but without any official premises in the village
Social Charity Fund	Supporting 200 families in the village
Hail Saeed Charity	Supporting each individual with an amount of 700 YR per annum.
Local products	Baskets and other handicrafts from palm leaves Vinegar from palm trees grown in the area Fish from the nearby shore
Protected area	The Heswa wet lands. Naturally preserved area for migrating birds and fauna.

Roads	The construction of a new ring road affected the environment in the village.
Aden Free-Zone	Took significant part of the area and affected the movement of fishermen to the sea shore

2% of the community depend on Agriculture and herding; 400 families of fishermen; 40% of the community members are government employees. The recently graduated members of the community are unemployed since the year 2000.

Women work in handicrafts using local palm leaves. Vinegar is a trade mark of Al-Heswa. Migration to Al-Heswa is more than migration to outside Al-Heswa..

Meeting with Village Leaders: Al-Heswa

A meeting was organized with village leaders in the village in a qat chewing session. The following issues were raised in the meeting.

- There is a representative in the local council from the village.
- There is a cooperative association for fishermen. It is a NGO established two years ago. It is independent organization.
- The basic school is one of the projects in the village. It will be opened this week.
- We plan for a sewage project. This is very important to us.
- We are following the medical center project.
- We do not have any International NGOs supporting us.
- The government is the support provider in the area.
- Some Japanese missions came several years ago to construct a school. No follow up of their visits was made. The local people did not agree on the location of the school.
- There is an environment project in our village. Three local members of the community were trained. The General Authority for Environmental Protection is supporting this project.
- The demined area property is currently under dispute by the government and the local people. The local people claim that the land is theirs. The authorities said the land belongs to the government.
- Local people and the community leaders appreciate what has been done by “YEMAC” during the whole process of mine cleaning.
- After demining a Bedouin came and built himself a hut in the demined area. He is now living along with his animals in the demined area.
- After demining we tried to establish a fish market, but an investor came and took over the area.

Meeting with Women: Al-Heswa

The meeting with women took place in the village in one of the houses. Present were more than 10 women from different age groups ranging from 20 to 55 years. Following are the major issues raised and discussed pertinent to mines and demining.

- We were living peacefully before planting of mines in the village.
- We used to be scared when we come closer to the mined area. Now we are not scared anymore.
- The road to the seashore was planted with mines. So they told us before demining.
- Our husbands used to use alternative long roads to reach the seashore.

- The demined area was the property of the community. Now the land appeared to be a property of individuals who trade with the land.
- The land is being sold to anybody who pays. Some land was sold to people from outside the village.
- We started feeling secure after demining. Now we do not feel safe because the land surrounding our houses is being sold to outsiders.
- We have palms in the village, which are used to make handicrafts, and we also extract vinegar from these trees. Long time ago, we used to extract fresh liquid and sell it as wine. Now, with the spread of religion, we keep the liquid until it becomes vinegar before we sell it.
- Girls collect fuel wood and make handicrafts from palm leaves.
- Old women and married women make bread in ovens. Girls do house work.
- When the liquid is extracted from palm trees the owner takes 50% of the cost.
- Palm leaves are cut and let to dry for a week or so, before we use it in the handicrafts.
- If I buy leaves for 500 YR I make 1000YR profit.
- We have a new basic school.
- We did not hear about “YEMAC” before.
- Yes, when the demining teams came, they organized campaigns in schools about mines and explosives.
- There were three casualties, two by mines explosion and the third one by a rocket explosion.

Meeting with women: Impact of clearance in Al-Heswa in Aden: Al-Heswa

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	All community members	Traditional regulations	Herding Fuel wood cutting Palm production	For household needs
Roads	All community	Road connecting to the seashore Road to the land for herding and fuel wood Road to palms Road to the protected area	Fishing for sale Palm uses in the village Fodder Herding	

Meeting with women: Development opportunities for Al-Heswa village:

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Agriculture		Medical center	All community	Government
Herding		Secondary school	Boys and girls	Government
Fuel wood		Sewage	All community	Government
Road		Training center	Women and girls	Government
Fishing		Recreation area	All community	Government

Meeting with Fishermen: Al-Heswa

The meeting with fishermen was held in one of the corners in the village. Following are the major issues raised and discussed:

- We feel secure after demining. One man ran away from a scorpion and hit a mine.
- The area is clean and you can go freely in the area.
- The demined area is use for fishing but only partially. Considerable portion of the land has been taken over the by the Aden Free Zone.
- The demined area helped us reach the seashore in only five minutes. Before, we used to spend one hour to each the seashore
- The demined area is used for herding animals and fuel wood cutting. The area for herding is about 32 ha.
- There is a project aimed at rationalization of rangelands for sustainable use of resources.
- If herding is terminated in this area, farmers will sell their animals. They cannot afford buying fodder everyday.
- The goat requires fodder for 50 Rials/day, the cow 800 Rials/day and the camel 500 Rials /day for fodder.
- The numbers of herders in the village are 10 households.
- All community practices collecting fuel wood twice weekly.
- The cost of fuel wood is 800 Rials
- There are three households who benefit from collecting fuel wood.
- 28 households practice fodder production. Sorghum fodder is the most popular fodder for animals.
- Cultivation of vegetables is also practiced in the demined areas.
- The area closed to the sea is sandy and not suitable for cultivation. It is a good rangeland for herding.
- The demined became a recreation area for the community.
- The opportunities are construction of a fish canning factory or ice factory. The government or private sector can be potential donors.
- We want to organize fishing. Storage, sale etc.,
- We want a medical center.
- We want sewage project. We use treated sewage water for irrigating palms.
- We want lands and houses for community members. We want to document the houses built by the community members.
- We want a plan for the village with all services and internal roads.

Meeting with Fishermen: Development Opportunities in Al-Heswa:

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land as Road to the seashore	All fishermen	Movements do not require decisions	Pedestrian road	Saved time and efforts
Rangelands	Herders (10) persons	Herding is allowed to all community	Daily herding in 32 hectares	Goat= 50 Yr Cow= 300 YR. Camel = 500 YR.
Agricultural lands	18 farmers with wells	Private lands	Cultivation of fodder and vegetables	Cultivated land is 10% of the area. Savings from buying fodder

Fuel wood cutting	All community	Open to the community	Cooking + For sale	Savings in the use of butane gas
Roads	For safe passage			

Development Opportunities for cleared land Al-Heswa:

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Road to the seashore	Low income	Ice factory Medical center Sewage project Project for transport of treated sewage water to the coastal area for planting of palms	Fishermen	Government
Rangelands			All community	Same
Agricultural lands			All community	Same
Fuel wood			All community	UNDP

Meeting with men/women survivors: Al-Heswa

A meeting with four survivors of mine explosion was held in the village. A summary of the four cases is as follows:

No	Name	Age at the time of incident	Injury	Treatment
1	Naser Mohamed Husain	23 in 1995	Fragments in the hand and leg	Not treated
2	Mohamed Ali Al—Busaily	27 in 1995	Fragments	Treated
3	Mohamed Abdulla Amer	26 in 1994		
4	Yaser	18 In 1995	Fragments in the legs	Not treated
5	Mohamed Abdulla	21 in 1994	Fragments	Treated

All the injured said that they were not aware about mines when they were injured. Some of them did not get treatment. Their names were not recorded in 1999. Those who were registered were treated in the hospital. They did not get any care from any organization after the incidents. They asked for assistance in any way to have their own business to create regular and decent income for their households.

Some of them extended help to the demining teams. Others could not because they cannot go far.

Meeting with Children: Al-Heswa

There were ten boys and two girls in the meeting. The major issues raised were as follows:

- We heard about mines from our parents. They warned us not pick any strange object and play with it.
- We were given lecture by people who came from outside the village. They showed us pictures of mines and rockets and warned us against playing with these items.
- We were told to report whatever we find which seems unusual to the nearest elderly person in the village.
- We used to be scared when mines were still planted.
- Women came to our houses and talked to us about mines, girls said.
- Now we feel more secure.

- Three months ago, a boy found a small rocket under a tree. He reported this to father who came and took the rocket to the police station.
- We also found a mine in Al Kawd near the sea shore and told the in charge of the village about it.
- We never heard about incidents in our village. We heard about incidents in Al Anad area in Lahj.
- We warn our brothers and sisters about playing with strange objects.
- Boys in Al-Heswa help in buying foodstuff from groceries to our houses
- The girls help in dish washing and clothes washing as well as dusting. We also play in the free time.
- We have TVs and Radio. We also have (satellite) dishes in our houses.
- Some in the village cannot afford to buy TVs or Satellite Dishes.

A sample of the livelihood of a household in Al-Heswa:

Number of family members: 5

Area of cultivated land = 5 feddans

Cultivated area = 5 feddans.

Crops cultivated = Fodder for animals.

Livestock = Two camels, 4 cows, 6 goats and sheep.

No of harvests per year= 2

Annual yield of fodder = 400 bundle of fodder.

Price per bundle= 50 YR/bundle.

Total cost = $400 \times 50 = 20.000\text{YR}$.

Cost of production:

Land preparation = $4 \times 1500 = 6000\text{YR}$

Seeds (annually) = 13000 YR

Labor = 5000 YR

Total costs = 24.000YR

It is clear that the farmer do not get much financial benefit from fodder cultivation. He in fact looses about 4000YR. The major income depends on the return from fodder for feeding animals and the fuel wood and livestock he raises. Camels are used for fuel wood transport at a rate of 400 YR /day or $400 \times 30 \times 12 = 144.000$ per annum.

From the birth of two camels every two years, he sells the small camels at a price of = 30.000 YR

From the birth of four calves, the farmer gets = $4 \times 25.000 = 100.000$ YR annually.

Goats are sold to meet urgent needs only.

Milk from livestock is used for households needs only.

Impressions of the survey team on the visit to the Al-Heswa village:

- The huge numbers of different animals in the village is evident. Despite the fact that the area is located close to a coastal area and close to the city.
- The local people sell their lands to outsiders.
- No medical unit equipped with staff and equipment in the village.
- The local people are scared if their area will be part of the Aden Free Zone.
- The reliance of the local people on palm trees in the production of vinegar and traditional handicrafts was noticed.
- Forty percent of the local community members are government employees.

Impacts and Opportunities after demining in Al-Heswa:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Fishermen	Safe road to the sea shore	All fishermen	The road is a shortcut to the sea shore	Ice factory	Fishermen and local community	High percentage of people are fishermen
Women	Herding + Fuel wood	Women of the village	Fodder for animals	Medical center	All community	Lack of equipped medical center
Farmers	Agricultural Land	18 farmers	Return from sale of products Improved livelihood	Sewage project	All community	Reduce deceases
Children	Safe road Recreation Play	Children of the village	The area is a recreation area for children	Project for transport of treated sewage water to the coastal area for planting of palms	All community	Save water in wells and use treated water
Employees	Safe passage Use of fuel wood	Employees and families	Demined area is recreation area Cooking	Secondary school	Student (M&F)	Local people need recreation areas Boys and girls travel long distances

Amran

Al-Burayqa District, Aden governorate

Date of survey: 22nd May, 2006

Summary: Amran

Large, medium impact, low altitude fishing village. The area is about 15 km from the village, and was cleared in 2003. It is now used for crops (when there is rain), livestock, transport and the construction of housing by villagers, nomads, the government and outside investors. The main beneficiaries are nomads so far due to its distance from the village.

Introduction: Amran

The survey team was warmly welcomed by the local community. "YEMAC is always welcomed. The centre did a very honorable and humane job in the community when they demined the area". The following names were recorded representing part of the gathering in the village.

1. Waadh Saleh Ali Gaafar	Sheikh of the village
2. Naser Ali Awadh	Laborer in the fish industry
3. Ahmed Mohsen Al-Eisa	Private Sector
4. Wagdan Mohamed Eissa	Fisherman
5. Abdul Rahman Al-Zohairy	Laborer in the Ministry of Fish wealth
6. Obeid Mashhal	Retired person.
7. Rubban Mohamed Salem	Fisherman
8. Zahi Awadh Ahmed	Fisherman
9. Awadh Mohamed Zaid	Fisherman
10. Mohamed Fadhl Mohamed	Fisherman

Time Line: Amran

- The community was established 200 years ago.
- People used to live in peace and feel secure before the planting of mines. Even rainfall was regular. We never felt that rainfall decreased. Floods used to come from the foot hills to the seashore of Amran. Agriculture was flourishing and we were planting sorghum grains and fodder and watermelon. We used to collect fodder for animals.
- The situation during planting of mines was scary. We used to walk around with our animals with caution. The dangers of mines were everywhere. However, in cooperation with military and engineers in the field as well as the Swedish organization (Rad Barnen) we posted local warning signs. This was important to keep people away from minefields.
- The mines were cleaned in the area in 2003.
- The situation after demining is improved. We feel safe and we enter the area from all directions. The land became cultivable. There is an asphalted road passing across the cleared land.
- Some demined areas are being sold now to investors.
- Yes, we feel safe and secured. Than God, but we suffer from high cost of living. This affected our feeling of peace.
- The beneficiaries from demined area are all the community members from the village and from the surrounding villages. Even the government benefited, because

it constructed an asphalted road connecting Aden with Hudaida, thus saving time and effort.

- These lands were government owned before unity in 1990. The land used to be called “BOOR”. It was open for herding of animals. Currently claims of landownership started to appear. Belonging to three tribes in Amran and some, others are Bedouins. These are “Al-Makdashy, Khudairy, Barhamy and Buaisy” and others.
- The demined lands are used for herding by nomads. Some of the demined lands were transferred into real estate and are being sold as pieces of land for construction.
- Landownership before was communal. Now the tribes appeared and started to utilize these lands as mentioned above.
- There were no incidents of mine explosions after the year v2000.

Village Profile: Amran

A. Internal Resources in the village

Facilities	Status
Population	7000
Houses	700 – houses and 700 families
Schools	Basic school (1)
Medical unit	Available but do not provide services
Water resources	Available
Mosques	Two
Electricity	Available
Telephone	Mobile only. Preparations are underway
Local Council	
Cooperatives and associations	There is one but not functioning
Shops	Small groceries only
Post office	Not available
Police Station	Not available
Development projects	Not available
Demined area uses	The demined areas are for herding
Immigrants	No immigration to outside the village
Family links	Strong
Markets	Not available
Credits	Available in fisheries
International NGOs	Not available
Charity and welfare	There is presence of the Social Welfare Fund
Dams and water structures	Not available
NGOs	Not available
Petrol station	Available

B. External Factors:

Facilities	Status
TV and Radio	Available
Internal immigration	Yes there is immigration to the village
Government activities	Weak
Disasters	Civil War of 1994, drought and chicken pox
Links with neighbouring villages	Strong
Politics	Active but no premises
Fuel	Increased costs of fuel affected life (fishing boats)

Meeting with Village Leaders: Amran

There are no associations or even charity organizations in the village. The local people are fishermen, and we have plans to form a fishing cooperative. However, we did not get anybody who could support our efforts. We need the Government to support the establishment of the cooperative. This is important to save our rights and we can get subsidized fishing equipment. The cooperative will also ensure the life and prosperity of fishermen.

We would like the Government to survey the land and re distribute it to the village members. There might be problems arising from land disputes if the situation continues as it is now. Land is owned by the community of Amran and its nomad neighbours. Demined field are given to owners via Sheikhs and to supporters of the government.

The role of leaders in the “YEMAC” program was in the field of awareness raising and cooperation with teams during the field work. We worked with a Swedish Organization before 1994. We got a training course in “Khormakser. We showed the nomads the areas planted with mines. We distributed extension pamphlets and posters and put local warning signs at the entrance of these areas. After demining the area, I participated in a ceremony in “Khormakser”, with the Governor of Aden to hand over Aden as an area cleared of mines.

We need the Government to construct a secondary school because the school in “Salah Aldeen” is very far for children. Alternatively, the government should allocate a bus to transport children to school.

Meeting with Women: Amran

The meeting was attended by more than ten women from different age groups. Before planting mines, the area was safe. The Bedouins had huts in these areas, which used to be called “savanna” or open areas. The nomads used to herd animals (camels, cows and small ruminants). They used to accompany their animals and live in the area freely. This was because rainfall was adequate in the past. We also used to cultivate wheat, vegetables, sorghum for grains and fodder. Generally we use to cultivate the land in summer season, using water from artesian wells or from rain water harvesting. The agricultural activities were in “Habwala” area.

The situation during the war and during planting of mines was terrible. There were places which we could not use or pass through, such as the mined areas. The explosions of mines used to be heard in the surrounding savanna and in the desert. These explosions scared us. The victims of mines were humans and vehicles. The herder uses to send animals to the mined area and monitor them from a distance. Red signs were posted to show that the area is closed. Because of the war, water pipes to houses were destroyed. We continued like this for about a year after the war. During this period, the nomads were fetching water from mined fields to the village across the coastal zone. The cost of a 50 liter tank was 100 YR, and 1000 YR for a barrel. We used to buy one barrel per day. The nomads also collected fuel wood from the mined field with the help of camels. One camel load cost 1200 YR. The whole process of fuel wood collecting

and marketing to the village involved a trip of four days to go and come back. The household with 10 members consumes a camel load of fuel wood in 20 days.

After demining every body felt safe. The de-miners came to the area in the year 2000 and continued demining till the year 2003. After demining we found an area for recreation and dancing. We found also places for herding animals. These areas used to be closed for nomads. The road connecting us with these areas such as “Rega’a Wadi” was via Lahj. The road was lengthy and time consuming. Now after demining, there is a new road to “Wadi Rega’a” taking one hour only. Wadi Al-Mukhannak, Bir Ali, Bir Al-Rawdha, Bir Ka’wa were battlefields between North and South in the 1994 civil war. Therefore, mines were planted intensively in these areas.

In the cleared savanna there are now about 30 nomad huts. The income of these nomads comes from selling livestock and fuel wood. The revenues are used to buy flour and other food needs.

Awareness teams came to the area in 2002, when they gave lectures to school teachers. The teachers afterwards gave lectures and raised awareness among children and school boys and girls.

The role of community members in Amran:

Men	Women	Boys	Girls
Fishing	House work	School	School
Medical care	Medical care	Work in fishing in summer	Help in the house
Teaching	Teaching		

The Makdesha is the biggest group of community members (tribe), followed by the Al-Khudaira, Al-Sada, Al-Barahena and the Bedouin.

There is a project looking after developing women in the coastal area supported by an international NGO. Women are trained on sewing, tailoring, making handicrafts and tourist materials. The women are trained for two months before they start getting 2000 YR per month.

The project has supplied computers and photocopying machine, but no trainers in how to use them.

Women at the age of 30-40 years now all went to school in “Salah Aldeen” (new) and Little Aden (old). They used to go in buses purchased and supported by the Russians. At present, there is only a basic school in the village. Students who go to secondary school have to pay for transport by their own means.

Fishing is the main source of income in this village. There are two types of fishing; with hooks and with nets. Fishing is carried out at night when there is no moon. This is because they can see the shining of the fish in the water. They start fishing from 20:00 in deep water till the morning when they pull the nets in at 05:00. The catch is carried to the wholesale market for sale and from there the fish is marketed to all governorates. The fisherman earns from 5000 YR to 50.000 YR.

Meeting with women: Impacts in Amran:

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Herding	Nomads	Open for all	Camels, cows, goats, donkeys	Increased numbers of livestock because they used to get killed from mines Increased milk production as a result of rainfall and fodder.
Water	Nomads	Open	For drinking of animals	The distance is decreased to get water
Houses	Nomads	Open	Huts	
Security	All community in the village and nomads		Safeguard human and animal lives	
Road	Connecting to neighbouring villages and to abroad		Asphalted and earthen Asphalted after the war	Shortcut
Fuel wood	All community in the village and Especially, nomads	The Bedouins sell fuel wood in the village for bread making and cooking		

Meeting with women: Development opportunities for Amran

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Herding	No rainfall; drought	Provide water projects	Nomads	
Water	Few wells They go to far way places to get water		Nomads	
Houses			Nomads	
Road				
Agriculture	Lack of irrigation water	Provide water projects Cultivate cereals		

Meeting with Farmers: Amran

The meeting with farmers took place in Amran village. The following names were recorded of participants in the meeting with farmers:

1. Mahdi Fugaishi Abdan Farmer
2. Mohamed Obeid Awadh Farmer
3. Salem Daryan Abdan Farmer
4. Saleh Sherwa Awadh Farmer
5. Ahmed Salem Mahraky Farmer
6. Mohamed Salem Mohamed Farmer

The agricultural land can be used. However, because of drought, we do not use the land at present. Herding is possible at times when there is rainfall. Fodder grows after rain . The animals find grasses for grazing.

Agricultural lands are privately owned. During the pre-unity era the land was communal. Now the land is privately owned through the Sheikh and the Government. Herding is open for all. The demined area is used now for herding and fodder collection only. The decisions on land use are made by the Sheikh. There is random ownership of lands, despite the claims of tribes about land ownership.

The socio economic return is in the form of fodder grasses during rainfall. Currently, land is dry and not covered with grasses. There are no wells in the demined areas.

The area is used for cars and pedestrians in all directions. There is an asphalted road to Mukka port in Tihama. There are earthen roads in the area. These roads are shortcuts and allow entering the area from different directions in a safe manner.

There are no buildings in the area. This is mainly because the inhabitants are nomads.

Suggestions for overcoming the lack of rainfall include the drilling of wells for irrigation.

First: there should be a survey of the demined areas and distribution of land to the local inhabitants through courts and law. Utilization should be launched after land distribution.

There is a need for a housing complex (project) in the area. The current houses are old and not suitable for living.

There is a need for a secondary school in the demined area

The Association for mines in “Khormakser” city and the Swedish Organization organized campaigns to raise awareness at the village level in the area. The local community members took part in these campaigns.

Meeting with Farmers: Impacts in Amran

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Agriculture and Herding	Land owners All	Through Sheikhs Random handing over of lands 14 tribes	For herding	There is economic return from weeds and fodder during rainfall. Now there is no return
Water				

Roads	For all	For all community	Asphalted road Several earthen roads became available after demining	Shortcuts and saving in time and effort Accessibility to the area Links improved with urban centers
Buildings				Nomads

Development Opportunities for cleared land: Amran

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Herding	No rainfall	Drill wells for irrigation	Land owners after land re distribution	Government and any donor agencies
Water	People cannot drill wells because they are poor	Same	Same	same
Roads	No problems	No problems	All community	same
Buildings (houses)	Few and not suitable	We want housing project	All community	same
Schools	One basic school The secondary school is far	We need secondary school in the village or close by	All students in Amran	Same

Meeting with men/women Survivors: Amran

Case Number (1): Zain Saeed Saleh. Age now 38 years; age at time of incident 18 years.

Status: very poor.

“I got a bomb in the open field. I hit it with another bomb. It exploded and injured my left hand and my eye. These bombs are leftovers of the civil war in January 1986. The incident took place in the “Khabt” of Bir Ali (4 kilometers from Amran village) in March 1986. I did not get any support from the government or other organization. The mining people gave a card to me but without any use. They prepared a file for me but without any further assistance. I did not know if these objects were dangerous. I still bear the entire burden related to my injury. I never heard about “YEMAC”. The incident did not affect my family or my links to the society. I got married after I was injured.

I can work in the sea. I would like to get a fishing boat with an engine to be able make my own living in a decent way.

I helped “YEMAC” in all my capacity as an invalid and victim of a bomb explosion.

Meeting with Children: Amran

The meeting with children was organized in a joint manner involving boys and girls.

We got awareness information from the school and from our parents. The awareness teams gave us lectures. There are no victims of our age. We go to the demined areas to dance in weddings (girls). Now we feel safe after demining. We play foot ball in the demined areas (boys). We would like a garden or a recreation center to be established in one of the demined areas.

Additional Notes: Amran

1. There are Sheikhs in the village, who distribute pieces of land which belong to individuals, to be sold to investors with support of local authorities.
2. The remoteness of the village from the demined area led to limited benefits. The main beneficiaries so far are the nomads. The demined area is 15 km away.
3. There is a development project looking after women in coastal areas. However, no staff available for training.
4. Women aged 30-40 years are well educated. They used to go to school with support from the Government and the provision of a bus by the Russians.
5. Despite the relatively huge daily incomes, their livelihood seems modest and they appear poor.
6. Instructions were given to the check point not to allow bringing building materials to the village.
7. Local people are afraid that their demined lands will be given other investors by the government. They request the Government to maintain equity among citizens.

Impacts and Opportunities after demining in Amran:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Leaders	Herding road	Nomads All community	The area is desert, and the benefits are roads and herding	Housing project Secondary school	All community Secondary school students	Because they used to live in demined areas before Because the School is located far away from Amran.
Farmers	Herding Security	Nomads All community	The area is desert and the benefits are roads and herding and security	Drill deep wells for irrigation	Land owners	To be able to cultivate it
Women	Security Fuel Wood	All community	Security is important. Fuel wood is used to prepare bread	Drill deep wells for irrigation Secondary school Support the coastal women development project with computer trainers	Students of secondary school All farmers and land owners	Because the secondary school is far away (Little Aden + Salah Al-Deenn) To be able to cultivate demined land To be able to use the facilities of the women's project
Children	Security	All	Security is	Garden	All	Because they

	Playing in the demined areas	community members. Boys	the most important impact	Secondary School or a bus for transport	students in the village	live far from residential areas Where there are gardens The secondary school is far
Survivors	-			More support		

Beer Ahmed

Al-Buraiqa District, Aden governorate
20th March 2006

Time line: The history of Beer Ahmed:

Stage	Mining Activities	Duration (years)	Coping strategies of local community
1	Before land mines	Before 1994	<p>There were few land mines laid in 1966 during the civil war but were not of significance.</p> <p>Activities of the community were:</p> <ul style="list-style-type: none"> - Agriculture activities related to growing vegetables and fruits to supply Aden. - Fodder production for animals. - Cotton cultivation. - Beer Ahmed was a recreation area for the citizen in Aden because of the orchards and green areas. - The confiscation of land by the government in 1970 had negative impacts on farming in the area. - There was a state owned dairy farm in Beer Ahmed - Some members of the local community practiced fishing. - Animal production was part of nearly all households (goats, sheep, cows and camels) - Significant portion of the local community were government employees in the army and in the civil service. - Internal migration to Aden was common among employees.
2	During land mines	1994-1998	<ul style="list-style-type: none"> - Community members were reluctant to visit sites or cross areas because of the potential threat of mines. - Movements of individuals were restricted in the area. - The area was a battle field during the 1994 civil war. - The presence of bombs which did not explode was additional threat to locals.
2			<ul style="list-style-type: none"> - Children were most vulnerable to bombs and mines because they used to collect shells for sale, (there were deaths and injuries) - Agricultural lands decreased to about 40% as a result of mines and bombs. - Range lands were reduced to nearly 30 % because of the same reason. <p>Individuals (Animal herders) were affected by land mines (death and injuries) (14 deaths from Beer Ahmed and the neighbouring villages since 1994)</p> <ul style="list-style-type: none"> - Animals were affected by land mines. - Cars and other means of transport were affected by mines. - Beer Ahmed was attracting area for migrants from the surrounding districts till 1994. After the war many of local immigrants returned to their villages. - During the 1994 the whole of Beer Ahmed was evacuated during the war. Community members went to their relatives in Aden and Lahej. <p>The income of community members was drastically reduced during this period.</p>
3	Demining	1998-	

		2001	
4	After land mines	2002- 2006	<ul style="list-style-type: none"> - Current cultivated lands are mainly investments by new comers and influential military personalities. - Local community members are not capable of investment without support from donor agencies or government intervention. - There was an attempt from an FAO project dealing with water shed management to rehabilitate reclaimed land from land mines. The project involved community participation which was beyond the capacities of local beneficiaries. The project never materialized. - Another reason for reluctance of community members to contribute is lack of knowledge, feeling of insecurity, lost of trust etc.,

The local Map: Beer Ahmed

The map of Beer Ahmed was illustrated and changes incurred on the previously developed map were highlighted with participating members of the local community. Following are major conclusions of the discussions:

- The previously prepared map includes areas belonging to other community called "Djawala". This was corrected on the map and the borders of Beer Ahmed were made in the map by participants of the local community.
- There is a continuous influx of investors to Beer Ahmed mainly in the construction sector as well as investors in agriculture.
- Random and uncontrolled drilling of deep wells is on the prime without any regulations.
- Beer Ahmed became the major supplier of water to Aden Governorate. Nearly 20 new wells were drilled from urban water supply.
- Significant portion of lands were transferred to residential areas under housing projects currently in progress.

Profile of Beer Ahmed:

Resources Available in the Community: Beer Ahmed

- Two basic schools with mixed M&F classes.
- Medical unit
- Telephone service
- 6 mosques
- Asphalted road to the village and the military camp.
- Central electricity service
- Local rural water supply.
- Sewage is disposed of in local pitches.
- Seasonal collection of garbage.
- Partial electric lighting of the village alleys.
- Few groceries
- Three types of houses:
 - o Block and cement houses
 - o Wooden and mud houses
 - o Shacks
 - o Tents and temporary houses of animal herders

External influences affecting the local community: Beer Ahmed

- Limited Government service and lack of urban planning of Beer Ahmed.
- Weak electricity and water supply services.
- Lack of sewage services.
- The local Municipality is either weak or lacking.
- Lack of asphalted internal roads in the village.
- Active private sector in construction of houses.
- Active private sector in investment in agricultural farms.
- There is a weak charity organization (non-functional)
- There is a non functional agricultural cooperative "7th of July Agriculture cooperative"
- There is an active disabled children charity organization.
- There is a non functional women's association.

Local community members' jobs and sources of income:

- Government employees 50%.
 - Private jobs : 10%
 - o Car owners
 - o Shop owners
 - o Carpenters
 - o Engineers
 - o Construction workers
 - o Farmers
 - Farmers 10%
 - Unemployed 30%
- Members of local community affected by mines are only partially looked after. Medical care and some artificial limbs.
 - No training provided to disabled.
 - Disabled are not helped to enrol in the job markets.
 - Jobs for disabled are lacking.
 - No disabled associations in the local community.

Problems from local community perspectives: Beer Ahmed

A problem raised in the general discussions was that a large proportion (about 70%) of cleared land has been taken for non-agricultural purposes, and is not available to the local community. Demined lands now have following activities:

1. Land levelled ready for campus building for the University of Aden
2. Land for housing (Private entrepreneur)
3. Land for Al Aml (Hope) housing complex (government)
4. Road connecting Beer Ahmed to Lahaj.

A. Agricultural lands cleared from mines are not rehabilitated.

Suggested solutions from community perspectives:

	Solution	Responsibility
1	Provide machinery and equipment through donations or soft loans.	Ag. Fund + Cooperative + National Land Mines Com (LMC).
2	Rehabilitate destroyed wells through provision of engines, electric supply	Ag. Fund + Association+ National Land Mines Com (LMC). + Electric Corporation
3	Rehabilitate irrigation canals	Cooperative+ Ag Fund + Irrigation Department MAI +
4	Rehabilitate the diversion structure of Beer Ahmed	Irrigation Department MAI + Ag. Fund + Cooperative + LMC
5	Stop the mining of soil for construction (gravel +sand)	The Governor + The Ministry of Defence (issuing licenses)

B. Range lands cleared from mines did not lead to increased livestock production.

Suggested solutions from community perspectives:

	Solution	Responsibility
1	Provide soft loans to livestock owners to purchase animals.	Ag. Fund + Ag Office Aden + Local Council + LMC
2	Introduce techniques to increase fodder using	Ag. Office + Extension + Research +

	local fodder resources	LMC
3	Provide Vet Services	Ag. Office Aden + Ag. Fund + LMC
4	Train local community members to become Para Vets	Ag. Office Aden + LMC

C. Members of the Local Community in Beer Ahmed and the surrounding villages affected by land mines are not helped in capacity building and development to enrol in the market and improve their livelihood.

Suggested solutions from community perspectives:

	Solution	Responsibility
1	Conduct a survey on those who were victims of land mines (M&F).	Charity organization + LMC
2	Conduct a training needs assessment among male and female victims	Ministry of social affairs + Social Fund+ LMC
3	Provide training for physically disabled male and female members of the community	Ministry of social affairs + Social Fund+ LMC
4	Help male and female disabled community members to enrol in appropriate activities and or businesses to create their own income (soft loans to open small enterprises or micro businesses , find suitable jobs in the government or the private sector on the basis of their training and skills)	Ministry of social affairs + The Governor + Local Council + LMC

Discussion with women (facilitated by Ahmed Alawi): Beer Ahmed

The representatives of the female community present at the meeting (approximately 15 in total) were among those affected by landmines, and benefited by the removal of landmines. These representatives were females working in agriculture, herding of animals, government employees and housewives. From discussions with participants, the 4 categories are prioritised as follows:

1. Farmers
2. Animal owners (herders)
3. Government employees and students
4. Housewives

The farmers and animal owners were affected the most and could be treated equally, followed by government employees, housewives and unemployed youth. This is mainly because farmers and animal owners are frequently subjected to landmine hazards. The benefits gained by local community from removal of mines are (from women's perspective):

- The possibility of reclaiming the land clean of mines
- Feeling of security during movements and conducting agricultural practices and animal management
- There is now a chance of practicing herding of animals and fuelwood collection

Problems encountered after removal of mines: Beer Ahmed

Among the problems encountered after removal of mines are the following (from women's perspective):

- The non-ability of farmers to reclaim land because of their low income and because some farmers shifted to government jobs
- The high percentage of unemployment (reaching 60%)
- Some cooperatives were established locally, but they failed as a result of rigid conditions in the process of formulating these cooperatives set by the government

The problems are mostly related to agriculture. Lands have been cleaned; however capacity of local farmers to reclaim the land requires support and means not available to farmers.

Support required to eliminate the above mentioned problems: Beer Ahmed

The local female community suggested the following potential solutions:

- Support local associations and ensure that they have their own premises, and facilitate government procedures for the establishment of these associations
- Support handicrafts
- Set programme of land distribution to farmers
- Provide equipment for agriculture (agricultural equipment, drilling of wells)
- Rehabilitation of buildings (building materials)
- Provide simple soft loans for land reclamation
- Support the establishment of handicraft projects (sewing machine workshop, etc)
- Support animal production in the area
- Train beehive keepers on bee-keeping management practices

Potential providers of support to solve the above mentioned problems: Beer Ahmed

The female community members participating in the meeting perceive that the establishment of cooperatives/associations is a potential solution, however, past experiences in the process of establishment of these failed because of government bureaucracies. If established, these associations can help a lot to solving the problems in the community. The female community believes that solving the problem of the local community is the responsibility of the community members through the establishment of cooperatives and local NGOs. Government support can be facilitated only when these are established.

Discussion with survivors of land-mine accidents (facilitated by Abdul Wahed Mukred)

During the after noon a meeting was organized with individuals who were affected by land mines. Three cases were discussed. The following is the outcome of these discussions.

Case No. 1: Fadhl Saleh Hasan

Fadhl Saleh Hasan is a citizen of Kaloah Village in the surrounding area of Beir Ahmed. He was a driver of a vehicle. He lost one of his legs in the last civil war when

the car hit a land mine. Two passengers were killed and he was injured. After the injury he could not drive and thus as a driver he was of no use. He survived since 1994 through the social fund monthly allowance of three thousand Yemeni Rials. He has a family of **four children and a wife**. He gets charity help in occasions like Ramadhan in an ad hoc manner. Literally he is a beggar, but in a decent way. He was visited by more than a mission with promises which never materialized. Artificial leg was not suitable for him because of his weight and because of what remains from his leg. He is asking for a soft loan or charity help to be able to do on of the following Investment Scenarios as a source of income for himself and for his family:

- Purchase a modified pick up car to practice driving for selling merchandise on the car. .
- Deliver goods such as vegetables for sale in the village.
- Open a small shop in the village.
- Purchase animals for fattening in the village.

Case No 2: Ali Beish and his Brother

Ali Beish and his brother were injured as a result of a land mine. They survived the injury and practice their life in a normal way. They did not loose and of their parts but were severely burnt and survived after a long period of medical care. They are looking for training to be able to start their own businesses.

Case No. 3: Aisha

Aisha hit a land mine and lost her two hands from the wrist while gathering fodder in the surrounding range area. Aisha is now looking after herself through the remaining of her two hands. She did not get married as a result. She is looking for artificial fingers through advanced surgery abroad. She is also looking for proper training to be able to live normal life and eventually can get married or start her own business.

Opportunities in Beer Ahmed and the surrounding villages:

Beer Ahmed and the surrounding villages such as "Kaloa" village are heavily infested with *Prosopis cineraria*. This is an introduced species for combating desertification and sand dunes movements. The different uses of this tree are not known to the local community. Because of its thorny nature, many animal herders consider it a threat to their animals because of the thorns which affect animals trying to graze the edible pods. The uses of the different parts of this tree were highlighted to several animal herders in the village. These uses are:

1. The high protein content of the pods of *Prosopis cineraria*. Pods can be collected and crushed and used as valuable protein rich fodder to animals.
2. The leaves can be used as fodder if they are cut and brought to animals.
3. The stems of *Prosopis cineraria* are of high quality for fuel wood and charcoal
4. If the trees are properly pruned they can create a solid trunk which can be used as furniture of high quality.
5. The collection of pods can be a source of income to young male and female members of the local community.
6. An individual can collect 8-10 sacks/day for a price reaching 1200-1500 YR.
7. The cost of ground pods is 600-800 YR per sack.

If a pilot project is established in a site of the area where the uses can be demonstrated and the pilot area is supplied with a diesel engine grinder, it would be possible to convince farmers and animal owners to use the ground pods as a protein rich fodder for

their animals. This can be easily demonstrated and the results should become evident in not more than two months after feeding animals. This opportunity has been quite a success in several parts of Yemen and many members of local communities are heavily engaged in this; for example, in Wadi Hadramout and the Coastal parts of Hadramout. Similarly many farmers and animal owners are using this fodder to feed their animals in Tihama and Abyan using the same approach.

Al-Mas'abain

Aden Governorate

Date of Survey: 27th May, 2006

Summary: Al-Mas'abain

Large, long-established, low-altitude village with good facilities near to urban centers. Security, roads, grazing and increased land values are benefits of demining, with individuals earning good returns from selling land or developing it for housing.

There is a local organization for helping the poorer members of the community. The village has plans to establish a medical unit, a housing complex and several factories.

There are strong feelings (expressed mainly by women) that the entrepreneur Ali Dirham has confiscated some of the cleared land by force, and that he should be dealt with by the law.

Introduction: Al-Mas'abain

The survey team first introduced themselves one by one, and then highlighted the objectives of the survey. The representative of the team indicated that the survey is aimed at the socio economic study of the demined areas and the benefits gained from cleaning the mines in the selected area. The study will help the local community in the identification of potential opportunities and the plans for the development of targeted demined areas. The survey will also help "YEMAC" to improve its activities in the future. There were no guarantees or promises given to the local community to raise expectations on concrete interventions or assistance likely to be extended by the survey team. The study will assess needs and submit that to the concerned authorities in "YEMAC".

The representatives of the local community greeted the survey team and expressed willingness to provide all the information required.

The representatives of the local community were as follows:

1. Hashem Saleh Mas'abain.
2. Ayoub Awadh
3. Ali Zaid Salem
4. Ahmed Hashem Saleh
5. Mohamed Nageeb Naser.
6. Fahm,an Nageeb
7. Mohamed Hashem
8. Madyan Ali ASaleh
9. Marwan Murshed

After this introduction the team proceeded to interview five categories of the members of the local community. These are: farmers, women, local leaders, children and survivors of mines.

Time Line: Al-Mas'abain

The village is about 800 years old.

Mines were planted in 1994 (the last civil war). Before planting mines life of people was normal. The community used to move around in the area without any feeling of fear or insecurity.

After planting the mines, the life of people changed dramatically. Local people started to move around with caution and with fear and reluctance to go anywhere.

The demining started in 2001 and 2002. After demining, local people started moving freely. The value of the land increased and many local community members managed to sell their lands for construction purposes for good prices. The revenues of sale were used to improve the livelihood of the individuals in the community. Fortunately, there were no victims of mine explosions in the village. There were no incidents after the year 2000. The feeling of security was one of the most important benefits from demining.

The demined area was used as an asphalted ring road connecting the village with neighbouring urban center of Dar Sa'ad in Sheikh Othman District.

The major beneficiary is Mr Ali Dirhim, who bought a big area in the village after it was demined. Mr Ali Dirhim established a residential housing complex in the purchased land.

The remaining demined land is the property of local people in the village.

Village Profile: Al-Mas'abain

A. Internal Resources in the village

Facilities	Status
Population	3000
Houses	200
Schools	One basic school
Medical unit	Not available. The area is close to a medical center and hospitals (5-7km)
Water resources	Water is available
Mosques	Two mosques
Electricity	Available
Telephone	Being finalized
Local Council	There is a representative of the local council in the village
Cooperatives and associations	There is an association in the village
Shops	Very few. The area is close to the city.
Post office	Not available.
Police Station	Available
Development projects	Not available except the housing project near Mas'abain
Demined area uses	Roads and housing project
Immigrants	Not evident
Family links	Strong
Markets	The area is located near a major urban center
Credits	Not available because of the un fair interests calculated
International NGOs	Not available
Extension center	Not available
Dams and water structures	Not available
NGOs	One charity organization in the village

B. External Factors:

Facilities	Status
TV and Radio	Available
Internal immigration	Not available
Government activities	Intensive in different forms: roads, water supply, electricity education, schools, etc.,
Disasters	The civil war in 1994. During the year 1940 Plague hit the village and 40 people died.
Links with neighbouring villages	Strong links

Meeting with Village Leaders: Al-Mas'abain

There is an association in Al-Mas'abain, which was established in 2004. It is a charity organization. There is a plan to establish a medical unit, a housing complex and several factories such as gas and steel factories, which are supported by investors.

The demined lands belong to the local citizens. They have documents supporting their claim (however, see the claims made by women about Mr Ali Dirham).

There is a protected area in the village. This area is closed. The area is a herding area for camels. The local council and the Sheikh prohibit cutting trees in that area for the good of the community.

The whole village of Al-Mas'abain is one family (Mas'abain family).

Meeting with Women: Al-Mas'abain

- The main benefit from demining is security.
- Camels and donkeys herd in the far plantations four hours walk away. Girls go with the animals. The time taken has been reduced by roads opened since demining.
- We sell livestock to buy household needs and medicine for our children. The cost of medical care is about 1,000 YR plus the cost of medicine. Malaria is the most serious disease in the village. The diseases are spread because of the sewage accumulation in ponds around the village.
- There is no telephone connection. The mobile phone is widespread.
- Mines were in the cemetery of the village. Despite the mines we used to bury our loved ones who die in the same cemetery. This is because of the wish of the loved ones who die. They want to be buried near their relatives.
- The demined areas were confiscated by Ali Dirhim, who is a business person from Al-Hudaida.
- A relative of a landowner said she used to cultivate the land and make a living. However, Ali Dirhim came and took over the land and buried the well and confiscated the pump and engine. The cost of drilling the well was 500.000 YR. After this he build a huge fence with towers for security.
- We used to have a place where we used to tie our camels. Ali Dirhim confiscated this area. Now we tie camels near our houses.
- The followers of "Ali Dirhim" stabbed a camel and shot another animal with live ammunition two months ago.

- A girl was killed in a mine explosion while she was collecting fodder. She was 21 years old. Her name is “Wedad”.
- We have a piece of land, which can be used to build a medical unit in the village.
- Mine awareness teams arrived in the village three years ago. They gave lectures and hung posters on the dangers of mines. They showed samples of different mines.
- They stressed that if anybody found a mine or a strange explosive device, he or she should report that immediately.
- The teachers cooperated with the awareness team in organizing additional lectures and house-to-house visits to show households the types of mines and their potential danger.

Meeting with women: Impacts of demining in Al-Mas’abain

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Agricultural land	Land owners Ali Dirham	According to ownership documents By Force	Cultivation of crops Housing	Sold to buyers from Sheikh Othman city
Herding	All community	Open for all (except in confiscated areas)	Camels, donkeys, cows and small ruminants	For household needs and for sale
Road	All the village and neighbouring villages	Open for all	Circle road No 70 leading to Abyan , Khormakser Circle road No 90 leading to Lahj and Khormakser and Aden	Shortcut Saved time and effort
Buildings and constructions	Ali Dirham	By force	Still stopped There is security and the area is fenced	

Meeting with women: Development opportunities for Al-Mas’abain

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Agricultural Land	The presence of Ali Dirhim	Solve the problem in the court between community and Ali Dirhim	Original Land owners	Government and the Law
Herding	Ali Dirhim might be killed	Stop him using force	Camel owners	Government

Meeting with Farmers: Impacts of clearance: Al-Mas’abain

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Land	Farmers in the village	Because it is located in our	Land	Saving fodder 100% Increased number of animals

Herding	All the community	property Same	Herding	
Water	Nothing	Nothing	Nothing	Nothing
Roads	Every body	Every body	Every body	Connecting the village with the district. Time saved and easy movement
Construction (Buildings)	Yemeni investors	Bought from local people	Development projects, factories, fenced areas	Development project accommodating all young people in the village

Development Opportunities for cleared land: Al-Mas'abain Farmers

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Agriculture Herding	High cost of fuel	Reduce cost of fuel Provide credits without interest	Farmers	Government and any non governmental institutions
Water				
Roads				
Construction (Buildings)		We need medical unit or medical unit		Government

Meeting with men/women Survivors: Al-Mas'abain

None in the village

Meeting with Children: Al-Mas'abain

Six children were present in the meeting, ranging from 10 years to 16 years.

The children were aware of the mines and their location. They were told by their parents, and elderly people in the village. The mined area crossed the area between Mas'abain and Al-Emad village.

We herd animals (cows and camels) with our relatives. We do not fetch water. The water supply project is in the village. Cotton is cultivated in the village as well as vegetables. The local people cooperated with the demining team throughout their stay in the village and in the different stages of mine clearing.

Impressions from the survey of Al-Mas'abain Village

1. Local people feel safe after demining the area.
2. There are development projects in the area implemented by one investor (Ali Dirham).
3. The demined are has been partially used for construction of an asphalted road connecting the village with the district centre. There are development projects belonging to investors from outside the village.
4. The demined are has been transferred into real estate and being sold as pieces of land for construction. The revenues helped improve livelihoods of local community members.
5. The spread of diseases such as malaria and typhoid because of the open sewage in the surroundings of the village.
6. The village is subject to intensive expansion and is gradually becoming an urban centre. This expansion of the village is taking place with medical services.

7. The whole village is made up of one extended family, the Musabyn family. There are no outsiders in the village.

Impacts and Opportunities after demining for Al-Mas'abain village:

Category	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why opportunities are important?
Farmers	Herding\ agriculture	All community Farmers	They depend on agric and herding animals	Medical unit	Community of the village	There is no medical unit in the village
Leaders	Broaden roads Development projects	All community Community and investors	It is important to connect the village Provide job opportunities	Plan the village as an urban area Create job opportunities	All community in the village and investors Youth	To facilitate provision of services Reduce unemployment
Women	Security Peaceful cemetery	All community and neighbouring villages	There are evident benefits to women	Sewage project Medical unit	All community in the village	The diseases are spreading There is no medical unit
Children	Security Roads	All community and neighbouring villages	It is a basic need Connect the village with other areas	Recreation area Park	All community	There is no park or recreation area
Survivors	No victims in the village					

Lahij Governorate

Al Khudad⁴

Tuban District, Lahij Governorate

Date of survey: 24th May, 2006

Summary: Al-Khudad

Al-Khudad is a large, low-altitude, low-impact village, which was badly affected by mines and unexploded ordnance in about 80% of the village, wadi and agricultural lands. It was cleared in 2005, since when people have started to use the land productively for crop and fodder production and the collection of fuelwood. 40% of adult men are government employees. Women also earn income through agricultural employment, but at a very low wage rate (70 YR/3 hours).

There is a charity organization in the village that works with international NGOs such as CARE and GTZ.

A number of government projects are underway, but a much needed sewage system is not among them. Locals are also concerned about soil erosion, and the effects of severe floods on houses.

Land that was re-distributed during the agrarian reform is now being disputed by the original landowners, and this needs to be settled. Also local people are afraid of outsiders taking their land.

Time Line: Al-Khudad

Before the presence of the unexploded rocket shells, Al-Khudad village was a peaceful, rural area where farmers practiced agriculture and animal herding. The major crops cultivated by farmers were vegetables, cereals and fruit trees. Irrigation from local wells was the major source of water when there were no floods or the spring in the wadi is dry. A considerable number of village members worked as casual laborers in the farms of the delta in Lahij.

During the civil war in 1994 the area was a battle front. Most of the community households fled the village to other parts in the delta of Tuban where there was safe shelter.

When the civil war was over, the community households returned to the village, which became a dangerous area because of the unexploded shells and ammunitions. The leftovers of the battle zone were everywhere in the village, in the wadi and in agricultural lands. Some of them laid on the surface of the soil others were half buried. Warnings were made by local authorities that local people should stay away from the strange objects and should report what they saw to the nearest police station. The sites of Wadi Kabeer and Wadi Khair were the most severely infected with shells.

The demining teams started visiting the village at the beginning of the year 2005. After clearing the area from shells and mines, people started feeling more safe and secure. In

⁴ Spelt Al-Khadad in LIS report.

2001 a mine exploded on two little girls in the area. After this, there were no incidents related to mines and shells. There were cases where people did not cultivate their lands because of the un-exploded shells and the danger of mines. These land owners starting cultivation of their lands only after the work of de-miners was completed and certificates were issued.

Village Profile: Al Khudad

A. Internal Resources in the village

Facilities	Status
Population	4000
Houses	450
Schools	Basic and secondary schools (2)
Medical unit	Not available
Water resources	Local water supply
Mosques	One
Electricity	yes
Telephone	yes
Local Council	The representative from a neighbouring village
Cooperatives and associations	A charity organization is active and supported by international agencies Water users association active (recently established)
Shops	Small groceries
Post office	Not available
Police Station	Not available
Development projects	Spate improvement project. Proposed project for asphaltting the road
Demined area uses	Agriculture production. Roads
Immigrants	Investors in agriculture(farms , drinking water factory)
Family links	Strong
Markets	Not available
Credits	There are applications for credits from the credit bank
International NGOs	Yes (CARE, GTZ)
Extension center	Yes but not functioning on a wide scale
Dams and water structures	Flood Water diversions on the main Wadi
NGOs	One charity organization

B. External Factors:

Facilities	Status
TV and Radio	Yes
Internal immigration	Few immigrants to neighbouring villages. After demining, they returned
Government activities	Evident in the spate improvement project.
Disasters	Floods Heavy rains in the year 2006.
Links with neighbouring villages	Strong

Additional information: Al Khudad

30% of the local populations work in agriculture.

2% work in herding animals (animal owners)

40% of the community members are government employees and retired persons.
 1% are graduates from secondary or university. Not working
 Land available for housing construction is not available. Most of the land is cultivated or wadis.
 Crops grown are: onions, fodder, tomatoes, cotton, okra, eggplant. Crop production is irrigated from wells.
 The major market is Al-Hawta, the old city and the capital of Lahj.
 Cost of irrigation is 300 YR per hour.
 Cost of labor 400 YR per day
 Wages of women is 70 YR per three hours
 Cost of transport of products is 500 YR for four trips.
 Cost of production is 30% or 25% from the total return.
 The highest land ownership is 30 fedhans (One ha = 2.250 fed)
 Lowest land ownership is 5 fedhans per person.

Meeting with Village Leaders: Al-Khudad

The meeting was attended by:

1. Mohamed Salem Ghaleb Officer in the Ministry of Defense and community leader
2. Adnan Saeed Ali Deputy of the local school and community leader

Following are the major issues raised by the local community leaders in the meeting:

- There is a charity organization in the village. This charity organization looks after poor people. The organization assists poor families with livestock raising and training for young people in engineering and car mechanics. These training programmes were supported by international NGOs such as CARE, GTZ and others. The charity relies on the contribution of the members and donations from donor agencies. The members of the charity organization are more than 130.
- There used to be a farmers' cooperative. However, the cooperative was cancelled after the civil war. The employees of the cooperative were transferred to the branch of the Ministry of Labor in the governorate.
- The village is cosmopolitan. The members of the community are from different governorates.
- The plan of the village is to asphalt the road, construct a medical unit and premises for the Husainy Football Club. These plans were approved by the local council and will be financed from the government budget.
- We applied for a sewage project for the village. However, this project was not approved so far.
- Among the submitted projects was the construction of a 12 class school to meet the expanding number of pupils in the village.
- There is a branch of a soil and water improvement project in Saber district in Lahj. .
- There are three Water Users Associations (WUA) established by farmers initiatives and supported by the agricultural office. These associations aim at improving the management of the irrigation structures in the Delta for the welfare of all farmers in the area.
- The water users associations will be supported further to provide members and farmers with different agricultural services.
- The land in the area belongs to the government and leased to farmers.

- The total area cleaned or demined from explosive devices is about 80% of the total land in the area.
- The beneficiaries from cleaning mines and explosive devices are the farmers themselves.
- The community in the village is grateful to “YEMAC” for their genuine efforts in demining and cleaning the area from the explosive devices left behind after the last civil war in 1994.

Meeting with Women: Al Khudad

The women in the meeting said:

- Only some of the women had heard about mines and shells. These are left over from the time of the last civil war in 1994.
- All village citizens were evacuated to neighbouring villages during the last civil war in 1994. “We ran away from here because there were military activities and camps here. When we came back, we find out many shells in the area and in the wadi. We used to see pick ups coming to the area where mines and shells were found. After the war we were not scared”.
- In Wadi Khair, crops like watermelon and sweet melon, onions, tomatoes and jasmine are cultivated. Local people, who do not own land, own animals. Ownership of animals differs from one household to another. Minimum is three sheep or goats. Sometimes ownership is higher. Landowners might allow women to collect fodder or grasses. No herding is practiced. Fodder is purchased from the market on a daily basis. Those who own animals and have land, take their animals to their land for herding.
- Men work in agriculture and get monthly salaries.
- Women practice agriculture as casual daily paid labor. Women work in planting onion seedlings, planting tomato seeds, weeding, picking of okra, carrying out mango and papaya fruits and picking of fol. The daily wage (3 hours) of women is 60 YR.
- Women who own land go to the field for work. However, young girls do not go to the field. They hire paid labor in some cases. Girls attending school help in house work.
- We collect fuel wood from the wadi. Normally after flood, there are lots of fuel woods left by floods in the wadi. On other days, we purchase fuel wood from retailers who come to the area on camels or trucks.
- Most wells in the area are open wells (shallow wells). When floods come down the wadi, water in shallow wells is recharged.
- Landowners are few in the area. They are from outside the area. Most farmers in the area are from among those who benefited from the agrarian reform. The government gave them the land for cultivation. Before the agrarian reform current farmers were sharecroppers.
- We rented land from the government. We pay 6000 YR per annum as rent to the Government.
- Women make chains of jasmine flowers for wearing in the afternoon. Special arrangements are made for making a circle of jasmine for weddings.
- We purchase our needs of vegetables from the market in the city. Sometimes when we harvest vegetables, we exchange with each other products for domestic use.

Meeting with Farmers and Animal Owners (Herders): Al Khudad

Number of households in the village is 450, with an average of 8 individuals in each household. The approximate number of members of the community is 3600.

One farmer indicated that a rocket fell and exploded in his field near the well. The well had cracks in it and the water disappeared from the well. He was forced to dig another open well for irrigation.

Another farmer from the same village said that people are feeling safe. Thanks to the efforts of the demining teams who cleaned the area from mines and exploded shells.

Some farmers indicated that the source for fuel wood in the village is the wadi. Farmers go down the wadi after floods. They get lots of fuel wood brought by the floods from the uplands.

A farmer from the same village said that forty years ago the land was confiscated from the sultans and the rich people and handed over to the poor farmers, who were sharecropping these lands (agrarian reform programme). For the past forty years, the new owners managed the land. Currently, some people started claiming that this land is theirs and they get it back. Many farmers are surprised and want this problem solved as per the arrangements stipulated in the law.

Al-Khudad community asks for a sewage water project to solve the problem of safe disposal of sewage water. The preliminary study of this project has been completed by the charity organization. Local community members expressed willingness to contribute 10% of the total cost of the sewage project for the village.

The water supply project is not functioning and cases of water cuts are common. The project is about twenty years old and cannot meet the growing demands of the community. There is an urgent need to develop this water project to meet the increased population. The local community wants support to this vital project through drilling of new wells and renovation of the pipe network to deliver water to different parts of the village and the surrounding villages.

Heavy rains fell in March 2006. There was severe damage caused by the high rainfall and floods. Al-Khudad was one of the areas affected by these heavy and unusual rains. Nearly thirty households were affected by floods, and their houses cracked by the stagnant water in the village for several days. So far, no serious attempts were made to help people overcome this disaster of rainfall and floods.

Meeting with Farmers: Impact of clearance Al-Khudad:

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Agricultural land in Wadi Kabeer	Land owners in Wadi Kabeer	Land ownership is known	For agriculture	30% of households rely on agriculture
Herding in Wadi Kabeer and Wadi Saghir	Herders Local people	Herding is open for everybody in Wadi Khair	Herding	5% of households depend on herding Some households are only

				herders (Bedouins)
Fuel wood collecting	Women and local people	Fuel wood collecting is open	For fuel wood	There are households who make a living from selling fuel wood. Some households still rely on wood for cooking

Development Opportunities for cleared land in Al-Khudad: Farmers

Assets/Resources	Problems	Solutions & Opportunities	Who will benefit?	Who should support?
		1. Solve the problems of land ownership of most local community members. Old owners returned and black mail the new land owners	Land owners	Government
		2. Sewage network study is completed and ready for implementation by the charity organization + the community 3. Water supply project needs extension to satisfy the growing needs of the community. 4. Protect the wadi banks from erosion because of floods. 5. Compensate the affected houses because of last heavy rainfall	All community All community All community All community	Government + Donor agencies

Meeting with men/women Survivors: Al Khudad

No data

Meeting with Children: Al Khudad

The meeting with children involved both girls and boys in the same site in Al-Khudad. The following issues were raised by children in the meeting.

- Girls in the meeting said that they did not know about mines, whereas some boys said that they heard about mines when the awareness team of “YEMAC” came to the village and gave lectures. The team came in red pick ups. The boys added that they did not hear about shells and explosive devices. Some boys said that they never saw any explosive devices in the wadi or in the area. One boy stated that he found five explosive devices buried in the soil. He reported that to the police, who came and took them. A boy said he heard about devices and mines from the TV. Some boys said that they saw the demining team working in the wadi last year.
- Girls said that they help their mothers at home after coming back from school. Girls said that some girls work in the wadi. They collect fuel wood or pick jasmine flowers or cut fodder sorghum. Some of us have livestock. Five or six animals only. Some do not have any animals and some have many.
- The potential opportunity from the children’s perspective is the building of a medical unit in the village. The medical center and the hospital are located in Al-Hawta, which is more than 10 kilometers away from the village.

Main impressions from the survey of Al-Khudad:

1. Despite the fertility of the soil and the diversified crops grown, yet this was not reflected in the well-being of the local people.
2. Local people are afraid of new comers to implement development projects in the village
3. Poor farmers, who received land from the government before unity are subjected to pressures and blackmail as well as threats for the return of land. Farmers insist on the application of the law on this matter. This law calls for the compensation of original owners.
4. Despite the strategic location of the village on the main roads from Aden to other Governorates, this comparative advantage has not been utilized efficiently by the local community members.
5. There is a sports club in the village. It was established in 1964. The club is considered the most important landmark in the village.
6. Women work as casual labors in cotton picking, vegetable picking and also in jasmine picking as well as mango and papaya handling and carrying to trucks in the field.
7. The fear of local people from mines and explosive devices lasted not too long after the civil war. This was because they find out that the area was planted with explosive devices not with mines.

**Analytical study on the level of income of a household: Animal owner (herder)
Saleh Ali Husain, aged 50 years**

Number of household members: 4 girls and 4 boys + the father and the mother = 10

The head of the household owns five feddans. The land is cultivated with fodder for his animals. + cotton.

Fodder

The yield of fodder is 1000 huzma (bundles) per year

The cost of huzma is 60 YR. = $1000 \times 60 \text{ YR} = 60.000 \text{ YR}$

Cotton

When he cultivates cotton, he collects 10 bags of cotton weight 60 lb.

The price per bag is 2000 YR.

The total price of cotton = $2000 \text{ YR} \times 10 \text{ Bags} = 20.000 \text{ YR}$

The cost of production

Land preparation by tractor = 10 hours

Price per hour = 800YR

Total price of land preparation = $10 \times 800 = 8.000 \text{ YR}$.

Costs of seeds = 2000 YR

Cost of labor for the whole season = 5000 YR

Total cost of production = 15.000 YR

Therefore the fodder produced by the farmer is consumed within one to two months only. The remaining needs for the other ten months is met by purchase of fodder from the market. The animal owner is forced to sell some of his animals to purchase fodder.

The animals owned by the herder are:

Goats 150 heads

Sheep 150 heads

Cows 5 (F)

Camels 7 (F)

During herding, especially after rainfall, the farmer can herd in the range lands going from one place to another for six months and for the remaining six months he relies on the fodder produced from his farm or he buys from the market.

The herder can sell two animals per month = $15.000 \times 12 = 170.000$ YR

The herder can sell 5 calves from cows per year = $3.000 \times 5 = 150.000$ YR

The herder can sell 7 small camels from the female camels per two years = 7×40.000 YR = 280.000 YR.

For the whole year the total sale of camels per year = 140.000 YR

The herder sells gee, yogurt from cows per year = $4000 \times 5 = 20.000$ YR

The herder saves manure from his animals totaling = 5000 YR

Total income from animal and animal product sales = 765,000 YR

Impacts and Opportunities after demining in Al Khudad:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Farmers	Agriculture land Herding	Land owners Herders	30 % of households in wadi Kabeer people herd in the wadi	- Solve the land dispute - Protect wadi banks - Expand water supply	Land owners Land owners All community	Farmers should be assured about their land ownership Reduce soil erosion Improve water supply
Leaders	Agriculture land Herding	Land owners All community	same	Construct medical unit Girls school	All community All community	No medical care in the community Increase girls schooling
Women	Agriculture land Herding+ fuel wood	Land owners All community	same	Girls school Medical unit	All community All community	Reduce drop outs of girls The hospital is far
Employees and retired	Agriculture land Herding	Land owners All community	same	Maintain affected houses from heavy rainfall Sewage project	Victims of rainfall All community	30 families affected Reduce diseases
Children	Road Agriculture	Children Local people	Shortcut Source of income	Rehabilitate the school Build additional classes	All children of the village and the surroundings	The school is old The children at school age are increasing

Am-Jarba⁵

Tuban District, Lahij Governorate

Date of survey: 24th May, 2006

Summary: Am-Jarba

Am-Jarba is a small town on the main Aden-Sana'a road about five minutes drive from Lahij, the governorate centre. It is a low altitude, medium impact site. The single, small minefield is in the middle of town in an active, built-up area. It is used as a thoroughfare for vehicles, and a playground for children. New housing has been started on the site since the mines were cleared just over a year ago.

There is little control over the building of houses, and poor planning of facilities to keep up with the rapidly expanding population (partly from immigration). There is high unemployment of both men and women, as the town is a transition between rural (without agriculture) and urban (without employment).

Note: The Am-Jarba area is located in the vicinity of the Saber City, the future capital of Lahij. There must be a master plan for the expansion of the capital, which means this village will become part of the capital. This was not known to the survey team at the time of the survey.

Introduction: Am-Jarba

The team was greeted by the Sheikh and local community members. The team introduced themselves. After this, a representative of the survey team highlighted objectives of the mission.

Time Line: Am-Jarba

The status of local people in the village before planting mines in the village was calm. People used to feel calm and peaceful.. We used to herd our animals and walk freely in the area.

The mines were planted during the 1994 civil war. The lives of people after planting mines were changed. The fear and anxiety were evident among children and grown ups.

The area was cleared from mines in the year 2005. After demining, peace and calm returned to the inhabitants of the village. People started utilizing the area for building houses, for a road and for herding animals. The beneficiaries from demining are the land owners. The demined land is located in the middle of a housing complex. The demined land belongs to Ali Mater Salem.

There was only one incident after the first survey, and before demining. That was in the year 2000.

“We feel delighted for demining of the area in the middle of our houses. Now we move around freely.”

When the demining team came to our village, we showed them around and provided support and extended help throughout the period they spent in our village.

Village Profile: Am-Jarba

⁵ The village is called Al-Jarba in the LIS report.

A. Internal Resources in the village

Facilities	Status
Population	
Houses	750 house
Schools	Two. One primary and one secondary
Institutions	Education College Vocational training institute Cotton Ginnery
Medical unit	Private medical clinic
Water resources	Available
Mosques	Two
Electricity	Yes
Telephone	Yes
Local Council	There is a representative of six villages among them Am-Jarba
Cooperatives and associations	Not available
Shops	Many trade centers and groceries
Post office	Yes
Police Station	Yes
Development projects	The spate improvement project
Demined area uses	Houses
Immigrants	Intensive immigration into the village
Family links	Very strong
Markets	Not far away
Credits	No activities of the credit bank
International NGOs	Not available
Extension center	Yes but not functioning
Dams and water structures	Diversion structures in Wadi Tuban
NGOs	Not available

B. External Factors:

Facilities	Status
TV and Radio	Yes
Internal immigration	Intensive
Government activities	The national livestock center in the area
Disasters	Floods in very rare case
Links with neighbouring villages	Very strong
Political activities	The ruling party and other parties but without any offices

Meeting with Women: Am-Jarba

Two meetings were organized in the village.

The first meeting was with the village teachers. The meeting took place in the premises of the school in the village.

The women said that two months ago a team from “YEMAC” came after the area was surveyed, and signs were put on the mined area. They demined the whole area in the middle of the village. The women said “when the demining team came to the village, we provided all kind of help to make their mission a success”.

The mines were planted during the 1994 civil war. In this village fierce fighting took place during the civil war. Combat lasted for as long as two months. Many village

community members fled the scene during the fighting. When the mines were planted we used to move around with caution and with fear. Luckily, there were no casualties or explosions, although the mines were planted in the middle of an earthen road used by many villagers. The road is also used by college students every day to go to and from their residential area.

Despite the demining, we are still feeling scared going across the demined area. It could be that this feeling of fear has accumulated from before and will fade away with time.

The villagers used to use this area for construction. However, there are still disputes between the village members and the government. The government wants to construct a big housing project for the academic staff of the education college. On the other hand, the village members want to have their own housing plans for expansion. The problem still persists, and is especially acute due to influx of people from the whole delta to live in the area.

The total number of female employees with government is around 5%. Most of them are female teachers in the local schools.

The second meeting was conducted in the village. Present in the meeting were a mixture of educated and illiterate women.

They said that the demining of the area is a great relief to us and to our children. We feel safe and calm after an ordeal, which affected our lives for the past decade.

The demined area is in fact a road to the farms and other villages, and is the property of local families and owners from outside the area, mainly from Yafa'a.

They said: We need a workshop for tailoring cloths. Many women do not work and do not have income for their own. About ten women work in sewing cloths. They are under paid. They use whatever they generate to support their families.

Most households in the village own a few animals ranging from 5-6 sheep and goat. Animals are kept as savings for the households to be spent in hard times, such as holy events or marriages or sickness.

The villagers suffer from shortage of water. There is rapid expansion in population; at the same time, the water supply is constant. This leads to shortages of water.

There is a private medical unit. However, it is expensive and many cannot afford the fees.

Meeting with women: Impacts of demining in the village of Am-Jarba:

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Pedestrian road for students	20% Cars very rare Some village	Allowed for everybody	Short cut	Time is saved

Construction of houses	members All village members	Land owners	Very few	Land became available
Security 90%		All community	Freedom of movement	Feeling of freedom

Meeting with women: Development opportunities for the village of Am-Jarba:

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Play ground for children	The area is planned as residential area	Play ground Allocate area for kindergarten	All community members All community	Government Government
Workshop for training in tailoring and sewing	Finance	Government should do the construction	All women in the village	Secure a source of income to women

Meeting with Village Leaders: Am Jarba

The meeting with the village leaders was held in the village. Following are the major issues raised in the meeting.

- The major government institutions located in the surroundings of the village are.
 - The Telecommunication centre
 - Police Station
 - The Vocational training Institute
 - The cotton ginnery
- The priority plans of the village community are:
 - Levelling of a children play ground
 - Construction of a water tank for the village.
 - Provision of electrical generator.
- The demined land is private property. It belongs to a village member (Mr Ali mater Salem), who has plans to build about 25 houses on the site (see Force Field Diagram at the end of this report)
- The land was returned to the owner on the basis of submitted documents.
- The local community provided the demining team all necessary support in different ways. They showed the team where the mines were planted, they worked with them in the awareness campaign programs, they gathered people to attend meetings, etc.

Additional comment from the survey team: Am-Jarba

The Am-Jarba area is located in the vicinity of the Saber City, the future capital of Lahij. There must be a master plan for the expansion of the capital, which means this village will become part of the capital. This was not known to the survey team at the time of the survey.

Meeting with Children: Am-Jarba

The meeting with children was held in the primary school in the village. Present in the meeting were 23 children and secondary school boys and girls.

The results of the meeting can be summarized as follows:

- We heard about mines in the school and in our houses and in the village.
- The awareness campaign led us to believe the dangers of mines and how to deal with strange objects if found in the field and how we should go back if we entered a minefield accidentally.
- The pictures of different types of mines were illustrated in the meeting and were also printed in posters to be hanged in different places in the village.
- After we realized that the area is demined we became cautious when passing near the demined area.
- A boy aged 11 years said that he found ammunition and brought it back home with him. When he started playing with this object, it exploded on him and caused serious burns to his face and different parts of his body. His parents rushed him to the hospital for medical care. His father paid the treatment.

The meeting with the girls in the secondary school took place immediately after the first meeting.

- Two years ago, a team of two women came to the village and asked for a meeting with women. The meeting was on awareness raising about the dangers of mines. They also showed us the different types of mines and the way we should deal with these mines in case we found them.
- The mined areas had special signs and the signs were painted with red colors.
- The young women said “Thank god, the mines are now cleaned and we can move around more freely without any fear”

Impressions of the survey team of Am-Jarba Village

1. Local people did not expect financial help.
2. The demined area is very small
3. The demined area is located in the middle of a residential area.
4. The area has a potential for development projects in the future
5. There is a huge construction program in progress.
6. The village is in fact an urban center.
7. 5% of the women work and 95% stay at home
8. 75% of the men work on their own. They do not have jobs or regular income.

Impacts and Opportunities after demining in Am-Jarba:

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Farmers (no farmers in village)						
Women	Security 90%+ safety	All community + land owner	After demining people were able to move freely in the built up area	Workshop for training in tailoring Playground for children	Women in the village Children	To improve their income Provide space for recreation

Leaders	Houses Road	Land owner All community	Development projects All community	Medical center Fencing for the playground	All community All community	No medical services Fear of confiscation of land by influential people
Children	Security Road	All community All community	They were scared Shortcut			
Land owner	Build a house Road	Land owner All community	Because he was able of building a house after demining To allow big trucks to pass	Construct a housing project	Land owner	To benefit from the rent

FORCE FIELD ANALYSIS: CLEARED AREA IN AM JARBA

Vision for 2009

Hopes to have a project underway to build about 25 houses on 3000 sq m of land to rent at 10-15,000 riyals per month (i.e. about 3 million riyals per year)

+ve forces

- Doesn't need permission to build
- Good demand for rented housing

-ve forces

- Has to find capital (from banks etc)
- Possible dispute about land ownership

Situation in 2006

- Building new house (for personal use), and will build a second for son
- Car and pedestrian access
- Play area for children

N.B. Price of a plot of land 12m x 12m is about 1 million riyals.

The owner paid about 1 million to clear the land of trees and grasses.

Beer Naser

Tuban District, Lahij Governorate

Date of Survey: 24th May, 2006

Summary: Beer Naser

Beer Naser is a small to medium sized village (population 1000 people), located at the border of the water supply area of Aden city. The area was planted with mines before the 1994 civil war. The village was designated as medium impact in the LIS. The demining of the southern part of Beer Naser was conducted in the year 2002 and of the northern part, in 2005. Local people felt safer after the demining of the area.

The village is reasonably endowed with services, having a primary school, water supply, communications and other services not far away on the main road. There are no cooperatives, village associations or development projects, although there are strong family linkages. The village water supply is from the public corporation for water and sanitation who are one of the main beneficiaries of the demining. The corporation fenced the southern part of the demined area and drilled wells, but allowed the community access for herding, fodder and firewood collection. Roads were reopened giving quicker access and enhanced mobility.

After demining, incidents of land disputes have increased as investment in urban land use competes with agricultural uses. The other main beneficiary is an individual Sheikh who is controlling the lands in the northern demined area, for private real estate development. This area is under dispute between the Sheikh, the village and the government, which has prohibited construction or agricultural activities in the area until further notice. For this reason, the community does not perceive great benefit from demining with respect to herding, fuel woodcutting or fodder collection. Fodder is being bought from the market and households have begun to reduce the numbers of animals kept, increasing their vulnerability. The main benefits have been to landowners.

The main development opportunities identified for the demined areas, were to drill wells for irrigation and to solve the dispute over land ownership as without this the resources could not be used. At the village level, they suggested building a medical unit, asphaltting the road and establishing village associations for housing and development.

Impacts and Opportunities after demining: Beer Naser

Introduction: Beer Naser

The joint meeting with representatives of the village of Beer Naser was held on the 24th of May 2006. The survey team introduced themselves to the gathering. The representatives of the local community in the village introduced themselves and welcomed the mission. After this, a representative of the survey team highlighted the objectives of the mission. He said, we are here representing “YEMAC”. We would like to know the socioeconomic benefits gained after demining the area what are the benefits gained after these areas were demined? What damage was caused by mines in the area? Did “YEMAC” do anything at all for your benefit? We are conducting a study of the affected areas with mines. This study will be submitted to the government for further action. We would like to know your plans for the development of the demined areas. Finally we do not promise anything. We will study, record your ideas and problems and we will follow up the submission oh the report to the concerned authorities.

Present in the meeting were many. The following were listed:

- | | |
|-------------------------------|-----------------------|
| 1. Abdulla Derweesh Ali | Sheikh of the village |
| 2. Salem Derweesh Ali | Retired |
| 3. Salem Mehdi Masoud | Driver |
| 4. Ahmed Salem Derweesh | Private |
| 5. Mohamed Ali Mohamed | Labourer |
| 6. Maged Saem Derweesh | Student |
| 7. Derweesh Abdulla Derweesh | Private |
| 8. Anees Mohamed Sa'ad Masoud | Private |

Time Line: Beer Naser

The area of Beer Naser was calm before mines were planted. The village is located at the border of the water supply area of Aden city. Beer Naser water supply project is the oldest water supply in the Southern Part of Yemen. It goes back to the fifties, when it was established to supply Aden with fresh water.

The area was planted with mines before the 1994 civil war. After the civil war, there were attempts to de-mine the area. However, these attempts were not conducted in a comprehensive and integrated manner. Therefore, mines remained in the area and what was cleared was marginal. During this period, there was a feeling insecurity in Beer Naser. Mines were planted in the water supply area and in the northern and southern parts of the village. Anti-tank mines were used in the area.

The demining, which was carried out after the war, minimized the risks, but the fear was still there. This was evident by the fact that there was an incident after the first demining. A truck hit an anti tank mine and exploded (after the year 2000). Despite this, a road was opened in the demined area, and local people used to use this road without going in any other direction.

The demining of Beer Naser took place in two stages. The demining of the southern part was conducted in the year 2002. The demining of the northern part was done in the year 2005. Local people started feeling safe and secure after the demining of the area. They started moving freely and there were no restrictions on movements anymore.

The major beneficiary of the demining is the public corporation for water and sewage services which is using the southern part of the village. The other beneficiary is Sheikh Saif Mohamed Fadhl Al-Uzaiby who is controlling the lands in the area by force. The northern part of the village was confiscated by the Sheikh, who started erecting poles for a so-called housing project in part of the area, without regard to the fact that this area is part of the village. The remaining part will be sold as real estate. The support extended to him by the government and his powers allowed him to do so.

“The demined land was an extension of the village. It will remain so. We will not accept the arrangements of the Sheikh. Concerning the corporation, there is an agreement signed in the early fifties stipulating that the corporation will recruit a certain percentage of staff from the village as compensation for drilling wells”.

Village Profile: Beer Naser

A. Internal Resources in Beer Naser Village

Facilities	Status
Population	1000
Houses and house holds	100 houses --- 120 households
Schools	One primary school
Medical unit	Not available
Water resources	The village benefit from the water supply project
Mosques	One
Electricity	Central supply
Telephone	Available
Local Council	Not available
Cooperatives and associations	Not available. Small projects are implemented through cooperation
Shops	Not available in the village. Groceries on the main road
Post office	On the main road
Police Station	On the main road
Development projects	Nil
Demined area uses	Water supply project + The Sheikh (real estate) Local authorities banned agriculture because of the plan to make urban areas for buildings
Immigrants	No
Family links	Strong
Markets	On the main road
Credits	No information about the credit bank.
International NGOs	Not available
Extension center	Not available
Dams and water structures	Not available
NGOs	Not available

B. External Factors:

Facilities	Status
TV and Radio	Available
Internal immigration	Not available
Government activities	Nil
Disasters	1994 civil war
Disease	Malaria and liver diseases
Links with neighbouring villages	Strong and supported by family ties and marriages.

Meeting with Village Leaders: Beer Naser

The summary of the meeting with the village leaders took place in the house of the Sheikh of the village Mr. Abdulla Derweesh Ali. The issues raised in the meeting can be listed as follows:

1. There are no associations or organizations in the village.
2. We plan to establish a charity association to look after development projects for the benefit of the village.
3. There are no laws regulating the use of demined land. The rules are traditional and landownership is fundamental issue in the society. Documents are the major issues in claims of ownership of land.
4. We collect zakat and distribute in the village to needy families and poor people.
5. The demined area is still under dispute between the government and the community. Currently, the land is under the control of the community but they are prohibited from building in it or cultivating it.

6. The demined area is still a problem between the Sheikh, the village and the government.
7. We supported the demining team when they came to the area to clear the mined fields.

Meeting with Women: Beer Naser

Before planting mines, the area in our village was open. We used to stay outside our houses at night. We used to herd animals and collect fuel wood during the day. We used to raise animals such as goats and sheep, camels and cows. The fodder was plenty in the area, there were many trees and shrubs. Rangelands were community property and open for all herders from inside and outside the village.

The public corporation fenced the area and drilled wells. However, we were still able to enter the fenced area and herd our animals or collect fuel wood. After planting of mines, we were told that the mines were planted in the road. The mines were anti tank, not anti individual. We became reluctant to go for herding or collect fuel wood after planting of mines. A school was built in the mined area. An explosion killed four labourers around the school and a truck hit a mine. The wheels exploded but the driver escaped injury.

After demining, the area witnessed an intensive investment in construction of houses and business premises such as warehouses, stores, fenced areas and complexes. Our lives changed forever. Instead of the rural type of living, we found ourselves in the centre of an urban centre and could not open our doors any more. Range lands vanished and were transferred into construction sites. Land disputes erupted and cases of killing and shooting became daily issues.

We started to purchase fodder from the market because we cannot herd our animals anymore in the open area. An average of five sheep and goats require green or dry fodder for a total of 4000YR per month. Many local community members reduced the number of animals kept because of the cost of fodder. Animal raising is part of our lives in the village. Animals are important savings for emergency situations such sickness, weddings, Eid, school or purchase of an urgent item for the household. We do not buy meat from the market. We slaughter an animal when we want to eat meat or when a guest comes to our family.

After demining, we started facing problems related to land disputes. The value of land increased dramatically and original owners started coming back from outside the country and claiming the land. Sometimes the sons or grandsons appeared suddenly and submitted papers claiming the ownership of land in the area. The Sheikh (without mentioning names) started putting his hands on the land in the area. He started the construction of buildings and started fencing big areas for future use or for sale. Whenever anybody comes claiming ownership of an area, the Sheikh compensates him in cash or gives him another piece of land elsewhere in the area.

We are now squeezed among buildings and business premises. We do not have access to rangelands, neither can we collect fuel wood. Demining from our perception was of no value with respect to herding and fuel woodcutting. Those who benefited are the landowners especially, the Sheikh.

When de-miners came, the entire village welcomed them and provided all the assistance required. We hung the poster in different parts of the village and organized meetings in school for public awareness on the dangers of mines.

Benefits from the cleared lands: women

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Herding	Local community			Two days after rain

Development opportunities for the village: women

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Land Agriculture	Shortage of water	Drill wells	Land owners	Land owners from outside the village
herding	Shortage of water		Owners of animals	
Buildings	We do not own land			
Roads	Not asphalted	Asphalt the road		Government

Meeting with Farmers: Beer Naser

The meeting with farmers took place in the village of Beer Naser. The following farmers were present.

1. Nase Saleh Masoud
2. Jameel Alim Mohamed
3. Makki Jaber Hassan
4. Ali Jaber Hassan
5. Ali Mohamed Subait

The demined area is used for herding and as roads for pedestrians and transport vehicles. Herding is open to all community members in the village.

Water in the village is from the wells of the water supply project under the public corporation for water and sanitation. There are about 45 wells for the supply of Aden since the 1950s. When the project started, there was an agreement with the village community that there will be a certain percentage of jobs for the local community in compensation for drilling wells in the area.

Roads are used in the demined areas for vehicles and pedestrians. The road is not asphalted. These roads are shortcuts to other destinations and other villages.

Construction in the village is in the form of foundations belong to the Sheikh. He first came to the village with the aim of building factories and securing jobs for the young people in the community. Later on he fenced the area and started claiming that it belongs to him. The dispute is still not over between him and the village community. Neither side have strong documents supporting their claims. The government issued an

order which stopped construction or agricultural activities in the area until further notice.

Benefits from cleared land: farmers

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Herding	All the community	Land owners	Mobile herding	Animal herding is important to local people. They save money from not buying fodder from the market
Wells and water	Public water corporation	The corporation took over the land from the owners	To supply Aden with water.	Water supply to the city of Aden
Roads	All the community	These are old roads reopened after demining	Vehicles travelling to different directions	Saved time and effort
Buildings	Sheikh Saif put poles in the northern parts	He does not have any legal basis. He is now using it as real estate for sale.	It could be a residential area or commercial centre	If used for housing, it will solve lots of problems.

Development Opportunities for cleared land: farmers

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Grains and herding	No water for irrigation	Drill deep wells for irrigation	All the community	Government or any other donor agencies
Water	No water for irrigation	Drill deep wells for irrigation	All the community	Government or any other donor agencies
Roads	Easy roads			
Buildings	Low income of community members	Establish an association for housing	Youth in the village	Government and Ministry of Social Affairs
Medical unit	Distant location of the nearest medical centre	Build medical unit	All the community	Government and Public associations

Meeting with men/women Survivors: Beer Naser

No information

Meeting with Children: Beer Naser

The major findings in the meeting with children were:

1. The awareness team on mines came to the village and gave a lecture on how to deal with mines.
2. They said that if a strange object is found by anybody, he or she should report that to the nearest police station. The awareness team illustrated

samples of different types of mines. Posters were put on the walls of buildings in the village for everybody to see and take notice.

3. Parents of children played big role in awareness-raising among their children.
4. The demining teams left red stones, signs and ropes to guide local people on the closed areas, where trespassing was prohibited.
5. Children in Beer Naser herd animals with an elderly person such as the grand father.
6. No body was affected by mines among children their age.

Major impressions from the survey in Beer Naser Village:

1. The demined area was confiscated by a Sheikh and by the water public corporation and sanitation.
2. Local community members did not benefit from the demined land.
3. The Ministry of housing prohibits the local community in Beer Naser from using the land because of what is said to be the urban plan for housing.
4. Because of the awareness and the education of the local community representatives, we were able to communicate with them and they understood our objectives clearly. Therefore, there were no long lists of requests. The submitted requests were reasonable.
5. The only village where we found there were eight victims of liver disease which occurred in 2003.
6. They expressed their appreciation and gratitude to the demining teams of “YEMAC”
7. The only area where local people were not aware of mines in their village until one mine exploded under a truck carrying stones.
8. The demined area is a subject of dispute between the local village and several other villages.
9. Women said that a mine exploded around a school while under construction in the mined area.

Impacts and Opportunities after demining: Beer Naser

Categories	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
farmers	Herding Road Jobs with the water company Drinking water	All the community Water Corporation. City of Aden	These are the only benefits available	Drill deep wells for irrigation Solve dispute on land ownership Association for housing Medical Unit	All community in the village	That is their only request
Women	Security Herding Road Buildings	All community Landowners only	Limited benefit and negative effects have been land disputes and loss of	Drill wells Asphalt road. Education program Training in sewing	Community All women in the village	To make better use of time in the village

			grazing to construction.			
Leaders	Security Roads Water supply Jobs with the water company.	All community	The main impacts after demining. Negative effects were an iIncrease in land related disputes	Solve the dispute on land Build a medical unit	Helps investors, community and government	Without solving this dispute on the land will not be utilized Disease affected local community members
Children	Security Herding	All the community	The two main impacts after demining	Play ground	All young people	Make better use of their time instead of chewing qat.
Survivors	-					

Abyan Governorate

*Amsura*⁶

Lodar District, Abyan Governorate

Date of survey: 25th May, 2006

Summary: Amsura

Amsura is a large, lowland village classified as low impact in the Landmine Impact Survey. A hillside overlooking the village was cleared of UXOs (from an old British firing range) in 2005, after which the land reverted to its original use of grazing, fuel wood collection, stone collection and water run-off for cropped areas to the benefit of the whole community.

30% of the community are farmers and 3% herders (nomads), but also around 1000 are civil or military employees.

The village is eager to connect to the electricity supply, build a water reservoir (study already completed), and to have a post office, preliminary court, sewage project, facilities for the Sports Club, asphalted internal roads and a medical center. These services would upgrade its facilities in line with its population.

Introduction: Amsura

The meeting with the local community in Amsura village took place in the village itself. Present in the meeting were several community leaders and dignitaries. A representative of the survey team highlighted the objective of the mission and said that the team will collect information from village members without any promises of any projects at this stage. The results of the survey will be submitted to “YEMAC” for further follow up.

The representatives of the local community included:

1. Ali Bashy
2. Mohamed Bedour
3. Awadh Mohamed Haitham
4. Obeid Saeed
5. Mohamed Saeed
6. Ahmed Mohamed Al-Soury
7. Mohamed Sa’ad Masoud
8. Ali Al-Asaly
9. Mohamed Ali Naser
10. Obeid Saeed
11. Mohamed Saeed
12. Gala Mohamed Abdulla
13. Mohamed Husain ahmed
14. Abdull Sa’ad Alshayani
15. Awadh Husain Al-Roly
16. Husain Al-sahneeny
17. Mohamed Salem Agroom
18. Saleh Awadh

⁶ Spelt Imsara in the LIS survey report.

Time Line: Amsura

The number of inhabitants in the village is 10,000 (1200 families). Local people indicated that shells were planted or left in the area. The dangerous area is called Al-Sawda. It is a mountain slope overlooking the village. These devices were there from 1950s. Local people were not sure if these devices were mines or unexploded shells. It was also said that warnings were made to all members of the community not to come close to strange objects. If such objects were found, they should be reported to the nearest authority. Under any circumstances, no body should attempt play or crack open or carry these objects. Local people were therefore scared of going up the hill of Al-Sawda.

When the awareness team and the de-miners started coming and surveying the area, they realized that what was in the area is in fact explosive devices, not mines. After this community, members became more confident about going up the hill for herding animals and collecting fuel wood.

Local people became aware of demining when they saw the flags (red and white in different parts of the area). The presence of demining teams with their red pick ups and their military uniform calmed local community and gave them more confidence. Awareness campaigns were organized covering all segments of the local community. Meetings, posters and mosques were used in the comprehensive campaign.

Al-Sawda hill slopes were always, and will continue to be, rangelands open for herding animals and fuel-wood cutting for all community members and neighbouring communities in the area. There is also an old water tank or reservoir on the hill.

Village Profile: Amsura

A. Internal Resources in the village

Facilities	Status
Population	10,000 inhabitants
Houses	1200 families
Schools	Two (basic + secondary)
Medical unit	New medical center is under construction. The old medical unit was transferred into a house.
Water resources	
Mosques	Two
Electricity	Local electricity project only. Working for 5 hours daily. The electric connections do not cover the village. The connection was terminated because of unknown reasons.
Telephone	Available
Local Council	There is a representative in the parliament and another in the local council from the village
Cooperatives and associations	There used to be an agriculture cooperative but collapsed after 1990.
Shops	Available on the main road and small shops in the village.
Post office	Available
Police Station	Available
Development projects	Not available
Demined area uses	Herding and fuel wood cutting
Immigrants	Intensive to oil rich countries (20) from the village only.
Family links	Strong

Markets	The main center in Mudeah – 15 kilometers from the village
Recreation centers	There is a sport and education club “Amsurrah Club”
Credit	Local people tried credits but with no benefit because of the interest rates and long delays.
International NGOs	Not available
Extension center	Not available
Dams and water structures	Not available
Local NGOs	Al-Ehsan charity organization is helping poor families

B. External Factors:

Facilities	Status
TV and Radio	Yes
Internal immigration	Intensive to urban centers
Government activities	Minimal
Disasters	Drought
Links with neighbouring villages	Strong
Political parties	PNC + the Socialist Party. No premises except for the ruling party.

Additional information: Amsura

30% of the community work in agriculture.

3% of the local population are animal owners (herders)

There are around one thousand employees from the village. Employment in the civil (education and health) and military service (police and army).

Crops cultivated in the area are: sorghum (red), millet, sesame, cotton, water melon, sweet melon. These crops are grown under rainfed conditions.

Four families own wells and practice irrigated farming. They are better off than rainfed farmers. They cultivate vegetables (tomatoes, okra)

UNICEF assisted the community with the construction of the medical center and supported the library of the girls’ school with books.

GTZ rehabilitated the girls’ school.

Al-Saeed Charity organization built an education complex.

The village of Amsura has been divided into two parts belonging to two different districts. The local community demands the return to the previous administrative arrangement. The community is deprived now from lots of facilities.

Meeting with Village Leaders: Amsura

The meeting with community leaders was held with three leaders namely:

1. Saleh Awadh Ahmed Dean of the school
2. Ali Mohamed Awadh Local Council member
3. Obeid Saeed Hady Director of the medical center.

Issues raised in the meeting:

- There used to be an association in the village. However, it was terminated because of lack of commitment of its members.
- There is a development plan for the village. This is the asphaltting of the road to the village plus + three classrooms in a neighbouring village. The water supply project is in progress, the electricity project is in the pipeline, as is furniture for the medical center.

- Sources of funds of the above projects are from the local council, the government and from other donor agencies.
- We are in the process of gathering information on the needs of all centers. We will submit the results to the local council.
- Some villages with support from local leaders prohibit cutting of green trees especially ziziphus and acacia. These trees are good for bees and honey production, good fodder for animals and shelter from sunlight.
- The demined area is government property. The area is rangeland. The area is also site for runoff water to lands located downstream and serves as site for cutting stones.
- Stones from the site are free. The cost of labor for cutting is 2500 YR for a truckload. 60% of local people benefit from stoner cutting. 60% of the local community benefits from the area as herding area.

Meeting with Women: Amsura

18 women participated. The major issues raised in the meeting were:

- Some had heard of the mines on Al-Sawda and others had not. Those who lived far from the hill did not go there.
- We know that there is a water tank on Al-Sawda hill for the water supply project. Two wells pump water to the reservoir (tank), which is located on top of the hill. From there water comes to the village.
- The tribes are the major owners of land in this area.
- Most of us here purchased the land on which we built our houses.
- Nearly 33% of the local population is employees. The remaining are casual labor. Some buy and sell, others work in construction.
- We plant our lands with cereals for grains and fodder. If rainfall is adequate, we get grains and fodder. If rainfall was limited we got only fodder.
- Eighty percent of the village community own animals. Sheep and goats only. No cows. The highest animal ownership is 15 heads.
- We buy fodder and bring it to the house to feed animals. During the rainy season we go to land owners to ask for animal fodder. Sometimes they give us free in other times we buy.
- Very few people go for fuel woodcutting. Most of us buy fodder, which is brought here by camels or on trucks.
- Girls, after school, do house work. Women look after animals such cleaning the house of animals (shed) and provide drinking water to the animals.
- Mothers instruct girls on housework.
- There used to be a medical unit. We had also five assistant doctors and nurses. An influential person confiscated the unit. He claimed the ownership of land. The land was confiscated from the time before unity.
- Most household have migrants in Saudi Arabia. They support their families back home. Some households have internal immigrants' in Aden. They moved to live in Aden and come back home on occasions.

Meeting with Farmers: Impact of clearance in Amsura

What assets have been made available by	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
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mine clearance?				
Land as herding area	All community in the village and the surroundings	Land ownership is known	For herding	15 heads x 400 YR/day number of households 30% twice a month Total per annum= 3.456.000YR
Land for fuel wood cutting	All community in the village and the surroundings	Land ownership is known	50% of the back of the hill has good wood for fuel.	10 households collects wood 10 times per months on camels= 1000 x 10x 12 = 1.200.000
The hill as runoff for land downstream	Land owners in the foot hills	Land ownership is known		

Development Opportunities for cleared land: Amsura

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
		<ul style="list-style-type: none"> - Connect electricity - Build water construction - Post office - Establish Preliminary court - Implement Sewage project - Build Premises for - the sports club - Asphalt the internal roads in the village 	<ul style="list-style-type: none"> All local people All local people All local people All local people All local people All local people All local people 	<ul style="list-style-type: none"> Government MAI – Ag Fund Government Government Government Youth Fund Government

Meeting with men/women Survivors: Amsura

Case Number (1): Abdulla Danbeia Al-Nakhaei (Age: 80 years)

He was injured in the thigh during the independence war (1965). During the British rule, of the Southern part of Yemen he was a member of the Front for the Liberation of South Yemen (FLOSY). He was injured during a battle with British soldiers in Al-Mes-hal in Amsura.

The survivor was give medical care by the British in Aden, and stayed in the hospital for a whole year.

The injury affected his life. He did not get any assistance from anybody.

The survivor is now being helped by his grand sons.

He heard about associations helping the revolutionaries of the independence war but did not get any assistance from them.

He never heard about “YEMAC” or the association for the support of mine victims.

Meeting with Children: Amsura

17 boys and girls raised the following issues:

We heard about mines at school. Two years ago people came and talked to us about the dangers of mines.

Yes, we know about mines in the Al-Sawda hill. The de-miners told us not to go there. The area is dangerous.

We know about the hill of Sawda. But we do not go there. The hill is far away.

Some of us used to go before. After de-miners warned us we stopped going there.

After I heard about mines in Sawda, I went with my friends twice. We used to walk on the car wheel tracks.

My brother found a rocket and brought it home. He gave it later to the military people in the area.

We are not scared. The area with mines and explosives is far away from our village.

One boy said that he herds about 16 sheep and goat not far from the area with explosives.

Girls said that they help their parents in housework. Their mother instructs them on what they should do.

One boy said his father opened a video game shop for him. His father works in Saudi Arabia. The income from the vide games shop is about 700 YR daily, which meets the families daily needs. The family has a small generator to run the video game shop the whole day.

Most children asked for electricity and sewage.

Most households in the village have one or more migrants in Saudi Arabia. Of those in the meeting, five children have a father, brother or uncle in Saudi Arabia.

Major impressions about the survey of Amsura:

1. The explosives have been in the area for the past 50 years. The young people seemed to be not aware of these explosives. The elderly have started to forget about the explosives.
2. Local people feel that there area has been undermined and reduced to village status. It used to be a major center in the governorate.
3. The request for providing a court and a post office attracted the team's attention.
4. The demined area Al-Sawda was a shooting exercise area used by the British forces.
5. There is a tendency among women in the village to go to Aden to live.
6. A high percentage of local people are employees in the government despite the far distance of the village from the center.
7. There are two representatives of the local council at the governorate and district levels.
8. Nomads constitute 3% of the local community members.

Impacts and Opportunities after demining in Amsura:

Category	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why are opportunities important
Farmers + Herders	Land as herding area Hill is runoff Land at foot hills	Bedouins Land owners Bedouins	Part of hill for herding Cultivation of crops at foot hills Land cover is good in part of the hill	Connect electricity Build water construction (study completed)	All the community members Same	
Employees				Post Office Preliminary Court	All community All community	
Women	Herding Fuel wood	Bedouins Bedouins		Connect electricity Sewage	All community All community	
Children	Playing	Children	Location of the hill	Premises for the	All	

	Recreation	of the village		sport club Asphalt the road	community All community	
Leaders		All community	Part of the hill for herding Nice view on the hill	Court Asphalt the road		

Habeel Al-Braq

Khanfar District, Abyan Governorate

Date of Survey: 27th May, 2006

Summary: Habeel Al-Braq

Habeel Al-Braq is a long established, medium sized village, with a population of around 2000. It had explosive devices left over from forty years ago, and mines which were planted in 1994. The village was rated as low impact in the LIS. The mines were cleared in 2004.

The main sources of income are cropping, animal production (goats, sheep, cows and camels) and wage employment. Crops include bananas, fodder, sesame, ground nuts and cotton. 50% of the population do not own land, but many work as share croppers or wage labourers. Some are government employees, work in construction or are drivers. Village services and infrastructure are very limited. There are no village organisations and no active local or international NGOs, although family ties are strong. Drought is a problem - there are no dams or water structures for irrigation and the drinking water source is one-hour way by donkey.

Benefits from demining include a greater feeling of security; access to rangeland for animal herding by all the community and Bedouins; greater mobility as paths were cleared; construction of a cement factory which is expected to provide employment; stone and marble cutting for house construction (by the small number of landowners). There are no crops grown in the demined area.

Development needs include deep wells and irrigation canals to rehabilitate agricultural lands and grazing areas; drinking water supply project; electricity project; literacy classes, medical unit; expansion of the school. There is a need to solve disputes over the ownership and use of the demined land to allow wider access.

Introduction: Habeel Al-Braq

The meeting with local community members and the survey team in Habeel Al-Braq in Abyan Governorate took place on the 25th of May 2006. The survey team introduced themselves and the hosts greeted the team and introduced themselves. After the introductory speeches, the team highlighted the objectives of the survey and explained the role of 'YEMAC' in the process of surveying, awareness and the actual demining of affected areas with mines. It was made clear that the survey would concentrate on five

categories of the local community members: These were farmers or animal owners, the women, the leaders, the children and the survivors of mine explosions if they are available at the time of the survey. It was also made clear that, the survey team did not have a portfolio of projects readily available. The team would assess needs and would report that to “YEMAC” for follow up with donor agencies.

Time Line: Habeel Al-Braq

The village has been inhabited for two hundred years. Before the mine planting and the shells (UXD), people were leaving a normal life. However, some participants said that the UXDs were there since the people knew the surroundings in the village. This means that the UXDs were there since the British rule more than forty years ago.

The mines and explosive devices were in the area. People were aware of these devices. However, they seemed not to be worried. They warned children on more than one occasion about the dangers of explosive devices or UXDs. As far as children are concerned, they should not touch any metallic objects or play with these objects.

The arrival of the demining team shed light on the dangers of mines and explosive devices. The continuous visits of the team and the hanging of the different red and white signs were apparent signs of the dangers expected in the area. People in a way started to become annoyed since they had forgotten the danger, because of the long period since these explosive devices were planted.

The clearing of the area by de-miners, which was completed in the year 2004, gave more confidence to local community members about the safety and security in the area. Local people feel that after demining they are more secure and not scared anymore. However, some indicated that they are still suspicious about the complete clearance of mines or explosive devices. This is because they thought some devices might be buried in the soil.

The local community members benefited from demining in gaining more freedom in herding their animals. However, the real beneficiary from demining is the cement factory, which is going to be constructed in the middle of the area. This is a private enterprise owned by local investors and Saudi business men.

There were no incidents since the year 2000.

The demined area is joint property of the tribes from Yafa’a and Al-Fadhly.

The cement factory took over most of the area in the Habeel.

The site of the cement factory was shown in the community map used in the survey.

Village Profile: Habeel Al-Braq

A. Internal Resources in the village

Facilities	Status
Population	2000 / 300 households (families)
Houses	200
Schools	One basic school not completed because the building is small. Only 4 classes. The remaining study under trees.
Medical unit	Not Available
Water resources	Not Available

Mosques	One
Electricity	Not Available
Telephone	Not Available – only mobile
Local Council	Not Available
Cooperatives and associations	Not Available
Local skills	Weaving traditional cloths using primitive tools
Shops	Not Available
Post office	Not Available
Police Station	Not Available
Development projects	The cement factory under construction.
Demined area uses	Utilized for herding and for the cement factory.
Immigrants	Intensive to the area from outside.
Family links	Strong
Markets	Not available
Credits	Not available
International NGOs	Not available
Extension centre	Not available
Dams and water structures	Not available in the area. Further down a big project is under way. The Wadi Hassan diversion structures.
NGOs	Not available

B. External Factors:

Facilities	Status
TV and Radio	Radio Available
Internal immigration	To the area from “Yarames” and other districts.
Government activities	Not available
Disasters	Drought and the civil war of 1994.
Links with neighbouring villages	Strong links
Political activities	The ruling party (80% are members) 20% in other parties. No buildings but from homes
Income	Labourers in agricultural fields, animal production and employees with the government (20)

Meeting with Village Leaders: Habeel Al-Braq

A meeting was held with the village leader, Sheikh Awadh Abdulla Breik

The following issues were raised and discussed in the meeting:

- There are no organizations or associations in the village.
- We plan to enrol our young people in the cement factory.
- We need irrigation canals to rehabilitate agricultural lands.
- There are no resources to be managed.
- We pay “Zakat” and give it back to poor people in the village.
- The demined land belongs to the tribes of Yafa’a and Al-Fadhly.
- Land handed back to the owners after demining, according to the documents they have supporting their claim.
- The community was very cooperative in the whole demining process, people are grateful to the demining teams, and “YEMAC” for their excellent work and humanitarian aid extended.

Meeting with Women: Habeel Al-Braq

The meeting with women involved several community female members. The meeting was organized in the village. The following are the major issues raised and discussed.

- The mined area is Hatat and Habeel Al-Barak
- Mines were planted while the socialist rule was here. Some additional mines were planted after the last civil war in 1994. The area was planted not only with mines but also with explosive devices.
- Twenty years ago three herders came here to herd their animals, a device exploded and killed two of them. They found a bomb and played with it for three days before it exploded. The third one was seriously injured.
- Two years ago, a mine exploded killing an eight year old girl just beside her house.
- The area planted with mines is arid and far away. Therefore, we never used to go there, not because we were afraid, but because we did not need to go there.
- We never used to cultivate the mined area. It is hilly and suitable for herding only.
- The wife of the Sheikh said that she and other women used to go to this area for herding. However, after planting it with mines in 1994, they stopped going there because of the dangers of mines. "Once we went herding with my father, we found many explosives."

After Demining Habeel Al-Braq

- There is no water in the demined fields. People tried to dig open wells, but found nothing.
- After demining the area, we started walking around more freely. There are areas for herding animals, but there are no houses because it is far away.
- Herders from the other side of "Baraq" go herding there. They are closer to the area.
- We go to field for herding we own only few animals.
- Households own an average of 10-100 small ruminants and around 4 cows.
- Every one is looking after his own business, no cooperation among people.
- Bedouins use the demined area for herding. These Bedouins came here six years ago. They are from Al- Hukaines and Al-Marakeshah.
- The land owners are cutting stones from the demined areas using dynamite. The cost of a truckload is 8000 YR.
- The landowners are from "Marakeshah" and "Hukaines". They claim ownership of the land. They have supporting documents, although they are from outside the area.
- The Saudi Arabian Company is building a cement factory in the demined area. The owners of this company are from the area (Yafa'a)
- Cutting stones by the village community is not allowed, only by land owners.
- No cultivation of crops in the demined area. People are poor and there is no water.
- The "Rehi" family owns land in the demined area. The hill is also owned by this family according to the documents they have.
- The land owners are :
 - a. Sheikh Salem Naser

- b. Saleh Al-Hukais. He has orchards in Bateis and wells. He also owns land in Yazouk.
- c. Ahmed Husain Hankal. He has land grown with sorghum fodder for cows.
- d. Saleh Malgam has land grown with fodder for the cows.

Additional information provided by women in the meeting: Habeel Al-Braq

- The village members work in the land of land owners as if they are members of a family.
- The farmer (sharecropper) gets more than 100,000 – 150,000 YR from 4 feddans.
- Fifty % goes to the land owner and 50% goes to the sharecropper after deducting the cost of inputs. The remaining is only the minimum.
- The most widely cultivated crops in the area are: fodder and bananas.
- Wholesalers come from Hadramouit to buy bananas. Bananas are best sold in winter. In summer, they ripen on the trees.
- In Wadi Hassan, we cultivate sesame, bananas, ground nuts, cotton and fodder. We collect from fuel wood because of the availability of water in Wadi Hassan.
- We market crops in Bateis and Dja’ar cities.
- We can say 50% of the population own land and the remaining do not own land.
- Men and women work in orchards for money.
- Average wage of a labourer is 250-300 YR daily. The monthly salary is 10,000 YR.
- We keep animals to slaughter them on occasions or sell them in hard times.
- We also make charcoal from wood brought to us from Toor Al-Baha in the foothills of the Lahij Governorate.
- Men work in agriculture, military, construction, drivers, tractor drivers, truck drivers.
- We do not buy manure, we use manure from our animals.
- We do not have a water supply project. We fetch water from a one-hour walking distance on donkeys. We are able to bring four tanks (9 litres capacity each) of water in a trip on a donkey. Only grown ups fetch water. Small children are not sent because wild dogs might eat them.
- Drinking water is brought from far away. Salty or brackish water is used for washing cloths or dishes.
- Some animals died because of drought.
- When we construct houses, we purchase water.
- We go to the hospitals in Dja’ar. This is about 25-30 km away. Dja’ar hospital used to be free, now we have to pay for medical care.
- Two of the Sheikh’s sons suffer from cough. They were given medicine but did not recover.

Opportunities required: Habeel Al-Braq

- Water supply project.
- Electricity project.
- Illiteracy campaign classes.

Benefits from cleared lands: Women, Habeel Al-Braq

What assets have	Who is using	How were rights	What is the	What is the socio
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been made available by mine clearance?	the freed assets?	to land use decided?	freed asset used for?	economic return from use of the freed assets
herding	- All community members and - neighbouring villages - Bedouins	Available to every body	Goats, sheep and cows	House needs Selling
stones	Land owners	According to documents	For construction of houses Cement factory	Income The cost of a truck load is 8000 YR
Buildings	Land owners	According to document of ownership	Cement factory	Recruit village youth in the factory
Road	All village Bedouins	Open for all	pedestrians	

Development opportunities for the village: Women, Habel Al-Braq

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Agriculture	No water	Drill wells	Land owners	Government
herding	No water	Drill wells	Land owners and village community	Government

Meeting with farmers: Habeel Al-Braq

The following farmers were present in the farmer's meeting:

1. Abdu Rageh Meree
 2. Hafedh Salkeh Nasere
 3. Ahmed Sa'eed Munassar
 4. Husain Mohamed Nase
 5. Gameel Salem Saleh
 6. Yaslam Saleh Ali
 7. Fadhl Mohsen Hasan
- And others

- The available benefits after demining were herding of animals which is the practice of all village members.
- People feel secure after demining.
- There is no water project in the village.
- The roads are rough and used by all travellers in cars or pedestrians.
- The people here are mostly Bedouins. They do not have big houses. They move from one place to another.
- The buildings in the area are mainly the cement factory, which is under construction.

The potential opportunities are: Habeel Al-Braq

- Stone cutting. This opportunity is not meant for community members but rather for landowners.
- Herding animals. This opportunity is for the whole community.
- We demand a water supply project
- We demand a medical unit.
- We demand electricity
- We demand a bigger school

Benefits from demining: Farmers, Habeel Al-Braq

What assets have been made available by mine clearance?	Who is using the freed assets?	How were rights to land use decided?	What is the freed asset used for?	What is the socio economic return from use of the freed assets
Herding	All community	They live in the village	Herding	The feeling of peace is the most valuable return. There is an increase of 10% animals after demining.
Water	Nothing	Nothing	Nothing	Nothing
Roads	All community	Should be opened with problems	Pedestrians and camels	Facilitated movement Shortened distances and time
Buildings	Bedouins	Live in it temporarily	For Bedouin housing	
Constructions Cement factory	Saudi Investor with Yemenis	Purchased by the Government	Cement Factory	At the initial stages

Development Opportunities for cleared land: Farmers, Habeel Al-Braq

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
Stone cutting Marble Herding	There are no modern equipment for the industry The hill is the property of tribes	Government intervention and coordination with Sheikhs to grant villagers a certain 5 of the hill	Most of the village will benefit from solving the dispute	Government and others
Water	Nothing	Drill deep wells For the water supply project. Surface water is salty and not suitable for drinking	All the community will benefit from drilling seep well. That will reduce the suffering of the community.	There are shortages of services such as Water, electricity, medical unit, school.

Meeting with men/women Survivors: Habeel Al-Braq

Meeting with Children: Habeel Al-Braq

The meeting with children was confined to girls only;

The following issues were discussed in the meeting.

- 1 The parents warned us, as well as the teachers and the elderly people.
2. We did not know about mines until the demining teams came with their cars.
3. We herd animals in our fields, which are far away from mined fields. After we knew about demining of the area, we became very happy and did not feel scared any more.

Note. The girls were very closed to themselves and feeling shy. That is why very little information was collected from them.

Major impressions from surveying the village of Habeel Al-Braq

1. The visitor to the village recognizes that the houses of villagers are huts and modest. This reflects the low income of these people.
2. There is a widespread drought. No water available. People travel long distances to fetch water. Two hours walking distance.
3. The demined area is used for herding animals. The cement factory took over most of the area as well as a marble factory.
4. Local community people demand that their sons be recruited by the factory.
5. There is no infrastructure whatsoever. There is a four-classroom school only.
6. Before 2004, local people used to get UDXs and keep them at home. They did not realize the dangers and to whom they should hand over these devices.
7. Labour in the area is cheap, especially those who work in farms in "Bateis".
8. There are sharecroppers in landowners' fields. Their share is 50% of the crop. In summer, farmers lose bananas because they ripen very fast.
9. The demined area is subject to land dispute among the owners and others who claim ownership by force.

Impacts and Opportunities after demining: Habeel Al-Braq:

Category	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Farmers	Herding Houses Roads Cement factory	All community members Bedouins All community Investors	The two potential resources in the area. Temporary housing. Shorter distance and time	Drill deep wells Water supply project Solve land dispute to broaden access to stone & marble cutting	All the village All the village Most of the village.	The major problem is scarcity of water. Surface water unsuitable for drinking
Leaders	Cement factory Marble factory Land	Investors from outside the area. Landowners Belongs to 2 tribes from outside the village	These are vital projects with good return to the community Have documents supporting claim.	Irrigation canals to rehabilitate agricultural lands. Infrastructure (Medical unit, water supply project, electricity)	All community and investors	Despite the short distance from the centre, the village is suffering from basic needs.
Women	Herding Security Road Stones Cement factory	All the community, Neighbouring villages, Bedouin. Landowners	They are obvious impacts for all the community	Literacy classes Water supply project Electricity	Illiterate women All community	
Children (Girls)	Security	All community	The only impact felt	Build a secondary school Expand the current school Water supply project	Children in the community All community	They complained of shortage of classes.
Survivors						

Ofeini

Khanfar District, Abyan governorate

Date of survey: 25th May, 2006

Summary: Ofeini

Ofeini is a desert area (with underground water) about 40 minutes drive from Abyan town along desert tracks. There is no village. Instead the area is populated by some 12 families of nomadic people from the surrounding area, who come and go according to the availability of animal feed. They live as separate (extended) families in very rudimentary “settlements”, and herd camels and sheep/goats, and keep bees (the main cash income – see diagram). One of the main forages is *Sesbania* sp, which is an introduced species (as a windbreak and sand erosion control plant).

The area was a battle ground, so there was a lot of unexploded ordnance, which has been cleared and destroyed (we saw the collection point). The one small minefield was cleared in 2005. It was classed as low impact by the Landmine Impact Survey

The area is owned by one Sheikh (Ali Saleh Ali Ahmed Al Fadheli), who allows the nomads to graze the area free of charge as long as they don't make any permanent settlement. The area is suitable for livestock and crop production (especially fruit and vegetables) if there is reliable water supply. No-one (nomads or Sheikh) seem to care that the nomad children get no education, and they can't see how they can be given schooling in a practical way as they are always moving their living place.

The Sheikh suggested that the area is good for livestock breeding (high quality sheep, goats and camels). Feed is available, as is a research station (established 1955). However this is just an idea, and would need technical assistance and funds (maybe from agricultural bank, but conditions are tough – or maybe in cooperation with other landowners). Not clear if nomads would also benefit from this from much needed employment.

Introduction: Ofeini

On arrival, the survey team met with one family (six women and about 10 men) only. The inhabitants of the area are nomads, without any permanent village site or village structure. The “houses” are temporary shelters, erected to stand few months before the household moves to another site.

Time Line: Ofeini

It was difficult to trace the history of the village. The women met by the team said they are new to the village. They came from Ahwar. The most senior among women said she has been in this site for almost a year. She heard about mines but does not know any details or dates of events. The others were less than a year in Ofeini, and knew nothing about mines.

They said they could not build more solid houses because; the land belongs to land owners. Settlement for long periods is not their strategy. They live in continuous movement. They sleep under trees and the shade is good enough for them throughout

the day. The total number of households in Ofeini is only four (NB men said 12). All of them came from Ahwar.

The woman said she and her family are using the so-called demined area for herding animals. The area is rich with trees and shrubs and has wide rangelands suitable for herding small ruminants, cattle and camels. Landowners own the area. However, they opened it for nomads to herd their animals without any restrictions. The women said all households in the village own animals. Some have 50 heads some 40 heads others might have more. They sell small ruminants with a price of 4,000 to 5,000 YR per head, and use that money to meet needs such as food, clothes etc.,

The women also said they have beehives in the village for honey production. The sale of honey is carried out on a daily basis. They use the cash from honey to purchase daily needs such as qat for the men and food for the family.

There is a well in the village. They are allowed by landowners to fetch water daily for themselves and for the animals. Women collect fuel wood and herd animals. The men manage the bee hives and also herd animals.

Village Profile: Ofeini

No facilities apart from wells.

Meeting with Village Leaders: Ofeini

A meeting with the landowner, Sheikh Ali Saleh Ali Ahmed Al Fadheli and his son.

Following are the major issues discussed:

- The land after demining became safe. People can move around freely without fear.
- We herd animals in this area. The area is rich with trees and shrubs which are considered good forages for big and small ruminants as well as camels.
- The land is owned by landowners. However, they opened it for herding animals without any charge. You need to get permission from the land owner only.
- When there are floods or rains, this area grew different crops such as: sorghum, water melon, millet, sesame, cotton, sweet melon and many other crops. All depends on the floods and the amount of rain. This land has not been cultivated for the past seven years because of drought.

The most important problems faced in Ofeini (according to the Sheikh) are:

- Shortage of rains and floods, especially during the past seven years.
- The potential of this area is the development of livestock .If there are resources and financial support, the animal production can be a success story. The animal production projects in the demined areas are the best investment with high return.
- These lands are currently used by nomads, because of the prevailing drought and the limited floods for the last seven years. If in case that rain will be adequate or floods will come down, the landowners will cultivate this land with crop

Meeting with women: Impacts from clearance in Ofeini community:

What assets	Who is using	How were rights	What is the	What is the socio
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have been made available by mine clearance?	the freed assets?	to land use decided?	freed asset used for?	economic return from use of the freed assets
Herding animals and bee-keeping	All community	Access is allowed for every body as long as they are not settled	Availability of trees and shrubs	Fodder for small and big ruminants and camels. Honey production (Total income 904,000 YR per year for one family)
Security	All community	Nomads		
Fuel wood	All community	Nomads	For cooking	Availability of fuel wood

Meeting with women: Development opportunities for Ofeini community

Assets/ Resources	Constraints and Problems	Solutions & Opportunities	Who will benefit?	Who should support?
School	We are not on our land We are not settled, and have limited financial means	Provide places for settlement and build school	All community All community	Government Government
Electricity	No power supply	Generator	All community	Government

Meeting with Children: Ofeini

There were only four girls in the village. They said that they do not know how to read and write. They do not go to school. However, they know how to make toys from tree branches to play with. When the nomad households come to the village in big numbers, they play with the children but normally they have few friends. They had heard about mines.

Impressions of survey team of Ofeini community:

1. All the community is made up of nomads.
2. There are many trees and shrubs in the area, which are suitable fodder for animals.
3. There is a good income from honey production and animal sales in the area (see diagram).
4. No education, because no local school and the itinerant lifestyle of people.
5. Landowners allow nomads to stay on the land and herd animal without any charge.
6. There is no alternative employment for men or women

Impacts and Opportunities after demining in Ofeini community:

Category	Benefit	Who benefits	Why?	Opportunities	Who benefits	Why these opportunities are important?
Herders-beekeepers	Security Return from bees and livestock	All nomads	Because they move The area is a good rangeland for herding and bee hive keeping	Jobs for men	Nomads	They look for additional permanent income
Women	Security Herding	Women nomads Same	Freedom of movement Rich area with	School Electricity	All children of nomads	Children are deprived from education

	Fuel wood	Same	tress and shrubs		Settlement of nomads	No electricity
Leaders (landowner)	Security	Land owners	They were given a chance to get projects.	Improvement of livestock production if there is technical and financial support	Land owner	The area is suitable for such projects. The research center is close to the area for technical support
Children	Security Herding	Children of nomads	Free movement Suitable area for herding			

Livelihood diagram for Abdullah Nasr Saleh and family, nomads living in Ofeini, Abyan governorate, Yemen. 25th May 2006.

Provisions:
 Purchases from town, using camel cart as transport. Very few possessions.
 Water free from local wells

Sales:

- One male camel per year (60,000 YR)
- 24 sheep/goats per year (6000 x 24 = 144,000 YR)
- Honey: 700,000 YR per year in good years

Total gross annual income = 904,000 YR
 No overheads (tax, rent, feed)

Women:

- Housework/cooking
- Caring for children

Children:

- No schooling
- Girls make toys and sing
- Help grazing
- Boys carry guns

Abdullah Nasr Saleh and family
 Total: 18 people (7 women and 11 men).
 Came to Ofeini from Ahwar (because of conflict there) one year ago.

Livestock owned by family:
 7 camels
 100 sheep/goats
 300 bee-hives

All feed from locally available plants (including *Sesbania* sp)
 No technical support

The family feel safe from mines/UXOs and from conflict with neighbours.
 Each of the 12 nomadic families in the area lives and works separately. They want alternative employment.