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Participatory, holistic evaluation of development initiatives in Sandema (Builsa District) Upper East Region Ghana

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Participatory, holistic evaluation of development initiatives in Sandema (Builsa District) Upper East Region Ghana

In the Framework of the 'Participatory Development Assessment' project of ICCO, Woord en Daad and Prisma-funded activities in northern Ghana and southern Burkina Faso, together with AMIDSt/UvA

(Nieuwe Prinsengracht 130, 1018VZ Amsterdam The Netherlands)

Facilitators of the Sandema workshop, which took place from 15-17 Sept. 2008:

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Report: Ton Dietz (March, 2009)

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Introduction: the workshop in Sandema

Sandema is the main centre of Builsa District in the western part of Upper East Region in Ghana, and this area had been selected as an example of a long-term intervention area of a Christian NGO that has been supported by ICCO since a long time: the Presbyterian Church, with its Presbyterian Agricultural Station and Presbyterian Health Clinic at Sandema. Fifty-seven local people participated in the workshop (42 men and 15 women), next to 13 facilitators. Besides a group of fifteen 'officials' (mostly government employees, working at district level in Sandema Town, in the centre of the district) there were representatives from ten village communities. We decided to combine them to form five groups at community level: Kandema/Nyansa/Balansa in the area west of Sandema Town, Molinsa/Nawaasa (the Chuchiliga area) in the area towards the northeast¹, Bilinsa/ Korri/Kobdema in the area east of Sandema Town, Farinsa, in the area south of Sandema Town, and Chansa/Siniensi (a small group) in the far south.

Sandema Workshop Programme 15-17 September 2008

Sunday 14

Evening: facilitators travel to Sandema and have a brief meeting there to prepare for the workshop

Monday 15

9.15 start with prayer and explanation (Francis Obeng and Fred Zaal)

10.30 start with five groups on time line and changing capabilities:

Elderly women (six plus Dieneke and Agnieszka)

Young women (seven plus Martha and Margareth)

Elderly men (twelve plus Saa)

Middle-aged men (ten plus Richard and Mahmoud)

Young men (fifteen and Frederick and Wouter)

14.00 lunch

15.00 continuation of capabilities and poverty assessment

16.00 plenary with prayer (Francis) and explanation personal life histories (Kees); heavy rains; part of the participants stays in Sandema

Tuesday 16

9.00 start with prayer and continuation of capabilities and poverty assessment

10.30 plenary session (Francis) to explain about listing; six groups formed

Area Groups on second day:

Molinsa and Nawaasa: 11 men and 3 women plus Richard

Bilinsa, Korri and Kopdema: 4 men and 4 women plus Martha (later also Margareth)

Kandema, Nyansa, Bilansa: 7 men, 5 women and Fred Kabila plus Wouter

Chansa: 3 men and Mahmood

Farinsa: 3 men and 2 women plus Dieneke and Agnieszka

All groups here appeared to be non-intervention groups of PAS; first the misunderstanding was that Farinsa would be the only community with ongoing PAS interventions but that was not true for this Farinsa community; however, indirectly PAS did have an impact

Government employees: 14 men and 1 woman plus Saa

They of course included PAS interventions as they were asked to work at the level of the Builsa District as a whole

13.00 lunch (plus assistance personal life histories)

14.30 continuation with project assessment of all projects on the lists: usefulness (categories 0-1-2-3-4 and for Government employees/Builsa District level: 4a (= substantial positive impact) and 4b (= positive impact but limited to only a few communities or only a few individuals).

Same groups, which were asked to separate women's from men's opinions, with one exception, the Kandema+ group, in which there was a separation between the men (Wouter) and the women

¹ Along the main road from Sandema to Navrongo and further towards Burkina Faso (North) and Bolgatanga (East).

(Frederick) to form specific groups. Later all groups were split in men's and women's opinions and the exercise was repeated for the women alone.

16.00 end-of-the-day meeting and explanation about the next day. Prayer by women leader.

Evening: team of facilitators discusses the day's findings and approach; discussion about the more sophisticated approach for poverty/capitals/best projects approach.

Agreement about the protocol for analysis and the approach to do that (triangulating after Ghanaian Team and Dutch Team each has done the analysis, following the protocol, based on the same basic material. Typing of the lists of projects for each group.

Discussion about the implication of the choice of the local organisers to invite officials (who at district level know about PAS) and ten village teams from non-intervention villages of PAS (but often not far from villages with PAS influence recently or in the past. It was decided that final decision making about the implications would be postponed until after the analysis, but that the research design (selecting a sub-district with recent interventions funded by Dutch NGOs, in this case ICCO) is at a level above villages. So: even if villages did not have PAS projects in recent periods, they still could be expected to be influenced by PAS projects, as people's networks go beyond their own villages (women marry exo-locational; markets are covering various villages and so do clinics and junior secondary schools). The unexpected choice of the local organisers does complicate the interpretation, but does probably not invalidate the approach/design for this round.

Wednesday 17 Sept.

9.30 start with prayer and explanation (Francis); copying all the Lists of projects and the scheme for wealth group/capabilities/best projects assessment.

10.00-12.30 in subgroups per area and gender (plus group of 'officials') decide about the impact of all projects on capabilities; about the five (ten) best and worst projects, about the impact of the five best projects on each of the wealth categories (Method: ten stones to be distributed over five wealth groups per project) and about the impact of the best five projects on capabilities per wealth category. In the meantime: typing most reports. 12.30 Final meeting, with speeches by project leaders Francis Obeng and Fred Zaal, by the manager of PAS Sandema (Emmanuel Akiskame), by the District Chief, and finally a prayer by the Reverent. Afternoon: finalising typing reports and collecting all material; finalising discussion about protocol for the analysis. We also received a written description of the history of PAS in the area.

Part 1. Perceptions about recent local history; the 'time line' of important events and initiatives, Sandema area

Timeline of important events and initiatives in Sandema area, Northern Region, Ghana, as reported by participants in the Sandema workshop (September 2008).

Groups: Elderly men (EM), Mid-aged Men (MM), Young Men (YM), Elderly women (EW), Young Women (YW). During the second day some area groups added further details (reported as: 'later additions').

Early collective memories

1924

First road constructed from Navrongo to Sandema (Chuchiliga; later addition)

1926

opening of the first Catholic Church (officials; later addition)

1931

First activities of the Presby church in the area (Chuchiliga; later addition)

1930s

Burkina migrants built a mosque (Chansa, later addition)

1936 (or 1939)

Opening of the first primary (boarding) school (MM);

Since 1940s

Cattle tax (Farinsa, later addition)

1947 (or 1942?)

Construction of the first dam: Biaga (MM; Farinsa, later addition);

1953

Opening of the first Presby Church and health activities (officials; later addition);

1959-1967:

State farms in Chuchiliga area and Chiana and Tono Workers Brigades (Chuchiliga; later addition)

1961

Opening of Namonsa School and Presby church (Chuchiliga; later addition)

1962

Hand dug dam by community (Gbelinsa) (MM).

Government health clinic opened in Sandema (officials; later addition)

Introduction of new crop varieties (a.o. Naga White) (officials; later addition)

Before 1970

No banking services (EM);

Vehicular transport not common; people used local material to 'beat' roads (road construction) (EM);

Barter trading common; only one commercial Market at Dorninga (EM);

No hospital / health centre/clinic but Presby station ran a mobile clinic; Father Maney treated people with local herbs (EM);

Only one Middle Boarding School in Sandema (EM);

Only Catholic and Presby Churches in Builsa (EM);

Had to send animals to Biu (near Navrongo) for vaccination (EM);

Law passed against women wearing leaves to cover private parts (EM);

Women not allowed to partake in discussions and decision making. They could only discuss issues with husband in-doors (EM);

FGM rampant (until about 1985) (EM);

Women were more mature early; they could marry young (EM);

1969

Introduction bullock plough (EM);

Aliens compliance order (EM);

District under Navrongo (EM).

URADEP started with small rural development projects (officials: since 1969; EM: since 1975); emphasis on animal traction.

Start of the first Presbyterian Agricultural Station.

The 1970s

Acheampong regime did appropriate things for the area; Spirit of voluntarism and self-help (EM);

Enough food to eat and farm (EW);

In dry seasons (wells dried up) animals would go to the bush and easily be stolen by thieves (EW);

Start immunization by government (yellow fever, measles in primary schools and communities (till '80s) (EW);

Introduction of boreholes in area (CIDA) (EW);

Start of rivers drying up in dry season (EW);

The Cotton Development Board introduced cotton growing (officials; later addition)

FASCOM depot built (Chuchiliga; later addition)

1972

Building of Tono Irrigation dam (EW);

CIDA boreholes (officials, later addition)

1974

New Builsa District created (EM);

Father Nayang became 1st African Catholic priest (EM);

Stadium built (EM);

Rural housing project (EM);

Area was forested (EM);

1975

1st African Presby Pastor (James Ayalic) (EM);

Tono irrigation dam, near Chuchiliga (EM, MM); at the time the largest irrigation scheme in Ghana (officials; later addition)

Drilling of boreholes started in the district (MM);

Introduction of chemical fertilizer (EM);

Operation Feed Yourself (OFY) (EM);

Introduction of composting methods by MOFA (Farinsa, later addition)

Good and ready market for rice (Fumbisi Valley for rice production 1975 – 1980) (EM);

Group farming in Kenaf to supply to Inte factory in Kumasi (EM);

Financial institutions gave loans to women (EM);

1st Magister Court in Builsa (EM);

Council (DA) offices built (EM);

Start of mobile outreach clinics by the Government Clinic (officials; later addition)

1979

First Secondary (Senior High) School (EM, MM); expanded in 1994 (officials; later addition)

1979/1980

Many boreholes constructed in Builsa District (EM);

Presby Station closed down temporarily (because of mismanagement) (EM).

The 1980s

Start improving harvests (EW);

Introduction of soybeans (to prevent malnutrition) (EW);

CRS school feeding programme (officials, later addition);

Start of women groups (officials, later addition)

1981

The military drill boreholes in Farinsa (Farinsa, later addition)

1982

Army Worms infestation (EM);

Severe Drought (MM, YM);

1983

Severe drought and famine (EM); Big famine; there was only sun and no rains; Food Aid given (government): wheat; rice and barley, sorghum and yellow corn (EW); Severe hunger in Sandema, surrounding communities and the nation as a whole. (Group members indicated they were told about it by parents; YW);

Wildfires (MM);

Increased destruction of forest for charcoal and pita brewing (EM);

1984

Severe dust (March). Drivers drive through the dust with lights (MM); Strange dust for two days, which gave a very strange light in the dark (YM);

1985

Full implementation of ICOUR (EM);

Chuchiliga irrigation canals constructed, with water from Tono Dam (Chuchiliga; later addition)

1985-86

Declared oncho – free zone (black flies controlled) (EM);

1986

Start of community school at Farinsa (Farinsa, later addition)

UNICEF school support programme (idem)

1987

Presby Station re-opened (Director: Joseph Mahama Salifu) (EM);

Lost harvest; famine (EW);

1988

First District Assembly (EM);

Floods that destroyed property (EM);

1989

Rural Bank opened (BuCo) (EM; YM: early 1990s).

UNDP and ICOUR started tree planting projects (Chuchiliga; later addition)

The 1990s

Start 'shepherds' schools (under the trees) -> have developed into community schools now (EW);

Presby Healthcare started (EM);

1991

Sandema connected to Electricity grid (EM, MM; YM and officials: 1993) by Volta River Authority

Presby Rehabilitation Centre opened for Community-Based Rehabilitation (EM);

1992

Floods (EM);

FOSADEP programme started: introduction of soybeans (officials; later addition);

IFAD funded LACOSREP programme started: farmer credit (officials, later addition);

The Presbyterian Agricultural Station introduced new maize varieties (officials; later addition);

Start of Community Livestock Workers (officials, later addition)

Primary Health Care established outreach at Chuchiliga and Siniensi (EM); Start working of health volunteers

(EW); Start immunization campaigns five killer diseases (health centres, schools) (EW); clinic becomes a

District Hospital (officials; later addition)

Start of non-formal education (Chuchiliga; later addition)

Constitutional rule District Assembly established (EM); start of a DA Poverty Alleviation Fund (officials; later addition)

Solar panels for non-formal education buildings (officials, later addition)

Feeder road Sandema-Farinsa (Farinsa, later addition)

1993 (or 1995?)

Fumbisi Secondary School (YM)

Tarring of Navrongo-Sandema and Sandema town roads (officials; later addition)

1994/95

Introduction soybeans and cowpeas (EW);

Introduction of hand wells (EW);

1995

Floods (EM); Flooding in the whole district. The state transport corporation (bus to Accra) tried to cross, but was swept from a bridge (YM);

Youth Leadership Training Institute opened (EM; YM);

Rural Aid started (EW);

Sandema Secondary School (YM);

Road surfacing (tarring) in Sandema (YM);

ADRA started school woodlot programme (officials, later addition)

Start of grafted mango project by PAS (officials, later addition)

1996

Start of Village Infrastructure Programme, with small-scale irrigation dams across the district (officials; later addition)

Start of activities of Buco Bank in the district (officials, later addition)

Sandema and Fumbisi Senior Secondary School (EM);

Outbreak of anthrax (MM);

Meningitis outbreak (YM)

PAS introduced improved cockerels and guinea fowls (officials, later addition)

1997

CSM outbreak (killed people) (EM, MM, YM: 1996);

Cholera outbreak (MM);

PS in Sandema/Balansa (YM)

VUM Trees started woodlot projects (officials, later addition)

PAS credit programme for disabled people (officials, later addition)

1998

The Government named an armoured car after Sandem Naab (EM);

Insects ate whole crop; no sorghum harvest (EW);

Introduction use of fertilizer (EW);

PAS introduced Sahelian breeds of sheep and goats (officials, later addition)

Kobdema and Farinsa connected to the electricity grid (YM; Farinsa. Later addition);

WFP Food rations and scholarships (officials, later addition);

Start of health surveillance workers (officials, later addition)

1999

Cholera outbreak (killed people) (EM, MM);

Improvement of sanitation (introduction of household latrines) (EW);

Army worms infestation (EM, MM);

Severe floods in Sandema area (MM);

UNICEF Freedom from Hunger project: credit to women groups through Buco Bank (officials, later addition)

New crops: soybean and sorghum (for Guinness) (YM);

Village Infrastructure Project introduced donkey carts on a massive scale (officials, later addition)

More shops in Sandema (EW)

Njasa PS 1999 (started in wood structure, 2005: building) (YM).

The 2000s

2000

Start of Saint Agnes Vocational School at Chuchiliga (officials; later addition)

School feeding programme by CRS (Farinsa, later addition)

MoH starts providing mosquito nets with repellents (Farinsa, later addition)

Restructuring of Presby Agric Projects (EM); IFAD-funded LACOSREP credit project now through PAS (officials, later addition)

Agric. Extension services (MOFA) since approximately 2000 (YM); a.o. introduction of improved sweet potatoes (officials; later addition)

Feeder roads construction started (EM); stimulated by Builsa North MP (Chuchiliga, later addition)

Cholera outbreak (YM);

Start of expansion of pig breeding (officials, later addition)

Small Town Water Systems in Sandema (officials, later addition)

District Administration Buildings in Sandema; establishment of area councils and unit committees (officials, later addition)

2001

Girl child education initiative by Unicef (EM; according to officials this already started in 1993; provision of bicycles and uniforms to girls); Unicef: Community Integrated Management of Childhood Illness (Chuchiliga; later addition)

Establishment of Traditional Healers Association (officials, later addition)

2002

A private company, GCCL started to buy cotton from farmers (officials; later addition)

Introduction of seeds to grow animal fodder (EW);

Insect infestation, which destroyed crops (YW);

Road to Namansa (YM)

Start of private schools ('Joy and Success Primary Schools) (Officials; later addition)

2003

Heavy rains washed away all the crops => famine (EW);

Illegal mining at Kandema (EM);

Introduction of composting (EW);

Improvement main feeder roads in surroundings of Sandema (EW);

African Development Bank Livestock Development Project (officials, later addition)

2004

District Hospital established (EM);

All primary schools have day care centres now (EW);

Outbreak of cholera, resulting in the death of many people, especially children (YW);

Cowpeas introduced (EM);

FAO project for Wealth Creation (Sahelian goats) (officials, later addition)

Anti-bushfire campaign and anti-tree cutting campaign by Government (NatMO) (Farinsa, later addition) 2004-05

Chansa dam rehabilitated; Siniensi dam (Kaassa) built (EM);

Many people died of HIV/ AIDS though some started dying from 1995 (MM); An outbreak of strange disease, locally referred to as 'acute malaria'. Both the cause and cure was unknown (YW); 2005

Kandema dam built (EM);

Road to Kori built (YM);

Five guesthouses started since 2005 (YM);

Every primary school now has a kindergarten attached to it (officials, later addition)

Start of so-called capitation grants to schools by MoE (Chansa, later addition)

PAS credit programme for farmer groups (officials, later addition)

SFMC loans for soybeans and sorghum (officials, later addition)

2005 and 2006

Good harvests (EW);

2005-2008

Boreholes: 60+ in last 3 years (YM)

2006

Very good harvest (YW);

Rural Enterprise guineafowl project NBSSI (officials; later addition)

Eclipse of the sun (March) (MM);

Introduction of the National Health Insurance System (MM);

Death of Sanama Naa (November 14th) (MM);

Outbreak of PPR, killing livestock (MM);

Bigger sheep and goats introduced by PAS-Sandema (YM);

New dam (CBRD) Siniensi-Kaasa and Namosa (YM);

CARE/PAS community-based extension agents (officials; later addition)

2007

Floods (August) (MM); 2007 Severe flooding (Aug 24/25, 2007) two days continuous heavy rains (YM); Floods through heavy rainfall: all crops washed away, houses partly under water (EW); Floods which destroyed crops (YW); Dam on the way to Kandema broken (built long ago) (YM); GTZ, ISODEC and Africa Online funded water treatment of all water points after the floods, and some borehole rehabilitation + rehabilitation of boreholes and dams by CARE-PAS (officials; later addition); MOFA gave flood support loans (maize seed and fertilizers) (officials; later addition); Late start crop season because of heavy rains (EW);

CODI Disaster Risk Reduction Project (officials; later addition)

Greening Ghana project (officials; later addition)

CARE-PAS mango project (officials; later addition)

Introduction of Metro: mass transport to the district (MM);

Communication: 3 telecom networks (all started in 2007), at least one reaches all communities present in the district (YM)

Introduction of Mutual Health Insurance (late 2008 over 70% of people registered; according to Chansa group it already started in 2004)

MASLOC loans (officials; later addition)

2008

Builsa Community Radio started (MM; YM);

Balansa Junior Secondary School opened (YM).

Moringa and Mango Project by PRONET North (officials; later addition)

Red Cross Housing project for flood victims (Chuchiliga; later addition)

Start of screening on HIV/Aids by mobile clinic Sandema (Farinsa, later addition)

$\ \, \textbf{Part 2. Trends in capabilities: perceptions about change in the Sandema\ area} \\$

As reported by participants in the Sandema workshop (September 2008):

YW = Young Women; EW = Elderly Women; EM = Elderly Men; MM = Middle-aged Men; YM = Young Men; SO = Sandema Officials

We used the perceptions about change domains (six 'capitals'/'capabilities'): natural, physical, economic, human, social-political and cultural. People were asked to use a time perspective of 25-30 years ("compare the situation now, with the time when your father/mother was your current age").

Table 2.1: Perceptions about positive and negative changes in natural capital during the last few decades

	Cha	nges
Natural	Positive	Negative
Land/Soil	More access for women to farming (YW); introduction of fertilizer; introduction of composting to improve the soil (EW); composting is widespread now; there is a general tendency towards commercialisation of land; soil winning and collection of stones for construction brings in income (SO).	The soil has become infertile; addition of fertilizers is needed to improve yields (YW); fertility is very low now; land has been overworked; application of fertilizers to land has helped to worsen its productivity; methods of cultivation cause erosion and floods have worsened it; climate change has worsened productivity: July used to be the month of harvest of early millet; it is now the planting month (SO).
Forest/trees	Tree planting (EW); there has been an increase in the planting of trees, especially economic trees, e.g. Mango and neem (SO).	More trees are felled for charcoal, due to poverty (YW); cutting of forest trees for fire wood and wood for construction (EW); forests disappeared; in the past the forest was 200 m from home; mother would leave small children alone to fetch firewood and be back in one hour; now this takes much longer; this happened gradually, through 1) population pressure, 2) firewood and charcoal trade (no longer by foot but by truck) (YM); there has been destruction of the forest for

		charcoal, firewood etc.; some tree species no longer exist,
		e.g. fig tree; medicinal plants/trees are now difficult to get; bush burning is more
		rampant now (SO).
Water	More sources of water (piped water, boreholes) (YW); enough water in rivers and streams for animals and gardens; in dry season they open the dam so that streams won't dry up but only reduce (EW); as a child shepherding, there was only one river (which one was warned not to cross): Abelekpieng; now there are more rivers ('uncountable'); reason: bridges/culverts divert the rivers into several streams (YM); boreholes, wells and treated water are available now (SO).	All rivers dry up completely; in the past some water would be left in pools for drinking; now no more (YM); many rivers have silted up; bad agricultural practices and cutting of trees along river banks are responsible; many rivers and dams have been polluted through bad fishing practices (e.g. use of poisonous chemicals) (SO).
Crops/Plants	Different types of crops were introduced (soybean, maize); crop production is more for sale than for home consumption now (YW); introduction of soybeans and cowpea (EW); before: hoes; now: tractor + bullock; Agric. Extension services (MOFA) since appr. 2000 (YM); new crops: soybean 1999, cowpeas 2004, sorghum (for Guinness) 1999; maize increased (YM); commercial farming has increased, particularly during the last three years) (YM); several new techniques: composting, mixed farming, etc. (YM); farmers now cultivate new varieties of crops such as groundnuts, and maize; there is a drastic increase in cultivation of maize; soybeans have been	Low(er) crop yields (YW); the season is changing: before: sowing in April/May; now: June/July (because rainfall starts later) (YM); Agricultural demonstration and grinding mill in Namjupiu: stopped in 1993 (YM); before: small plots, high yields; now: bigger plots, smaller yields; e.g 9 bags yield before, now 3 bags from same plot (last year: only half bag because of flood); another example: 2000: 6 bags, now 2 or 3 bags (YM); crop yields are lower now; quality of seed of most crops is getting worse every year (SO).

	production is gaining grounds (e.g. tomatoes, rice,	
	onions, pepper, okra, garden eggs etc.) (SO).	
Animals	Pigs were introduced; animals are now pegged to allow children to go to school (YW); veterinary workers go to villages to vaccinate small animals and give trainings on care taking (mobile station veterinary service); introduction of improved varieties of goats from Burkina Faso (EW); new animals: donkeys (increased); bigger sheep/goats (2006) by PAS-Sandema (YM).	Although there are many animals now, they still die easily (YW); livestock is weakernow: then people with 900 fowls, now 10; bigger groups of animals easily die; sheep/goats as well; e.g. in 2008 20/22 sheep died; not donkeys; stronger animals sold to South (because they survive transport better) (YM); no wildlife left; in past you could meet wildlife when moving from one community to another; there is a general decrease in numbers of farm animals; there is an increase in rustling (stealing) of livestock; cost of livestock health care is very high now (SO).

Table 2.2: Perceptions about positive and negative changes in physical capital during the last few decades

Physical	Positive	Negative
Physical: Roads	More roads (YW);	The roads are in bad
	construction of road from	condition (due to rain) (YW);
	Chuchiliga – Sumbesi (EW);	Some roads are/have become
	new roads to Namansa and	very bad during the rainy
	Kori (YM); road network	season; they have bridges
	now good (roads have	with no gravel on top (EW);
	increased in numbers and	maintenance of roads is a
	quality) (SO).	problem (SO).
Physical: Buildings	Better structures from	Increase of houses means a
	cement, zinc roofs (YW);	reduction of land for
	greatly improved in all	agriculture (YW).
	communities; market	
	structures now far better:	
	stalls and sheds by District	
	Assembly and private people	
	have been constructed in	
	markets (SO).	
Physical: Latrines	Construction of household	Not all houses do have
	toilets; there are public toilets	latrines; there are not enough

	now in Sandema; some houses now have Ventilated Improved Latrines (VIP) (EW).	public toilets available; not every house has these 'free range' latrines: spoils the environment: rivers and streams - > ill health (EW).
Physical: Water and Boreholes	More boreholes (YW; EW); quality of water has improved, but not all year round (YW); there has been no change in the number of dams, but the YW group has no idea about the condition of the dams; other members of the group have no dams in their communities, so could not tell much about dams in their community (YW); new dams have been constructed and old ones rehabilitated (SO); every community now has at least one borehole SO).	There are worms in a particular borehole constructed in 2006 (around May every year). Poor sanitation around boreholes (YW).
Physical: other drinking water facilities	Hand dug wells; local wells; introduction of water pipe in Sandema (EW)	
Physical: irrigation channels	New irrigation schemes for rice; soybeans; vegetables like okra, tomatoes, onions and carrots (EW)	
Farm tools	People have access to improved farm tools now (ploughs, tractors) (YW) Many people own bullocks now (YW); animal traction is common now (20 – 90% of households in communities own bullocks/donkey ploughs) (SO).	
Electricity	Electricity in Sandema since 1993 and in Kobdema since 2008; but not yet in places like Kandem and Namasa (YM)	
Telecom	Recently three networks started and all centres are now connected by at least one telecom network (YM)	

Table 2.3: Perceptions about positive and negative changes in human capabilities during the last few decades

Human Capabilities	Positive	Negative
Knowledge	Has improved: enlightenment	Bad knowledge has also
	about the importance of	increased; people have learnt
	children, gender roles (YW);	to take drugs and strong
	good knowledge has	drink (SO).
	increased (SO).	
Education level	More educated people in the	The level of education
	community employed at	depends on the income of the
	various organisations (some	parents (YW).
	community members are	
	now teachers or nurses)	
	(YW); generally, the level of	
	education is high now (more	
	people now complete higher	
	education) (YW); there are	
	many more primary schools	
	and vocational training	
	centres; increase in non- formal education: learning to	
	write their own language	
	(EW); now it is easier to find	
	an English speaking person	
	in each village; literacy has	
	increased (YM); schools	
	have increased in numbers;	
	kindergartens are now in all	
	primary schools and	
	therefore in almost all	
	communities (SO).	
School enrolment	Now high ("we have realised	Not all children go to school
	the importance of	(shepherds often not) (EW);
	education") (YW); almost	some say: increase in number
	universal enrolment in PS	of drop outs because there
	now (97%); in the past	are more demands now when
	parents did not want their	attending school (shoes,
	children to attend schools	clothes) (YM); high pupil:
	(even though PS were there):	teacher ratio; many schools
	education would lead to bad	in rural areas lack teachers
	boys and they were needed	(SO).
	for shepherding; dropouts	
	used to be high, because of	
	shepherding and early	
	marriages (YM); drastic increase in enrolment of	
	females in schools (SO).	
Health	More health facilities and	A lot of new diseases (e.g.
1 Carui	decreased infant mortality	'acute malaria') (YW); there
	(YW); Hospital in Sandema;	is an increase of malaria;
	health centres/clinics in	despite the increase in nets:
	moduli condes/enines in	acopite the mercase in nets.

	villages (EW); introduction	people have already been hit
	villages (EW); introduction of CHIP (Community Health Improvement Programme); vaccinations (CSM, every 3 years; yellow fever, every 5 years; 5 killer diseases (given in schools and health centres); providing vitamin A capsules in health centres; introduction of treated mosquito nets (EW); child mortality has decreased (some members of YM group disagree): people are better informed now; health posts (clinics, CHPS compounds, weighing centres, all communities have at least one) → access improved (YM); there is a hospital and there are many health centres and clinics now; medicines are now readily available; maternal and child mortality has greatly reduced; measles, polio etc. are completely eradicated (SO).	outside by the mosquitoes (EW); despite better health care, people are not healthier: the previous generation was stronger (all members of YM group agree); the next generation is even weaker; life expectancy becomes shorter, as a result of smoking, drinking, sexual lifestyles; maternal mortality is high (e.g. 1 community: 6 cases in recent years); loss of traditional knowledge (herbs), because of easy acceptance of western medicine; costs of medicine are high, e.g. costs of a health card; 0.5 → 5 Ghc in 2 years; few are on health insurance (premium of Ghc 13 is regarded as too high) (YM); many people are forgetting herbal treatment; herbalists do not even know some of the herbs anymore; HIV/AIDS now prevalent;
		strange diseases such as hypertension, stroke etc. now prevalent; there is an increase in self medication and drug
Sanitation	Has improved: proper disposal of faecal waste, KVIP (YW). (EW: idem; although not all houses).	in self medication and drug abuse (SO). Very few use latrines (only one person in the YM group has a latrine in the compound) (YM); sanitation is getting worse; more toxic waste in the system now (polythene bags etc.); sanitary inspection (samasama) no longer strict; there is no longer a "mosquito season": mosquitoes are now around every time of the year; there are no toilets in many communities (SO).

Table 2.4: Perceptions about positive and negative changes in economic capital during the last few decades

Economic capital	Positive	Negative
Overall income levels and	There are more women in	Overall income now lower
'well being'	farming and petty trading. This makes them	(later discussion: income maybe higher, but expenses
	independent so they can take care of the children's school	even more higher, so feel poorer); well being /
	bills (YW).	happiness: 6 members of the
		YM group: lower, 4: higher,
		2: balanced ("now people do
		no longer cut their coats
		according to their sizes") (YM)
Access to credit (banks) and	Some groups can get loans	Not accessible to all groups;
money	because of the banks; we can	It is difficult to get loans
	save money and withdraw	from the banks because
	(YW); loans are available	debtors have refused to pay
	now (EW); banks: the most common one charges 37%	various earlier loans; high interest rates (32 % now
	interest; also: MOFA/IFAD	reduced to 22, but it is still
	branch (lower interest),	very high) (YW); loans are
	MASLOC (no one in the YM	not for poor people: they
	group had experience) and	need collateral and have to
	PAS (20-30% interest); banks are readily available	pay interest (EW); political loans have several negative
	now; informal borrowing not	aspects (SO).
	so common anymore; women	
	have saving groups; only	
	men with formal salaries	
	have saving groups (YM); women and men groups have	
	greater access to loans;	
	'political loans' also	
	available now (they are loans	
	given on the basis of political	
Migration and Remittances	patronage) (SO). We can't say much about	Migration to South from
	this: some do, some don't	November to April each
	(YW); outmigration in the	year: people leave their
	dry season has increased	houses to beg (EW);
	(esp, to the Kumasi area): 11 out of 13 members of the	migration breaks social relations; women combine it
	YW group do this (other 2	with prostitution → hiv-aids
	had formal jobs); it is better	(YM); also local migration
	than local daily labour, it is	has its downsides: it breaks
	paid in bulk afterwards >	down social relations (YM);
	better able to save, easier to	remittances are now very
	invest. Ghc 4.5 / day; use:	low; conditions are now also

	invest in livestock; nowadays	difficult in the South (SO).
	also women join seasonal	difficult in the bouth (bo).
	migration: many work in	
	chop bars, or sell water;	
	women remit more faithfully	
	than men; there is only	
	limited migration to	
	destinations outside Ghana	
	(YM); moving between	
	villages has also increased,	
	e.g. to Fumbisi, Navrongo,	
	Moo (Upper West); some	
	stay behind in Kumasi (YM).	
Work/Jobs	There are more paid jobs	Youths get independent
WOIN/3003	now (hair dressers,	money → less respect for
	seamstresses) (YW); trading	parents, spent on drinking \rightarrow
	increased, esp. cattle,	addictions → stealing in dry
	sheep/goats/ fowls; many	season to get drinks; also:
	female traders; also Fulani	meagre payment; communal
	retailers and traders; the	labour (kpaariba) is reduced /
	number of artisans increased	and harder to organise (YM).
	(carpenters / masons), e.g.	and harder to organise (1111).
	from 1 to 9 in 10 years in 1	
	community. Some do it part	
	time along farming (YM);	
	positive side of paid labour:	
	way to get money; positive	
	for big farmers: it is easy to	
	get labourers (YM); paid	
	labour for commercial	
	farmers (esp. rice, also	
	groundnut, tomatoes): when	
	money is needed: Ghc1.2-2.5	
	/ day (8-13h) (YM); women	
	are now the farmers: they	
	farm to feed the families; dry	
	season production has	
	become common; salary	
	earners have increased	
	greatly in Builsa District	
	(SO).	
Shops/ kiosks/market	Better structures, more shops	Less space for other
<u> </u>	and kiosks, street lights in the	businesses like hairdressers.
	market so they sell more;	This is due to the rise in
	more business until late in	number of shops and kiosks
	the evening (YW); there are	(YW).
	stores now in Sandema;	
	Fumbisi; Wiaga; Chuchiliga	
	and small stalls in the rural	
	and sinan stans in the fural	

	-	
	structures relocated (within	
	Sandema); now Sandema has	
	the best market structure, yet	
	Fumbisi market is better	
	attended, e.g. by traders from	
	Kumasi (YM); there are	
	many more shops now; it	
	becomes an alternative to	
	farming; however: shop	
	incomes decreased; capital to	
	start shops: farming (if rich),	
	work in Kumasi, bank loan,	
	building up from small trade	
	(e.g. fowls); in 10 yrs the	
	number of shops has grown	
	500%; mostly younger	
	people start shops (YM);	
	shops have greatly increased	
	in all parts of the area; people	
	can now buy anything	
	without travelling far (SO).	
Transport and Busses	There are more busses and	Bus fares are high (except for
_	lorries in good condition	government busses) (YW);
	now; this makes travelling	the road is often very bad
	easier, faster, and trading as	(EW).
	well (YW); people can drive	
	along with the lorries when	
	there are roads; there are	
	busses going from Sandema	
	to Bolgatanga now (EW);	
	in the past people needed two	
	days to reach Accra, now	
	only one day; there is a direct	
	connection to Kumasi (on	
	Sandema market days, once	
	every three days); from	
	Chuchuliga to Sandema used	
	to take six hours on foot,	
	now 15 minutes by taxi car;	
	there are always cars going	
	to Navrongo / Bolga now; on	
	market days there are 15	
	buses (some govt –'Metro'-,	
	some private, some owned	
	by outsiders); there are many	
	more bicycles now (in the	
	past one per family, now	
	almost every family	
	, ,	
	member); government workers now use motorbikes;	

ten years back there were	
only two car owners in	
Sandema, now: 25-30 (YM);	
trucks are used now to trade	
with Kumasi (YM).	

Table 2.5: Perceptions about positive and negative changes in social and political capabilities during the last few decades

Social/ political	Positive	Negative
Farmers' relationships	YW group members emphasised that they still love and care for each other, even more than before (YW); working together through family relationships is still normal (EW); landownership is still reigned by men: if the husband is good, he will give land to till and build to the women (EW).	There is more disrespect (members of the family moving away for jobs, education) (YW); happiness decreased, because of less social relations; less care for the poor; more discrimination, and a breakdown of the social support system; because of education → jobs elsewhere → loss of contact / bondage with families → less respect (YM); the extended family system breaks down ("imitation of whites' customs") (YM); family relationships are deteriorating; there is too much selfishness now (SO).
2 m. 102 202 m. 102 m. p. 102 m. p. 102 m. 1	exists: sharing farm work (e.g. weeding) in millet/ sorghum/ maize and groundnuts (EW).	
Political parties	Increased awareness of the need for non-violent politics (YW); generally peaceful political process; family members can vote for different parties (but YM group members were not willing to reveal their political preferences) (YM)	Political parties are more deceptive, increased supply of hard liquor by parties making especially the youth more violent (YW).
NGOs	There are more NGOs, their response rate improved (more rapid); this makes their assistance more helpful than before; more people are reached (YW); more NGOs	Sometimes NGOs are selective in their operations (distribution of aid) (YW); not all communities are involved in NGO work yet (EW).

Associations	are working in the area now (EW); CRS is active in providing food at schools (WFP) (EW); NGO work has increased significantly (SO). There are more groups now, which has increased unity (YW); start of women's associations (-> empowerment) (EW).	
Leadership	Leaders are now more approachable (sub-chiefs, assembly men) (YW); Chieftaincy is for a lifetime; unlike politicians who change every xx years (EW).	Whatever the leaders say has to be done, without any discussions with other members of the society; women can't go back to their father's place; only in case you have an own place you could go there (EW); it is good to 'play politics' but the way the politicians play it is not good; some people are afraid of politics (EW); respect for leaders is much less now (YM); there is less respect for elders, chiefs, pastors etc. these days; there are leaders who so not lead good lives; politics has destroyed traditional leadership values; higher-level politicians do not respect local leaders (SO).
Land ownership/ tenure	Women can own /access land unlike in previous times when land was owned by chiefs and men only (land is sold now; and some women now buy land) (YW); no changes reported; no problems with land cases (YM); women have access to land to farm and even to build; widows are entitled to their late husbands' lands now (SO).	

Table 2.6: Perceptions about positive and negative changes in cultural capital/capabilities during the last few decades

20

Cultural	Positive	Negative
Christianity/ Islam	Increased number of	Many people (mainly men)
, and the second	Christians and Muslims.	don't want to change from
	They can pray for the sick to	their traditional belief to
	be healed (YW); the three	Christianity / Islam; when
	groups of religion	bad things happen people
	(traditional; Christians and	tend to fall back on their
	Islam) go well together	traditional belief (EW); note:
	(EW); there are no religious	remarks about family /
	tensions; traditional belief	leadership - see
	less, Christianity more, Islam	social/political - also have
	equal (YM); Christianity is	strong cultural aspects (YM)
	increasing; women and youth	
	are attracted to charismatic	
	churches; Islam mainly by	
	settlers from elsewhere (SO).	
Traditional beliefs and	There is a decrease in taboos	Indiscipline by both boys and
customs	(YW); Christianity frees	girls has increased; the fact
	people from ghosts; people	that traditional rituals are
	don't have to be afraid	dying can be negative (SO).
	anymore (EW); there are	
	more modern weddings now,	
	FGM is fully gone, some	
	funeral rites as well (e.g.	
	widow wearing some leaves)	
	(YM); traditional sacrifices	
	and rituals are dying (SO).	
Ethnicity/ languages	Diverse, especially in the big	The local language is being
	towns; contributes to the	badly adulterated (SO).
	richness of culture (we learn	
	from each other) (YW); the	
	knowledge of English has	
	increased but English is not	
	the lingua franca; however,	
	everybody speaks Buli (EW);	
	there are no ethnic tensions;	
	there are more ethnic groups	
	now, esp. Ashanti (YM).	
Music and dance	Traditional dances, music	Loss of culture (the youth
	and songs are being	have a preference for modern
	preserved (-> good because	music) (YW); it encourages
	this is part of our culture)	our children to go to night
	(EW); traditional music is	clubs (YW); music and dance
	still alive and used (other	are becoming very strange
	types added; in the YM	(SO).
	group there was a big	
	discussion about whether or	
	not increasing). Traditional	
	music and dances are still	
	common at marriages,	

	harvest feasts, communal labour parties (YM).	
Clothing		Varied clothing but most are very revealing/not decent (YW); 'Foreign' dressing styles are taking over even at funerals (SO).
Food/ diet	Variety of food (YW); different preparations of food nowadays; instead of putting pounded groundnuts and homemade oil on top of boiling rice, now also fish and meat is eaten (EW); positive changes in food habits (YM); meat and fish consumption has increased (SO).	Eating habits have changed for the worse; rice is becoming a staple food item; local ingredients are being replaced with manufactured ones e.g. magi in stead of dawadawa (SO).
Migration	Increased migration (people get connected as they meet other people, they learn about other cultures) (YW)	

Part 3. Integrated assessment (perceptions) of wealth and poverty in Sandema

SANDEMA: Wealth groups; Characteristics of the Rich and Poor, as reported by participants in the Sandema workshop (September 2008).

EW = Elderly Women; YW = Young Women; EM = Elderly Men; MM = Middle-aged Men; YM = Young Men.

Table 3.1: characteristics of five wealth categories in Sandema

Very rich

Who?: The men among the very rich have more than one wife (3-4) (EW). The really rich are mostly women in well-to-do extended families (YW). This could be men or women (MM). Mostly male, but only a few (YM).

Economy: Farmland > 20 acres. Could easily hire up to 60 labourers and feed them. Have many cattle, sheep and goats. Hire shepherds. Some are cattle dealers selling in Kumasi and Accra; shop owners; rich farmers (who could also partly be salaried workers); owners of guest houses (EW). Are mostly (female) traders with big stores. Have grinding mill(s) (YW). Own a lot of farm animals (over 50 cattle), also many sheep and goats (EM). Have 100 and above cattle; In the district almost all the very rich have cattle. Sheep and goats: over 180. Not many fowls. People go to him/her for loans (MM). Cattle: 70+; Sheep: 80+; Goats: 80+; Fowls: many; Land: able to farm 20+ acres; Some tractors; Jobs: farmers, (agricultural) salaried workers, politicians (YM).

House: Houses have zinc roofing, walls of blocks, cement floorings and even cemented yards; have their own boreholes. If electricity is available, they are connected (EW). Own 'self contained' house(s) (YW). Live in their own block house (a good building) (EM). Block and iron sheet houses (MM). House: cement, painted, 6 rooms. Many: second house in town: 20+ rooms to rent out (YM).

Transport: Have their own car (EW). Own car(s), and can afford more but fear for attacks by armed robbers stops them from having too many (YW). Have their own cars (EM). May have cars and/or buses (MM). Some: cars. Always a fancy mobile phone (YM).

Food: Have plenty of food and the way to feed their family (silver plates); eat three meals per day, not only tz all the time (EW). Able to meet all needs (MM). Always good food, 3x/day, incl. meat, beans (YM).

Clothing/ 'look': Very well-dressed (GTP or Holland wax); nicely done hair; Also children have new clothes (EW). Look: nice clothes, walk self-confidently (easy to recognize), always take priority in traffic. Look healthy (YM).

Children's education: Up to university. Enough money to afford to buy books, school uniforms, shoes (EW). Have well educated children (EM). Able to educate all his/her children well (MM). Education: all children to university / polytechnic, outside the district, even abroad. Children follow extra classes at school (YM).

Health care: Go directly to hospital in case of illness (EW).

Funerals: if Christians: use coffins; if traditionalist => buried in local cloths (smog). Children will be given the money brought by the relatives. Drummers are being hired.

	All guests are being fed by the family (with a variety of food); guests are being
Rich	entertained by music and dancers. Guests bring money / gifts for the children (EW). Who?: Mostly male. Some rich men have more than one wife (YM).
Kich	who Mostly male, some tien men have more than one wife (1141).
	Economy: Own land: 5 – 10 acres. Can hire 15 – 30 labourers to help them farming. Have cattle, but not as much as the very rich; can easily solve problems by selling animals (EW). Hardworking farmers. Have many small ruminants: about 30 sheep, 20 goats and 10+ cattle. Some are money lenders, transport owners and commercial house owners (they rent out rooms) (EM). Have cattle but less than 100. More sheep and goats. More fowls. Most salary workers. Farmers who farm more than 20 acre (MM). Cattle: 20+; Sheep: 30+; Goats: 30+; Fowl: very many (even more than the very rich). Land: able to farm 10+ acres. Able to access tractor services. Jobs: farmers, traders (along with farming), some are government workers (YM).
	House: Block houses with zinc roofs. Have piped water in Sandema and well water elsewhere; don't have private boreholes. If electricity is available, they are connected (EW). Own cement block house, which is 'self contained' (with kitchen, toilet and bath inside) (YW). House: 4 rooms, built with cement (YM).
	Transport: Own motorcycles/ bicycles (EW). Sometimes own a car (YW). Own motorbikes, phone (YM).
	Food: Eat 3 nutritious meals a day with meat at dinner (EW). Always have food to eat and eat three meals per day (YW). They can eat anything they want (EM). Able to meet their needs (MM). Food: 3x/day throughout the year (YM).
	Clothing/ 'look': Nice clothing but not as nice as the very rich; nicely done hair; children are well dressed (EW). Look: look healthy, neatly dressed (YM).
	Children's education: Go to school but not all of them (1-2 take care of cattle). Can go up to university (EW). All his/her children go to school (YW). Education: all children to Polytechnic / TTC (YM).
	Health care: Go to hospital in case of illness (EW). Funerals: The same as the very rich; the difference is that the children of the dead person will come together and contribute money and food to the ceremony (EW).
Average	Who?: Average farmers. Salary earners (EM). Older Widows with grown up children who are rich and take good care of them (MM). Both male and female. Many people in the communities belong to this category, up to 30%, but for men the biggest group is in this 'average' category (YM).
	Economy: Have 2-3 goats /sheep. Community farming (begging neighbours for help, but can afford to cook food while others work on their land) Carry firewood / sell charcoal to buy ingredients for eating (EW). Own at least own some poultry. These are mostly farmers, but also some government workers (the latter are better off than farmers because they are sure of an income at the end of the month, unlike farmers, whose sources of income are not reliable) (YW). May not have cattle, or up to 20. Have sheep and goats. May be container traders with quite a lot of goods in the shop. Farmers who cultivate above 10 acres. Some salary workers fall in this category (MM). Cattle: 5; Sheep: 10; Goats: 15; Fowls: 20. Jobs: farmers, teachers, government workers (YM).

House: Have houses with cement floorings and mud walls. Roofs made out of traditional material. No electricity (EW). Own a family house (YM).

Transport: May have motor bikes (MM). Own bicycles; some: motorbikes. Mobile phone (YM).

Food: Eat 2 meals a day; lunch will be a snack (milet masa) (EW). Food: 3x/day. Meat: only if an animal dies (YM).

Clothing: Wear first selection second hand clothing or 'Togo' made cloth. Have a maximum of 2 sets of clothes. Children also wear second hand clothing (EW). Children's education: Not all children go to school and only up to basic level (EW). Married couples, who can afford it, send at least one of their children to school (YW). Education: max. 3 children up till SSS level. Rest till JSS (YM).

Health care: Able to access health insurance (or otherwise health services) (YM).

Funerals: Food is only TZ (sometimes rice); guests are not bringing money for the children (EW).

Poor

Who?: Are mostly widows with small children, who cannot farm large plots of land, because she has little or no help (YW). Widows with little children. Older widows with children who are poor. Older widows without children (MM). Male and female. 60% of population. For women: biggest group in category 'poor' (YM).

Economy: Beg rich people to plough their land with bullocks; if refused they use hand plough. Community farming. Some have land but since they don't have money they are not able to farm on their own land. They don't have animals. Work as farm labourers for the rich / very rich. They don't take part in credit groups (EW). No cattle; Goats: 3; Sheep: 2; Fowls: 15; Jobs: farmers, many paid farming (work as labourers for others) (YM).

House: Mud houses with traditional roofing; houses often not well made. People are not strong enough to get woods from the forest as proper building materials (EW). Food: Eat any time of the day in case they have food; don't eat rice (EW). May have at most 2 meals a day (YW). The poor can only take one or two meals a day. The first

most 2 meals a day (YW). The poor can only take one or two meals a day. The first meal is usually flour water. Eats one type of meal every time (EM). They have food from their farm but not enough to take them to the next harvest (MM). Two meals per day. Meat only at special occasions, e.g. sacrifices. If a sheep dies, they sell it (and don't eat it). If they catch fish, they also sell it (YM).

Clothing: Some won't have proper clothing; dress in 2nd selection second hand cloths. Children have torn dresses, not well done hair (EW). Will have one or two dresses (EM).

Children's education: They don't go to school (EW). Persons whose children do not go to school (YW). Able to send their children to school but not above JSS (MM). PS + JSS (up till this level education is free now), few till SSS. Their daughters marry early (YM).

Health care: Ask neighbours for (left over) medicine. Some can pay Health Insurance premium; although registration is free still a token has to be given (EW). Health: some are able to access health insurance. Others sell animals in case of health problems or rely on herbs (YM).

Funerals: When the poor die the rich will pay for the drummers for the poor and eat in their own houses when hungry; the clan will contribute small amounts of money to pay for the funeral; they don't provide food for the guests – just the flour-water and some peanuts; if a Christian person dies and the local Church can afford it - it will buy a coffin. No gifts given by guests (EW).

Very poor

Who?: Old people without children, people suffering form leprosy; disabled people, orphans; some widows with children who don't have animals (note: not all widows with children become poor; generally the belongings of the husband are taken back by his family; only the land can be kept by the wife. When she is strong she will be able to build up her life again) (EW). Many are disabled people with no relatives (YW). People who have mismanaged their resources in the past can also be very poor. People who have had 'improper' marriages can become very poor. Many disabled people are very poor (EM). Mostly men; beggars; disabled people; lepers; lazy people; some may have wives married earlier but if not, they cannot get a wife (MM). Some of them are disabled. The majority of them are drunkards. Much stealing (or their children) in order to get money for drinking. Also many widows. Mostly female. Total: 5% of population (YM).

Economy: Often no farm at all. They rely on daily labour for others. If there is communal labour, they will go (even before it is announced), in order to receive the food that is given as compensation (YM).

House: Only one room in their house (EW). Mostly live in houses built of plant stalk with thatch roofs (YW). They have no good places to sleep, uncompleted buildings etc. (MM). House: single room with leaking roof (YM).

Food: They have to beg to be able to eat (EW). Have only one meal a day and it is mostly 'flour water', which only needs the addition of water to be ready (YW). A daily meal is not assured. The very poor and/or their children beg for food (EM). No good food (MM). Food: 1 meal/day. Esp. gari. Further: when available (YM).

Clothes/'looks': bad clothes; they don't have money to buy them (they beg for clothes) (EW). No clothing (YW). They look malnourished, esp. their children (YM).

Children's education: Their children can now go to school, there are no school fees anymore for PS-JSS, but still some children of the very poor are not being sent to school (EW). Education: PS + JSS (because it is free now) (YM).

Health care: They have Health Insurance in practice (when you have nothing, you can register for free in HI – free hospital entrance) (EW). People who have chronic diseases are usually very poor (EM).

Funerals: When the very poor die, the clan would come and be responsible for the burying; in Sandema for all the five wealth categories the funeral lasts five days; at each day certain rituals have to be performed in order for the soul of the dead person to find rest. Women are singing around the local mat, the children of the dead will be singing and dancing on the mat (only when the person is old) (EW).

Part 4/5. Lists of initiatives and the assessment of their impact: description and analysis: summary findings

(For a detailed description and analysis, separate for the Sandema officials and the five communities, please see part 11)

Of course, people may not collectively remember all development-oriented initiatives, projects or 'interventions' in their area, and they also make mistakes in attributing initiatives to certain agencies. However, we do have confidence in the general trend op people's reconstructive capabilities, and together the workshop participants in Sandema mentioned 341 initiatives. In about half of those (173) government agencies played a role, and in 46 of those cases government agencies worked together with others, often supranational or bilateral agencies, but sometimes also church- or non-church based NGOs, or private/community initiatives, also called 'public-private partnerships'. Churches or church-based NGOs had been active in 88 initiatives, 17 of those together with others. Non-church NGOs had been active in 39 initiatives (mostly as stand-alone agencies) and private or community initiatives were counted 61 times. If we look at the various 'sectors', crop development and educational initiatives were mentioned most (each 51 times), followed by health (40), water (34) and economic (32) initiatives. Government agencies' involvement was most pronounced, relatively speaking, in transport infrastructure, energy, water, crop development (although with church-based NGOs closely following), education, health care, economic projects (mainly credit schemes), and administrative initiatives. Churches and church-based NGOs were prominent in livestock development projects, in religious initiatives, and almost as important as the government in crop development. Non-church NGOs dominated in initiatives to protect or improve the natural environment, and private/community initiatives were dominating in the social sector.

Table 4.1: Intervention agencies and sectors in Sandema

Sector	Gov	G+S	G+C	G+S+C	G+C+N	G+S+P	G+P	Total Gov
Infrastr	16	1						17
Energy	4							4
Water	9	6					1	16
Agric	17	2	2		2			23
Livest	4	1			1		1	7
Nat.Res	8					1		9
Educat	26	6	1				1	34
Health	22	7					1	30
Econom	6	5		1		2	1	15
Relig								0
Social	6	1					2	9
Admin	9							9
Total	127	29	3	1	3	3	7	173

Sector	С	C+N	C+P	Total	N	Total	P	Total	Grand
				C		N		P	Total
Infrastr					1	1	2	2	20
Energy					1	1	2	2	7
Water	4	2		6	8	8	4	5	34

Agric	13	5		22	2	4	8	8	51
Livest	7	1		9	2	3	5	6	22
Nat.Res	5	1		6	10	10	4	5	29
Educat	6		1	8	6	6	4	5	51
Health	7			7	2	2	1	2	40
Econom	7		1	9	1	1	8	11	32
Relig	17			17			2	2	19
Social	2			2	3	3	10	12	24
Admin	2			2			1	1	12
Total	70	9	2	88	36	39	51	61	341

 $G = Government, \ S = supra-governmental, \ C = church-based \ NGOs, \ N = non-church-based \ Non-governmental organisations, \ P = private sector \ and \ community \ initiatives.$

Table 4.2: Sandema: intervening agencies and judgement about their impact.

	Gov	G+S	G+C	G+S		G+S	G+P	Total
				+C	+N	+P		Gov
0	3	1						4
1	3							3
2	9	2		1			1	13
3	12.5	2	1			1		16.5
4a	76.5	16	1		2	4	3	102.5
4b	8	2	1				1	12
mixed	14	6			1			21
Total	126	29	3	1	3	5	5	172

	С	C+N	C+P	Total	N	N+P	Total	P	Total	Grand
				C			N		P	Total
0								2.5	2.5	6.5
1								1	1	4
2	1			2	3		3	5	6	22
3	10	5	1	17	11		11	9.5	10.5	53
4a	51	4	1	59	16	1	19	19	26	194.5
4b	2			3				5	6	19
mixed	6			7	5		6	10	10	42
Total	70	9	2	88	35	1	39	52	62	341

0 = negative impact, 1 = 'only paper', 2 = no longer visible/unsustainable, 3 = on-going, 4a = positive impact, 4b = positive impact but for a few people

G = government agency; S = Supra-governmental agency (supposed: always with G); C = Church-based NGO;

N = non-church based NGO; P = private/community/individual

Same, in percentages

Assessment	Gov	Church	NGO	Priv/comm	Grand Total
0	2	0	0	4	2
1	2	0	0	2	1
2	8	2	8	10	6
3	10	19	28	17	16

4a	60	67	49	42	57
4b	7	3	0	10	6
mixed	12	8	15	16	12
total	100	100	100	100	100

The overall picture is that almost six out of ten initiatives were judged as useful projects, with impacts that can still be felt. In Sandema the officials decided to add a category to these useful projects: those which had been useful for only a few people (category 4b, another 6%). If we add the two subcategories initiatives by churches and church-based NGOs had the highest score (70% seen as useful), but closely followed by government initiatives (67%). Initiatives by non-Church NGOs and those of communities or private parties had a lower score for usefulness (49, resp. 52%). In the case of non-Church NGOs this was partly because relatively many of their projects were still on-going (28%, against 16% on average). It is striking that only 10% of initiatives in which government agencies are/had been involved were judged to be on-going, which might be interpreted as signs of a withdrawing government, and maybe even as a sign of 'post-development', or a shift to a relatively more prominent position of non-governmental involvement, with a growing importance of private and community initiatives. If we look at the relative distribution of 'bad', 'minimal' and 'nonsustainable' initiatives (categories 0, 1 and 2), we may first conclude that these were not so many: 9% of all initiatives. Private initiatives had a higher score, though, followed by government initiatives. Church-based NGOs had remarkably few negative judgements. Finally, in 12% of all cases men and women came to different conclusions in those groups where a separation was made. Private and non-church NGO initiatives had some more mixed scores, and church-based NGOs only few.

Table 4.3 Sandema: assessment of impact per sector

Sect	0		1		2		3		4a		4b		mix	ed	total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Infra			1	5			1	5	15	75	1	5	2	10	20	100
Ener							2	29	3	43	1	14	1	14	7	100
Wat					1	3	6	18	22	65			5	15	34	100
Crops			2	4	8	16	8	16	22	43	4	8	7	21	51	100
Liv	0.5	2					6	27	8.5	39	2	5	5	23	22	100
Nat					4	14	11	38	12	41			2	7	29	100
Edu					3	6	2	4	35	69	4	8	7	14	51	100
Hea					1	3	4	10	28	70	3	8	4	10	40	100
Econ	3	9	1	3	3	9	5	16	13	41	1	3	6	19	32	100
Reli							3	16	15	79			1	5	19	100
Soc	1	4			1	4	3	13	14	58	3	13	2	8	24	100
Adm	1	10			1	10	2	20	6	60					10	100
Total	5.5	2	4	1	22	6	53	16	194.5	57	19	6	42	12	341	100

0 = negative impact, 1 = 'only paper', 2 = no longer visible/unsustainable, 3 = on-going, 4a = positive impact, 4b = positive impact but for a few people.

The relatively positive assessment of the usefulness of initiatives in Sandema (overall: 57%) was particularly high for religious initiatives and those in transport infrastructure, health care, education and water, and much less so for the livestock, natural resources and economic initiatives. As we have seen the area's officials used a special category for initiatives that

were judged positively, but only for a few people (overall: 6%). These could particularly be found in energy and social initiatives. Sixteen percent of all initiatives were categorized as ongoing, but relatively many of those in natural resources and energy initiatives. Initiatives that had been judged unfavourably (either as negative, or as only minimal or as unsustainable; overall: 9%) could particularly be found in economic (credit) projects and in the sectors of crop development, administration and natural resources. Finally, mixed results for men and women (overall: 12% of all initiatives) could mainly be found among livestock, crop development and economic initiatives, which often caused controversies among the local population.

Part 6/7 The impact of initiatives on capabilities: summary findings

(For a detailed description and analysis, separate for Sandema officials and five communities, please see part 12)

Table 6.1 Sandema: Agencies, and their impact on capabilities,

Agency	n	N	P	E	H	S	C	Total	Total/n
G	127	22	44	105	118	43	15	347	2.7
G+S	29	5	6	22	36	10	4	83	2.9
G+C	3			3	3			6	2.0
G+S+C	1			1	1			2	2.0
G+C+N	3	2		5	2	1		10	3.3
G+P	7		1	2	5	4		12	1.7
G+S+P	3	2		3	4			9	3.0
All G	173	31	51	141	169	58	19	469	2.7
C	70	12	11	56	55	24	27	185	2.6
C+N	9	1	1	9	14			25	2.8
C+P	2			2	2	1		5	2.5
All C	88	15	12	76	77	26	27	233	2.6
N	35	16	8	26	31	8	3	92	2.6
N+P	1				2			2	2.0
All N	48	19	7	40	49	9	3	129	2.7
P	51	7	11	52	26	23	7	126	2.5
All P	61	9	12	59	39	28	7	154	2.5
Total	341	67	82	286	299	114	56	904	2.7
Average		.20	.24	.84	.88	.33	.16	2.65	
Score/n									
Id G		.18	.29	.82	.98	.34	.11	2.71	
Id C		.17	.14	.86	.88	.30	.31	2.65	
Id N		.40	.15	.83	1.0	.19	.06	2.69	
Id P		.15	.20	.97	.64	.46	.11	2.52	

In the various groups of participants (officials and members from five communities, sometimes men separate from women) we asked about the impact of each and every initiative on six capability domains: changes in the natural environment (N), the physical environment, (P), economic services (E), human capital (H, mainly education and health), social and political capabilities (S), and cultural capabilities (C). The 341 different initiatives that people had identified before received a total of 904 scores on 'impacts on people's capabilities', which on average means that each initiative on average had an impact on 2.7 out of the 6 capability domains. Initiatives in which the government had been involved and initiatives in which non-church NGOs had been involved had the widest impact, followed by initiatives initiated by churches and church-based NGOs. Private and community initiatives had the lowest width of impact on the various capabilities. But the differences are not big, and in a number of cases there were overlaps, as some initiatives were shared by government, church, NGO and/or private parties.

The various initiatives had most impact in the domain of human capabilities, followed by impact in the economic domain. Considerably lower impacts were noted in the social and

physical domain, and the lowest impacts in the natural and cultural domains. In the natural domain the non-church NGOs clearly found a niche; and all others had much less impact there. In the physical domain the government had most impact relatively. In the economic domain the private and community initiatives had most impact, but also church-based NGOs. In the human domain non-church NGOs and the government were assessed to have had a relatively larger impact than initiatives initiated by church-based NGOs and private/community agencies. In the social domain private/community initiatives were clearly leading and in the cultural domain —not surprisingly- churches and church-based NGOs.

If we look at the width of impact per sector the interventions in transport infrastructure were clearly leading, followed by initiatives in livestock improvement, in water and in education. Infrastructure had its major impact in both the physical and economic capability domains. Initiatives in agriculture, in economic services, livestock, natural environment, energy and in administration had most impact on the economic capability domain. Initiatives in education, health and water had their most prominent impacts in the domain of human capabilities, while the social investments were leading in the domain of social and political capabilities and those in religion in the domain of cultural capabilities.

Table 6.2 Sandema: Impact on capabilities, scores per sector

Sector	n	N	P	Е	Н	S	С	Total	Tot/n
Infra	20	2	27	27	8	8	0	72	3.6
Energy	7	1	2	4	3	2	1	13	1.9
Water	34	7	19	18	42	1	7	94	2.8
Agric	51	9	2	66	50	7	1	135	2.6
Lives	22	9	1	32	18	9	4	69	3.1
Nat.env	29	23	0	26	17	2	6	78	2.7
Educat	51	0	12	32	67	24	8	143	2.8
Health	40	1	7	17	56	18	7	106	2.7
Econom	32	0	2	44	21	4	0	71	2.2
Relig	19	0	3	3	4	9	23	42	2.2
Social	24	2	4	12	12	25	2	57	2.4
Admin	10	4	3	6	5	4	2	24	2.4
Total	341	67	82	286	299	114	56	904	2.7

Same, in percentages

Sector	n	N	P	E	Н	S	С	Total
Infra	20	3	38	38	11	11	0	100
Energy	7	8	15	31	23	15	8	100
Water	34	7	20	19	45	1	7	100
Agric	51	7	1	49	37	5	1	100
Lives	22	13	1	46	26	13	6	100
Nat.env	29	29	0	33	22	3	8	100
Educat	51	0	8	22	47	17	6	100
Health	40	1	7	16	53	17	7	100
Econom	32	0	3	62	30	6	0	100
Relig	19	0	7	7	10	21	55	100
Social	24	4	7	21	21	44	4	100

Admin	10	17	13	25	21	17	8	100
Total	341	7	9	32	33	13	6	100

In absolute scores, the natural domain was influenced most by initiatives in the sector of natural environment, followed by those in agriculture and livestock (in relative terms also administration has been important). The physical domain was influenced most by investments in transport infrastructure, water and education (in relative terms also by those in energy and administration). The economic domain was influenced most by initiatives in agriculture, followed by those in credit and other economic services, in livestock and in education (in relative terms also by those in agriculture). The human domain was influenced most by initiatives in education, health, agriculture and water. The social domain was influenced most by social, education and health activities (in relative terms also by those in religion), and the cultural domain most by religious activities (in relative terms even overwhelmingly so).

Part 8 The best and worst initiatives: description

Table 8.1: Best initiatives, Sandema

Score calculation: 1 = 5 points; 2 = 4 points; 3 = 3 points; 4 = 2 points; 5 = 1 point; 6 or 7 or 8 or 9 or 10 = 1 point.

Sector	Project/details	Agency	Score	Off	Kande	ema	Chucl	niliga	Bilins	sa	Farins	sa	Chansa
					m	W	m	W	m	W	m	W	m
Infra:	Roads:	G	6	3			3						
transport	Sandema-												
	Navrongo												
	Roads: Feeder	G	7	4							2	5	
	Roads: specific	G	9		2	1							
Subtotal inf	frastructure-transpor	rt (n=7)	22										
Infra: irrigation	Irrigation: Tono	G	10	6			1	2					
	Irrigation: Small-scale	GS	1	7									
	Dam	P	1										5
	Dams (Biaga)	P	5								1		_
Subtotal int	frastructure irrigatio		17										
Water	Boreholes	G	14							2	3	4	1
	Boreholes	G-GS- C	1	8						_			
	Boreholes	G-GS-P	5					1					
	Boreholes/wells	GS+N	5		3	4		1					
	Hand pumps	G	5		3				1				
	Water systems:	N	1	9					1				
	Small town w.s.	11	1	,									
Subtotal wa	ater (n=10)	•	31										
Energy	Electricity	G	7					3				2	
Subtotal en		II.	7										
Crops	Presby Agric Station activities	С	4				2						
	Improved varieties of crops	G-GS- C-P	1	5									
	Seed aid after floods	NC	1					5					
	Groundnuts	С	1							5			
Subtotal cro	ops (n=4)	•	7										
Livestock	Prevention animal diseases	G	2		4								
	Sheep and goats	С	8						2				2
	Bullocks & donkeys	С	2							4			
Subtotal lix	restock (n=4)	<u> </u>	12								-		
Nat Env	Tree Aid	N	1			5					<u> </u>		
rat Ellv	activities	1	1			,							
Subtotal na	tural env. (n=1)	1	1								 		
Education	Schools: Public PS & JSS	G	13	2		2				1			
	JSS Balansa	G	5	1	1		1		1		 		
	Community school	NP	6		1						5	1	
Cubtotal a 1	ucation (n=6)		24								-		
		GP					5				-		
Health	Clinic	GP	1	1	1)	l	1	1	1		1

	Clinics: Mobile Health outreach	G-GS	5	1									
	Vaccination	GS	3			3							
	Polio Immunization	С	3										3
	Comm-based health	G	3						3				
	Weighing in schools	G	3									3	
	Health Insurance	G	5						4	3			
	Mosquito nets	G	2								4		
Subtotal hea	Subtotal health care (n=9)		25										
Economic	Chuchiliga central market	P	4				4	4					
Subtotal eco	onomic services (n=	=2)	4										
Social	Youth employment scheme	G	1	10									
	Youth group formation	P	2										4
	Builsa Community Radio	N/GS?	2		5				5				
Subtotal soc	cial services (n= 4)		5										
Total (n=55	<u> </u>		155							_			

Table 8.2: Worst initiatives, Sandema

Score calculation: 1 = 5 points; 2 = 4 points; 3 = 3 points; 4 = 2 points; 5 = 1 point; 6 or 7 or 8 or 9 or 10 = 1 point.

Sector	Project/	Туре	Scor	e	Officials	Kan	dema	Chu	chiliga	Biliı	ısa	Farii	ısa	Chansa
	details	of				m	W	m	w	m	W	m	W	m
		agency												
Infra:	Fascom	G	4					2						
transport	Depot													
1	Kori road	G	5							2	5			
Subtotal in	frastruct.: transp	ort (n=3)		9										
Infra: irr	Dams	P	4				5						3	
111111111111111111111111111111111111111	(Biaga)	-												
Subtotal in	frastr.: irrigation	(n=2)		4										
Water	Wells	C	10							1	1			
Subtotal wa			10	10						-	1			
Crops	Cotton	P	1	10	6			+				-		
Crops	Pigeon Pea	GC	1		8									
		G			9			_			-	-		
	Naga White		1		9	4	-							
	Sorghum for	G	9			1	2							
	Guinness	G	4											
	Cowpea	G	4			2	1	1-	1		1			1
	Tomato	P	3					5	4					
	project		<u> </u>				1		1		 			ļ
	Grinding	GS	4			4					4			
	Mill													
Subtotal cr				23										
Livestock	Piggeries	P	7		2					3				
	Improved	G	2				4							
	goats													
	Veterinary	G	2							4				
	services													
	Poultry	G	4								2			
Subtotal liv	vestock (n=5)			15										
Nat Env	Woodlots by	N	1		5									
	VUM Trees													
	Greening	G	1		10									
	Ghana													
	Acacia	С	4									2		
	seedlings		'									-		
	Palm trees	P	5											1
	Alberzia	P	1											5
Subtotal na	tural environmen		1	12										3
Education	Primary	P	6	14		3	3		+	-	1			
Luucatioli	schools: TV	1	U			ر)		1					1
	donation								1					1
	Exercise	G	3				1	1	+		+			3
	books	G	3						1					٥
	Non-formal	C	1			5	1	1	1		1			1
		G	1			5			1					1
C-1-4-4-1 1	education			10			1	1	+		+			1
	lucation (n=4)		1	10			1	1	+	<u> </u>	1		1	-
Health	Exclusive	G	1						1	5				1
	breast								1					1
	feeding						1		1		1			ļ
	Screening HIV-AIDS	G	5										1	
Subtotal be	ealth care (n=2)	<u> </u>		6			+			+				
Subtotal IIC	and care (II-2)			U	l	1	<u> </u>			1	1		1	1

Economic	Poverty alleviation	G	7	3			2				
	fund										
	LACOSREP I&II (micro) credit scheme	GS	17	4	1	1	1				
	Namonsa market	P	2			4					
	Loans by Comm. Bank	P	3					3			
	Idem to women traders	P	6						4	2	
Subtotal ec	onomic services	(n=10)	35								
Religious	Building mosque	P	2								4
Subtotal rel	ligious services (n=1)	2								
Social	Drinking bars	P	5	1							
	Sandema Community centre	G	1	7							
	Football club	P	3						3		
	Widow's group	P	1						5		
	Men's group	P	1							5	
Subtotal so	cial services (n=	5)	11								
Admin	Area Council	G	6			3	3				
	Unit committee	G	4								2
	Tax for cattle	G	7						1	4	
Subtotal ad	ministration (n=	5)	17								
Total (n=55	5)		155								

Part 9: Best and worst initiatives: analysis

Table 9.1: best and worst initiatives

Score calculation: 1 = 5 points; 2 = 4 points; 3 = 3 points; 4 = 2 points; 5 = 1 point; 6 or 7 or 8 or 9 or 10 = 1 point.

Sector	Bes	t pro	jects	5					Wo	rst p	roject	S				
	n				sco	re			n				sco	re		
	О	m	W	all	0	m	W	all	О	m	W	all	0	m	W	all
Infrastructure	4	6	3	13	7	22	10	39	0	2	3	5	0	8	5	13
Water	2	4	4	10	2	16	13	31	0	1	1	2	0	5	5	10
Energy	0	0	2	2	0	0	7	7	0	0	0	0	0	0	0	0
Crops	1	1	2	4	1	4	2	7	3	4	3	10	3	12	8	23
Livestock	0	3	1	4	0	10	2	12	1	2	2	5	4	5	6	15
Natural Environment	0	0	1	1	0	0	1	1	2	3	0	5	2	10	0	12
Education	1	2	3	6	4	6	14	24	0	3	1	4	0	7	3	10
Health care	1	5	3	9	5	11	9	25	0	1	1	2	0	1	5	6
Economic services	0	1	1	2	0	2	2	4	2	3	5	10	5	9	21	35
Religious services	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2
Social services	1	3	0	4	1	4	0	5	2	2	1	5	6	4	1	11
Administration	0	0	0	0	0	0	0	0	0	3	2	5	0	12	5	17
Total	10	25	20	55	20	75	60	155	10	25	19*	54	20	75	59	154

^{*} one group of women only gave 4 scores for worst projects

In percentages

Sector	Bes	t pro	jects						Wo	rst p	rojec	ts				
	n				sco	re			n				sco	re		
	0	m	W	all	0	m	W	all	0	m	W	all	0	m	W	all
Infrastructure	40	24	15	24	35	29	17	25	0	8	16	9	0	11	8	8
Water	20	16	20	18	10	21	22	20	0	4	5	4	0	7	8	6
Energy	0	0	10	4	0	0	12	5	0	0	0	0	0	0	0	0
Crops	10	4	10	7	5	5	3	5	30	16	16	19	15	16	14	15
Livestock	0	12	5	7	0	13	3	8	10	8	11	9	20	7	10	10
Natural Environm.	0	0	5	2	0	0	2	1	20	12	0	9	10	13	0	8
Education	10	8	15	11	20	8	23	15	0	12	5	7	0	9	5	6
Health	10	20	15	16	25	15	15	16	0	4	5	4	0	1	8	4
Economic	0	4	5	4	0	3	3	3	20	12	26	19	25	12	36	23
Religious	0	0	0	0	0	0	0	0	0	4	0	2	0	3	0	1
Social	10	12	0	7	5	5	0	3	20	8	5	9	30	5	2	7
Administrative	0	0	0	0	0	0	0	0	0	12	11	9	0	16	8	11
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

The workshop participants were asked to select five best and five worst 'projects' from their lists of all initiatives/projects. The Sandema officials decided to make a list of ten best and ten worst projects from among their much longer list. We counted all best and worst projects, per sector, and we gave scores in reverse order (a best project got 5 points, the fifth best project one point. All officials' projects between the sixth and tenth place also got one point).

If we look at the sector distribution the infrastructural projects were most numerous among the best projects, and also received most points, followed by water projects, health projects and educational projects. If we look at the differences between officials, and the men and

women from the villages, we can see that the officials mostly selected infrastructural and water projects among the best ones, but they gave the highest scores to infrastructural, health and educational projects. For the men from the villages, infrastructural, health and water projects were most numerous, but for water the scores were higher than for health. For the women from the villages water projects were most mentioned among the best projects, followed by the other three sectors. However, in terms of scores, women valued the best educational and health projects higher than the best water and infrastructural projects. Agricultural (crop and livestock) projects were not often mentioned among the best ones, and crop projects certainly not by the men, and livestock projects certainly not by the women. Also natural environment projects (mainly in afforestation) were not highly valued. The women in some villages did mention electricity as important, also with high scores. Best education projects were more mentioned by women than by men (and with higher scores), while men included more health projects among the best ones (although the scores for men and women were the same there). Very few economic projects (credit, market support) have been included among the best ones and few other sectors as well.

If we look at the worst projects many of those could be found in the economic domain and in agriculture. Women and officials were more critical than men about economic projects, while particularly officials were negative about the crop improvement and livestock projects, and about projects to improve the natural environment. In infrastructure village women (and men) were more critical than officials. In education men were more critical. Officials were very critical about many social projects, while village men did not like quite a number of 'administrative' projects.

Let us look at the sectors in more detail.

Infrastructure:

Best: The Navrongo-Sandema road that was tarred from 1993 onwards was an important way to open up the district, according to officials. According to them the road has helped significantly in commerce and wealth creation for the people of Builsa. Also the men from Chuchiliga mentioned this project as among the best ones. The recent expansion of feeder roads has been important to connect farmers to markets. Women from Kandema regarded the roads the best initiative, and Kandema and Farinsa men put it on the second best place; Farinsa women at the fifth best position.

The Tono Irrigation project (*1975) has become a major income source, especially during the dry season (officials; Chuchiliga men: best project; women: second-best), and this is also true for small-scale irrigation projects. However, a negative impact has been the increase of mosquitoes, and hence of malaria. Worst: the old Fascom Depot still counts as the area's white elephant, but also the bad Kori road and the silted Biaga Dams were mentioned as being among the worst ones.

Energy:

Best: After ranking the officials started to discuss the fact that they did not include the impact of the arrival of electricity among the 'best ten'. Many officials (but not all) felt that the impact of electricity had been far greater (and on all capitals and capabilities) than quite a number of other projects/initiatives that they did select among the best ten. The women from Farinsa and from Chuchiliga did include electricity among their best five projects. Worst: never included.

Water:

Best: After the introduction of boreholes (*1972) and their gradually increasing numbers, there now is no village community in the district without a functioning borehole. This has had a significant impact. According to officials one does hardly hear about water borne diseases, and a reliable water quality has a major impact on all other capabilities. The women in Chuchiliga and the men from Chansa regarded this as the best project, the women from Bilinsa as the second best one, the men from Farinsa as the third best, the women from Kandema and from Farinsa as the fourth best. The men from Bilinsa liked the hand pumps from the Ministry most. The small-town water system (*2000) introduced 'town life' in the district: one can turn on water taps and have

showers (officials). Farinsa men saw the local dam as the best project and for the men in Chansa their old local dam was also included among the best five (this was part of 'infrastructure' in some earlier analysis). Worst: only one project (wells).

Crop development:

Best: Yields of indigenous crop varieties were very low, so the introduction of many higher-yielding varieties has been important. This was done by government programmes (often supported by supranational agencies) and by PAS. According to officials this has resulted in better food security, better health, and increased incomes. Particularly the introduction of soybeans did have a significant economic and health impact, while the recent introduction of commercial sorghum production - for Guinness production – also shows a lot of promises (officials). The men from Chuchiliga regarded the PAS as the second best project. The women in Chuchiliga regarded the seeds that were distributed to flood victims recently as an important contribution, and the Bilinsa women added the groundnut project by PAS as among the best ones.

Worst: Cotton has become a nightmare. The (private) cotton companies are no longer effective and payment is extremely low or not at all (officials). Some newly introduced crops or crop varieties have become a disappointment, due to the non-availability of seeds (e.g. pigeon pea), or the fact that they mature too early, with birds eating the complete harvest (Naga White). Villagers mentioned Sorghum for Guinness, a cowpea and a tomato project and a grinding mill as disappointing initiatives.

Livestock development:

Best: the sheep and goats project (Bilinsa and Chansa men: second best). Also: prevention of animal diseases (Kandema men), the bullock and donkey programme (Bilinsa women)

Worst: The expansion of pig breeding in the district (*2000, mainly farmers' own initiatives) has become a nuisance. Pig housing is very poor and free roaming pigs destroy farms (officials).

Natural environment:

Best: the Tree Aid activities (Kandema women)

Worst: VUM Trees' woodlots (*1997) have been a disappointment, with very little to be seen on the ground (officials). Also the recent Greening Ghana project, launched to celebrate Ghana's 50th anniversary, has been a great disappointment (officials). And three more initiatives to improve the natural environment were not particularly liked: the introduction of Acacia seedlings, palm trees and alberzia.

Education:

Best: Officials regard the many primary schools and the few Junior Secondary schools in the District as a major contribution to general improvements. The Kandema men regarded the JSS in Balansa the best project, and the Bilinsa and Kandema women the schools in their area. The Farinsa women liked their community school most, while also the women from Farinsa mentioned this school as among their best projects.

Worst: in a few cases educational projects turned out to be disappointing: a donation of a television set to a school without electricity (yet), the donation of far too few exercise books and the introduction of non-formal education.

Health:

Best: Officials regard the clinics and the (mobile) health outreach programme as the biggest contribution to people's wellbeing ("health is wealth"). These are activities by the government and by the Presbyterian Church, and they have gradually improved and increased (also the Chuchiliga men included this among the best five). Among the other best projects in health care were: vaccination (Kandema women), the new CBHPS compound (Bilinsa men), the MHIS (Bilinsa women and men), weighing children at schools (Farinsa women), the polio vaccination (Chansa), mosquito nets (Farinsa men).

Worst: in two cases health initiatives were seen to conflict with cultural practices, or clumsily developed: the exclusive breast feeding project and the screening of patients at the clinic for HIV-AIDS

Economic support:

Best: the Chuchiliga market (Chuchiliga men and women), and that was the only economic project that was regarded as really a success...

Worst: The Poverty Alleviation Fund (*1992, District Assembly) has had little impact and has always been "very political" (officials). The successive IFAD-funded LACOSREP credit schemes (*1992; 2000; the second one together with PAS) have become a major burden, although they did have a positive after they had been launched. Repayment was so bad that the banks are still servicing loans obtained by farmers, and many farmers still fear the banks' claims (officials). Economic projects seem to be difficult, as the villagers included three

more of those among their worst projects: the start of the Namonsa market, loans by the community bank, and loans to women traders (interest rates were regarded as far too high and pay-back time too short.

Religious projects:

Never mentioned as among the best initiatives. A mosque that had once been started but that was no longer used was mentioned as among the worst projects.

Social projects:

Best: The Youth Employment Scheme created major expectations. The officials hope it will stay. Although not included among the best ten, the officials regarded the women's groups (*1980s) as a major success and with a great social and economic impact, also for illiterate women. The formation of Youth groups was regarded a best project by the men from Chansa.

The start of the Builsa community radio was seen as an important project by the men from Kandema and from Bilinsa).

Worst: The recent expansion of drinking bars has created major problems (officials: "they have destroyed people; there is too much drinking of liquor in Builsa"). The Sandema Community Centre has become very dilapidated and does not offer any services (officials). Some villagers did not accept that women groups were only for women and men's groups only for men, so some of those had been included among the worst ones. And for some strange reasons a local initiative to start a local football club was seen as useless, because it was supposed to be only for some youth...

Administrative initiatives:

Worst: although not included among the ten worst projects, the officials also regarded the area councils and the unit committees as "only being there in name". Some villagers indeed agreed, and they also were critical about the age-old cattle tax.

Part 10. The impact of the best initiatives on wealth categories: description

For each of the initiatives that had been selected as the best ones, the group participants were asked to distribute ten stones over the five wealth/poverty categories in their area, and they were asked to give reasons why, as well as further details about capability changes per wealth/poverty category. Sandema officials, groups of men from Kandema, Chuchiliga, Bilinsa, Farinsa and Chansi and groups of women from Kandema, Chuchiliga, Bilinsa, and Farinsa all gave their assessments of the impact of the various 'best projects' on the five wealth categories. The officials selected ten 'best projects' out of a list that was longer than in the villages. The villagers each selected five 'best projects'.

Explanation on capabilities

N= natural, P= physical, E = Economic, H = Human, S= Social and Political, C= Cultural 0 = negative impact, 1 = minimal impact, 2 = unsustainable impact, 3 = ongoing impact, 4a = positive impact on most/many people, 4b = positive impact, but only for a few people.

	Impact on Very Rich	Impact on Rich	Impact on Average	Impact on Poor	Impact on Very Poor
Researchers' impression of overall distribution of wealth categories in Sandema	5%	10%	30%	45%	10%
Researcher's impression of wealth categories among workshop participants (based on life histories)	10%	35%	35%	20%	0%
1. Sandema officials: Clinic/Health Outreach (G+P)	0%	10%	30%	40%	20%
Remarks	They go to hospitals	Few go to the clinics	These are the maclinics and outreserve.		Most of these fear to come out to benefit from services
Impact on capabilities	EHS=1, C=3	H=2, ES=1, C=3	EHS=4a, C=3	EHS=4a, C=3	EHS=4b, C3
1 Kandema men: JSS Balansa (G)	10%	10%	60%	20%	0%
Remarks	Their children already have what they want: not serious at school. Or: go to school in town	Their children already have what they want: not serious at school. Or: go to school in town	They cannot go to JSS in town	They are not able to send all their children to school	May not have children, or children have no food, books, clothes to attend school; but the school buildings can be used for shelter and during floods
Impact on capabilities	NC=1, PEHS=4	NC=1, PEHS=4	NC=1, PEHS=4	NC=1, PEHS=4	NEHC=1, PS=4
1. Kandema women: Roads (G)	10%	20%	30%	30%	10%
Remarks	Not many in community. Could move anyway	More in community than very rich and have more motorbikes and bicycles that they use	Benefits most from the marketing services enhanced by the road network Many in	Benefits from goods and services brought into community. Engaged as porters to many traders	Do not travel nor engage in economic activities

		on the roads	communities		
Impact on capabilities	NC=3,	NC=3,	NP=1, EHS=4,	NPSC=1,	NPSC=1, EH=4
Part out out parties	PEHS4	PEHS4	C=3	EH=4	
1 Chuchiliga men: Tono	40%	20%	20%	10%	10%
Irrigation Project (G)	4070	2070	2070	1070	1070
Remarks	Commercial	1-2 acres they	½ - 1 acre	Only work as	Only go there to
Remarks	farmers	are also able	/2 1 dete	labourer on the	beg during and
	cultivate 20-	to some		farmers and	after harvest
	40 acres.	extent to pay		get some	arter harvest
	They have	for the		money	
	money to pay	services		money	
	and invest	scrvices			
Impact on capabilities	N=1,	NC=1,	NC=1,	All=1	All=1
impact on capabilities	PEHSC=4	PEHS=4	PEHS=4	All-1	All-1
1.Chuchiliga women:	10%	30%	20%	20%	20%
Boreholes (G+GS+P)	1070	30 70	20 / 0	20 /0	20 / 0
Remarks	The very rich				They cannot pay
Normal Ro	use pipes, but				for the water
	when they do				charges but they
	not run they				are helped by the
	use the				community
	boreholes.				Community
		l na naarnass of tha	horehole how use	ful it is to people,	hut all profit. No
			e and they don't ta		out an profit. No
Impact on capabilities	NESP=1, PH=4		e and they don't to	iik iiiucii.	
1 Bilinsa men: Hand pump	10%	15%	20%	25%	30%
(G: MoWS)	1070	1570	2070	25 70	3070
Remarks	They can afford	l water thev	Make friends	It's is their	Nobody wants to
Remarks		he rich and very	around the	only source so	be friends with
		as well because	pump; learn	it is important	the very poor (so
	they have more		from them	for them, but	if they come,
		atter. They have	ITOIII tileiii	not for the	others will avoid
	more livestock			livestock	them, and treat
	families; therefore			which they	them
	they benefit mo	•		don't have.	disrespectfully)
	project. If the p			don t nave.	distespectfully)
		n to save money			
	(don't get water	•			
	elsewhere). Do				
	,	n purification of			
	unsafe water. T	1			
		re famous when			
	they goes to this				
	looks as if they				
	programme.	minuted tile			
Impact on capabilities	N=4++,	NE=4+,	NEHS=4	NH=4, SC=1	N=4+++, H=4,
impact on capacinates	E=4+, HS=4,	HSC=4	11212	1111-7, 50-1	EC=1, S=0
	P=3, C=1	1100-1			20-1, 5-0
1 Bilinsa women: schools (G)	40%	25%	20%	10%	5%
Remarks	The vey rich	Can send	Can afford to	Can afford	Because they are
	can afford to	almost all	send some	lower-level	very poor it is
	even send	children to	children to	education	mostly very
	their children	school	school		difficult to buy
	to private				uniforms for
	school				children
Impact on capabilities	NPEHS=4,	NPEHS=4,	NPEHS=4,	All: 1	All: 1
pass on suparimes	C=1	C=1	C=1		
1 Farinsa Men: Dams (P)	10%	20%	20%	20%	30%

Remarks: NOTE: in this group, it was indicated that the differences between rich and very rich are very small (mostly in terms of animals: very rich will have 10 cows, while the rich just have 5, etc.); the differences between the poor and the very poor are also very small. Impact on capabilities		one (all groups o	They can fish and make profit; their animals can easily drink it. s beneficial for all f people) gets toge		x it. H=4+, NPES=4,
1 Farinsa women:	0%	0%	20%	40%	C=1 40%
Community School (N+P)	0,0	0 7 0	2070	10 / 0	10,0
Remarks	When there is a school in the community or not, doesn't matter, since they will send their kids to schools elsewhere anyway.	school and pay Children will ea before going to Could go to SS pay for them The school teac	own food to eat o send children to for uniforms. at left over food school. S when relatives thes them and lso know-how to	they have 5 child school; if 7 – 5 v other children ar relatives and if t they will send th schools, if not cl housemates or sl Get knowledge a (washing hands) nutritious food However: Don't finalizing school Knowledge to sp communities and associate with other children and school the school of	to school (i.e. when dren – 3 will go to will go to school), re being sent to hey can afford – lose children to hildren will serve as hepherds. about hygiene and about know if they are ling.
Impact on capabilities	All: 1	All: 1	NEHSC=4, P=1	NHSC=4, E=3, 1	P=1
1.Chansa: Borehole (G)	0%	40%	40%	10%	10%
Remarks	There are no	They can	They can	They cannot	They cannot
	very rich people in the community	afford to pay the monthly maintenance fee of GHc2.00	afford to pay the monthly maintenance fee of GHc2.00	afford to pay the monthly maintenance fee and can only beg to fetch	afford to pay the monthly maintenance fee and can only beg to fetch
Impact on capabilities	-	All:4	All: 4	All: 1	All: 1
2. Sandema officials: Public Primary/Middle (JSS) schools (G)	10%	10%	40%	20%	20%
Remarks	Most of these b	enefited from	Major impact		Many of these

	the schools but	now their			cannot even buy
	children go to p	rivate schools			school uniforms
Impact on capabilities	H=2, ESC=1	H=2, ESC=1	EHSC=4a,	EHSC=4a	EHSC=4b
2 Kandema men: 4 different roads (G)	40%	30%	20%	10%	0%
Remarks	They are the ones using cars	Use motorbikes + hire lorries	Use bicycles, have better access to clinics	Easier walking when buying / selling things from market	No bicycle or transport money to make use of roads; however, less snakebites when walking, and they can help offload trucks
Impact on capabilities	N=1, PEHSC=4	N=1, PEHSC=4	N=1, PEHSC=4	N=1, PEHSC=4	NP=1, ESHC=4
2. Kandema women: Schools (G)	20%	20%	30%	20%	10%
Remarks	Children were sent to schools in Sandema	Children could be sent to schools in Sandema	Can send more children now to school. Can afford to let children leave farm work and attend school	Free basic education system and presence of school improved enrolment School feeding and WFP activities boosted enrolment in this group.	Not benefitting much because of poverty and hunger. Few only attend school because of feeding Parents prefer to use children for other menial jobs Frequent absenteeism
Impact on capabilities	NE=1, PHS=4, C=3	NE=1, PHS=4, C=3	N=1, PHES=4, C=3	NE=1, PHS=4, C=3	N=1, PHS=4, EC=3
2 Chuchiliga men: Presby Agric. Station (C)	0%	20%	20%	30%	30%
Remarks	Do not even know of the station or what they do	These are put into groups and helped	These are put into groups and helped	They give preference to these people	They give preference to these people
Impact on capabilities	All=1	N=3, PEHSC=4	N=3, PEHSC=4	N=3, PEHSC=4	NPSC=1, EH=4
2. Chuchiliga women: Tono irrigation (G)	30	40	20	10	0
Remarks	You have to pay money to have access to the land. The very rich can. They don't work on it themselves, but hire others			Labourers for the rich. The poor can also profit if they have earned something to pay for the land. Others can work on the land.	The very poor do not have the money to have access to the land
Impact on capabilities	NPSC=1, EH=4	NPSC=1, EH=4	NPESP=1, H=4	NPESP=1, H=4 (doubts)	NPESP=1, H=4 (doubts)
2 Bilinsa men: Sheep and goats (C)	0	0	20%	30%	50%
Remarks	They have more animals than they	Don't have too many animals so		Project specifically designed for	Benefit most from this project; but on the other hand

	even need, so this project doesn't add anything to this. Did not benefit from this project	they do get some animals from it		the very poor	make more use of natural resources
Impact on capabilities	E=4, NPHSC=1	E=4, NPHSC=1	NEHSC=4, P=1	NEHSC=4, P=1	EH=4+, NSC=4, P=1
2 Bilinsa women: Boreholes (G)	30%	30%	20%	10%	10%
Remarks	These people can even afford boreholes in their houses	Can afford boreholes in their houses		The poor and very poor depend on the community boreholes. The very poor fetch water from dams and wells when the boreholes break down	
				categories, becaus ch also helps peop	
Impact on capabilities	NHC=4, PES=1	NHC=4, PES=1	NHC=4, PES=1	C=4, NPEHS=1	C=4, NPEHS=1
2 Farinsa Men: Feeder Road (G)	20%	20%	20%	20%	20%
Remarks Impact on capabilities		re very often y of transport the village to charge fees for oney. h category of wea			eople are using the chers to come and
	NP=1	HSC=4, NP=1	,		
2 Farinsa women: Electricity (G)	60%	30%	10%	0%	0%

Remarks	Can pay electricity; Can buy TV, deep-freezers and even earn more money through selling ice-creams or ice-water with these.	Can pay electricity bills, some can buy deep- freezers, selling ice- creams or ice- water; have own TV	Sometimes they can have little money to pay electricity bills => if not they are disconnected; having radios; if having friends with relatives, they can watch their TV sometimes. Children can learn at night (watching TV at the places of the rich)	They can't pay elect. bills since they do not even have food to eat	They can't pay elect. bills; do not have food to eat; in principle the very poor can visit their richer relatives who have electricity and watch TV at night, but they are shy (because of poverty) and don't want to be too demanding.
	Behave differen				fraid of the ghosts
	what they see or	n I V		afford to pay for	ey themselves can't
Impact on capabilities	PEHSC=4, N=1	[HC=4, NPES=1	All: 1	All:1
2. Chansa: Sheep + goats (C)	0%	50%	40%	10%	0%
Remarks	There are no	Can easily	Can afford to	Can afford to	Cannot afford to
	very rich	afford to buy	buy some	buy a few	buy sheep and
	people in the	many sheep and goats for	sheep and	sheep and	goats
	community	rearing.	goats for rearing.	goats for rearing	
Impact on capabilities	_	All: 4	All: 4	All: 1	All: 1
3. Sandema officials:	10%	20%	50%	20%	0%
Sandema-Navrongo Road (G)					
Remarks			They do most of the sale of their farm produce		The very poor might never have used the road. The impact for most is minimal
Impact on capabilities	EH=4a	EH=4a	EH = 4a	EH=4a	EH=1 and 4b
3 Kandema men: 8 boreholes	10	10	20	20	40
(GS+N) Remarks	They com	Can	Reduces	Reduces	They have
Remarks	They can afford to buy pure water.	sometimes buy other	walking time for obtaining	walking time for obtaining	They have otherwise no access at all to
Impact on capabilities	Boreholes only make it a bit cheaper for them (there are no people with private boreholes here); little impact on their health (they are already healthy) NHSC=1,	water; little impact on their health (they are already healthy)	water N=1,	water N=1,	safe water; they get stronger/ healthier: able to pick firewood now. N=1, PEHSC=4

3. Kandema women:	10%	10%	40%	20%	20%
Vaccination (G)	D: 1 11	D' 1 11	Б	A 11 1 C' 1	D C. 10 C
Remarks	Rich could afford good health	Rich could afford good health	Free vaccination enabled all to vaccinate	All benefitted because of free nature of vaccination	Benefitted for free
Impact on capabilities	NPEC=1, HS=4	NPEC=1, HS=4	NPC=1, EHS=4	NPC=1, EHS=4	NPC=1, H=4, ES=3
3 Chuchiliga men: Main road (Navrongo –Sandema) (G)	40%	30%	20%	10%	0%
Remarks	Use their vehicles, goods are brought to them by big trucks from the cities	Move their motor bikes or cars around	They send their good to market in public vehicles, travel, use their donkey carts	Once in a while they go to the market in public transport to buy or sell.	Road does not help them make any income. They hardly ever travel.
Impact on capabilities	All=4	All=4	All=4	All=1	All=1
3. Chuchiliga women: electricity (G)	60	30	10	0	0
Remarks	The rich have many things that use electricity	They can now l	isten to the news	The poor have no money to pay for this	The very poor have no money to pay for this
Impact on capabilities	NPSC=1, EH=4	NPSC=1, EH=4	NPEC=1, HS=4	NPESP=1, H=4	NPESP=1, H=4
3 Bilinsa men: New CBHPS compound (G)	0	50%	40%	10%	0%
Remarks	Don't want to join this project since it is below their standards. They can go anywhere for hospital services	They can afford it and they normally use it	Health services provided are almost affordable. Can have small businesses around the clinic compound	Do not have enough money to pay for these services	Don't have anything, so it is impossible for them to go there anyway
Impact on capabilities	All: 1	All:1	PH=4+, ESC=4, N=1	PHSC=4, NE=1	NPEHC=1, S=0
3 Bilinsa women: MHIS (G)	10%	10%	50%	20%	10%
Remarks	The very rich and rich opt for private hospitals at times.	These people register mostly because hey may not be able to afford the hospital bills.	May not be able to register the whole family	May not have money to register at all	
	MGIS is mostly by the very rich			ealth, which in the	and the most poor long-run helps
Impact on capabilities	C=3, NPEHS=1	C=3, NPEHS=1	PEH=4, C=3, NS=1	PEH=4, C=3, NS=1	C=3, NPEHS=1
3 Farinsa Men: Boreholes (G)	10%	10%	20%	30%	30%

Dl	Even if the	1	Danian and		I
Remarks		-	Easier and		
	water is far		closer access to		
	away from		water brought		
	them, they		big		
	can hire		improvement		
	people who		in their health.		
	will bring it to				
	them				
				41	h h 1
					boreholes, as they
			l socialise. That is		
			gative (for their wi water to someone, e). Nobody is using the
Impact on capabilities	H=4, NPEC=1,	S=0			H=4+, NPEC=1,
					S=0
3 Farinsa women: Weighing	0%	0%	20%	40%	40%
children (in the school) (G)					
Remarks	Prefer going	Can send	The some as	Do not send	Better able to till
Kemarks					
	to the clinic in	children to	for the v.poor	children to far-	their land (if
	Wiaga (nurses	health centre	but a little	away place for	grown up well)
	are always	in Wiaga	better but can	weighing; this	because of better
	there); not to		beg for food	helps them to	health. Healthy
	the		anytime.	know whether	children will be
	community		Do not go to	their children	able to earn a
	centre, as they		Wiaga,	are doing well.	better living as
	want to show		because	Not giving	grown ups
					grown ups
	their richness		children might	food, but vit. A	
	(women and		want to get	in case the	
	children are		something	child does not	
	dressed very		which they	grow well.	
	well). It is		can't afford to		
	inferior to		buy them.		
	them anyhow			sessions educatio	n is given on
	because you			rying from person	
	don't pay for			ygiene to relations	between men and
	these services		women		
Impact on capabilities	All: 1	All: 1	NEHSC=4, P=1	T	T
3. Chansa: polio	0%	10%	20%	30%	40%
•					
immunization (C)					
immunization (C) Remarks	There are no	Can easily go	Can afford	Can afford to	Cannot pay for
` '		Can easily go to hospital to			Cannot pay for treatment and are
` '	very rich	to hospital to	treatment from	pay with	treatment and are
` '	very rich people in the	to hospital to pay for	treatment from other health		
Remarks	very rich people in the community	to hospital to pay for treatment	treatment from other health facilities	pay with difficulty	treatment and are benefiting more.
Remarks Impact on capabilities	very rich people in the community	to hospital to pay for treatment All: 1	treatment from other health facilities All: 1	pay with difficulty All: 4	treatment and are benefiting more. All: 4
Remarks Impact on capabilities 4. Sandema officials: Feeder	very rich people in the community	to hospital to pay for treatment	treatment from other health facilities	pay with difficulty	treatment and are benefiting more.
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G)	very rich people in the community	to hospital to pay for treatment All: 1	treatment from other health facilities All: 1 40%	pay with difficulty All: 4 30%	treatment and are benefiting more. All: 4
Remarks Impact on capabilities 4. Sandema officials: Feeder	very rich people in the community	to hospital to pay for treatment All: 1	treatment from other health facilities All: 1 40% Most farmers fal	pay with difficulty All: 4 30%	treatment and are benefiting more. All: 4
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G)	very rich people in the community	to hospital to pay for treatment All: 1	treatment from other health facilities All: 1 40%	pay with difficulty All: 4 30%	treatment and are benefiting more. All: 4
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G)	very rich people in the community	to hospital to pay for treatment All: 1	treatment from other health facilities All: 1 40% Most farmers fal	pay with difficulty All: 4 30% I in these two he feeder roads	treatment and are benefiting more. All: 4
Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks	very rich people in the community - 5%	to hospital to pay for treatment All: 1	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce	pay with difficulty All: 4 30% I in these two he feeder roads	treatment and are benefiting more. All: 4 10%
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities	very rich people in the community - 5% EH=1	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a	treatment and are benefiting more. All: 4
Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention	very rich people in the community - 5%	to hospital to pay for treatment All: 1	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce	pay with difficulty All: 4 30% I in these two he feeder roads	treatment and are benefiting more. All: 4 10% EH=4a
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10	treatment and are benefiting more. All: 4 10% EH=4a 0
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention	very rich people in the community - 5% EH=1	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals usually makes	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals survive in the area
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals usually makes use of	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals usually makes	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals survive in the area
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals usually makes use of	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals survive in the area → more killed → more shared
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals usually makes use of vaccinations, but it costs	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals survive in the area → more killed →
Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G) Remarks	very rich people in the community - 5% EH=1 40 Most animals	to hospital to pay for treatment All: 1 15% HE=2 30	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals usually makes use of vaccinations,	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals survive in the area → more killed → more shared
Remarks Impact on capabilities 4. Sandema officials: Feeder roads (G) Remarks Impact on capabilities 4 Kandema men: Prevention of animal diseases (G)	very rich people in the community - 5% EH=1 40	to hospital to pay for treatment All: 1 15% HE=2 30	treatment from other health facilities All: 1 40% Most farmers fal groups and use the for farm produce EH=4a	pay with difficulty All: 4 30% I in these two he feeder roads EH=4a 10 Everyone with animals usually makes use of vaccinations, but it costs	treatment and are benefiting more. All: 4 10% EH=4a 0 No animals; but More animals survive in the area → more killed → more shared

Boreholes (GS+N)					
Remarks	Have donkey	Could assess	Could manage	Benefits most	Can access clean
	carts to fetch	water with	to get water	because water	water freely
	water	bicycles	8-1 /	is accessible	Water borne
	Had wells in			for all	diseases were
	house			Water borne	common most
	Could move			diseases were	common among
	to better			common in	this group
	places			this group.	uns group
Impact on capabilities	NH=4, PE=3,	NH=4, PE=3,	NESC=1,	NESC=1,	NESC=1, PH=4
impact on capabilities	SC=1	SC=1	PH=4	PH=4	11250=1,111=4
4 Chuchiliga men:	30%	20%	20%	20%	10%
Chuchiliga central market	2070	2070	2070	2070	1070
(P)					
Remark	Sell more,	Sell on the	Sell and buy	Sell and buy	Go to market to
	order goods to	market	from the	from the	beg and
	the market,		market	market	sometimes do
	people work		market	market	small buying.
	for them.				Sinuit out ing.
Impact on capabilities	No details given	n	1	1	1
4. Chuchiliga women:	30%	20%	20%	20%	10%
Chuchiliga central market					
(P)					
Remarks	The kids get foo	od from the trade	rs at the end of the	day when they ge	t home. The rich
		the poor don't go		, , , ,	
Impact on capabilities	NPHSC=1,	NPHSC=1,	NPSC=1,	NPHSC=1,	NPHSC=1, E=4
1	E=4	E=4	EH=4	E=4	,
4 Bilinsa men: District	0%	40%	30%	10%	20%
mutual health insurance					
scheme (G)					
Remarks	Don't like to	Because they	Same as rich;	Because	Registration is
	be associated	have money	but not the	payment is	free for the very
	with the poor	they are able	whole family	needed, they	poor. Evangelists
	and the very	to join the	could be	can't afford	visit the clinic;
	poor,	programme	registered,	registration	since the very
	therefore they	and even	maybe some	C	poor do visit the
	won't make	register their	members only		clinic, they can
	use of this	whole family			benefit from their
	scheme	J			presence
Impact on capabilities	All: 1	All: 1	EHSC=4,	EHSC=4,	H=4+, ESC=4,
			NP=1	NP=1	NP=1
4 Bilinsa women:	40%	30%	20%	10%	0%
Bullock/Donkeys (C)					
Remarks	They have	Can afford to	May not be	-	Have no money to
	money to buy	buy them	able to pay		buy them
	them		back		
Impact on capabilities	NPE=4, H=1	NPE=4, H=1	NPE=4, H=1	NPEHC=1	NPEHC=1
4 Farinsa Men: Mosquito	0%	10%	20%	30%	40%
Nets (G)					
Remarks	The very rich	-	-	It was hard to	It was impossible
	were having			afford the net	to afford the net,
	mosquito nets				so free mosquito
	i	1			nets was a big
	anyway.				
	, ,				thing for them.
Impact on capabilities	anyway. H=4, NPESC=1				
Impact on capabilities 4 Farinsa women: Boreholes	, ,	10%	10%	30%	thing for them.

Damada	Th 1		T	1	T
Remarks	They can also		Important		
Companyly market and a 1.5	buy water in		since they		
General: maintenance is with	bottles in the		don't have		
the community; everybody	store.		money to buy		
pays for this. No private	When the		water		
boreholes in F.	borehole				
	needs repairs,				
	sometimes the				
	(very) rich				
	will pay for				
	the repairs				
	then the poor				
	and the very				
	poor won't				
	have to pay	C 1 1 1	6 1	1	
				al activities. All the	
				re responsibility for	
Impact on conchilities	HS=4, NPEC=1		the different poverty	y categories will be l	iiiited
Impact on capabilities 4. Chansa: Formation of	0%	0%	0%	50%	50%
youth groups (P)	0 /0	0 /0	0 /0	30 /0	JU /0
Remarks	There are no	May not see	May not see	Will benefit	Will get more
TOHIM NO	very rich	the need to	the need to	more because	benefit because
	people in the	belong to a	belong to a	through the	through the
	community	group	group	groups they	groups they can
	Community	group	group	can access	feel the sense of
				some facilities	belongingness and
				like credit	can access some
				inc crear	facilities like
					credit and others
					ereart and others
Impact on capabilities	Recent project (four months old:	no impression to	be given vet: all: 3	
Impact on capabilities 5. Sandema officials:		i e		be given yet; all: 3	0%
5. Sandema officials:	Recent project (four months old: 20%	no impression to 1	be given yet; all: 3	0%
5. Sandema officials: Improved crop varieties		i e			0%
5. Sandema officials:	10%	20%		30%	0%
5. Sandema officials: Improved crop varieties (G+GS+C+P)	10% Relatively large	20% scale farmers	40% Most farmers are	30%	0%
5. Sandema officials: Improved crop varieties (G+GS+C+P)	10%	20% scale farmers	Most farmers are categories, and s	30% in these tarted cultivating	0%
5. Sandema officials: Improved crop varieties (G+GS+C+P)	10% Relatively large already cultivate	20% scale farmers	40% Most farmers are	30% in these tarted cultivating	0% E=1, H=4b
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks	Relatively large already cultivate varieties	20% e scale farmers e improved	Most farmers are categories, and s improved varieti	30% e in these tarted cultivating es	
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities	Relatively large already cultivate varieties E=4a, H=1	20% e scale farmers e improved E=4a, H=1	Most farmers are categories, and s improved varieti EH=4a	30% e in these tarted cultivating es E=4b, H=4a	E=1, H=4b
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa	Relatively large already cultivate varieties E=4a, H=1	20% e scale farmers e improved E=4a, H=1	Most farmers are categories, and s improved varieti EH=4a	30% e in these tarted cultivating es E=4b, H=4a	E=1, H=4b
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40	e scale farmers e improved E=4a, H=1	Most farmers are categories, and s improved varieti EH=4a	30% e in these tarted cultivating es E=4b, H=4a 10	E=1, H=4b 0
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have	e scale farmers e improved E=4a, H=1 30 They have	Most farmers are categories, and s improved varieti EH=4a	in these tarted cultivating es E=4b, H=4a 10 Have only	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to	e scale farmers e improved E=4a, H=1 30 They have most time to	Most farmers are categories, and s improved varieti EH=4a	30% e in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from	E=4a, H=1 30 They have most time to listen (from	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning)	E=4a, H=1 30 They have most time to listen (from 7.30 morning)	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention by being	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention by being mentioned on	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention by being mentioned on the radio);	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention by being mentioned on the radio); They still	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention by being mentioned on the radio); They still don't know	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention by being mentioned on the radio); They still don't know all about	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time
5. Sandema officials: Improved crop varieties (G+GS+C+P) Remarks Impact on capabilities 5 Kandema men: Builsa community radio (N+GS)	Relatively large already cultivate varieties E=4a, H=1 40 They have most time to listen (from 7.30 morning) because not working on land. + have time to phone to program to ask questions (and to get extra attention by being mentioned on the radio); They still don't know	E=4a, H=1 30 They have most time to listen (from 7.30 morning) because not working on	Most farmers are categories, and s improved varieti EH=4a	a in these tarted cultivating es E=4b, H=4a 10 Have only (sometimes) a small radio and not always	E=1, H=4b 0 No radio, no time

	the health	I			
	messages on				
T	the radio	1			NDELICC 1
Impact on capabilities	NPE=1, HSC=4		400/	200/	NPEHSC=1
5. Kandema women: Tree Aid Activities (N)	10%	10%	40%	30%	10%
Remarks	Less of this group are beneficiaries	Less are beneficiaries	Most beneficiaries are from this group.	Less from this group	See project as too long. Not many can afford the time for the training especially where there is no food at the process of the training
Impact on capabilities	NH=4, PESC=1	NH=4, PESC=1	NPEHS=4, C=1	NHES=4,PC=1	NPC=1, HES=3
5 Chuchiliga men: Chuchiliga health centre (G+P)	30%	20%	20%	20%	10%
Remark Chuchiliga health centre	Go to the clinic with the slightest sickness	Go there when they are sick and able to pay	Go there when they are sick and able to pay	Go there when they are sick and able to pay	Only go there when the sickness is in there advanced stage and cannot do anything about it
Impact on capabilities	No details given	1			-
5. Chuchiliga women: seeds to flood victims (N+C)	20	30	20	20	10
Remarks	It was also even good for the very rich as the quality of the seeds on the market was questionable			The poor have no fields so their capitals improve less, but they also benefit from labour and food given	The poor were given food aid. They can't profit from this as they have no land
Impact on capabilities	NEH=4, PSC=1	NEH=4, PSC=1	NEH=4, PSC=1	NPSC=1, EH=4	NPSC=1, EH=4
5 Bilinsa men: Community radio station (N+GS)	0%	50%	40%	10%	0%
Remarks	They normally have a television and wouldn't listen to the radio. They use the radio for advertisement for their businesses. Because the very rich are more in politics they benefit more from the radio channel when	They can buy the radio and the batteries and have time to listen to the radio	They can buy a radio, but not always afford batteries. They can go there to make announcements	A relative may give them a radio and they may be able to buy batteries	Cannot afford a radio at all

	'canvassing'					
Impact on capabilities	ES=4+, NPHC=1	HC=4+, ES=4, NP=1	H=4+, PESC=4, N=1	HSC=4, NPE=1	All: 1	
5 Bilinsa women: Groundnuts (C)	0%	20%	20%	30%	30%	
Remarks	Normally, the very rich do not want to bother themselves with collecting seeds – prefer	-	-	The main targets are the poor and very poor. They are first on the priority list of the Agric Station.		
Impact on capabilities	to buy them. All: 1	All: 1	NPEC=4,	NPEC=4,	NPEC=4, HS=1	
5 Farinsa Men: Community School (N+P)	0%	0%	HS=1 20%	HS=1 30%	50%	
Remarks		v (even when	travelling costs - programme in so parents of childr education of the chances of a suc	en to school as it is + the presence of the chools is very enha- ren cannot afford for se children which a cessful life in the facetings, which before a).	ne feeding ncing. However, arther higher minimises their outure	
Impact on capabilities	PEHS=4, NC=	C=1				
5 Farinsa women: Feeder	40%	30%	10% 10%		10%	
Remarks	Use more vehice motorcycles -> They use the reconstruction made Don't like the very rich change behaviour by we television and contact with the	benefit more. ads to buy nterial. vay the rich and the their atching come into	They walk the shortcuts and won't take the feeder roads while going to markets or even the hospital Don't ha money to for riding lorries			
Impact on capabilities	NPEHS=4, C=0		All: 1			
5. Chansa: Dam (P)	0%	40%	30%	20%	10%	
Remarks	There are no very rich people in the community	They can do more dry season farming and also have animals that drink from the dam	They also do dry season farming but have limited number of animals that drink from the dam	They only do small gardens during the dry season and have no animals	They do very limit scale of dry season farming and have no animals.	
Impact on capabilities	-	All: 4	•	•	•	
6. Sandema officials: Tono Irrigation (G)	10%	40%	30%	20%	0%	
Remarks	cultivators or la	bourers	from the irrigation water-borne diseas			
Impact on capabilities	NE=4a, H=0, S=1	NE=4a, H=0, S=1	NE=4a, H=0, S=3	NES=4a, H=0,	NES=1, H=0	
7. Sandema officials: Small scale irrigation systems (GS)	0%	10%	50%	30%	10%	

Remarks				These are at the village level so farmers benefit very much			
			Health risks	-			
Impact on capabilities	NEHS=1	NEHS=1	NES=4a, H=0	NES=4a, H=0	NES=1, H=0		
8. Sandema officials: Boreholes (G+GS+C)	10%	10%	30%	30%	20%		
Remarks	All categories of people benefit from the boreholes. The very rich and rich are however concentrated in the towns						
Impact on capabilities	NPEHC=1	NPEHC=1	NPEHC=4a NPEHC=4a		N4a, PEHC=4b		
9. Sandema officials: Small	10% 30%		30%	20%	10%		
town water systems (N)							
Remarks	There are more	very rich and ricl	n in Sandema Tow	n, so they profit n	nore		
Impact on capabilities	NPEHC=4a	NPEHC=4a	NPEHC=4a	NPEHC=4b	NPEHC=1		
10. Sandema officials: Youth employment (G)	0%	0%	50%	30%	20%		
Remarks	The rich and veneed the program	•					
Impact on capabilities	EHS=1	EHS=1	EHS=3	EHS=3	EHS=1		

Part 11. The impact of the best initiatives on wealth categories: analysis

The 55 'best projects' that had been identified by the various groups of workshop participants (out of a total of 314 initiatives) were spread over the various agencies and sectors, and they enable us to see what the specific and overall perceptions were among workshop participants about the distribution of impact across wealth categories. Table 11.1 gives the results for agencies, table 11.2 for sectors. It also makes it possible to see which types of initiatives had had most impact for each of the five wealth categories (table 11.3).

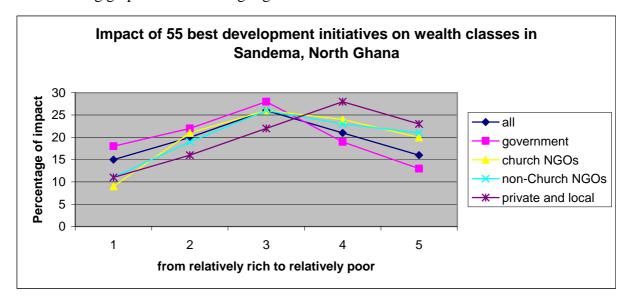
Table 11.1: Agencies and relative perceived impact on wealth categories

Agency	Number of	Impact on	Impact on	Impact on	Impact on	Impact on
	initiatives	very rich (%)	rich (%)	average (%)	poor (%)	very poor (%)
G	29	19	22	28	18	13
GS	1	0	10	50	30	10
G+P	2	15	15	25	30	15
G+GS+C	1	10	10	30	30	20
G+GS+P	1	10	30	20	20	20
G+GS+C+P	1	10	20	40	30	0
GS+N	4	15	25	25	18	18
С	6	7	22	23	23	25
C+N	1	20	30	20	20	10
N	2	10	20	35	25	10
N+P	2	0	0	20	35	45
P	5	14	20	18	26	22
Grand Total	55	15	20	26	21	16
Total G	39	18	22	28	19	13
Total C	9	9	21	26	24	20
Total N	9	11	19	26	23	21
Total P	11	11	16	22	28	23
Researchers'		5%	10%	30%	45%	10%
impression						
of overall						
distribution						
of wealth						
categories in						
Sandema						

In terms of distribution of perceived benefits of the 55 'best projects' most impact went to the people in the average wealth category, followed by the poor, with the very rich and the very poor lagging behind. If we compare this distribution with the (researchers') perception of wealth distribution in the Sandema region, we see a relative overrepresentation of the very poor, but also of the very rich and rich, and a likely underrepresentation of the poor and average categories. Looking at the various 'best projects' in which a government agency had been involved the distribution shows more (perceived) emphasis on the average, the rich and the very rich and a lower (perceived) emphasis on the poor and very poor. The 'best projects' in which church-based NGOs had been involved show more (perceived) emphasis on the poor and very poor, and it shows much less impact on the very rich. The many projects initiated by the Presby Agricultural Station, and its orientation on poor farmers (groups), make this an understandable distribution of impacts. The 'best projects' in which non-church NGOs had been involved show a comparable emphasis on the poor and very poor, and this is even more so with 'best projects' initiated by communities and private initiators (although often together with others). It is interesting to compare the scores in cases where agencies had been working alone, with the scores in cases they had been working with others. For government agencies it

hardly matters: with or without partners from other categories they show the same distribution pattern (slightly more on the poor, and slightly less on the very rich). For church agencies working with others it means that they are somewhat compromising on their orientation towards the very poor, and they allow more benefits for the very rich and average. For non-church NGOs working with others (often with supranational agencies) it means more emphasis on the very poor and much less on the average. Finally for private agencies and local communities working with others it means more emphasis on the average, poor and very poor, and less emphasis on the rich and very rich.

In the following graph the result is highlighted.



We can further differentiate this picture by looking at the sectors in which the 55 'best projects' have been active.

Table 11.2. Agencies and relative perceived impact on wealth categories in the sectors infrastructure, energy and water

Subsector and	Agency	Impact on	Impact on	Impact on	Impact on	Impact on
number		very rich %	rich %	average %	poor %	very poor %
Roads 7x	G	25	24	27	19	7
Irrigation 4x	G (+GS)	20	28	30	18	5
Waterdams 2x	P	5	30	25	20	20
Energy 2x	G	60	30	10	0	0
Boreholes 5x	G	12	21	22	21	24
Boreholes 2x	GS+N	10	10	20	25	35
Boreholes 1x	GS+C	10	10	30	30	20
Boreholes 1x	GS+P	10	30	20	20	20
Boreholes 1x	N	10	30	30	20	10
All boreholes	Var.	11	19	23	23	24
10x						

With regard to the most favoured projects in the infrastructural sectors (25 out of the 55 initiatives mentioned as 'best projects'), the large majority had been initiated by government agencies, sometimes supported by supra-national agencies. Roads and irrigation projects were perceived to favour the average, rich and very rich groups most, and had only meagre impacts

on the very poor. Although water dams also had most impact on the rich, their impact on the poorer groups was seen as considerable. Energy (the connection of the area to the electricity grid) was seen to have had no impact on the poor and very poor, and an overwhelming impact on the very rich. On the other hand the many borehole projects were perceived to have had a major impact on the very poor and poor, although with differences between the agencies.

Table 11.3. Agencies and relative perceived impact on wealth categories in the sectors agriculture, livestock, natural environment, and credit

Subsector and	Agency	Impact on	Impact on	Impact on	Impact on	Impact on	
number		very rich %	rich %	average %	poor %	very poor %	
Crops 1x	G+GS+C+P	10	20	40	30	0	
Crops 2x	C	0	20	20	30	30	
Crops 1x	C+N	20	30	20	20	10	
All crops 4x	var	8	23	25	30	18	
Livestock 4x	С	20	28	20	15	13	
Nat env 1x	N	10	10	40	30	10	
Market 2x	P	30	20	20	20	10	

Out of 55 project nine had been in the sectors of crop development, livestock development, credit and care for the natural environment, mostly with a church-based NGO (and often PAS) involved. In crop development most impact was perceived to have gone to the poor, followed by the people in the average category. In livestock development the benefits had mainly gone to the rich and in natural environment initiatives to the average people. In the provision of credit most benefits were thought to have gone to the very rich.

Table 11.4. Agencies and relative perceived impact on wealth categories in the sectors education, health, and social development

Subsector and number	Agency	Impact on very rich %	Impact on rich %	Impact on average %	Impact on poor %	Impact on very poor %
Education 4x	G	20	16	38	18	9
Education 2x	N+P	0	0	20	35	45
All education 6x	var	13	11	32	23	21
Health 6x	G	3	20	33	22	22
Health 2x	G+P	15	15	25	30	15
Health 1x	С	0	10	20	30	40
All health 9x	var	6	18	30	24	22
Social 2x	GS+Ñ	20	40	30	10	0
Social 1x	G	0	0	50	30	20
Social 1x	P	0	0	0	50	50
All social 4x	var	10	20	28	25	18

Education interventions had been mentioned six times as 'best project' and they mostly favoured the average, followed by the poor and very poor. In health care (nine times mentioned as 'best project') it is the same story, but with even having a lower impact on the very rich than with education. Four times a 'social project' had been mentioned as one among the 'best projects'. The community radio was thought to mainly have an impact on the rich and average inhabitants, a government youth employment scheme was basically thought to have an impact on the average group and a youth group in the most remote village mostly on the poor and very poor.

In development circles, and particularly among donor NGOs a question often asked is: "what impact does a project have on the (very) poor?", or "what type of project/intervention can reach the very poor?" Our research material allows a tentative answer, at least with regard to the perceived impact on the poor and very poor. If we take the two wealth categories together, which type of interventions, by which agencies, had 50% or more of its perceived impact on the poor and very poor? Eighteen of the 55 initiatives that had been selected as "best five" did have an impact that was mostly favourable for the poor and very poor. The list is given in table 11.5. Six of these could be found in water development and four in health projects, three in crop development, two in education and among the social projects and one in livestock development. None were found in transport, energy and irrigation infrastructure, in natural environment and in economic projects/initiatives.

Table 11.5 Initiatives with the highest perceived impact among the poor and very poor inhabitants of Sandema.

Percentage of	Sector	Agency	Name of project	Where
perceived				
impact among				
poor and very				
poor				
100 (50+50)	Social	P	Youth group	Chansa
80 (30+50)	Education	N+P	Community school	Farinsa woman
80 (40+40)	Education	N+P	Community school	Farinsa men
80 (40+40)	Health	G	Weighing school	Farinsa women
			children	
80 (30+50)	Livestock	С	Sheep and goats	Bilinsa men
70 (30+40)	Health	С	Polio immunisation	Chansa
70 (30+40)	Water	G	boreholes	Farinsa women
70 (30+40)	Health	G	Mosquito nets	Farinsa men
70 (40+30)	Crops	G+GS+C+P	All crop development	Officials
60 (20+40)	Water	GS+N	boreholes	Kandema men
60 (30+30)	Water	GS+N	boreholes	Kandema women
60 (30+30)	Water	G	boreholes	Farinsa men
60 (30+30)	Crops	С	PAS	Chuchiliga men
60 (30+30)	Crops	С	groundnuts	Bilinsa women
60 (40+20)	Health	G+P	Clinic/health outreach	Officials
55 (25+30)	Water	G	hand pump	Bilinsa men
50 (30+20)	Social	G	Youth employment	Officials
50 (30+20)	Water	G+GS+C	All boreholes	Officials

Part 12: A more detailed description and analysis of impact assessment by agency and sector: the Sandema officials and the five communities.

a) the Sandema officials

Type of initiatives, by agency and by sector

In Sandema a group of officials (14 men and one woman) were put together, and separated from the village communities. They had a wealth of knowledge (and opinions) about a large number of initiatives that took place in Builsa District as a whole, a total of 114 initiatives, in 12 domains or 'sectors'. The Government of Ghana had been active in most domains, some of it as part of the normal central government activities in any District in Ghana (e.g. Ministry of Food and Agriculture, Ministry of Health), some specifically as activities of the District Assembly, some as part of special intervention programmes (e.g. the Village Infrastructure Project, URADEP, FOSADEP, Ghana@50) or by separate government entities (e.g. the Volta River Authority, the Ghana Fire Service). Many initiatives came from international supragovernmental agencies (FAO, IFAD, UNICEF, WFP, African Development Bank, World Bank) or from foreign bilateral development agencies (DfID, CIDA, GTZ). Although mostly these initiatives came through the Government of Ghana, many local people would talk about them as the equivalents of 'NGOs'. The real NGO's working in the district were partly church-related ('faith-based NGO's', the most important one being the Presbyterian Agricultural Station - PAS - , CBR and the Presby Clinic, but also the Catholic Relief Services, Bible Church Africa, and ADRA; although there are Muslims in the area people did not mention Muslim-based NGO's), and non-church related NGOs: CARE, CODI, CCFI, VUM-Trees, Pronet North, Rural Aid, CWSA, ISODEC, FISTRAP. Finally people mentioned private initiatives, either by village communities, women groups, the Traditional Healers Association or local entrepreneurs themselves (in one case by a group around a local MP), or by (foreign) companies, like Africaonline, GCLL, BucoBank, SFMC, and three mobile phone companies (MTN, GT, TIGO). In a number of cases initiatives were joined activities by a government agency and a church-based NGO (4x; three times PAS, in one case also with IFAD involvement), a church-based and a non-church based NGO (3x; again with PAS in a key role, together with CARE), a government agency and a private agency (2x), and, in one case, a joint venture by a government agency, supported by a supranational agency, and a church-based NGO (PAS again). Table 12.1 gives an overview. In total out of the 114 initiatives (or 'projects') 63 were (partly) government initiatives, 27 (partly) church-based NGO initiatives (often related to the Presbyterian church, mainly PAS), 22 (partly) private initiatives and 13 (partly) by non-church non-governmental organizations.

Table 12.1: Intervention agencies and sectors in Sandema, according to the 'officials'

Sector	Gov	G+S	G+C	G+S+C	G+S+P	G+P	С	C+N	C+P	N	P	Total
Infrastr	4	1										5
Energy	2										1	3
Water	1	4					1	1		5	1	13
Agric	7	1	2				2	1			3	16
Livest	1	1				1	4				3	10
Nat.Res	2						2	1		4		9
Educat	10	3	1								2	16
Health	6	1					5				1	13
Econom	4	2		1	1	1	3		1		1	14

Relig Social							2					2
	4									1	6	11
Admin	2											2
Total	43	13	3	1	1	2	19	3	1	10	18	114
Total G						63						
Total C			+	+					27			
Total N								+		13		
Total P						+			+		22	

G = Government, S = supra-governmental, C = church-based NGOs, N = non-church-based Non-governmental organisations, P = private sector and community initiatives.

Table 12.2: Sandema: intervening agencies and officials' judgement about their impact.

	Gov	G+S	G+S+C	G+S+P	G+C	G+P	Church	C+N	C+P	NGO	Private	Total
0											1,5	1,5
1	1											1
2	4	1	1							1	2	9
3	9	2		1	1		5	3	1	7	4	33
4a	21	8			1	1	12			2	5,5	50,5
4b	8	2			1	1	2				5	19
Total	43	13	1	1	3	2	19	3	1	10	18	114

In percentages

	Gov	G+S	G+S+C	G+S+P	G+C	G+P	Church	C+N	C+P	NGO	Private	Total
0											8	1
1	2											1
2	9	8	100							10	11	8
3	21	15		100	33		26	100	100	70	22	29
4a	49	62			33	50	63			20	31	44
4b	19	15			33	50	11				28	17
Total	100	100	100	100	100	100	100	100	100	100	100	100

Agencies' involvement, in percentages of impact types

rigeneres inve	Gov.	· 1	Supra-gov.		Church		NGO		Private	;
	n	%	n	%	n	%	n	%	n	%
0									1,5	7
1	1	2								
2	6	10	2	13	1	4	1	8	2	9
3	13	21	3	23	10	37	10	77	6	27
4a	31	49	8	55	13	48	2	15	6,5	30
4b	12	19	2	13	3	11			6	27
Total	63	100	15	100	27	100	13	100	22	100

0 = negative impact, 1 = 'only paper', 2 = no longer visible/unsustainable, 3 = on-going, 4a = positive impact, 4b = positive impact but for a few people

G = government agency; S = Supra-governmental agency (supposed: always with G); C = Church-based NGO;

N = non-church based NGO; P = private/community/individual

Negative judgements (score 0) were few, and only among private initiatives: the recent start of many drinking bars in the district (by private individuals) was seen as having too many adverse effects. Quite a lot of officials saw the recent growth of pig rearing by individual farmers (since the early 2000s) as a nuisance, as most pigs were destroying crops when they were allowed to leave their pig houses, which often happened, although others also saw its economic benefits (this was the only mixed judgement: some officials gave a 0, others a 4). One government project, the Poverty Alleviation Fund, managed by the District Assembly, was seen as 'just paper' (score 1), although it already existed since 1992. Many officials also regarded it as too much politicised.

Nine projects/initiatives were judged as unsustainable (score 2). A crop variety that was introduced in the 1960s by a government agency (Naga White) was maturing so early in the year that it was a major target for pests, and farmers gave up. A government initiative from the early 1970s onwards, the introduction of cotton, followed in the early 2000s by similar initiatives by a private agency (GCCL), looked promising in the beginning, but many farmers gave up because of dwindling prices recently. A project introduced by an NGO (VUM trees) in 1997/98, to develop woodlots, had also lost its attraction, while the 'Greening Ghana project', introduced in 2007 by Ghana@50, was very soon seen as a disappointment. A project funded by GTZ in 2007, after the disastrous floods in the area, was seen as too shortlived to have a lasting impact (it was treating all water points). Many officials had become quite sceptical of the activities of members of the newly established Traditional Healers Association (established in 2001): "many herbalists no longer know which herb cures what disease". A farmers credit programme, that was first launched in 1992, as an IFAD funded activity through the Ministry of Food and Agriculture, and was followed up in 2000, becoming a joint activity of PAS and the Ministry, again with support from IFAD (both under an umbrella arrangement called LACOSREP) had also lost its value. As many beneficiaries had not paid back their loans, the project had ended, with heavy debts for the banks that had been involved. Finally, the Sandema Community Centre, built by the District Assembly, is collapsing, "and nobody seems to care". If we look at the various types of agencies, unsustainable projects were relatively prominent among initiatives supported by international supra-national or bilateral agencies, through the Government of Ghana.

The officials listed 33 projects/activities which were still on-going (score 3) and for which they found it difficult to judge its impact, as many were quite new. A majority of the activities of the non-church based NGOs belonged to this category. For 70 projects (61%) the officials concluded that the impact had been positive and lasting (score 4), although for 19 of those projects the impact was not very wide-spread (score 4b) and for one activity (the pigs, as we have seen before) some did not agree at all, and regarded it as an innovation with mainly negative impact. The activities which were regarded as positive, lasting and with wide-ranging impacts could (relatively speaking) mostly be found among government activities that were supported by international supranational and bilateral agencies, but closely followed by all activities in which government agencies had been involved and by activities supported by church-based NGOs. Private activities had a relatively high percentage of projects with a positive impact, but for a limited number of people (score 4b).

Table 12.3 Officials' assessment of impact per sector

Sect	0		1		2		3		4a		4b		Total	
	N	%	n	%	n	%	n	%	n	%	n	%	n	%
Infra									4	80	1	20	5	100

Ener							1	33	1	33	1	33	3	100
Wat							5	40	8	62			13	100
Crops					3	19	5	31	4	25	4	25	16	100
Liv	0.5	5					4	40	3.5	35	2	20	10	100
Nat					2	22	7	78					9	100
Edu							1	6	11	69	4	25	16	100
Hea							1	8	9	69	3	23	13	100
Econ			1	7	2	14	5	36	5	36	1	7	14	100
Reli							2	100					2	100
Soc	1	9			1	9	2	18	4	36	3	27	11	100
Adm					1	50			1	50			2	100
Total	1.5	1	1	1	9	8	33	29	50.5	44	19	17	114	100

0 = negative impact, 1 = 'only paper', 2 = no longer visible/unsustainable, 3 = on-going, 4a = positive impact, 4b = positive impact but for a few people.

For a detailed table with information about sector x agency x impact score: see appendix.

As we have seen before, activities with a negative impact were few, and they were in the livestock and social sectors; there was only one project which was regarded as 'just a paper project', in economic development. For religious activities, projects in natural resources and livestock development, and for administration most activities were judged to be ongoing (score 3), while for infrastructure, education, health and water the majority of the activities were judged to have had a broad, positive impact. Activities with a positive impact, but with a small reach, were mainly judged to exist in energy and social projects.

What about the assessment of activities/projects/initiatives of PAS and other Presby agencies? (as seen by the Sandema officials)

As we have seen before, Presbyterian activities started in 1953, first mainly accompanied by minor health work. Form 1969 onwards, agricultural development activities became important and the Presbyterian Agricultural Station started, but had to close down in 1979 after mismanagement. The officials did not mention any project/initiative from these early years. PAS restarted in 1987, and was joined by a Presby Health Clinic in 1990 and a Rehabilitation Centre for Disabled People in 1991. In 2000 the PAS was restructured. See appendix 1 for a story about PAS, written by the PAS-Sandema director. Although there are a few other church-based development activities in Builsa District, the activities of the Presbyterian Church stand out as very prominent. If we look at the officials' judgements we can see that out of twenty-two initiatives in which the Presby church has been involved one was seen as unsustainable, eight as on-going (some already for a long time), ten as having a wide range positive impact and three with a more limited positive impact.

Unsustainable: In 2000 PAS joint an initiative by the Ministry of Food and Agriculture (funded by IFAD, under the umbrella of LACOSREP, to give loans to farmers. After a promising start this is now seen as a failure.

On-going: In 1993 PAS, together with the Ministry of Food and Agriculture, and the Agricultural Research Institute, introduced pigeon peas, but this is still on-going, although the officials judged that it was still very difficult to obtain the seed. In 1995 a grafted mango project started, which is still on-going, and this was expanded as the 'mango project', together with CARE, in 2007. In 1996 PAS started to introduce improved guinea fowls (and cockerels), which is still on-going. In 1998/99 PAS introduced 'Sahelian' sheep and goat breeds and is still doing that. In 2005 PAS started to work together with a private company (SFMC) to give loans for sorghum and soybean production, for which SFMC provides a ready market. In 2006 PAS and CARE started with community-based extension agents; officials have "yet to see how it works". After the major floods of 2007 PAS and CARE worked together with the rehabilitation of boreholes and dams, but that is not yet ready.

Positive and wide-range impact: In the 1950s the Presby Church started the Health Clinic, followed in 1990 by the Presby Primary Health-Care Project and in 1991 by Community-Based Rehabilitation (CBR) and (date unknown) an Eye Treatment Programme (for which specialists from Bawku Hospital visit the area). These are all seen as having had a significant impact. In the 1990s PAS started so-called *gnud* loans (in kind), which are now seen as an important start of better credit facilities in the area. In 1992 PAS introduced two new varieties of maize (Safita-2, and Obatanpa). This has had a major positive impact on food security, better health and improved income. In 1996 PAS introduced improved cockerels, which are seen as a success. In 1997 CBR (related to the Presby Church made it possible for disabled people to get credit, and "many disabled can now fend for themselves". In 2005 PAS gave a boost to credit possibilities by introducing credit facilities for farmer groups.

<u>Positive and limited-range impact:</u> In 2000 PAS introduced community livestock workers, but they are still few. In 2005 PAS, together with the Ministry of Food and Agriculture introduced a sorghum variety (Doraado) which is preferred by the brewery industry, but still with limited effects. Together with the Catholic Church the Presby Church supports orthopaedic specialist services (with specialists from the hospitals in Bawku and Nsawam), but, although important for some, the range has been limited.

b) The communities of Kandema, Nyansa and Balansa

Initiatives by agency and sector

The Kandema-Nyansa-Balansa community was represented by seven men and five women, who first together made a list of all initiatives in their communities, and then gave a separate assessment of the impact of each of these initiatives. They came from three adjacent villages, west of Sandema Town, an area that can be regarded as 'the far end' of Upper East Region. Table 12.4 shows the types of agencies and the sector distribution per agency. Out of 47 identified initiatives 28 came from the government, in 9 of these cases supported by supranational or bilateral agencies, and in three cases working together with a church and a non-church-based NGO (PAS and CARE). The supranational and bilateral agencies supporting the area had been UNICEF and Canadian CIDA. UNICEF came to the region in 1996, with projects in agriculture, water, credit, education and health care. CIDA started in 1983, and was seen as an NGO, working in water development. If we combine all Government initiatives these had been identified most in agriculture/livestock (7; from the early 1990s onwards), and in education (6; starting in 1993), infrastructure (4; one from the 1990s and three more recent), health (4; starting in the 1990s), natural resources (2; starting in 1992), water (2; in 1983 and 1996); credit/business development (2; from 1994 onwards) and social communication (1; unknown starting date).

The church-based activities that had been identified consisted of activities by the Presbyterian Agricultural Station (the introduction of soybeans, in 1992, together with another NGO, ADRA and the Ministry of Food and Agriculture, improved cropping and livestock methods from 2007 onwards also with the Ministry (and with CBRD), and with CARE, and giving awards to the best farmers. In 2002 PAS had also started a credit programme in one community. Among the church-based initiatives we finally find educational support by the Catholic Relief Services. Four identified non-Church NGOs and a few unidentified ones had played roles in this research area, and some still do. ADRA started in the early 1990s with two agricultural projects, Rural Aid started in 1995 with projects in water and in health, and an organisation called MECRO started education projects in 1995, after an unidentified NGO had started in this field in 1992, and another one came in 2005. Finally, an organisation called Tree Aid became quite active in natural resources management and in agricultural development from 2003 onwards, and they have very recently started additional activities. Finally the local people mentioned a rural community bank and an infrastructural project 'by their grandfathers' as private activities.

Table 12.4 Initiatives in Kandema-Nyansa-Balansa per agency, per sector.

Sector	Gov	G+S	G+C+N	С	N	P	Total
Infrastr	4					1	5
Water		2			2		4
Agric	2	1	2	1	2		8
Livest	1		1				2
Nat.Res	2				4		6
Educat	5	1		1	3		10
Health	1	3			1		5
Econom		2		1		1	4
Relig				1			1
Social	1				1		2
Total	16	9	3	4	13	2	47

G = Government, S = supra-governmental, C = church-based NGOs, N = non-church-based Non-governmental organisations, P = private sector and community initiatives.

Among the 47 initiatives that had been identified, 31 had the same quality judgements by men and women, of which 25 were unanimously judged as 'positive' (score 4), and none as purely 'negative' (score 0) or 'only words' (score: 1). In 16 cases men had a different judgement compared to women; often the women were more critical. Table 12.5 shows the judgements with regard to types of intervening agencies, table 12.6 looks at the agencies and judgements per sector. If we combine 'stand-alone' initiatives with 'joint initiatives' the participants had identified 28 government activities, 16 non-Church NGO activities, and 7 church-based activities. Of all initiatives with (some) government involvement 54% were regarded as positive by men and women (score 4). For all initiatives with (some) NGO involvement this was 69%; and for all initiatives with (some) involvement of church-based NGOs this was 43%.

Table 12.5 Kandema-Nyansa-Balansa: intervening agencies and people's judgement about impact.

	Gov	G+C+N	G+S	Church	NGO	N+P	Private	Subtotal	Total
M+W 0								0	31
M+W 1								0	
M+W 2	2		1		1			4	
M+W 3				1				1	
M+W 4	10	2	3	1	9	1		26	
M1W4					2			2	16
M2W4	1		1				1	3	
M1W2							1	1	
M4W1				2				2	
M4W2	1	1	4				1	7	
M4W3	1							1	
Total	15	3	9	4	12	1	3	47	47
%	67	67	33	25	75	100	0	55	
M+W4									

0 = negative impact; 1 = 'only paper', 2 = no longer visible/unsustainable, 3 = on-going, 4 = positive impact; M= Men; W = Women

Although a slight majority of all initiatives had been judged as having had a positive impact (55% of all 47 initiatives), the initiatives of the non-church NGO sector were judged as most positive (75; the one with a clear community involvement even 100%). But also government agencies performed relatively well (with 67% judged as positive by both men and women), and also those in which government agencies worked together with a Christian and non-Christian NGO. The few initiatives by Church-based NGOs, by private initiatives, and by joint ventures of a supra-governmental and governmental agency were regarded as more controversial, often with the women being more sceptical about the results.

Table 12.6 Kandema-Nyansa-Balansa: judgement of impact per sector

Sector	Score 0	Score 2	Score 3	Score 4	Mixed	Total	% 4/
	or 1				score		Total
Infra				4	1	5	80
Water				3	1	4	75
Crops		3		2	3	8	25
Livestock				1	1	2	50
Nat Env				4	2	6	67
Education		1		7	2	10	70
Health				3	2	5	60
Economy					4	4	0
Religion			1			1	0
Social				2		2	100
Total	0	4	1	26	16	47	53

0 = negative impact; 1 = `only paper', 2 = no longer visible/unsustainable, 3 = on-going, 4 = positive impact. For a table with detailed results about sector x agency x impact score: see appendix.

The sector with the highest assessment of positive impact was the social sector, followed by water, infrastructure, and by education. The highest doubts about sustainability (score 2) were about initiatives in agriculture. Differences between judgements of men and women (mixed score) were most profound among the economic (credit) projects, followed by initiatives in livestock and health. Women were more sceptical about credit and livestock initiatives, men about water projects.

Let us look at the history of initiatives in more detail to see what judgements were given per sector, and why.

<u>Infrastructure</u>: Four recent road projects by the government were generally appreciated, even if some bridges were not yet ready, and some had already collapsed after heavy rains. Farmers regard improved roads as an important means to get better access to markets and particularly women appreciate faster access to health care in case of urgent needs. A very old dam for watering cattle (private 'grandparents' initiative) had become silted and was no longer seen as useful, and the community had not yet organised itself properly to desilt the dam, as they seem to have been waiting for 'the government' to do something.

<u>Water</u>: The people of Kandema, Nyansa and Balansa remembered that CIDA was the first external agency drilling boreholes, one in each community (in 1983; these still function well). Action Aid added 18 hand-dug wells in 1995-1997, some with pumps and some without. The women were happy with those, the men less so; they say they prefer the ones with pumps, and regard the others as too time-consuming (for their wives, we suppose). UNICEF added

another one, in 1996, which no longer works properly. In 2004 an unidentified NGO provided 8 new boreholes, for which the local communities also had to contribute. These still work and are appreciated.

Crops: Two crop improvement projects had been introduced to the community by a joint venture by the Ministry of Food and Agriculture, Church-based PAS, and two NGOs (CARE and ADRA). A recent project on composting and new crop storage methods was well appreciated; an older project - starting in 1992 - to introduce soybeans was still seen as useful by the men, but the women disliked the fact that the community approach had given way to an individualised approach; limiting access. An approach by ADRA to come with a package of seeds and fertilisers (in 1994-95) was judged to be of little value and too brief to have a lasting impact. A recent project by PAS, to give awards to 'best farmers', was appreciated by the men, but the women felt ignored. A government project to introduce sorghum as a raw material for Guinness production (starting in 2000) looked promising first, but recently prices had become too low to be seen as useful, and farmers no longer continued. A government project to introduce cowpeas (in 2003) was first seen as very useful, because it came with a package in which pesticides were included (which was very much appreciated), however, since that stopped the women lost interest, although the men still liked it. An NGO called Tree Aid had recently become quite active in the area and their approach on introducing new agricultural techniques about composting and manure preparation was regarded as useful. Finally, UNICEF had introduced a grinding mill in the area in 1996, but that had broken down and nobody had organised its repairs, as it was unclear who should do that. In fact, if we look at all crop improvement initiatives, only the most recent ones get the benefit of the doubt, it seems; all older projects were regarded as disappointing, either by the women, by the men, or

Livestock: In 2000 the Ministry of Food and Agriculture had introduced 'improved goats'. According to the men this indeed had the impact that generally goats became bigger, and they judged this initiative as a success, even if all original goats had died, and there were doubts about their sturdiness in the dry seasons. That was the reason the women regarded this project as not-sustainable. In 2007 a group of agencies (PAS, but also MOFA and two NGOs) became involved in livestock improvement projects and veterinary care, which was well appreciated. The prevention of animal diseases seriously started in 1992, according to the participants, first by the government, more recently also by Tree Aid. Natural resources: in 1992 the Ministry of Food and Agriculture started soil management and anti-erosion activities in the area, which were regarded as useful. Very recently also Tree Aid added some activities, together with tree planting (for shade, fruits and wind breaks) and training about tree management, all seen as relevant and useful by the participants. Education: An old government primary school in Balansa was improved by an unidentified NGO in 1992-1993, and another one built by the government in 1997, and a Junior Secondary School in 2007, while Catholic Relief Services had started to support a school feeding programme in the early 1990s for nursery and junior primary pupils (although people very much regretted that it would stop soon). In 1995 an NGO called MECRO built a primary school in Nyasa (extended in 2005), which meant that children from Nyasa did not have to walk all the way to Balansa (which in the rainy season was almost impossible). These were all regarded as very useful initiatives. Not so useful were non-formal education initiatives by the government (started in 1998, but stopped), the donation of school uniforms and bicycles for girls (by UNICEF, in 2001; all agreed that that had given a boost to girl education, but the women regarded it as insufficient to really make a difference) and the donation (by an MP) of television sets to primary schools (the men liked the idea; the women regarded it as a waste, since the schools did not yet have access to electricity).

Health care: In the early 1990s the Ministry of Health and UNICEF started so-called weighing centres, but the women saw it as too irregular to be of real value. It came with vaccination programmes, which were appreciated. In 1996 UNICEF came with mosquito nets for children and pregnant women, which indeed reduced the incidences of malaria, according to both men and women. In 2003 Rural Aid started to build household latrines, which the women liked, but the men were far more sceptical ("They made holes, but only one person actually made a latrine"). In 2005 the government started an HIV prevention programme, which was very much appreciated.

Credit and business support: In 1994 the Ministry of Food and Agriculture, supported by IFAD, started to give community loans to farmer and business groups, which the men liked, but the women regarded the interest rates as too high. In 2000 UNICEF started to give (improved) goats on loan and started 'grain banking', which no longer functions (the men were positive, the women less so). PAS added a loan scheme for farmer groups in Balansa, which the women saw as biased against them (and even regarded it as a 'project with a negative impact' (score: 0); the only one in this area). According to the women, recently a community bank started to do the same, but with even higher interest rates.

<u>Religion</u>: various church groups had built church buildings in the area; among the women there was a debate about the impact of 'new churches' coming to the area (next to the established churches, the Roman Catholics and the Presbyterians), and about their attitudes, which were seen, by some, as "too permissive".

<u>Social/communication</u>: finally the people appreciated the fact that the government had started Bolga Radio station, meant for the Upper East communities, while very recently an NGO had started the Builsa Community Radio, in the local language. Both men and women all agreed that this has stimulated discussions and behavioural changes, specifically on sexuality, hivaids, and drinking.

c) The communities of Chuchiliga (Nawaasa and Molinsa)

Initiatives by agency and sector

The communities of Nawaasa and Molinsa, in the area that is called Chuchiliga, was represented by eleven men and three women. They first made a list of 82 initiatives (although with nine religious projects more or less lumped together; which we separated for the analysis), and then - as a united group - gave assessments of quality of impact scores. Later the men and women split and they gave separate judgements about the impact on capabilities.

If we look at the list of types of agencies, in Chuchiliga the faith-based organizations (churches, one mosque and church-related NGOs - the CRS, or often PAS - , sometimes together with a non-church based NGO, like CARE) had the most numerous initiatives. The government was comparable, though, if we look at the combined activities of Ministries, the District Assembly, government activities supported by supra-governmental agencies (UNDP, IFAD, or UNICEF) and joined activities of government agencies together with communities. Non-church initiatives came from organizations like The Red Cross, Technoserve, PICT, an anti-Child Labour NGO, SWO, and private initiatives were either by communities themselves or by private activities of Members of Parliament (of Builsa North constituency) or private companies, like a tomato factory, ICOUR, GILLBT, the BucoBank, or the so-called Award-winners Association.

Table 12.7 Chuchiliga area: number of initiatives per type of agency and sector

Sector	G	GS	G+P	GS+P	С	C+N	N	P	Total
Infrastr	5						1	1	7
Energy	1							1	2
Water	1		1		1	1	1		5
Crops	4				5	4		4	17
Livest.						1	1		2
Nat En				1	2		1	1	5
Educa	3				3		2	1	9
Health	5	2	1				1		9
Econo	1	1		1	2		1	3	9
Relig					9				9
Social			2		1		1		4
Admin	2				2				4
Total	22	3	4	2	25	6	9	11	82

On average two-thirds of all initiatives that had been identified were well appreciated (score 4). Projects, in which the government, a supra-governmental agency and the community worked together, were appreciated most, although these were few. But also church-based activities were highly appreciated in this area. However, this included all separate churches (people mentioned the Presbyterian Church, the Roman Catholic Church, the Church of Pentecost, the Good News Church, the Assemblies of God, the Methodist Church, the Fountain Gate Chapel and an Islamic Mosque), which were invariably judged as positive. Less positive judgements were given about the private initiatives. Particularly a local village market set up by an enterprising local individual was seen as disruptive, and had to be closed by the area Chief. A private tomato factory was judged to be very disappointing. Government initiatives were judged as somewhat below average, and with some very negative assessments included. These included the FASCOM depot from the 1970s, a micro-credit project supported by IFAD and the Area Council, which was said to be 'dead', as well as the socalled Poverty Alleviation Fund, in the hands of the District Assembly, which was regarded as a very disappointing activity of the 1990s. A recent government fertiliser subsidy was also judged to be useless.

Table 12.8 Chuchiliga area: impact scores per type of agency

Sector/	G	G+S	G+P	G+S+P	С	C+N	N	P	Total
score									
0	2	1						1	4
1	2							1	3
2	2		1				1	2	6
3	2.5				3	2	3	3.5	14
4	13.5	2	1	4	22	4	5	3.5	55
Total	22	3	2	4	25	6	9	11	82
% 4/	61	67	50	100	88	67	56	32	67
total									

If we look at the judgements of impact per sector the workshop participants from Chuchiliga were most happy with activities in the religious and social domains, followed by those in water, education and health care. Looking at the 0, 1 and 2 scores initiatives to improve the

economy and agriculture were often seen as problematic, although it must be said that the majority of activities in these fields were see as positive.

Table 12.9: Chuchiliga area: impact scores per sector

Sector	Score	Score	Score	Score	Score	Total	% 4/
	0	1	2	3	4		Total
Infrastr		1		1	5	7	71
Energy				1	1	2	50
Water				1	4	5	80
Crops		2	2	2	11	17	65
Livest.				2		2	0
Nat En			2	2	1	5	20
Educa			1	1	7	9	78
Health				2	7	9	78
Econo	3		1		5	9	56
Relig					9	9	100
Social					4	4	100
Admin	1			2	1	4	25
Total	4	3	6	14	55	82	67

See appendix for detailed table of sector x agencies x impact scores

Let us look at the history of initiatives in more detail to see what judgements were given per sector, and why.

Infrastructure: The first road to Sandema, from Navrongo, was made in 1924, under the responsibility of the then Governor of the Northern Territories, and originally for horses; later for bicyles (introduced by the Roman Catholic mission), and then gradually improved to be used by cars. Recently, other (feeder) roads were added, also for use by cars and trucks. Particularly the men of the workshop regarded the roads as a basis for further developments, and they commented favourably on an initiative by the Builsa North MP to facilitate the feeder roads from Chuchiliga to the canals of the Tono Irrigation Project. The men were very negative about a FASCOM Depot, built in 1970. The government sold agricultural inputs once and that was the end of it. It was handed over to an individual who never used it. It has been abandoned. Recently an organization called TechnoServe built another warehouse/store. Energy: Electricity came to some parts of the area from 1992 onwards. Women particularly commented on the positive impact on grinding grains; it saves them a lot of time. Private entrepreneurs started local fuel stations.

<u>Water</u>: In the early years of the establishment of the Presbyterian Church in the area, they built the Namonsa Dam, which still functions. In 1972 the Government started building the Tono Dam, which was later used for irrigation purposes. According to both men and women this can be regarded as one of the best things that happened to the area. Between 2003 and 2007 the District Assembly and the communities paid for 18 boreholes with pipes, and TechnoServe later added one, which are all working and are seen as useful. The women even regarded the boreholes as the best project, as most communities now have clean and reliable drinking water supplies. When the area attracted disaster relief, after the 2007/8 floods, PAS and CARE added the construction of wells for irrigation, with pumps.

<u>Crops</u>: Crop development has very much been the intervention domain of the Presbyterian Agricultural Station (and is seen as among the best agencies in the area), recently together with CARE (after the disastrous 2007/8 floods). The men comment: PAS "have farmers"

interest at heart and farmer's problems are their problem. They educate farmers on good farming practices". The emphasis has been on (new varieties of) sorghum, soy beans, cowpeas, and groundnuts, and (after the floods) on all types of seeds to flood victims (among the women seen as the fifth best project). A recent government scheme to subsidise fertilisers was not seen as efficient. Private farmers started to produce rice, using the nearby Tono Irrigation scheme, for which the Chuchiliga canals had been dug in 1985. The Tono Irrigation project was seen as the best project by the men, and the second best by the women. The men had this to say: "It brought all-year round farming. The youth do not migrate. It brought in more money to farmers...some have built block and zinc houses. Fishermen have jobs almost all year round and fish is available almost all year round". The women added: "it gives the food they need to eat in the dry season". Earlier state farms at the Tono Area, and the socalled Tono and Chiana Workers Brigades are still remembered, but have been dismantled after socialism was buried, in 1967. Two private companies had tried to encourage farmers to produce and sell tomatoes. Particularly the men regarded this as one of the worst projects, and they complained about lack of reliability of purchase, lack of transport and bad prices, despite encouraging promises. A recent initiative (by Award Winners Association) tried to organise farmers to get credit to start again, but farmers are sceptical due to earlier bad experiences. Livestock: There are two recent initiatives to improve small ruminant housing (by PAS and CARE) and to encourage guinea fowl improvements (by TechnoServe).

<u>Natural resources</u>: In 1989 UNDP/ICOUR established a woodlot, but many trees are dying and people did not regard this as a sustainable initiative due to lack of care. A more recent initiative by ICOUR to encourage farmers to start composting was regarded as not effective, unlike a comparable project by PAS (since 2004). Recent initiatives (a mango project by PAS and an Integrated Soil Project by PICT) were seen as too new to judge.

Education: In 1961 the Presbyterian Church started the Namonsa School; later the government added the Chuchiliga School. In 1992 non-formal education was encouraged as well and is still doing well according to the workshop participants. Both government and an NGO are involved. Recently many projects have been added to improve basic education, e.g. the Food for Girl Child programme, and for pre-school children (Catholic Relief Services), and a project to free children from labour at the Tono Irrigation Scheme and send them to school (by an NGO, 'Child Labour').

<u>Health care</u>: This is an area where the District Assembly is active, in 2001 with support by UNICEF (Community-based surveillance; community integrated management of childhood illnesses. Clinics in Chuchiliga, Namonsa and a new one in Achayiriguaye are seen as very useful, and so is the new Health Insurance System. The men particularly commented on the fact that the Chuchiliga Health Centre did very good work when there was a CSM outbreak, and they liked the attitude of the staff: "they attend to all who come. If you don't have money to pay they can allow you time to pay".

Credit and business support: The older credit projects were seen as a failure: those of IFAD (the women regarded that as the worst project: too expensive and periods for paying back too short; there was no training given before the project started; and in a year with a crop failure people still had to pay back). Also the so-called Poverty Alleviation Fund, in the hands of the District Assembly since 1994 was seen as negative (the women: "they are too harsh, if you don't pay they come to you to get the money". More recent initiatives to provide credit were looked at more favourably: those of PAS were even seen as very useful for farmer's groups (and PAS was also commented favourably for organising marketing and for facilitating timely payments for farmer's produce) and the micro-credit that was combined with education for women was seen as 'very, very good'. The Chuchiliga central market was seen as a very good project by both men and women, as it has commercialised life a lot in the area. Smaller

market initiatives by local entrepreneurs were seen as problematic; in two cases the Chief had to interfere and these markets were closed down, as 'they were bringing problems'. Religion: The Presby Church clearly is the most established one (since 1961), but many other faith groups came to the area as well: Roman Catholics, Pentecostals, the Good News Church, the Assemblies of God, he Methodists, and the Fountain Gate Chapel. Muslims built a mosque.

<u>Social/communication</u>: PAS started farmer's groups from 1995 onwards and these are appreciated for building more community spirit. An interesting initiative was taken by the community in 2002, when they built a place and invited the Police to start a post to reduce crime and conflict in the area. The offer was accepted and according to the people it is more peaceful now. Later the Police moved to the DA building. After the 2007/08 floods CARE and PAS together gave food aid to flood victims, and the Red Cross constructed 30 houses for them.

<u>Administration</u>: the Area Council was declared 'dead' by the workshop participants, and particularly the men were disappointed.

d) The communities of Bilinsa, Korri and Kopdema Initiatives by agency and sector

The communities of Bilinsa, Korri and Kopdema, east of Sandema Town (we will call it the Bilinsa area), was represented by four men and four women. They first made a list of 48 initiatives. Later the men and women split and they gave separate judgements about the impact of these initiatives.

If we look at the list of types of agencies, in Bilinsa the government agencies had the most numerous initiatives (government departments, the District Assembly, or the sub-chiefs), followed by faith-based organizations (churches, and church-related NGOs - ADRA, the Bible Church of Africa, or often PAS (called 'Presby Agric' by then workshop participants), In three cases government activities had been supported by supra-governmental or bilateral agencies (Germany/France, WFP, and WHO). Non-church initiatives came from organizations like Pronet North, FISTRAD, and two unidentified NGOs, and private initiatives were either by communities themselves, or by a mobile telephone company (MTN), the Builsa Community Bank, or the Azulichaab Association.

Table 12.10: Bilinsa area: number of initiatives per type of agency and sector

Sector	G	GS	С	N	P	Total
Infrastr	1					1
Energy				1		1
Water	2		2		1	5
Crops	2		5		1	8
Livest.	2		3	1		6
Nat En	1			1		2
Educa	5	1	1	1	1	9
Health	4	1				5
Econo	1		1		2	4
Relig			2			2
Social	1	1	1			3
Admin	2					2
Total	21	3	15	4	5	48

Less than half of all initiatives that had been identified were well appreciated by both men and women (score 4). Initiatives by Church-related organisations were appreciated most, as well as those of the government and a foreign donor, although these were few. In this area there were two initiatives that were judged negatively by both men and women (although with different scores). These were a badly constructed road to Korri (a government project in the feeder roads programme), and the introduction of pigs, by local farmers, but initiated by a small (but 'nameless') NGO (the participants complained about the costs of pig feed, which made this innovation too expensive). In the Bilinsa area the men were far more critical than the women in judging the impact of initiatives. In one case part of the men were against the way a breast-feeding programme had been introduced in the area by the Ministry of Health. According to them the education to the mothers was not well understood by them. A project to make wells (by the Bible Church of Africa) was seen as a waste by the men because a promised pump never came, while the women noted that as well, but appreciated the attempt of 'treating' the water in time. Another hand pump project by the same organisation was also not succeeding (the women rated that as an 'on-going project' (score 3), while the men had simply given up hoping that one day the promised pump would come. A hand-dug dam, started in olden times, but deepened in 1997 was still not finished and the men had given up, while the women saw it as an 'ongoing' project. In agriculture a project to introduce better groundnuts (by the so-called 31st December Women Movement, between 1992 and 1995) was regarded as unsustainable by the men, although the women said that it had taught them that higher yields could be possible, with the right seeds (and was a basis for a much appreciated project by PAS, later). A soybean project by ADRA also only lasted three years (1997-1999) and was seen as unsustainable by the men, although the women saw it as the start of successful soybean expansion later (supported by PAS, from 2001 onwards). A governmentdonated grinding mill (*2004) had recently broken down and had not yet been rapaired, so the men saw it as a failed project, but the women were hopefull that it would (soon?) be repaired, although they commented negatively about the fact that it was not (yet) using electricity. The men were also dissatisfied with a government project to bring veterinary services and livestock keeping education to the area, for which they had to pay, even if the animals would die after vaccination. A school building in Korri had (partly) been destroyed by rain and this was seen as an unsustainable project (it was a mud building) by the men, but the school still functions, so the women still regarded it as a successful project. In 2005 ten poor people in Korri received a government donation of school uniforms and bicycles, to enable their children to go to (far-away) schools, but the men were disappointed that this only happened once. The men also regarded the education project on fishing too minimal to be of value, but the women were happy that there was more knowledge now in the community about when and how to fish. Likewise the men regarded a vocational training project (by an NGO called FISTRAD) as having had minimal impact. In the sphere of economic projects a loan by the Azulichaab Association was regarded as only having a minimal impact by the men, but the women liked the fact that they had been assisted buying seeds. One may conclude here that men were less patient than the women, and more easily disappointed when a project only lasted for a brief period, or with only small investments. Only in one case the women were more negative compared to the men: electrification transformers and pole wiring had come to the area in 2006, but no homes had been connected yet. Men were convinced that that would happen one day; women had given up (and were disappointed because they had had high hopes that their school-going children would be enabled to study during the evenings).

Table 12.11: Bilinsa area: impact scores per type of agency

Sector/	G	G+S	С	N	P	Total
score						
0						0
1						0
2						0
3			1	1		2
4	10	2	10		1	23
mixed	11	1	4	3	4	23
0+4/4	1					1
0/3			1			1
0/4			1			1
1/2	1			1		2
1/4	2			1	1	4
2/3					1	1
2/4	3		1		1	5 5
3/4	3	1			1	
3/2				1		1
4/3	1		1			2
Total	21	3	15	4	5	48
% 4/	48	67	67	0	20	48
total						

If we look at the judgements of impact per sector the workshop participants from Bilinsa were most happy with activities in the religious, administrative and economic domains. Looking at the mixed scores, initiatives to improve the infrastructure (roads, water), and those in crop and livestock development were often seen as problematic, but we have seen that the women mostly liked those initiatives, while the men were far more critical. That is even more pronounced in initiatives to improve education, health care and economic projects.

Table 12.12: Bilinsa area: impact scores per sector

Sector	Score	Score	Score	Score	Score	Mixed	Total	% 4/	% 4
	0	1	2	3	4	score		Total	scores
									by
									women
Infrastr						1	1	0	0
Energy						1	1	0	0
Water					1	4	5	20	40
Crops				1	3	4	8	38	88
Livest.					2	4	6	33	67
Nat En				1	1		2	50	50
Educa					4	5	9	44	100
Health					3	2	5	60	100
Econo					3	1	4	75	100
Relig					2		2	100	100
Social					2	1	3	67	100
Admin					2		2	100	100
Total				2	23	23	48	48	81

Let us look at the history of initiatives in more detail to see what judgements were given per sector, and why.

<u>Infrastructure:</u> these communities are not well connected to the outer world, and an attempt to build a (feeder) road to Korri, in 2004, was seen as a waste of money, as the road had not been constructed well and was in bad shape.

<u>Energy</u>: as we saw before, the electrification had started in this area, but was not (yet) finished.

<u>Water</u>: An old ('grand parents') hand-made water dam was renovated by the Bilinsa community in 1997, but not yet ready. Four boreholes drilled by the government between 1983 and 2004 were all functioning well, and provided clean water to the communities. The men were particularly happy with the hand pumps that were easy to maintain, and of which the installation came with proper government training of maintenance by the community. However, a well and hand-pump project donated by the Bible Church of Africa (2000-2003) was deeply criticised (by the men) for not keeping its promises.

<u>Crop development:</u> Both men and women said they had benefitted from recent PAS initiatives to introduce (better) soybean, groundnuts, maize and mango cultivation in the area. A few earlier projects (groundnuts by a private 'movement' in 1992, and groundnuts by ADRA in 1997) were seen as not sustainable by the men, and that was also true for a grinding mill donated by the Ministry of Food and Agriculture in 2004. A recently introduced maize project by MOFA was too new to judge.

<u>Livestock development</u>: the three PAS projects were all very highly valued. The men particularly liked the recent sheep and goats project, targeted to the very poor in the community. The women liked the bullock (2004) and donkey (2008) donations, which made cultivation and marketing work easier. The introduction of pigs was not seen as a very rewarding activity and a government project to upgrade poultry production was too new to be judged, although the women already complained that feeding was too expensive. We saw before that the usefulness of the government veterinary services were doubted by the men. Natural environment: the anti-bushfire campaign (since 1998) introduced by the sub-Chiefs was valued as useful. The recent introduction of Moringa trees by an NGO was too new to be judged.

Education: District Assembly Schools in Kobdema and Korri exist, but have their problems in providing proper buildings. A project by the World Food Programme to give 'take home' food to girls (1995-2002) increased the enrolment of girls in schools. The government donated school uniforms and bicycles to children of poor families living far away from the local schools, which the women liked but the men felt insufficient. The mobile telephone company active in the area once (in 2007) donated ten books to all students in all schools in the community, which was appreciated. The community-based extension services by PAS (since 2004) were highly appreciated by both men and women (and seen as 'education', although a lot had to do with crops and livestock). Vocational training (by an NGO called FISTRAD) and education on fishing (by the government) was seen as far too minimal to be seen as a success by the men.

Health: In this area health care clearly has been a government responsibility, in one case (provision of mosquito nets to pregnant women and suckling mothers, in 2001) supported by the World Health Organization. In 1996/97 the Ministry of Health started a vaccination campaign against six childhood killer diseases and a so-called exclusive breastfeeding programme. In 2004 the District Assembly built a new community-based health planning and services compound, and in 2006 the District Mutual Health Insurance Scheme started in all three villages. All initiatives were judged favourably, with the exception of the breastfeeding initiative, which some men judged as inadequately connected to training. The Health Insurance initiative was seen as one of the best initiatives in the area by both men and women, while the men also included the CBHPS compound as among the best five projects.

Economic: In 2004 the Builsa Community Bank started to provide loans, followed by the Azulichaab Association in 2007 (a local NGO assisting its members to buy seeds). The first one was judged positively although the women complained about the high (22%) interest rates. The second one was judged as too minimal by the men to be of value. In 2002 the Sandema secondary technical school started to buy local farmers produce, while in 2007 PAS started to assist farmers in marketing their soybeans; both appreciated.

<u>Religion</u>: although there are more church groups in the area, the Bible Church of Africa was explicitly mentioned. It had started with an outreach programme in 1993 and a new church building was built in 2006. We saw earlier that the workshop participants were critical about the water projects of this organization, but they appreciated their other activities and their teaching on 'moral behaviour'.

<u>Social</u>: In 1992 the Presby Church started community-based rehabilitation activities, which succeeded to give most physically challenged people loans with which they could start small businesses. In 1998 the government started a social welfare programme connected to human rights protection, which, according to the workshop participants, succeeded to prevent forced marriages. In 2008 the Government of Ghana, supported by bilateral donors from France and Germany, started a community radio station, using the local language. All social activities were deeply appreciated by both men and women, and the radio was even seen by the men as among the five best projects.

<u>Administration</u>: In 1990 the sub-chiefs of the area started to organize small communal labour projects, and in 1998 they added a community protection committee, to assist in law enforcement, but this was also used to teach better sanitation behaviour and stimulate environmental cleanliness. Both activities were appreciated and seen as a success.

e) The community of Farinsa

Initiatives by agency and sector

The Farinsa community was represented by three men and two women, who first together made a list of all initiatives in their community, and then gave a separate assessment of the impact of each of these initiatives. Table 12.13 shows the types of agencies and the sector distribution per agency. Out of 30 identified initiatives 18 came from the government, in 1 of these cases supported by a supranational agency (UNICEF), and in one case working together with the community. If we combine all Government initiatives these had been identified most in health care (5; from the mid 1990s onwards), in water development and in infrastructure (a road, a bridge, electricity) and in education (3; one with UNICEF and one as a teacher's initiative together with the community).

The five church-based activities that had been identified consisted of activities by the Salvation Army (distributing acacia seedlings in 1991, and building a church and a pastor's house in 2004), Catholic Relief Services (the start of a community school, together with the community, in 1986, followed by school-feeding programmes from 2000 onwards and still on-going), and the Church of Christ (in 1992, building a Church in Farinsa). The group representing Farinsa did not mention any projects by the Presbyterian Agricultural Station or its Health Centre. They also did not mention any non-church NGO.

The community mentioned seven private/community initiatives: they included the sub-chief's court as an important activity "that had always been there"), but also activities by the Builsa Community Bank (starting in 1998), by an individual teacher who had started a church-related Farinsa Widow's group (in 2007), and by three local initiatives, to form a men's group, a youth group and a football club. They also jokingly mentioned an old project by a private well-wisher, a 'Mr Bush' from the USA, who already in 1942 supported the community digging a water dam.

Table 12.13: Initiatives in Farinsa per agency, per sector.

Sector	Gov	G+S	G+P	C	C+P	P	Total
Infrastr	2						2
Energy	1						1
Water*	3					1	4
Agric	1						1
Nat.Res	2			1			3
Educat	1	1	1	1	1		5
Health	5						5
Econom						1	1
Relig				2		1	3
Social						3	3
Admin	1					1	2
Total	16	1	1	4	1	7	30

G = Government, S = supra-governmental, C = church-based NGOs, P = private sector and community initiatives.

Among the 30 initiatives that had been identified, 27 had the same quality judgements by men and women, of which the very high number of 25 were unanimously judged as 'positive' (score 4; one health project was categorized as ongoing; score 3, and one project - cattle tax, seen as a left-over from Colonial times – was judged as purely negative). In 3 cases men had a different judgement compared to women: in the case of a women's traders group loan by the Builsa Community Bank and the widow's group the women liked it, but the men judged it as useless (for them); in the case of a men's group the women regarded it as useless (for them). Table 12.14 shows the judgements with regard to types of intervening agencies, table 12.15 looks at the agencies and judgements per sector.

Table 12.14: Farinsa: intervening agencies and people's judgement about impact.

	Gov	G+S	G+P	Church	C+P	Private	Total
0	1						1
3	1						1
4	14	1	1	4	1	4	25
1/4						2	2
4/1						1	1
Total	16	1	1	4	1	7	30

0 = negative impact; 1 = 'only paper'/'useless', 3 = on-going, 4 = positive impact; men/women

In Farinsa the community representatives, both the men and the women, were extremely positive about the initiatives they had categorised (83% unanimously positive, score 4). In fact only one very old intervention was judged (very) negatively. As we have seen the men judged two projects as useless, the women one, but then the women, resp. the men liked those initiatives. As we will see, even when the Farinsa group members had to choose 'worst projects', they still regarded some of those as more positive than negative and gave a score of

^{*} two government-initiated water projects and one community water initiative had been included under 'infrastructure' by the Farinsa community; we put them under 'water'.

4. If we look at the distribution of scores over sectors, some (partial) doubts were only given to economic, administration, religious and social initiatives.

Table 12.15: Farinsa: judgement of impact per sector

Sector	Score 0	Score 3	Score 4	Mixed	Total	% 4/
				score		Total
Infra			2		2	100
Energy			1		1	100
Water			4		4	100
Crops			1		1	100
Nat Env			3		3	100
Education			5		5	100
Health		1	4		5	80
Economy				1	1	0
Religion			2	1	3	67
Social			2	1	3	67
Admin	1		1		2	50
Total	1	1	25	3	30	83
%	3	3	83	10	100	

0 = negative impact; 1 = 'only paper', 3 = on-going, 4 = positive impact; mixed: different scores men/women

Let us look at the history of initiatives in more detail to see what judgements were given per sector, and why.

<u>Infrastructure</u>: The government connected the Farinsa community with Sandema with a feeder road, in 1992. In 1998 electricity reached the area and in 2004 a bridge was built. The people particularly liked the road because it provides easier and faster access to the hospital in case of emergencies. It also provides better access to markets and opened the area for lorries. Women added that it meant that they no longer had to carry back-braking loads. People were less enthusiastic about the bridge that was made from cheap materials. Still, "it is better to have a bad bridge rather than no bridge at all".

<u>Energy</u>: Electricity was seen to have had many advantages, also on social life ("there is better security, because people do not go to drink at night, and it brings people together"). It created opportunities for (collectively) watching educational programmes on television, and it had assisted children "to learn more and see more".

Water: The digging of the Biaga Dams (started in 1942, but with later maintenance activities) was seen as a very important 'project' by the men, as it enables people to farm during the dry season (vegetables), it provides opportunities for fish farming, and animals can drink nearby. However, the women included the dams among the worst projects, as one of the three dams was no longer functioning and they were disappointed about the lack of external attention for this problem. The boreholes that were drilled in 1981 by the military were seen as important, and among the best projects by both men and women. They prevent cholera and guinea worm infestation, and they provide much better quality water. Between 1997 and 2006 the government provided support for digging wells, and they made one man and one woman from the community responsible for keeping the wells clean, with labour inputs from the community as a whole. In 2004 the government (MoH) came to purify the water and check the water quality of wells and boreholes.

<u>Crops:</u> this community had experienced remarkably little agricultural attention. People only remembered a composting project in 1975 by 'Agric', the district extension people from the government at the time. After that, neither government crop or livestock interventions nor PAS projects reached the area in a direct way (yet), although there were occasional visits by MOFA personnel "to tell the people to buy a certain variety of seeds (maize, soybeans, cowpeas etc). It shows the isolation of Farinsa.

<u>Natural environment:</u> In 1991 the Salvation Army had given out acacia seedlings (in 1991), followed by cashew nut seedlings by the government and an anti-bushfire and anti-tree cutting campaign in 2004. It is interesting to note that the men included the acacia project among the worst ones, as they commented that this tree is only used for feeding the animals and as firewood, and had no further use for people (...).

Education: In 1986 the community of Farinsa, supported by the Catholic Relief Services and by an UNICEF grant, started a community school. In 1998 the teachers in Farinsa succeeded to get additional support (also for adult education) and from 2000 onwards CRS provides school feeding. In 2003 the government added a day care centre. For the women the start of the community school was seen as the best project ever, and they liked the fact that it kept the children in the local community and enabled a better control over their school attendance. The men also included the school as among he best five projects, but only in fifth position. Health care: In Farinsa there is no clinic (people have to go to Wiaga) and there are no recognised Traditional Birth Attendants. In 1996 serious attention started for immunisation and weighing children at schools (MoH). In 2000 the government provided mosquito nets with repellent (seen as among the best projects by the men, as "it allows them to sleep well"), and in 2007 the government provided "free hospitalisation", followed in 2008 by HIV-AIDS screening (seen by the women as the worst project, because of "not a proper approach"). Economy: In 1998 the Builsa Community Bank started to provide credit to traders groups, but there is a difference between women's and men's groups: for the men they have to go to the bank in Sandema, while the women will be visited in their village. That was the reason why the men regarded this project as among the worst ones. But also the women were not happy with the bank, as they regarded the interest rate as too high and the time to pay back as too short. In Farinsa individual people can only get a loan if they have a salary or a pension, so the large majority of the people has to form a group to get a loan.

Religion: Besides 'traditionalists' there are a few Christian churches active in Farinsa; the workshop participants mentioned the Salvation Army (active since 1991) and the Church of Christ (since 1992). There are no Muslims in Farinsa. One offspring of religious activities was a widow's group (since 2007), to assist widows after they had lost all property (except land) after the death of their husband, following customary law ("empowerment by prayer sessions" led by a local teacher). The men included this initiative as among the worst ones. The workshop participants commented favourably on the church's impact on preventing alcohol abuse by the youth,

<u>Social</u>: From 2003 onwards the community of Farinsa started men's farming groups, followed in 2005 by youth farming groups and in 2006 by its own football club. Women looked at these men's groups with suspicion, and included them among the worst initiatives. <u>Administrative</u>: The workshop participants mentioned the hated 'colonial' cattle tax, and the court of the sub-chief, which they liked ("the sub-chief is respected in the community, so his verdicts are helping to keep peace").

f) the Chansa community

From deep South of the district three men (and no women) participated from the Chansa and Siniesi communities. They made a list of all initiatives in their area, and then gave an

assessment of the impact of each of these initiatives. Table 12.16 shows the types of agencies and the sector distribution per agency. Out of 20 identified initiatives 9 came from the government, 3 from church-based agencies, and 8 from private/community initiatives. The isolation from the rest of Sandema can be illustrated by the fact that he participants did not mention any infrastructural or economic project.

Table 12.16: Initiatives in Chansa per agency, per sector.

Sector	Gov	C	P	Total
Water	2		1	3
Crops	1			1
Livestock			2	2
Nat. Res	1		3	4
Educat	2			2
Health	1	2		3
Relig		1	1	2
Social			1	1
Admin	2			2
Total	9	3	8	20

G = Government, C = church-based NGOs, P = private sector and community initiatives.

Among the 20 initiatives that had been identified, 15 were judged as 'positive' (score 4) and 2 on-going (score 3). Three initiatives were judged as unsustainable: a government donation of exercise books to schools, drugs for elephantiasis by the Presby health clinic, and a community water dam. Table 17 shows the judgements with regard to types of intervening agencies, table 12.18 looks at the agencies and judgements per sector.

Table 12.17: Chansa: intervening agencies and people's judgement about impact.

	Gov	Church	Private	Total
2	1	1	1	3
3			2	2
4	8	2	5	15
Total	9	3	8	20

0 = negative impact; 2 = unsustainable; 3 = on-going, 4 = positive impact.

Table 12.18: Chansa: judgement of impact per sector

Sector	Score 2	Score 3	Score 4	Total	% 4/
					Total
Water	1		2	3	67
Crops			1	1	100
Livestock			2	2	100
Nat Env		1	3	4	75
Education	1		1	2	50
Health	1		2	3	67
Religion			2	2	100
Social		1		1	0

Admin			2	2	100
Total	3	2	15	20	

2 = unsustainable; 3 = on-going, 4 = positive impact.

Let us look at the history of initiatives in more detail to see what judgements were given per sector, and why.

<u>Water</u>: In 1981 the Department of Agriculture dug a well and in 1983 they drilled a borehole in the area, which was still seen as the best project ever, as it had reduced water-borne diseases among people and provided drinking water for both people and animals. In 1988 the community made a water dam, which provided some opportunities for dry-season farming. However, now desilting is badly needed.

<u>Crops:</u> In Chansa MOFA had introduced maize, but only in 2001. Farmers increased yields and it reduced hunger in the area.

<u>Livestock</u>: An individual from the community introduced improved poultry in 2001, followed by the introduction of better goats and sheep by the local chief. Poultry, goats and sheep are used to buy food, for sacrifices and to entertain friends and visitors, while goats and sheep are also used in the performance of marriage rites. The improved goats and sheep were judged to have reproduced faster than the local breeds, and were judged as the second best intervention in the area

Natural environment: In 1998 an individual from the community introduced teak trees, which can be used for rafters and roofs of houses. In 2004 MoFA introduced grafted mangos, a multi-purpose tree (food, income, shade). In the same year an individual from the community introduced palm trees, but this was seen as the worst project, as the trees were not yet bearing nuts. It was followed in 2005 by the introduction of alberzia which can be used as forage for animals, as firewood and as windbreaks. However, the workshop participants did not particularly like this initiative as it "only benefits people with animals".

<u>Education</u>: In 2004 and 2005 the parents were relieved of some education costs (capitation grant and exercise books; the last project was criticised for being too meagre), but the community does not have its own school.

<u>Health care</u>: In 1998 the Presby Health clinic did a polio immunization campaign (well appreciated) and provided drugs against elephantiasis, both to avoid forms of disability. In 2004 the Government introduced the National Health Insurance scheme, which increased accessibility for health care and reduced costs.

<u>Religion</u>: In the 1930s Burkinabe migrants built a small mosque in the area. The mosque assists the local Muslims in the area to live peacefully with the original inhabitants of the area, it helps them in farming and in the building of houses (it stimulates mutual assistance). However, nowadays most Muslims have moved to Sandema Town, and the mosque is quite idle. In 1987 the Pentecost Church started to build seven churches in the area. Members are assisted during funerals and naming ceremonies, and contributions are being generated to assist in building houses. The churches also help the destitute people.

<u>Social</u>: In 2008 the community started the formation of Youth groups, to link them to NGOs and the Rural Bank to get loans and other services. Until now no NGOs have ever come to the area, though.

<u>Administrative</u>: In 1994 the District Assembly was formed and the local assembly men form a link between the community and the DA. They also settle disputes and stimulate community development initiatives. They also help those who cannot pay their hospital bills. In 2000 this was followed up with the formation of Unit Committees, which are basically meant to provide environmental surveillance (avoid felling of trees, preventing bushfires and preventing people

to use poison for fishing). The workshop participants from Chansa saw this as the second-worst project as it is a non-paid job and it brings enmity between these unit committee members and other members in the community.

Part 13: Detailed analysis of impact on capabilities

a) Assessment of the Officials in Sandema

Table 13.1: Agencies, and their impact on capabilities, according to Sandema officials

Agency	N	N	P	E	H	S	C	Total	Total/n
G	43	10	16	37	38	19	13	133	3.1
G+S	13	5	5	12	13	5	4	44	3.4
G+C	3			3	3			6	2.0
G+S+C	1			1	1			2	2.0
G+P	2			2	1	1		4	2.0
G+S+P	1			1	1			2	2.0
All G	63	15	21	56	57	25	17	191	3.0
С	19	5	4	17	17	10	7	60	3.2
C+N	3	1		2	3			6	2.0
C+P	1			1	1			2	2.0
All C	27	6	4	24	25	10	7	76	2.8
N	10	6	2	6	9	1	2	26	2.6
All N	13	7	2	8	12	1	2	32	2.5
P	18	4	2	17	8	9	2	42	2.3
All P	22	4	2	21	11	10	2	50	2.3
Total	114	31	29	99	95	45	28	327	2.9

The Sandema officials gave a total of 327 capability scores for 114 initiatives. Most scores were given to impacts on economic and human capabilities, the lowest number of scores on impacts on natural and physical capital and on cultural capabilities, with the impact on social capabilities in between. The officials regarded the government agencies as having had the widest impact (on average on 3 different capitals/capabilities; even wider when the government was funded by an international supra- or bilateral agency), and private initiatives as having had a more narrow impact (on 2.3 different capitals/capabilities), with church- and non-church NGOs in between. For all capabilities the government agencies were the ones with the most numerous impact scores, followed by non-Church NGOs for natural capial and human capabilities, by church NGOs for social and cultural capabilities, by the private sector for economic capabilities and by supra/bilateral agencies (together with a government agency) for physical capital.

Table 13.2: Impact on capabilities, scores per sector, according to Sandema officials

Sector	N	N	P	Е	Н	S	С	Total	Tot/n
Infra	5	2	5	5	5	2		19	3.8
Energy	3	1		2	2	1	1	7	3.5
Water	13	7	7	7	13		7	41	3.2
Agric	16	2		16	13			31	1.9
Lives	10	6		10	7	7	2	32	3.2
Nature	9	9		9	7			25	2.8
Educat	16		9	15	16	11	8	59	3.7
Health	13	1	7	12	13	11	7	51	3.9
Econom	14			14	13			27	1.9

Relig	2				2	2	2	6	3.0
Social	11	2		8	3	10		23	2.1
Admin	2	1	1	1	1	1	1	6	3.0
Total	114	31	29	99	95	45	28	327	2.9
Per int.		0.27	0.25	0.87	0.83	0.39	0.25		2.87

If we look at the officials' assessments of the impact of initiatives in different sectors, the widest impacts were perceived in health, infrastructure, and education (3.7 types of capabilities or more). Natural capital was impacted most by specific initiatives in natural environment (mainly forestry) projects, physical capital most by educational projects, economic capabilities most by initiatives in agriculture, human capabilities most by initiatives in education, and in health care and cultural capabilities most by initiatives in education.

b) The communities of Kandema/Nyansa/Balansa

In the Kandema-Nyansa-Balansa group the 47 initiatives were judged to have had a total of 68 impact scores on various capabilities by the men, and 60 by the women.

Table 13.3 gives an overview of the differentiated impact of the various intervening agencies on each of the capabilities; table 13.4 gives further details about differences between sectors. In both cases the data for the men are given separate for those of the women.

Table 13.3: Intervening agencies and impact on capabilities in Kandema-Nyansa-Balansa

	Natı	ıral	Physi	cal	Econ	omic	Hun	nan	Soci	al	Cult	ural	Tota	1	Tota	al/n
	m	f	m	f	m	f	m	f	m	f	m	f	m	f		
Gov	1	3	4	5	10	7	6	5	2	1	1		24	21	1.6	1.4
(15)																
GS				1	4	3	6	6	1				11	10	1.2	1.1
(9)																
GNC		2			3	2	1	1	1				5	5	1.7	1.7
(3)																
G tot	1	5	4	6	17	12	13	12	4	1	1		40	36	1.5	1.3
(27)																
C (4)					2	1	1	1	3	1	1		7	3	1.8	0.8
C tot		2			5	3	2	2	4	1	1		12	8	1.7	1.1
(7)																
N	3	4			5	4	6	7	2	1	1		17	16	1.4	1.2
(12)																
NP							1	1					1	1	1	1
(1)																
N tot	3	6			8	6	8	9	3	1	1		23	22	1.4	1.4
(16)																
P(3)			1	1		2	1	1	1				3	4	1	1.3
P tot			1	1		2	2	2	1				4	5	1	1.3
(4)																
Total	4	9	5	7	24	19	22	22	10	3	3	0	68	60	1.5	1.3
(47)																
Per	.09	.19	.11	.15	.51	.40	.47	.47	.21	.06	.06	0	1.45	1.28		
int																

According to the men the government initiatives had the highest width of impact on a variety of capabilities; according to the women this was less so. The various initiatives had most impact on economic and human capabilities. The men have been more generous in the width of the impacts they noted, particularly on social, economic and cultural capabilities, while relatively speaking - the women saw a bit more impacts on natural and productive capabilities. If we compare the two major types of intervening agencies, (pure) government, and non-church related NGOs, the government initiatives had most of their impact on economic capabilities, followed by human and productive capabilities (both for women and for men), while the NGO initiatives had most of their impact on human capabilities, followed by economic capabilities (see appendix for detailed data). Both for government and for NGO initiatives it is remarkable to see that the men did see some impact on social and cultural capabilities, but the women hardly or not at all.

Table 13.4: Impact on capabilities differentiated by sector in Kandema-Nyansa-Balansa

	Natı	ıral	Physi	cal	Econ	omic	Hun	nan	Soci	al	Cult	ural	Tota	1	Tota	al/n
	M	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f
Infr 5			5	5	4	5							9	10	1.8	2
Water					1		4	4					5	4	1.3	1
4																
Crop 8		4		1	8	6	2	2	3				13	13	1.6	1.6
Liv 2					2	2		1					2	3	1	1.5
Nat E 6	4	5			5	2		1					9	8	1.5	1.3
Educ				1	1		10	9	2				13	10	1.3	1
10																
Health							4	5	1				5	5	1	1
5																
Econ 4					3	4			1				4	4	1	1
Relig 1									1	1	1		2	1	2	1
Social							2		2	2	2		6	2	3	1
2																
Total	4	9	5	7	24	19	22	22	10	3	3	0	68	60	1.4	1.3
47																

According to the men the (few) initiatives the social, religious and infrastructural sectors had the widest impact on capabilities; according to the women those in infrastructure. If we look at the judgements about the impact of sector-specific initiatives on the six types of capabilities, we see that natural capabilities were influenced by initiatives in natural resources (and according to the women also by initiatives in crop improvements), productive capabilities were mostly enhanced by infrastructural investments, economic capabilities by all types of initiatives, human capabilities mainly by education, health care and water projects, and social and cultural capabilities mostly by social investments, although the men also regarded some crop improvement projects as enhancing their social capabilities.

c) the communities in Chuchiliga (Nawaasa and Molinsa)

The 82 initiatives in the Chuchiliga area were judged to have had a total of 156 impact scores by the men and only 58 by the women. Women often declined to give an impact score here, and if they did they often selected the most important impact domain.

Among the various types of agencies according to the men initiatives by combined Christian and non/religious NGOs and by government agencies had the widest impact across domains.

For women the few initiatives by government/supra-governmental and the community had most width. Men gave most impact scores to the economic domain, closely followed by the human and the social domain. Women mostly saw impacts on the human domain, and remarkably few on the social domain. Both for women and for men the impacts on natural and cultural domains were negligible.

Table 13.5: Intervening agencies and impact on capabilities in Chuchiliga

	Natu	ral	Phys	ical	Econ	omic	Hum	an	Socia	al	Cult	ural	Tota	1	Tot	al/n
	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f
Gov			7		16	5	11	12	12				46	17	2.1	0.8
(22)																
G+P			1				1	2	2				4	2	1	0.5
(4)																
GS					1	1	3	2	2				6	3	2	1
(3)																
GS+P	1	1			1	1	2	1					4	3	2	1.5
(2)					- 10				4.5							
G tot	1	1	8		18	7	17	17	16				60	25	1.9	1.2
(31)	2	-		-	10	-	10	0			10		4.5	1.4	1.0	0.6
C (25)	3	1	2	1	13	1	12	8	5	1	10	2	45	14	1.8	0.6
(25)			1			1	6	5					13	6	2.2	1
C+N (6)			1		6	1	O	3					13	0	2.2	1
C tot	3	1	3	1	19	2	18	13	5	1	10	2	58	20	1.9	0.6
(31)		_		_		_	10	10		_	10				1.0	
N (9)	1		2	2	5	2	5	2	4				17	6	1.9	0.7
N tot	1		3		11	3	11	7	4				30	12	2.0	0.8
(15) P																
	1		1		11	4	4	3	4				21	7	1.9	0.6
(11)																
P tot	2		2		12	5	7	6	6				29	12	1.7	0.7
(17)																
Total	6	2	14	3	53	15	44	35	29	1	10	2	156	58	1.9	0.7
(82)																
Per	0.07	0.02	0.17	0.04	0.65	0.18	0.54	0.43	0.35	0.01	0.12	0.02	1.90	0.71		
int.																

Table 13.6: Impact on capabilities differentiated by sector in Chuchiliga

Sector	N	Nat	ural	Physic	cal	Econo	omic	Hur	nan	Soc	ial	Cult	ural	Tota	ıl	Tot	al/n
		m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f
Infr	7			7		4	5		1	4				15	6	2.1	0.9
Energy	2					2			1	1				3	1	1.5	0.5
Water	5					5	1	5	4					10	5	2	1
Crop	17	1		1		17	2	11	12	4		1		35	14	2.1	0.8
Liv	2			1		2	2							3	2	1.5	1
Nat En	5	5	2			4		3						12	2	2.4	0.4
Educ	9			2		5		7	4	6				20	4	2.2	0.4
Health	9					3		9	7	6				18	7	2.0	0.8
Econ	9				2	9	5	7	1	3				19	8	2.1	0.9
Relig	9								2			9	2	9	4	1	0.4
Social	4			2	1			2	2	3	1			7	4	1.8	1
Admin	4			1		2			1	2				5	1	1.3	0.3

Total	82	6	2	14	3	53	15	44	35	29	1	10	2	156	58	1.9	0.7

If we look at the judgements by the men the initiatives in the natural environment and in education had the highest width of impacts across domains; for the women (although much lower) the highest width was found among initiatives in infrastructure and economy (credit and markets). Natural capabilities were most influenced by initiatives in the natural environment (not surprisingly), productive capabilities by initiatives in infrastructure (men) and economic initiatives (women), economic capabilities by those in crop development (men) and economics and infrastructure (women), human capabilities by those in crop development (both men and women), social capabilities by those in education and health care (men only), and cultural capabilities by those in religion (men and women).

d) The communities of Bilinsa, Korri and Kobdema

In the Bilinsa group the 48 initiatives were judged to have had a total of 70 impact scores on various capabilities by the men, and only 51 by the women (the women decided they would mainly give one score to the capability that was impacted most).

Table 13.7 gives an overview of the differentiated impact of the various intervening agencies on each of the capabilities; table 13.8 gives further details about differences between sectors. In both cases the data for the men are given separate for those of the women.

Table 13.7: Intervening agencies and impact on capabilities in the Bilinsa area

	Natu	ıral	Physic	cal	Econ	omic	Hun	nan	Soci	al	Cult	ural	Tota	1	Tota	al/n
	m	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f
Gov	1	3	1	3	10	8	16	8	2	1			30	23	1.4	1.1
(21)																
GS							2	3	1				3	3	1	1
(3)																
G tot	1	3	1	3	10	8	18	11	3	1			33	26	1.4	1.1
(24)																
С		2		2	11	9	11	1			2	2	24	16	1.6	1.1
(15)																
N (4)	1	1	1	1	2	2	2						6	4	1.5	1
P (5)			1	1	3	4	3						7	5	1.4	1
Total	2	6	3	7	26	23	34	12	3	1	2	2	70	51	1.5	1.1
(48)																
Per	.04	.13	.06	.15	.54	.48	.71	.25	.06	.02	.04	.04	1.5	1.1		
int																

According to the men the church initiatives had the highest width of impact on a variety of capabilities. The various initiatives had most impact on economic and human capabilities. The men have been more generous in the width of the impacts they noted, particularly on human, capabilities, while - relatively speaking - the women saw a bit more impacts on natural and productive capabilities. If we compare the two major types of intervening agencies, (pure) government, and church-related NGOs, the government initiatives had most of their impact on human and economic capabilities, while the Church-based initiatives had most of their impact on economic capabilities, but for the men also on human capabilities. The impacts noted on social and cultural capabilities were limited.

Table 13.8: Impact on capabilities differentiated by sector in the Bilinsa area

	Natu	ıral	Physi	cal	Econ	omic	Hun	nan	Soci	al	Cult	ural	Tota	1	Tota	al/n
	M	f	m	f	m	f	m	f	m	f	m	f	m	f	m	f
Infr 1			1	1	1	1							2	2	2	2
Ener 1			1	1									1	1	1	1
Water			1	5	1		5	1					7	6	1.4	1.2
5																
Crop 8		1			8	7	8						16	8	2	1
Liv 6		2			6	5	6						12	7	2	1.2
Nat E 2	2	2											2	2	1	1
Educ 9					3	4	9	5					12	9	1.3	1
Health					1		5	5					6	5	1.2	1
5																
Econ 4					4	4							4	4	1	1
Relig 2											2	2	2	2	1	1
Social					1	1		1	3	1			4	3	1.3	1
3																
Admin		1			1	1	1						2	2	1	1
2																
Total	2	6	3	7	26	23	34	12	3	1	2	2	70	51	1.5	1.1
48																

According to the men the initiatives the crop, livestock and infrastructural sectors had the widest impact on capabilities. If we look at the judgements about the impact of sector-specific initiatives on the six types of capabilities, we see that natural capabilities were influenced by initiatives in natural resources, and (according to the women) also by those in livestock and crop development initiatives, and in the administrative project on providing communal labour; productive capabilities were mostly enhanced by water investments (according to the women); economic capabilities by all types of initiatives; human capabilities as well according to the men, but according to the women mainly by education, and health care projects, and social and cultural capabilities mostly by social and religious investments.

e) The Farinsa community

The 30 initiatives in the Farinsa area were judged to have had a total of 62 impact scores by the participants (men and women did this together). The width of impact was comparable across the agencies, with slightly wider impacts by church-based NGOs (and by the one project initiated by UNICEF). The impacts on human capabilities were high and those on social and economic capabilities were judged to be considerable; those on the other capability domains much less so. Initiatives with regard to infrastructure (road, bridge, electricity), water and crop development were judged to have had a wide impact, followed by attempts to improve the natural environment and by religious initiatives.

Table 13.9: Intervening agencies and impact on capabilities in Farinsa

Agency	N	P	Е	Н	S	С	Tot	Tot/n
Gov (16)	2	5	6	13	4	1	31	1.9
GS (1)			1	1	1		3	3.0
G+P(1)				1	1		2	2.0
G tot (18)	2	5	7	15	6	1	36	2.0

C(A)	1	1	1	2	2	2	10	2.5
C (4)	1	1	1		3		10	2.5
C+P (1)			1	1	1		3	3.0
C tot (5)	1	1	2	3	4	2	13	2.6
P (7)		1	4	2	4	2	13	1.9
P tot (9)		1	5	4	6	2	18	2.0
Total (30)	3	7	13	20	14	5	62	2.1
Per int.	.1	.23	.43	.67	.48	.17	1.9	

Table 13.10: Impact on capabilities differentiated by sector in Farinsa

Sector	N	Natural	Physical	Economic	Human	Social	Cultural	Total	Total/n
Infr	3		3	2	2	2		9	3.0
Water	4		3	1	4	1		9	2.9
Crop	1	1		1	1			3	3.0
Nat En	3	2		3	2		1	8	2.7
Educ	5			2	5	5		12	2.4
Health	5				5			5	1.0
Econ	1			1				1	1.0
Relig	3		1	1		3	3	8	2.7
Social	3			1	1	3		5	1.7
Admin	2			1			1	2	1.0
Total	30	3	7	13	20	14	5	62	2.1

f) The Chansa community

The 20 initiatives in the Chansa area were judged to have had a total of 52 impact scores by the participants (in Chansa these were only men). Private-community initiatives had the widest impact, and most impacts had been attached to human and economic capabilities. If we look at impacts by sector, most of those were judged to have been related to natural environment improvements, followed by livestock and religious initiatives. The last two also had the widest impact.

Table 13.11: Intervening agencies and impact on capabilities in Chansa

Agency	N	P	E	Н	S	C	Tot	Tot/n
Gov (9)	2	3	6	9	2		22	2.4
C (3)		1	1	2	1	1	6	2.0
P (8)	2	3	7	4	5	3	24	3.0
Total (20)	4	7	14	15	8	4	52	2.6
Per int.	0.2	.35	.7	.75	0.4	.2	2.6	

Table 13.12: Impact on capabilities differentiated by sector in Chansa

Sector	N	Natural	Physical	Economic	Human	Social	Cultural	Total	Total/n
Water	3		3	2	2			7	2.3
Crop	1			1	1			2	2.0
Livestock	2	1		2	1	2	2	8	4.0
Nat En	4	1		3	4	2		10	2.5
Educ	2			2	2			4	2.0
Health	3			1	3			4	1.3
Relig	2		2	2		2	2	8	4.0

Social	1		1	1		1		3	3.0
Admin	2	2	1		2	1		6	3.0
Total	20	4	7	14	15	8	4	52	2.7

Appendix 1: the Participants in the workshop in Sandema

Four farmers each were invited from the following villages:

- 1 Nawaasa (together with Molinsa 14 came; 11 men and 3 women)
- 2 Molinsa
- 3 Kandema (together with Nyansa and Bilinsa 12 came, 7 men and 5 women)
- 4 Nyansa
- 5 Bilinsa
- 6 Korri/Kopdema (together with Balansa 8 came)
- 7 Balansa
- 8 Chansa (3 came, all men)
- 9 Bachonsa (noone could make it; this is a very isolated community)
- 10 Farinsa (5 came, 3 men and 2 women)

Other stakeholders

- 1 Distr. Chief Exec. Builsa
- 2 Chief Anlang
- 3 MoFA representative
- 4 District Co-operative Officer
- 5 Credit Officer BUCDBANC
- 6 GNAFF Chairman
- 7 Apinsik opinion leader Kalijnsa
- 8 Community Development Officer
- 9 Social Welfare Officer
- 10 Assembly man Kobdema
- 11 Assembly man Jeningsa
- 12 Assembly man Swinransa
- 13 The District Minister PCG
- 14 Herbalist-Nanjopung
- 15 PAS director Sandema

Group lists

Sandema Older women

Name Sex Org./ dist	rict Community
---------------------	----------------

Janet Anamsini	f	Builsa	Farinsah
Lawrencia Amoasa	f	Builsa	Farinsah
Agnes Kazimierczuk	f	Nl	nl
Ajoboyen Asealenta	f	Builsa	Kandema
Ayer Urobe	f	Builsa	Kandema
Achumnibelo	f	Builsa	Chuchuliga
Irene Alcumbagni	f	Builsa	Kandema
Dieneke de Groot	f	Nl	Nl

Sandema Older men

Name	Sex	Org./district	Community
Saa Dittoh	m	UDS	Nhiamgala
John E. Aboyen	m	Presby Church	Kodema
Yakubu Abarik	m	Presby Church	Ayansa
Akan-nyeasugi Atin-	m	farmer	Nawansa
yomsi			
Agialikum Avaripo	m	GNAFF Chairman	Sandema
Abiakoba Akom	m	farmer	Balansa, Sandema
George Akanko	m	Farmer	Farinsa, Sandema
Samuel Adosenj	m	Dept. Of Co-ops	Sandema
John Abaziuk	m	FBO	Chuchuliga
Roras A. Abaazan	m	Presby Agric S.	Tamale
Nab A. Azulany	m	Traditional council	Siniensi
Akando Martin	m	FBO	Kpandema
Angaruk T.A.	m	G.E.S.	Chuchuliga

Sandema Youngest Men

Mathias A. Ateng	M	Builsa District Asst	Sandema
Samuel Adaayeh	M	Gov. official	Sandema
Akanura A. Vesper	M		Kandema
Abain Michael	M		Balansa
Ebenezer Awoniteng	M		Balansa
Azombili Aagutiba	M		Chuchuliga
Aboringa Anaamwie	M		Siniemse
Aluize Edward	M		Koblema
Azumah Atiniak	M		Korio
Victor Atiyeusi	M		Chuchuliga
Tangyei Lawrence	M	Builsa DA	Sandema
Yaw Chuma	M		Molsah
Agavuuta Fusini	M		Nyansa
Francis Diedong	M		Sandema
Cephas Anadem	M		Korio

Young women

Esie Adaalaaga	F	farmer	chuchuliga
Patricia Ayombisa	F		Kori
Angella	F		Nyasa
Aponmana Ampaa	f		Bilinsa
Millicent Azong	f		Bilinsa (?)

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Ajua Akandekutim	f	Nyasa
Felicia Ayombin	f	Bilinsa

Mid-aged men

Ambegbisa Akamfebnaab	m	farmer	Nyansa
Richard Ajobulisa	m	farmer	Namonsa
George Anakube	m	farmer	Chuchuliga
			(Nyawasa)
Joseph Anagnanab	m	farmer	Nyawasa
John Agangeb	m	farmer	Wiaja (?)
Kojo Abowen	m	farmer	Gbelimonsa (?)
Jampson Azuchem	m	farmer	Chuchuliga
			(Nyawasa)
Matthew Anum	m	farmer	Chuchuliga
Jonas Abantiloa (?)	m	Head of department	Sandema
Edgar Brak (?)	m	MoFA	Sandema

Appendix 2

The history of Presbyterian Agricultural Station in Sandema written by Emmanuel Akiskame, Director PAS SANDEMA

HISTORY:

The Presbyterian Agric Station – Sandema was established in 1969 as a church-based NGO in the Builsa District by the Presbyterian Church of Ghana (PCG). The main purpose of setting up this station, like the other three sister-stations (Garu Agric Station, Langbinsi Agric Station, Mile7 Agric Station Tamale) in Northern Ghana, is to improve the living standards of rural poor farmers through quality extension service delivery. The offices and other structures of this station are located at Kobdema, near Sandema. Currently (Sept. 2008), the station is working with 37 mixed groups which have just been developed into FBOs (Farmer Based Organizations).

OUR GOAL:

To contribute specifically to increased food production security and income levels of resource poor farmers (men, women and disabled) and the empowerment of subsistence farmers in general.

PROGRAMME GOAL AREAS, OBJECTIVES AND ACTIVITIES

GOAL AREA 1: ORGANIZATIONAL STRENTHENING

MAIN OBJECTIVE:

- Organizational structures, systems and links with other institutions developed so as to ensure that the station implements programmes in a way that will achieve the station's vision.

MAIN ACTIVITIES:

- To explore and identify potential financial donors for support.
- To review PME systems and methodology.
- Establish and run efficiently Income Generating Unit.
- Develop HRD plan (policy document, implement and review it from time to time).
- Conduct Needs Assessment of staff and implement training programme to address staff capacity gaps.
- Conduct and review baseline information on communities.
- Acquire ICT equipment and train staff in ICT.
- Establish Website.
- To expand/strengthen institutional networking and collaboration with other organisations.

GOAL AREA 2: FORMATION AND DEVELOPMENT OF FARMER BASED ORGANIZATIONS (FBOs)

MAIN OBJECTIVE:

- Farmer Based Organizations (FBOs) developed based on product lines who drive their own action plans in an integrated way supported by project staff.

MAIN ACTIVITIES:

- Facilitate the identification of viable groups to form FBOs according to product line.
- Identify and link farmer groups to non-formal educational Institutions for training.
- Train farmers in relevant topics that address their identified capacity gaps.
- Identify interested/conducted Farmer Needs Assessment for Animal Traction Programme.
- Facilitate distribution of funds and purchase of Bullocks/donkeys
- Train farmers in Animal Traction on Handling, Harnessing, Ploughing and Animal Husbandry practices.
- Facilitate recovery of loans from beneficiary Animal Traction farmers.
- Identify market outlets for selected produce.
- Groom and link productive groups to market outlets.
- Facilitate the production and supply of good quality produce to markets.
- Conduct sensitisation on the establishment of a Credit Union.
- Establish Credit Union in the district to support small-scale farmers with finance.
- Train farmers and other beneficiaries in Credit Management and savings mobilisation.

GOAL AREA 3: ADVOCACY AND GENDER

MAIN OBJECTIVE:

- Proactive Communities taking informal decisions on their livelihood strategies developed.

MAIN ACTIVITIES:

- Organize refresher courses for staff on gender and advocacy issues and mainstream them.
- Identify economic and other social rights that are being disregarded in the communities.
- Carry out sensitisation on gender and Advocacy issues.
- Facilitate the identification of key trade policies
- Mount joint platforms with Stakeholders on Advocacy issues.
- Deeper awareness on communities through churches and video shows on HIV/AIDS.
- Develop and produce IEC materials.
- Advocate for people living with HIV/AIDS (stigmatisation).
- Encourage Voluntary Counselling and testing.

Appendix 3: detailed tables of sector \mathbf{x} agency \mathbf{x} impact quality judgement: officials, Kandema and Chuchiliga

Table A1 Agencies, sector, and officials' assessment of impact

Sector	Total
Infrastr.	
Mater Mate	5
Crops	4
Compage	1
3	16
4a	3
Ab 3 1	5
Livestock	4
O	4
3	10
4a 1 3 1 1 3 1 1 3 1 1 2 1 1 3 1 1 1 1 2 1 1 1 2 1 </td <td>0,5</td>	0,5
Ab	6
Nat Env 2 1	1,5
Compage	2
Sample S	9
Water 3 1 3 1 3 1 2 Energy 2 Energy 3 1 1 2 1 1 2 1 1 1 2 1	2
3	7
4a 1 4 Energy 3 1 4a 4a 1 4b 1 1 Educ. 3 1 4a 8 2 1 4b 1 1 2 Health 3 1 4 4 4a 4 1 4 4b 2 1 1 Economy 1 1 1 1 2 1 1 1	13
Energy 3 1	5
3 1 4a 1 4b 1 Educ. 3 1 4a 8 2 4b 1 1 4a 4 1 4a 4 1 4a 4 1 4b 2 1 Economy 1 1 1 2 1 1	8
4a 1 4b 1 Educ. 3 1 4a 8 2 4b 1 1 4a 4 1 4a 4 1 4a 4 1 4a 4 1 4b 2 1 Economy	3
4b 1 Educ. 3 1 4a 8 2 4b 1 1 Health 3 1 4 4a 4 1 4b 2 1 Economy The content of th	1
Educ. 3 1	1
3 1 4a 8 2 4b 1 1 Health 3 1 4 4a 4 4 4b 2 1 Economy 1 1 1 2 1 1	1 16
4a 8 2 1 4b 1 1 2 Health 3 1 4 4 4a 4 1 4 4b 2 1 1 Economy 1 1 1 1 2 1 1 1	
4b 1 1 Health 3 1 4a 4 1 4b 2 1 Economy 1 1 2 1 1	1 11
Health 3	4
3	13
4a 4 4b 2 Economy 1 1 2 1 1 1	1
4b 2 Economy 1 1 2 1 1 1	9
Economy 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3
1 1 2 1 1	14
2 1 1 1	1
	2
3 2 1 1 1 1	5
4a 1 1 3	5
4b 1	1
Religion	2
3 2	2
Social	11
	1
2 1	1
3 1 1	2
4a 1 3	4
4b 1 2	3
Admin	2
3 1	1
4a 1	1
Total 43 13 1 1 3 2 19 3 1 10 18	114

Table A2 Kandema-Nyansa-Balansa: intervening agencies, sectors and people's judgement about impact.

Sector	Gov	G+C+N	G+S	Church	NGO	Private	Total	Scores	% 2	% 3	% 4	% m
Infrastr.			l				5					
2						1		1	20			
4	4							4			80	
Crops			I		I		8		l	l	l	
2	1		1		1			3	38			
4		1			1			2			25	
mixed	1:2/4	1:4/2		1:4/1				3				38
Livestock			ı		I.		2		1			
4		1						1			50	
mixed	1:4/2							1				50
Nat Env							6					
4	1				3			4			66	
mixed	1:4/3				1:1/4			2				33
Water							4					
4			1		1			2			50	
mixed			1:2/4		1:2/4			2				50
Educ.			•		•		10			•	•	
2	1							1	10			
4	3			1	3			7			70	
mixed	1:4/2		1:4/2					2				20
Health			•		•		5					
4	1		2					3			60	
mixed			1:4/2		1:1/4			2				40
Credit							4					
mixed			2:4/2	1:4/5		1:1/2		4				100
Religion							1					
3				1				1		100		
Social							2					
4	1				1			1			100	
Total	16	3	9	4	13	2	47					
N,% 2	2				1xx	1=50%	5=11%		11			
N,% 3				1=25%	1xx		1=2%	1x3		2		
N,% 4	10xx	2=66%	XX	1=25%	8xx		25=53%				53	
N,% m	4xx	1=33%	XX	2=50%	3xx	1=50%	16=34%					34

Mixed: M/W assessment

Table A3: Chuchiliga area: detailed data about sector x agencies x impact scores

Sector	G	GS	G+P	GS+P	С	C+N	N	P	Total
Infrastr	5						1	1	7
1	1								1
3							1	1	2
4	4								4
Crops	4				5	4		4	17
1	1							1	2
2	2								2
3								2	2

4	1				5	4		1	11
Livest.						1	1		2
3						1	1		2
Nat En				1	2		1	1	5
2				1				1	2
3					1		1		2
4					1				1
Water	1		1		1	1	1		5
4	1		1		1	1	1		5
Energy	1							1	2
3/4	1							1	2
Educa	3				3		2	1	9
2							1		1
3								1	1
4	3				3		1		7
Health	5	2	1				1		9
3	2								2
4	3	2	1				1		7
Econo	1	1		1	2		1	3	9
0	1	1						1	3
2								1	1
4				1	2		1	1	5
Relig					9				9
4					9				9
Social			2			1	1		4
4			2			1	1		4
Admin	2				2				4
0	1								1
3					2				2
4	1								1