

**IMPACT OF NATURAL RESOURCES OWNERSHIP PATTERN
TENURE AND ACCESS ON LAND DEGRADATION
AND DESERTIFICATION IN AFRICA**

DAKAR, SENEGAL - 7 to 9 MARCH 1994

**REPORT OF
THE WORKSHOP ON TENURE SYSTEMS
AND DESERTIFICATION IN AFRICA**

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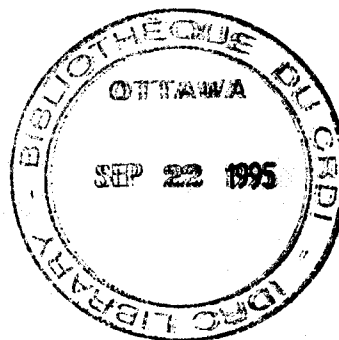


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Introduction

At the United Nations Conference on Environment and Development (UNCED), in June of 1992, African nations suggested that the phenomenon of land degradation in arid and semi arid ecosystems, i.e. desertification, be considered a problem of global concern, and succeeded in obtaining a consensus that an international convention to combat desertification, particularly in Africa be negotiated.

At the same conference, the International Development Research Centre (IDRC) of Canada, was given, by the Canadian Government, the responsibility to participate actively in the implementation of action plans of Agenda 21.

In the light of these two events, as well as her age-old mandate to serve as a knowledge broker, and to encourage developing countries to find appropriate solutions to problems of development, IDRC developed a programme of action representing her contribution to the ongoing global effort to combat desertification.

The control of a phenomenon as complex as desertification, requires a proper knowledge of the various factors involved, and their effect, relationship and impact on the process. An important initiative in the IDRC programme of action is therefore, to contribute to the ongoing global efforts to better understand the role and impact of a number of key factors of relevance to the desertification process.

This initiative comprises the preparation of analytical review papers, followed by three workshops on the following themes respectively.

- i) "THE IMPACT OF INDIGENOUS KNOWLEDGE AND TRADITIONAL COPING STRATEGIES ON THE PREVENTION OR MITIGATION OF LAND DEGRADATION AND THE DESERTIFICATION PROCESS IN AFRICA.
- ii) "THE IMPACT OF NATURAL RESOURCES OWNERSHIP PATTERN, TENURE AND ACCESS ON LAND DEGRADATION AND DESERTIFICATION IN AFRICA.
- iii) "THE IMPACT OF WORLD TRADE, ECONOMIC POLICIES AND STRUCTURAL ADJUSTMENT PROGRAMMES ON DESERTIFICATION IN AFRICA.

The first workshop on indigenous knowledge and desertification was held in Cairo from January 3 to 5, 1994, while the second one on tenure systems and desertification was held in Dakar, from March 7 to 9, 1994. The third workshop on economic policies and desertification will be held in Nairobi from May 17 to 20, 1994. This report will focus only on the Dakar workshop that examined the relationships between tenure systems and desertification in Africa.

SUMMARY

THEME: Natural Resource Tenure Systems ownership pattern and Desertification in Africa.

Title of papers:

1. Negotiations at the Intergovernmental Negotiations committee: Comments.
Diawar Dieng.
2. Tenure systems and the prevention of desertification: what are the stakes for Africa.
Ibrahima Albassadji Touré.
3. The question of the commons in the sahel.
Mark S. Freudenberger.
- 4.. Tenure systems and management of natural resources in the the sahel: processes, outcome and the stakes.
5. Land registration and cadastral systems in Africa.
Mohamed Boualga.
6. Modern legislation and community rights: differences in ownership partterns, management and preservation of resources in the Maghreb.
Mohammed El Tozy.
7. Dynamics of tenure systems and their impact on the management of natural resources in the Maghrebian Steppes.
Ali Abaab.
8. Political economy of desertification in Southern Africa.
James Murombezi.
9. Pastoralism and sustainable resource management: the case of Karamoja (Uganda) and Maasailand (Tanzania).
Daniel Ndagala.
10. The politics of development and natural resources degradation.
Massata Gueye.
11. Tenure systems and desertification: causes or remedies.
Tidiane N'gaido.

PARTICIPATION:

The workshop was attended by a total of 60 participants representing a number of countries from the sahelian, maghrebian, eastern and southern African regions. African governments were well represented by a number of negotiators in the ongoing INC-D meetings as well as technical and policy personnel from the Ministries of Environment, Agriculture or Forestry and Water Resources. The opening session was chaired by the Senegalese Minister of Environment and the Protection of Nature

Up to 10 non-governmental organisations from the various sub-regions of Africa, and representing the interests of local populations participated in the deliberations, and a variety of international organisations such as the FAO, ICRISAT, ICRAF, CILSS, UNSO, UNESCO... honoured our invitation and contributed meaningfully to the high level of discussion observed during the workshop.

OBJECTIVES:

The objectives of the workshop were two fold.

Firstly, to contribute to a better understanding of resource tenure systems in Africa, in order to sensitise all of the actors involved in the management and utilisation of these resources, to the positive and/or negative impact such systems could have on land degradation and the desertification process.

Secondly, to identify and recommend tenure systems compatible with a sustainable management of natural resources.

DELIBERATIONS:

In order to achieve these objectives, a total of 10 commissioned and analytical papers were presented at the workshop. Six of the papers dealt with tenure systems, ownership pattern and access in the maghreb, sahel and southern/eastern Africa, with particular emphasis on case studies to illustrate system effects on the resources. Four others dwelled on conceptual issues such as the question of the commons, on-going efforts by the CILSS to coordinate efforts in the sub-region on land tenure and decentralisation, as well as the potential contribution of updated land registration and cadastral systems in Africa on sustainable resource management.

The papers were presented in four working sessions during which participants had ample opportunity to debate the issues and contribute their particular experiences and views on such a difficult and complex theme. A fifth working session was devoted to a general discussion of conclusion and recommendations of the three-day workshop.

SALIENT POINTS OF DISCUSSION:

Some of the salient points discussed and on which some consensus seemed to have been reached after 3 days of presentation and discussion are as follows:

A wide array of property rights arrangements or tenure regimes such as state, private/individual, common and open-access property regimes coexist simultaneously in many parts of Africa, and are in constant transition from one property status to another. These multiple and often conflictual systems have their origins in the historical past of Africa.

Historically, the origins of tenure legislations and rights in Africa can be traced to three sources:

- Customary/traditional rights developed over several generations by local people, and which incorporate local sensitivities and customs, as well as ecological considerations.
- Islamic legislation (Charia), based on Islamic customs, rights and Koranic interpretations.
- Modern laws and legislation dating back to colonial and post colonial periods. These usually assume an equity posture, but rarely take into account, socio-cultural and ecological sensitivities.

The superposition of these three legislative approaches explains the observed discrepancies between legal provisions and what obtains in practice. It is also in part responsible for the apparent confusion and poorly defined tenure regimes which often ignite conflict between various user groups, and constitutes an obstacle to appropriate and sustainable natural resources utilisation and management.

Authorities in different parts of Africa have adopted different strategies and policies to grapple with this historical legacy. Such efforts include: the policy of "substitution", which attempts to completely replace customary laws and tenure rights with western style oriented property rights arrangements ; the policy of "adaptation" that tries to adapt new legislation to the needs of the people, or even the policy of "non intervention", that gives free reign to the customary property regimes, along side state legislation.

Case studies show that these attempts have not successfully arrested conflicts over resources ownership and access, with the accompanying misuse and degradation of fragile ecosystems in particular. Hence the need for reform efforts to be intensified to evolve tenure arrangements which not only are in harmony with the ecosystem, but also accommodate the production and development aspirations of the population.

Ecological variation and diverse customs and developmental aspirations make it imperative that the reforms must be flexible and must cater to local peculiarities. Hence the need to involve the local population in the development and choice of tenure options suitable to their environment. This is particularly true for fragile ecosystems of the arid and semi arid regions, where the complex relationships between the various production systems - agrosylvopastoral, sylvopastoral, pastoral, agropastoral - need to be well understood and accommodated.

In general, modern property regimes tend to favour agricultural production via the privatisation route to the detriment of pastoralists who are legislated out of required land. Given that mobility is essential to this system which is particularly well adapted to the semi-arid ecosystem , the privatisation approach has tended to reduce their access to resources leading to overexploitation and degradation.

No tenure system or regime should, a priori, be privileged or penalised without a proper analysis of the targeted ecosystem in order to understand the ecologic and socio-political stakes, and to properly define its role and place in the overall system equilibrium and balance.

Thus, privatisation in the sense of individual ownership and management is not necessarily a panacea. Experience in Tunisia for example shows that although privatisation of land in the steppes led to a diversification and intensification of agricultural production, it also resulted in excessive resource utilisation, and hence degradation in this fragile zone characterised by a dry bioclimate. Further evidence from elsewhere, clearly show that attempts to ensure tenure security in fragile ecozones of the west African sahel through privatisation often impacted negatively on the environment, since privatisation led to reduced rotation and fallow strategies required to ensure a sustainable management of the resources.

Evidence also shows that the thesis of the "tragedy of the commons" is not a necessarily self fulfilling prophesy, if certain indispensable conditions were guaranteed. Such conditions include: well identified boundaries between the commons and other property right regimes; proximity of resource to the user group abode; small resource user groups to facilitate social encounters; strong legitimate and respected local authorities that can enforce rules; state respect for community controlled common property regimes; functional conflict resolution mechanisms and flexibility to adjust to evolving conditions.

It was clear from the various case studies presented and the rich discussion that followed that it would be foolhardy and presumptuous to make firm recommendations for any particular tenure arrangements or regimes, given the ecological and customary variations that prevail, as well as the variability in resource availability. Nevertheless, administrative and legislative reforms are clearly necessary to reconcile the utilisation and management of resources with availability.

Important elements or principles to consider in formulating reforms designed to encourage a sustainable use of natural resources and avoid degradation and desertification should include: flexibility, equity, harmony with local ecological, social and economic dynamics, full and sincere involvement, and participation of local populations.

RECOMMENDATIONS:

The workshop formulated a number of recommendations directed at all of the actors involved in the utilisation and management of natural resources, in the belief that these may contribute towards the formulation of tenure regimes compatible with a sustainable management of these resources.

1. Given the well documented relationship between climate and desertification on the one hand, and land degradation/desertification i.e. biomass loss and biodiversity on the other hand, negotiators should ensure that the desertification convention be given equal weight and attention as other conventions on climate and biodiversity in order to tackle these problems of global concern in a holistic manner.
2. Africa is the least mapped and cartographed continent, with little archival or current data on quantitative resource dynamics and availability. Given the important roles access to such information could play in the formulation of appropriate policy options, efforts should be made to provide such cartographic and GIS data, and /or guarantee easy and inexpensive access to them when available elsewhere.
3. Legislative and administrative reforms should be undertaken urgently to evolve appropriate tenure systems that equitably guarantee access and clear propriety rights and obligations to all users including pastoralists.

4. Such tenure systems should be developed with the full participation of all actors and user groups, so that local socio-cultural peculiarities and ecological features are respected.
5. In this respect, newly evolved or evolving tenure arrangements that show evidence of equity and local relevance should receive recognition, support and legitimisation.
6. Given the heterogeneity and hierachisation that exists at the local community level, often with strong interest groups that tend to be self serving, efforts must be made to ensure that the spirit of democratisation permeates up to this level, and that the interest of minority groups, particularly women are protected.
7. In this respect, special efforts must be made through research, education, and legislation to guarantee the rights of women to own and have access to land and other natural resources and incorporate these rights into tenure arrangements.
8. In the same vein, access rights of pastoralists to grazing land and water sources, that are gradually being eroded need to be guaranteed, documented and enforced.
9. Common property regimes still exist in many parts of Africa, but competetion for the unsettled areas, or seasonally utilised areas is increasing, and the commons are being threatened. It is important to protect these tenure regimes in ecosystems where they have obvious comparative advantages in terms of a sustainable utilisation of the resources.
10. The international community should harmonize its development programmes and projects with national efforts and aspirations of the local populations, and through appropriate conditionalities encourage national governments to facilitate the development of tenure regimes favourable to a sustainable management of natural resources.
11. Research and training programmes need to be developed to reinforce the organisational and institutional capabilities of local populations so that they become effective partners to policy and development planners. In this respect, culturally appropriate participatory approaches that exploit the rich indigenous patrimony should be privileged.
12. Appropriate training programmes should also be directed at officials that implement tenure legislations and rights, as well as local population representatives, to ensure a proper comprehension of rights and obligations.

Detailed report

Ownership and Land Tenure: A major issue in Desertification

The second of the three workshops on issues related to desertification and land degradation took place in Dakar, Senegal, from 7 to 9 March 1994. Sponsored by the West and Central Africa Regional Office of the International Development Research Centre and entitled 'Workshop on the Impact of Natural Resource Ownership Pattern, Tenure and Access upon Land Degradation and Desertification in Africa,' the meeting was held at the Novotel complex, Dakar, Senegal. During the workshop over 60 participants from 12 countries in Africa concerned with the results of land degradation and desertification studied the issue and formulated recommendations for presentation to the United Nations INC-D convention negotiations.

Welcoming remarks

The participants to the Workshop were welcomed by Gerald Bourrier, Regional Director of the IDRC West and Central African Office.

Mr Bourrier pointed out that desertification is the result of a complex series of interactions that include chemical, physical and biological factors. Other influences also come into play such as socioeconomic and political phenomena. The problems associated with desertification are multifaceted and require complex interdisciplinary solutions. This is one of the reasons why the participants to the workshop were drawn from a diversity of backgrounds.

IDRC is a unique Canadian organization dedicated to researching the most effective means of advancing the cause of development. It is concerned with the issue of empowerment believing that this is one of the best ways of bettering the life of individuals and communities in the developing world. Mr Bourrier then outlined IDRC's structure and some of its specific policy objectives.

Specifically, six areas have been defined. These include: the integration of political, environmental and socioeconomic issues; technology and the environment; systems of food production; the use of communications in the service of the environment; the environment and health; and biodiversity. He stated, that the workshop covered several of these areas of concern. The objective of the workshop was to both advance knowledge on the processes of desertification and to contribute to the solution of the problem.

Introduction by the Minister

Welcoming participants to the conference, Pr Abdoulaye Bathily, Minister for the Environment and the Protection of Nature in the Government of Senegal, said that he was glad this conference was taking place in his country. This, after all, was one of the nations of Africa where desertification was an important issue. The Minister reviewed the topic as it was discussed in the Rio meetings leading to the UNCAD negotiations. He continued that he was glad that the Government of Canada was interested in desertification and land degradation and welcomed the efforts of IDRC. Desertification was a problem that had bedeviled mankind for many centuries. He hoped that there would be considerable progress in reaching a solution to it by the start of the next century.

Progress in the INC-D negotiations

The status of the INC-D negotiations were reviewed by Mr Diawar Dieng. He reported that a draft of the convention that takes into account the positions developed by the end of the meeting held in January will be presented to the next session that will take place in Geneva at the end of March. There are still some controversial topics that needed to be discussed. In particular these concerned the meaning of the definitions that will be part of the final document. These definitions include such issues as what is a developing country as well as descriptions of desertification and land degradation. The definitions are important because they will influence the level of funding provided for antidesertification programmes.

Mr Deng also stated that it was important that all countries involved in the issue, whether they belonged to the first or the developing world and whether or not they were directly affected by the problem, make some gesture of contributing to the antidesertification fund. This is particularly so as some potential donors are concerned about the degree to which other countries are expecting them to support these programmes. He noted that the Geneva meeting had a good chance of success despite the fact that there are a number of political difficulties that will have to be solved.

Keynote address

The keynote address to the workshop was provided by Dr Ibrahima Albassadji Touré, Geographer with the Institut du Sahel (CILSS), Bamako. Despite the conclusion of the Rio conference, Dr Touré considers that desertification is a global problem. In Africa, more than 75% of the pasturage and water points, more than 60% of the rainfed areas and 20% of the irrigated land is affected one way or another by desertification or degradation. In this continent there is a great desire for the issue to be dealt with. People want security of food supply, secure access to natural resources and a general lowering of the risks of life. They would also like to see progress in political, economic and social equity. Finally, they desire to participate in the decision making processes that govern their lives.

The author pointed out that there are three sources for the land tenure laws that govern people's lives in much of Sahelian Africa. These are: traditional and cultural sources, Islamic or Shara codes and colonial and post-colonial legislation. When there are this many sources for land tenure laws, confusion and conflict tend to occur. A major problem is that often laws from one source are placed over another without the consent or understanding of the people concerned. In general, conflicts lead to a worsening of the situation. Furthermore the imposition of new types of agriculture or work oriented motivations have also negatively influenced the situation. These include such policies as moving agriculture toward monocropping and the introduction of cash crops.

He proposed that there was one principal that still applied to the management of natural resources and this was that 'Co-operation between all members of a society who were interested in the resource was necessary for the good management of the resource.' This means that the responsible participation of the affected population is required in any management plan. In many societies this is unfortunately not happening. For example, women are often not allowed to have a say in the management and disposition of resources or are allowed only to have access to marginal resources such as poor land. This happens despite the fact that women are often the most knowledgeable people in the community about land management methods. It is important then that all available knowledge, technical skills and values held by a community be integrated in land management efforts. In other words, the control and management of the earth's resources are a multidimensional problem that will require efforts from many disciplines before a solution is found.

The objectives of the Workshop

The overall objectives of the workshop were outlined by Dr Olanrewaju Smith, IDRC, Dakar. Desertification is generally considered to be the result of a number of human factors acting upon a susceptible environment. These factors include: agricultural exploitation of the land; political and cultural factors that influence the way people treat the land; and sociocultural and institutional factors that influence policy toward the land and its utilization. These later include such aspects as the role of women in farming activities.

Given this, it is the function of this workshop to investigate these factors and their influence upon desertification and land degradation. It was suggested participants pay attention to the various land tenure systems discussed and consider the role that they play in the daily life of people. They should identify the positive aspects of some cultures and propose recommendations suitable for presentation to the INC-D negotiations.

Discussion on the papers

One of the problems that the INC-D negotiators are having with the definitions is that there are so many of them. The right definition for the political circumstances has to be chosen. And, because desertification was not considered a global issue at the Rio conference, there will not be a 5th funding window in the Global Environment Facility (GEF). INC-D has to go it alone so far as funding is concerned. Already it has been decided that Africa is the continent with the greatest desertification problem. This is one of the reasons why it is important that all African countries make some contribution to the general fund that will support the antidesertification programmes.

There is evidence from some marginal areas that local communities are having every success in adapting their traditional land tenure rules to the modern situation. As a result, these pockets stand out in large areas of degraded land. Their techniques need to be studied.

The First Working Session

The problems associated with land held in common in the Sahel were discussed in a paper entitled 'The question of the commons in the Sahel' by Dr Mark S. Freudenberger and Paul Mathieu, Land Tenure Centre, University of Wisconsin-Madison.

Tenure can be defined as the right to have access to a resource, to control that access, to manage the resource and to defend that right. Commons are resources that are owned, used and or controlled simultaneously or serially by a group of people. In practice, communities spend a lot of their time defending their rights to a resource. As a result, poorly defended rights often lead to the over exploitation of a resource. This can be termed 'open access.' Failure to successfully defend a right is often the result of a failure to exclude users who come from outside the community.

Usually rights contain both inclusive and exclusive clauses. That is, those who can use the resource as well as those who cannot are defined. The effectiveness of the defense of rights depends upon the ability of the community to impose these inclusive and exclusive clauses upon those who wish to use the resource. In these times communities are mostly too weak to impose their decisions upon others. For this they need the help of outside sources such as national or regional governments. The upholding of rights usually takes a lot of negotiating but, if a community feels it will get a return from the effort, it will invest the time.

There are a number of positive factors that have been identified as leading to successful control of communally held property. These include: a degree of resource scarcity; well identified boundaries; and proximity to the residences of the controlling group. There are also a number of institutional requirements. These include: that the group be definable and have social and cultural homogeneity; have high social cohesiveness; have the most powerful members on side; have an acceptable distribution of the costs and benefits; and have the ability to defend the group from outside assaults. It also helps if the group is small. In general, the tenure system itself must also be flexible and, nowadays, it is an imperative that the state support the type of communal property rights that communities establish.

In conclusion this means that simple and effective means of state-community cooperation are best. Rules have to be site specific and enforceable. There has to be state involvement and the poor and disadvantaged in the community must benefit as well as the rich. Lastly, the right of conditional exclusion has to be negotiated with other potential users of the resource as must be punishments for those who fail to obey the rules.

Resource tenure and management in the Sahel

The debate about tenure systems was continued by Dr Moustapha Yacouba of CILSS in a paper entitled 'Debates sur la foncier et la gestion des ressources naturelles au Sahel.'

The current actors in the control of natural resources in the Sahel have several weaknesses. These include: too heavy involvement by the state in the issue (top-down approach); the people using the resources have too little say; and those with money and political influence have too high a control over the resource. Many current laws fail to help local people and their communities. Furthermore while the laws are constantly changing, local people (those most affected) have little understanding of them. Neither do government policies identify who they are helping nor define the process.

As a result, sustainable resource management is not helped by current laws. Even when laws have been reformed, or a reform is proposed, those who have been able to profit from the unreformed situation are often the strongest opponents of the reforms.

Local populations need laws and regulations that are understandable. This generally means that, besides being applicable to the local situation, the laws must take into consideration the diversity in relationships that are found between communities and their various resources. Additionally laws should be translated into indigenous languages so that the people can know their rights. This means that the debate between the various actors needs to be opened up so all can participate. When this happens local people can become involved in the management of their resource.

Discussion of the papers

The question of combined involvement in the protection of commons is constantly evolving. Some communities have been very successful in defining and then protecting their rights. Others are less so. One question is the degree to which communities can define their own rules. Most communities state that definition is not a problem but defense is. For this they need the support of a higher power at state or regional levels. Africans have a well demonstrated ability to negotiate rights and their defense, especially with regard to land tenure issues.

While it is generally agreed that underutilized land is becoming scarcer, there are some areas of the Sahel that are under populated. If migration were eased at the national level, and the crossing of arbitrary national borders allowed, then some of the land would become accessible.

A land charter is not a bad idea. Such a charter would define the philosophical basis for land tenure regulations and allow for greater flexibility. Historical and cultural factors could also be included in a manner that was non-binding but still able to influence human behaviour.

As a general principle, the bottom-up approach to rules and regulations was supported. Also it is necessary that land tenure systems are related to the local production system whatever it is.

It must be remembered that local communities are not homogenous. Each has its own desires and needs. Tenure systems themselves often vary from community to community. It is incumbent upon legislators to remember this and build flexibility into any laws or regulations that they promulgate.

Two other issues are how to resolve conflicts in a humane way (communities often hold the key to this) and what to do as the population expands and the resource becomes ever scarcer.

The Second Working Session

The second working session of the workshop opened with a discussion of cartographic problems in Africa. A paper entitled 'Land registration and cadastral systems in Africa,' was read by M. Mohammed Boulga, Secretary General of the Organization of African Cartography and Photogrammetry. Mapping will not change the environment, nor will it protect it from abuse. It will, however, tell people what is happening and besides, reliable information is needed to enable the sustainable management of resources.

Maps and mapping in Africa are dormant issues of considerable importance. This is because the continent is the most poorly provided with maps of all the world's large land masses. In most countries, mapping activities originated with the colonial powers and most African countries are still using maps based upon the activities of colonial administrators.

Unfortunately 60% of the maps left by the colonial powers are now obsolete. Furthermore they no longer represent the interests of the population and, in particular, are useless as a guide for development or for such activities as resource management and conservation.

A recent survey of the situation by the OAU has revealed a wide disparity amongst the nations of Africa in the resources they have available for mapping. The range is from complete fulfilment of requirements to continued reliance upon outside sources. To help ease the situation, the UN has recommended that regional mapping centres be set up. This has been done and the centres are able to fill part of the requirement

for suitable maps. Unfortunately, mapping is now a highly technical activity and the equipment needed is very expensive. It is not anticipated that the poorer countries will be able to carry out all their own mapping in the foreseeable future.

There are a number of issues associated with mapping. A major one is the ownership of the data collected for the creation of a map. Countries need to set up appropriate organizations to gather and store information. Countries owning data should be prepared to share it with their neighbours and the continent as a whole. This is because rarely is the information only applicable to one nation. Work also needs to be done on the type of mappable information that is required at the community level, how it should be gathered and how it should be used.

Discussion of the issue

The information obtained from maps can both protect and lead to the exploitation of a resource. In general resource exploitation companies can get information more easily than can villagers or NGOs concerned about conservation.

Maps help us know more about the environment so they are a worthwhile investment. This means that governments and NGOs need to investigate the sources of funding that will help them make maps for the development and conservation activities they are planning.

Tenure Systems in the Maghreb Region

The different land tenure systems found in the Maghreb region of North Africa were discussed by Dr Mohammed Tozy of the Universite Hassan II, Casablanca, Morocco, in a paper entitled 'Les modes d'appropriation, gestion et conservation entre le droit positif et communautaire au Maghreb.'

Dr Tozy presented evidence that countered the theory of the 'tragedy of the commons.' It is proven that in many cases a sustainable equilibrium has been reached in the management of communally held resources even though by some criteria resource depletion is taking place. In fact the criteria that should be used in such cases are under discussion because not enough emphasis is laid upon the criteria employed by the indigenous managers of the resource. He believed that there is a negative linear relationship between the monetary value of resources, including land, and the level of degradation. There are also conflicts between the desire of a community for a regional say in its affairs and the strength of central governments. A third level of conflict occurs when there are a number of different sources for the laws governing resource use.

These conditions exist in the Maghreb were traditional practices, Shara law and elements of Roman law all coexist. In post colonial times this has been combined with a variety of government policies toward resource law and the desire to upgrade or change the existing situation. Morocco can, for example, be considered a conservative state with reference to this issue while Algeria and Tunisia are more concerned with reform.

Each of these states has altered its resource access and tenure laws in the years since independence; Morocco perhaps the least. Yet in each of these states it can be said that the domain types that have been developed have little relevance to the real situation. Furthermore, legal precedence often overshadows the new laws as far as real legal practice is concerned. This is further complicated by the overlapping of the various legal systems.

While this is notionally very complicated, local people are able to sort the situation out by going to one court for a given service and to a different court when the situation warrants. This can lead to the sharing of rights where, for example, the right to gather firewood might be governed by one jurisdiction and the right to gather fruit from the same trees, by another. Problems occur when organizations or individuals from outside a community attempt to gain access to a resource expecting that one source of law has precedence over all others.

It should be noted that, in spite of attempts at the state level to change or upgrade existing law systems, little impact has been observed in all three countries. What is happening is that recent legal revisions are reverting to the *status quo pro ante* and the systems that the people were using all along. The lesson here is that the state must not take responsibility for all land laws. It is better for it to support the local customs so that the community concerned does not feel threatened.

The rangelands of the Maghreb

In a paper entitled 'Dynamique des systèmes fonciers e leurs impacts sur la gestion des ressources naturelles en zones steppiques mahrébines,' Dr Ali Abaab, Research Associate with CIHEAM-IAM, Montpellier, France, discussed the dynamics of land tenure systems on the management of rangelands in the Maghreb.

About 12% of the Maghreb is rangeland with a rainfall of 100 to 400 mm/year. This area has a population density of about 39 persons/km². In recent years, state attempts to maximize agricultural production in the region have resulted in an increase in cultivated land and a reduction in pastoralism. Cultivation and private land ownership have been especially concentrated in areas of better rainfall. This has removed access to this resource from the herds of the pastoralists.

Privatization has created a market for land in the Maghreb and further isolated the poor from the best of the resources. As a result, poor people are reduced to utilizing the areas with the least resources such as water. These areas are the most prone to degradation and so it is no surprise that lands occupied by poor people are the most degraded and subject to desertification.

Comments and questions

Although both papers accurately described existing conditions, they were criticised for the lack of proposals to rectify the situations that they defined. Further, it was thought that the role of women in cultivating the land was not considered. Another question is the ability of the many new land owners with no agricultural background to efficiently farm their land without degrading the resource.

Title deeds in many areas are essentially meaningless because private owners of what was once communal lands, continue to manage the land as if it were still communally owned. In Tunisia, the government has established a Land Allocation Council the duty of which is to mediate land tenure and usage conflicts.

There is evidence that people do play off one system of land law against another in attempts to better their situation.

The Third Working Session

This session discussed land tenure and resource access issues in the southern portion of the continent. The first paper, entitled 'The political economy of land tenure, natural resource management and resource degradation in Southern Africa: A Zimbabwean case study,' was presented by Dr James C. Murombedzi, CASS, University of Zimbabwe.

Currently in rural Zimbabwe there are two broad systems of land tenure. The commercial farm system is essentially a private ownership system in which large areas of land are allocated for large-scale commercial farming. This system developed in colonial times when this type of farming was restricted to whites. The communal ownership system is also an inheritance from the colonial period. In it, black tribal-based communities hold land in common. Both systems correlate with land classification zones. Most commercial farms are located on the best lands while, in general, communal lands are on marginal areas. This system of land allocation developed slowly from the period of initial settlement by the British South Africa Company.

Unfortunately these colonial policies are still being applied even though efforts are being made to reallocate land more fairly. This is because large-scale commercial

farming is economically viable. It is also unfortunate that over-exploitation of the communally held marginal areas is continuing. This means that these areas are increasingly subject to overstocking and to land degradation. Another result of long-standing colonial policies is that the state now has almost total control over the nation's natural resources. This control is confirmed by the fact that almost all traditional laws and practices are no longer operative and/or are forgotten. Post-independence policies are being implemented that are geared toward transferring ownership and responsibility for managing resources back to rural communities. The most significant of these policies is the village management system that produces significant economic benefits to participating local communities.

The situation of East Africa

The problems encountered by the pastoral Maasai in Tanzania were presented to participants by Dr Daniel K. Ndagala, Ministry of Education and Culture, Government of Tanzania, in a paper entitled 'Pastoral resource access and control and the desertification process in East Africa.'

East Africa has large arid areas. Eighty percent of Kenya, for example, is considered to belong to this category. Even so there are small, well-watered areas in the arid lands as well as permanent rivers. This means that in precolonial times, pastoral people such as the Maasai were able to comfortably survive by combining access to these well watered areas with year-round herding.

During the colonial period, many of these comparatively well watered areas were removed from the control of the pastoralists and given to white farmers. The reduction in their grazing lands, and in their ability to move about in response to environmental stress, has resulted in the marginalization of these people. The situation has also resulted in conflict when non-pastoralist tribes are moved into pastoralist areas because their lands were taken away from them, often for use by white farmers or, more recently, after designation as a park or wildlife reserve. Moreover, at the present time, many farmers are moving into the arid areas, with the encouragement of government, in order to utilize the patches of arable land that are available.

The author concluded that the evidence is that current state governments are antagonistic toward pastoralists and the communal ownership of land. As an activity, pastoralism is seen as being socially disruptive and an unacceptable method of land management. One reason for this attitude is the fact that pastoralists, while they are relatively few in number, have control over large tracts of admittedly often marginal land.

Discussion on the papers

The relationship between rural people in eastern and southern Africa wildlife is a complex one. Too often it is the state that attempts to profit from this resource that local people usually consider they own. Communities with access to wildlife resources should therefore become intimately involved with the management of the resource. This would result in the local people realizing that wildlife has an economic value in which they can share. It is important that local people have access to information sources in an understandable format that will provide them with information about their legal rights.

There is a tendency amongst agricultural policy formulators to believe that the large-scale privatization of land and intensive commercial agricultural exploitation of the resource are a panacea to many social ills associated with rural poverty. This is not the case. Intensive agriculture only works in areas where resources such as rainfall are reliable. In most of Africa rainfall is too variable on a season by season basis for intensive farming to be viable while converting land to large-scale farms displaces people who were otherwise employed in traditional agriculture. Thus by reducing the mobility of the indigenous population, people are marginalized and social problems are increased.

Senegal promulgated an innovative legal framework in 1972 that empowered local authorities to write local legislation governing the use of local resources. The state, however, maintained its right to veto any piece of legislation while refraining from empowering local authorities to veto state legislation governing access to the same resource. In other words, a good idea was weakened by the lack of a system of checks and balances.

The convention can support a process that will lead to a signatory country defining an appropriate tenure system. For example, it could require that land and resource tenure systems be devolved to an appropriate level as close as possible to members of local communities. It could also require that tenure systems empower and encourage people to conserve and improve their local environments and ecological systems.

The Fourth Working Session

The legal aspects of tenure systems and their effect upon desertification and land degradation, as well as other issues such as development, were discussed in the fourth working session. Dr Massata Guèye, Ministry of Rural Development, Government of Senegal, presented a paper entitled 'Politiques de développement et dégradation des ressources naturelles au Sénégal.'

An advocate of community participation in decision making and participatory management, Dr Guèye said that plans to increase community participation in development were constrained by the interaction between the three types of resource tenure and management arrangement that existed in Senegal.

These were:

- those associated with the state;
- those associated with communal property; and
- those associated with private property.

Recent government policies toward these systems have tended to optimize the productivity and the political development of state and private tenure arrangements at the expense of communally held resources.

Land is generally a collective property in African societies as ownership is based directly upon the output of work. Shared work results in collective ownership. This means that tenure issues need to encompass a much wider range of issues than those just associated with agrarian activities.

Many of the tenure problems faced today relate to a lack of understanding of indigenous cultures by colonialists. For example, they requisitioned unoccupied land not knowing that it was communal land in a fallow state. Often defined as state forest, problems occur when these areas are once again opened up for exploitation. Then, because the original pattern of management activities has been lost, the area is often overexploited by its new users.

In much of Senegal, sylvo-agriculturalism is the most sustainable and traditional land use management practice. Conflicting land use activities, however, as well as a reduction in the area of available usable land are negatively affecting areas that are under sylvo-agricultural and sylvo-pastoral management regimes. The result is that riverine areas, the traditional home of farmer-fishermen, are being encroached upon. As well, wildlife habitats are being degraded and the returns from hunting are decreasing. Hunting, it should be noted, has traditionally supplied protein to pastoralists at times when their cattle stocks are depleted by drought or other natural events.

Past state development activities have also had their negative side effects. The digging of wells in arid and semiarid areas, for example, has resulted in the over grazing of the vegetation surrounding the water point. This leads to problems with water supply and the creation of desertified spots that quickly erode and tend to enlarge.

The participation of communities in the management of the resources upon which they rely may be one solution for unproductive development. One problem is that in many African countries the desire to create a strong central government has degraded, or in some cases eliminated, traditional community structures that might have been used. Senegal helps communities recreate themselves by encouraging grouping around such community structures as schools. Communities are then encouraged to recreate their own modes of jurisprudence, education and taxation as well as management resource structures.

Tenure systems and desertification

The role of tenure systems in land degradation was discussed in a paper entitled 'Le foncier dans le processus de la desertification: cause ou remede,' presented by the author, Tidiane Ngaido, Research Assistant, Land Tenure Centre, University of Wisconsin-Madison.

Stating that tenure systems have developed from the interaction of people with their resources, the author noted that indigenous people define their positions with reference to the resources they use as responses to the constraints they face from their environment. Because of this, it was necessary to understand the 'yardsticks' that people employed in their relationships with their tenure systems. When this was done, he believed that development activities would be more successful.

All programmes that have tried to ameliorate the physical problems faced by developing world communities have failed when they ignore the human element. It must be remembered that the collective use of resources leads to improved security for individuals as well as for groups such as farmers. This means, for example, that social sanctions are the most effective way of controlling human behaviour in traditionally-based societies. Development workers therefore have to study all traditional laws and understand how they work and are used as well as their relationship to the day-to-day lives of community members.

It is a feature of tradition-based communities that people's attitudes to their resources change as their use of the resources change. This also means that control of access to the resource changes as use of the resource develops. People also have the means to develop *ad hoc* methods of resource management. Often this is based upon their immediate experience with the resource.

In tradition-based communities, problems occur when these self-determined resource management techniques are arbitrarily superseded by regulations promulgated and enforced by a *supra* body such as the state. The problem then becomes how to resurrect the previous relationship and help it to adjust to the new circumstances. At the same time, the requirements of the state must be adjusted so as to allow the tradition-based laws to evolve and be implemented where and when they are efficient.

The independent African governments have perceived the traditional forms of tenure as having elitist elements and therefore have introduced reforms intended to democratize resource access. The reforms inadvertently redefined the boundaries between the different groups interested in the resource and this led to misuse of the resource and sometimes degradation. Resource degradation has also resulted in social degradation as the roles of community members were affected by tenure reform. It is thus only by looking at these two aspects of degradation together that a complete picture of the situation is arrived at. Only then will adequate solutions be found.

Statement from the NGOs

Enoch Okpara, Nigerian Environmental Study/Action Team, Ibadan, Nigeria, made a presentation on behalf of the six NGOs making up the IDRC supported project, Desertification Convention, Africa.

The NGOs have a role to play in bringing about the sustainable management of land resources in the context of sociocultural settings found in Africa. This accomplished by:

- working at the community level to mobilize people to assume greater responsibility over their resource base; and
- using their powers of informed advocacy to see that appropriate legal and institutional frameworks are put in place to guarantee access to land and resources.

Comments from the floor

The growth of voluntary rules, regulations and management practices needs to be studied in order to ease attempts by government to control situations and resources.

In the process of creating policies for development, the sustainable management of resources must be included as well as the economic necessities of the population.

Many government-run development projects take too broad an approach and apply technical solutions from outside the culture in a wholesale fashion.

Power is never given, it has to be taken. Thus, in order to be effective managers, people have to take control of the opportunities that are either available or are presented to them.

State policies of centralizing power have resulted in the effective disenfranchisement of communities. Despite this, traditional structures have survived. This is because Africans are deeply committed and involved in the use of their traditional structures.

Security of tenure is one of many incentives to combat desertification and land degradation and there are many ways to increase security of tenure. The process of defining security is critical and should be carried out at a national level.

The Conclusions and Recommendations of the Workshop

In the final session of the workshop, the discussion centred upon the conclusions and a list of proposed recommendations that would form the basis of a list to be presented to the INC-D negotiators at their next meeting. The following are the conclusions arrived at by workshop participants and the list of the draft recommendations grouped in categories:

Conclusions:

A plurality of tenure regimes can be appropriate in any place (country) at any one time. Efforts should be made to identify and support appropriate tenure arrangements for specific ecological and/or socioeconomic environments. The privatization of resource ownership is not necessarily the best answer to problems of land degradation, especially in dryland areas.

Mobility, risk sharing, flexibility and controlled access to key resources are essential for pastoralists in dryland Africa. Under these conditions, pastoralism is sustainable and provides an optimal system for drylands management. (Resource privatization is not conducive to pastoralism in the arid and semiarid areas of Africa and the land use practices that accompany privatization are often not sustainable in these areas.)

The appropriate response to the environmental degradation of the commons, often referred to as the 'tragedy of the commons,' is not necessarily privatization of the commons by individuals. Broad ranges of alternative communal property regimes exist that are better suited to drylands management. Tenure arrangements should be encouraged that promote greater community control over the commons in dryland areas. User groups should negotiate tenure arrangements to the commons.

African tenure systems are complex, varied and constantly changing, especially in arid and semiarid areas. This is due to the complexity of social and ecological systems found on the continent. These tenure systems should be better studied, publicized and appreciated. Local tenure arrangements merit protection if they support sustainable resource management.

Commons are of particular importance to the poor and they have a special interest in protecting them. Examples of successful management of the commons exist throughout Africa.

Managing dryland areas as integral ecosystems through communal tenure regimes is consistent with and promotes the objectives of the international climate and biodiversity conventions.

Certain tenure conflicts may not have solutions at this time and may remain unresolved. Economic diversification is important in order to absorb growth in the population.

Recommendations:

LEGISLATION and RULE MAKING

National legislation that enables local rule-making is necessary.

Local community process of rule making should be encouraged.

Legislations pertaining to dryland management needs harmonizing to reduce conflicts. Legislation must reflect the needs of pastoralists.

Legislation should be simple, accessible and applicable to all rural areas.

Legal and paralegal education is needed for government and rural/urban populations on legislation and administrative practices.

HUMANITARIAN FACTORS

Clarification and continuity are required in tenure relations

The state is needed to guarantee debate and the evolution of tenure systems by incorporating the interests of all members of society.

Provide framework (forum) at different levels for all actors and interest groups to express perspectives on tenure.

Capacity and awareness building to encourage the state to recognize local tenure practices.

Conflict resolution mechanisms are needed at all levels and the justice system should be available to the poorest and least empowered members of a society.

TENURE DIVERSITY

The state should recognize and respect tenure diversity and practices.

State should facilitate changes in tenure and land-use practices to meet new ecological and environmental conditions.

Flexible tenure arrangements are necessary but these should be renegotiated

easily as needed by all the actors concerned.

RESEARCH and DEFINITION

Co-management (partnerships) need to be defined between different actors at different levels of society. Contractual agreements should be negotiated through a process of agreements.

Tenure monitoring is necessary to assess changes in tenure systems using new technologies if they are cost effective.

Action Participatory Research is needed on ways to increase the access of differentiated social categories to natural resources.

Indigenous Knowledge of rules and practices should be incorporated into the negotiation of new tenure arrangements.

Research on tenure practices should be valorized and multidisciplinary. It should take into account issues related to tenure.

MANAGEMENT POLICIES

National and international development policies should facilitate and encourage the sustainable use of natural resources.

Pastoralist resource management practices are often the most appropriate uses of semiarid lands. Pastoralist tenure arrangements (management systems) of water and pasture resources should be respected and protected.

USER GROUPS

Those that currently use resources should have a priority, though not an exclusive role, in determining tenure arrangements.

While priority should be given to local communities, decision mechanisms must take into account national and regional priorities.

Disenfranchised social categories (women, children, minority ethnic groups) should be allowed to partake in the negotiation of new tenure arrangements to natural resources.

ACCESS TO INFORMATION

Easy and inexpensive access to information such as cartographic data.

Workshop evaluation report

An evaluation form was given to all participants on the first day and they were requested to evaluate the workshop using a 6 point scale: 1: very poor, 2: poor, 3: fairly good, 4: good, 5: very good, 6: excellent. Criteria on which the workshop was to be evaluated are below.

Twenty eight participants handed in their evaluation form on the last day, with the following scores:

- i. Did the workshop measure up to your expectation? Average score was **4.2, i.e. good**, with a spread of 3 to 6.
- ii. To what extent did the workshop fulfil its objectives of:
 - providing useful information for the upcoming rounds of INC negotiations? Average score: **4.2 (good)**, spread: 2 to 6.
 - providing a forum for addressing key issues related to tenure systems and desertification, and identifying need for future research and development activities? Average score: **4.7 close to very good**, spread: 2 to 6
- iii. Presentations: Relevance of topics and quality of presentations were both scored at **4.2 (good)** with a spread of 2 to 6. Time allocated to discussions was scored rather low with an average of **3.5 (fairly good)** and a spread of 2 to 5. Nevertheless, the value and quality of discussion was well appreciated, with an average score of **4.2 (good)** and a spread of 2 to 6.
- iv. Logistics: Criteria evaluated under this topic were: workshop administration which scored 5.1 (very good) spread between 2 and 6; hotel services which scored 5.1 spread between 3 and 6; and materials and documents provided with a score of 5.3.

- v. Other comments: Only 13 of the 28 participants that evaluated the workshop made some additional comments which are reproduced verbatim under the various sections they addressed.

- Documents provided.

a) Case studies commissioned by IDRC were quite good and very interesting. I hope the discussant comments are incorporated into the final versions; literature was provided late to participants so it was difficult to read all papers before sessions. No copies of desertification convention draft for participants, how can we frame our discussions?

b) More background information on the convention is needed in the future, efforts should be made to have "summaries" of the papers written and reproduced in major languages of the workshop.

c) Si on pouvait savoir à l'avance les titres des communications cela nous aurait bien aidé à contribuer aux discussions; tous les documents doivent être traduits dans les deux langues de travail.

- Workshop organisation

a) Certains ont pensé qu'on aurait dû travailler en groupes:

b) At some point, the seminar should have broken down in small groups for greater participation, provide for more interchange: eg three subgroups at various times during the meeting.

c) Très peu de femmes invitées; les impliquer davantage.

- Time use

a) Schedule not followed tightly, time wasted as a result. Start session on time! Question answer format totally inadequate. Why not follow a more flexible format? The classical French system of lists, long and verbose questions is really quite inappropriate.

- Workshop Recommendations

- a) On aurait pu prendre plus de temps pour préparer les recommandations.
- b) Not enough time to generate adequate conclusions plus recommendations before plenary session.
- c) No time was really given to write down participant thoughts because the morning question/answer session poorly managed?
- d) The organisers should have set up a better structure for generating recommendations. Set up an outline within which recommendations can emerge easier, or review papers and extract recommendations.

- Congratulations

- a) Très bon travail, très bon atelier.
- b) Action à poursuivre
- c) This in my view was a very successful workshop.
- d) Most of the objectives were realised, the organisation was superb. Keep it up.

Conclusion

In general one can conclude that the workshop was well organised and met the set objectives. A number of points should be highlighted and taken into account for implementation during the next workshop on trade and economic policies.

1. Working groups to tackle specific aspects of the agenda and make recommendations. This was not done in Dakar because of the problem of providing interpretation for small working groups. It might be easier in Nairobi.??
2. Allocate sufficient time for preparing and discussing recommendations.
3. Poor female representation should be looked into and rectified.

4. Examine possibility of providing all papers in the two languages. Or at least the executive summaries.

5. More time for discussion!! In Dakar, one and a half hours including discussants' 20 minutes commentaries were allotted for discussing the pair of papers presented per session, and this appears adequate. Some chairpersons managed this period well, others did not. Serious thought should be addressed to the issue of more discussion time, time for working groups and more time for recommendations, all in three days!!

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