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The Desertification Convention:

a Progress Report

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I. Introduction

Desertification constitutes one of the international environmental problems whose global importance has been recognized by the international community. This importance is clearly visible in the massive endorsement that states have given to the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa adopted in 1994.

Desertification is a problem which affects a number of regions of the world in developed and developing countries but Africa, the continent with the largest number of least developed countries, is the region which suffers most from desertification. Desertification is perceived differently from other global environmental problems such as climate change mitigation or biodiversity management. This is due in part to the fact that the negative impacts of desertification are confined to a given region and do not affect directly all countries. It is nevertheless slowly being recognized that land degradation in drylands is, for instance, a significant vector of biodiversity loss.

The concept of sustainable development which constitutes the focus of much of recent environmental policy making implies that environmental problems cannot be tackled without taking into account the broader development framework into which they fall. While this is true for most environmental issues, desertification is even more closely associated with the development process insofar as it impacts on people's livelihoods much more directly than other environmental problems. In particular, there are close links between dryland degradation and food production. Given that the satisfaction of basic food needs for an increasing world population constitutes one of the central challenges of environmental management in the coming years, the loss of productive land is of major concern in a world where hundreds of millions of individuals already go hungry today.

II. The Problem of Desertification

Land degradation which is caused either by anthropogenic or climatic factors has occurred since time immemorial. In recent times, it became an issue of international significance in the wake of the Sahelian drought of 1968-1973. Since then, there have been several coordinated efforts at the international level to tackle the growing problem of desertification and land degradation which have culminated in the adoption of the Desertification Convention.

Definition and Extent of Desertification

The definition of desertification has varied over time and has been the object of significant debates among specialists. In particular, there has been disagreement over the extent to which anthropogenic factors are to blame in the process of land degradation. The most recent definition inserted in the Convention recognizes that a variety of factors are at stake and states that desertification is land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities.

An exact assessment of the extent of land degradation remains elusive both because of the difficulties involved in measuring it and because of the different definitions used over time. However, it is estimated that about 40% of the total land area of the world or 6.1 billion hectares is dryland and that 15% of these drylands (1 billion hectares) are hyper-arid deserts. The greatest impact of land degradation is in the African continent where dryland, including hyper-arid deserts, comprise about two-thirds of the continent. It is significant that the 5.1 billion hectares drylands which are not hyper-arid deserts support about a fifth of the world population.

Causes of Desertification

Desertification is caused by a number of factors which have been the subject of significant debate. One can generally distinguish between climatic factors such as natural disasters and human factors such as salinization of water sources or overexploitation of biological resources. Climatic variations have significant impacts on dryland soils because they are inherently vulnerable to desertification processes as they already have low levels of biological activity, organic matter and aggregate stability. Indeed, dryland soils become increasingly susceptible to accelerated erosion by wind and water as plant cover decreases.

Human actions constitute the other major cause of desertification. While the data concerning human impacts on drylands is not good, a number of trends and factors can be highlighted. The direct human-induced causes of desertification include overgrazing, over cultivation, deforestation and salinization on irrigated cropland. One estimate of the direct causes of degradation allocates, for instance, the responsibility to overgrazing (35%), deforestation (30%), other agricultural activities (28%), overexploitation of fuel wood (7%) and bioindustrial activities (1%).

Generally, human-induced desertification is caused by the intensification of land use. This is also linked to broad structural changes such as increasing population densities, local socio-economic development, distribution of property rights over land and the unfavorable impacts of the international economic order. Population growth and migration to dryland areas have often been brandished as primary culprits of land degradation. While increasing human population is bound to increase the pressure on natural resources, especially in situations where the basic necessities of life are not available, the relationship between population and desertification is not clear-cut. In some cases, as in the case of the Indira Gandhi Nahar Pariyojana (Rajasthan canal) in northern India, the introduction of irrigation water has made cultivation possible in new areas and has therefore directly resulted in important migration flows to the area. In this case, land degradation seems to be linked directly to rapidly increasing human population and expanding livestock numbers. In other cases, however, it has been noted that when out-migration from drylands previously cultivated may accelerate the process of desertification because the land is not any more adequately managed. In the case of the Machakos district in South-East Kenya, land deemed to be unsuitable for cultivation a few decades ago had been successfully regenerated. Further, it appears that local people, despite their difficult economic situation and a rather adverse climate, have not destroyed their environment while improving their livelihoods. Indeed, the district seems to have been able to sustain agricultural intensification, improved conservation and increased output through several decades of population growth in excess of 3% per annum.

Impacts of Desertification

Desertification is unanimously acknowledged to have significant adverse impacts for affected populations and affected countries. It is associated with accelerated soil erosion by wind or water, salt accumulation in soils, reduction in species diversity and plant biomass and reduction in overall productivity of dryland ecosystems. It often leads to the conversion of usable drylands to land which is unable to support agriculture or settlement.

The loss of soil fertility constitutes one of the major socio-economic impacts of desertification with direct repercussions on yields, food production and people's incomes. In turn, this directly contributes to the exacerbation of poverty, to migration or displacement and social breakdown with the resulting political instability that this can bring about. Losses in productive capacity caused by desertification which include production lost because of human-induced land degradation and the cost of rehabilitation are difficult to estimate but are of significant magnitude. The United Nations Environment Programme (UNEP) estimated, for instance, for 1991 that losses amounted to $42.3 billion a year.

Desertification also has a number of environmental consequences. These include a loss of endemic animal and plant species. Despite the perception that drylands are not rich in biodiversity, it is remarkable that a number of the most important food crops on which humankind relies such as wheat, barley and millet originated in arid or semi-arid lands. Land degradation also reduces resilience to climatic disturbances such as drought or human-induced impacts such as overgrazing. Further, it can also contribute to flooding and sedimentation.

III. The Internationalization of the Question of Desertification

The preceding remarks on the extent and impacts of land degradation indicate clearly that desertification is a significant international environmental problem. Combating desertification is also a central component of the realization of sustainable development at local and international levels. Indeed, the solution to a number of other environmental problems cannot be found unless the problem of land degradation is tackled alongside. Even though land degradation is closely related to a number of other environmental problems, in particular the management of biological and water resources, the international community has decided to address the problem of desertification as a separate topic. Today, land degradation is therefore a distinct issue in international legal parlance, as indicated by the existence of a separate desertification convention, alongside the various other international environmental treaties.

Early Developments

Desertification has been a concern for all human societies established in arid or semi-arid areas from antiquity. In recent times, one of the first international efforts at addressing land degradation was the UNESCO arid zone program established in 1952. However, it was only in the 1970s that desertification became a focal point of international attention. The trigger was the Sahelian drought which started in the late 1960s and focused the world's attention on the seriousness of the situation there. This was reflected at the Stockholm Conference on the Human Environment in 1972 and led to the establishment the following year of the United Nations Sudano-Sahelian Office (UNSO) which was charged with coordinating recovery and rehabilitation efforts in drought affected regions. The limitations of action focused only on drought relief for addressing the underlying social and environmental problems linked to the drought led the General Assembly to declare the next year that the international community should make appropriate efforts to take measures to combat desertification in affected developing countries since land degradation has important negative repercussions on their agricultural production. This paved the way for calling an international conference on desertification in Nairobi.

The Desertification Conference and the Plan of Action

The UN Conference on Desertification which took place in 1977 was the first major international meeting addressing specifically land degradation. It was in large part a response to the regional crisis which had erupted in the Sahel but it managed to make land degradation a core environmental issue at the international level. The main result of the conference was the adoption of a Plan of Action to Combat Desertification (PACD) which

sought to prevent and arrest the advance of desertification, to reclaim desertified land for productive use, and to sustain the productivity of areas vulnerable to desertification in order to improve the quality of life of their inhabitants. The PACD presented a set of recommendations for initiating and sustaining cooperative efforts to combat desertification. It was divided into three main areas: The first focused on national and regional action, including desertification evaluation and land management, corrective anti-desertification measures, underlying socio-economic aspects and on the strengthening of national science and technological capacities. The second section focused on international action and in particular the role of the UN and other international agencies in tackling desertification and recognized the need for cooperation among neighboring states to deal with a problem which is often transboundary. The third focused on measures to be taken to implement the PACD.

The PACD generally acknowledged that the success of the fight against desertification implied the recognition of the interdependence of a number of factors and the need to take them all into account at the same time. These elements included the development process, population change, relevant technologies and biological productivity. The PACD thus recommended that governments should formulate programs to combat desertification that would be part of an integrated and comprehensive developmental plan transcending sectoral approaches.

Overall, the plan of action reflected a broader recognition of the importance and seriousness of desertification. It did recognize the importance of using knowledge evolved at local levels to fight land degradation and the fact that the success of anti-desertification measures depended on public awareness and participation. However, it was generally based on a top-down approach where effective participation of affected people was not a priority. Further, the PACD reflected the idea that affected people were often the main culprits in the process of desertification. Thus, its basic principles included, for instance, the need to educate people and affected communities to an awareness of the problem. More specifically, it noted that ecological degradation was due to a considerable extent to the subsistence-level economies and activities of local inhabitants which resulted in overgrazing, rapid soil erosion and deforestation.

The PACD envisaged full implementation by the year 2000. However, implementation was bogged down from the beginning. Serious inconsistencies made the Plan to a large extent irrelevant. Thus, while calling for a bottom-up approach and the recognition of the importance of local knowledge in tackling desertification, it also promoted large-scale technical solutions which were not commensurate with a bottom-up approach. Further, affected countries did not take implementation seriously. Overall, the Plan of Action generated further international awareness concerning the seriousness of the land degradation issue but failed to stem the spread of desertification. This was due in large part to the unavailability of sufficient funding to carry out required measures and by the lack of effective participation by affected people and communities. UNEP's own review of the situation in 1991 came to the conclusion that little evidence of progress had emerged from the reports received.

The failure of the PACD to promote effective action against land degradation led some states to demand further action in this field. Thus in the context of the preparation for the UN Conference on Environment and Development (Rio Conference), the UN General Assembly urged developed countries and international organizations to intensify their efforts to combat desertification and intimated that the Rio Conference should accord high priority to the fight against desertification. This reflected in large part the demands of African states seeking to see further attention given to this problem at the international level. Negotiations for an international treaty concerning desertification were not undertaken before the Rio Conference. However, to secure the active participation of all developing countries in the negotiations for the Biodiversity Convention and Climate Change Convention, it was formally agreed that negotiations on a desertification convention would be undertaken with a view to adopt an instrument by mid-1994.

IV The Desertification Convention

The Desertification Convention was adopted in Paris on 17 June 1994 after negotiations extending over a period of one year. It came into force on 26 December 1996 and had 167 member states as of September 2000. It is a direct product of the Rio Conference in more senses than one. On the one hand, its negotiation was part of a deal struck during the preparations for the 1992 Conference. On the other hand, the fact that the Convention was not negotiated in the Rio framework was a reflection of the lesser importance attributed to desertification by some countries as an international environmental issue.

Basic Structure

The Desertification Convention is a lengthy document which reflects a compromise between proponents of a framework convention on the model of the Climate Change Convention and proponents of a more operative instrument including more precise and directly implementable obligations. The final result is a treaty which provides a broad framework for tackling desertification and several regional annexes which strive to give more specific content to the instrument. The general focus of the Convention is also noteworthy. While it is an instrument meant to tackle desertification generally, it was supposed to give special emphasis to Africa because of the seriousness of land degradation in this continent. At the end of the day, while some measure of emphasis on the African region was retained, the negotiators could not avoid the demands of other affected regions for special consideration. The result is the several annexes for Africa, Asia, Latin America and the Caribbean and for Northern Mediterranean, and an additional annex for Central and Eastern Europe adopted at the fourth meeting of the Conference of the Parties.

The Convention's main objective is 'to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas'. The main strategies to combat desertification proposed include improving the productivity of arable land and the rehabilitation, conservation and sustainable management of land and water resources.

The Convention is governed by several guiding principles which give it a particular orientation. First, the Convention highlights the need for state parties to involve local people and local communities from the design stage to the implementation of programs and projects to combat desertification. This emphasis reflects concerns about a number of previous anti-desertification efforts which were seen as being heavily top-down. It also reflects the significant involvement of non-governmental organizations (NGOs) in the negotiations which allowed them to push through some of their suggestions in the text of the Convention. Second, the Convention focuses on the need for all relevant actors to cooperate towards finding solutions to the problems of land degradation. This partnership includes not only cooperation among states but also with all other actors, whether government bodies or NGOs. Third, the Convention recognizes the necessity to take into account the specific needs and circumstances of developing countries. This differential treatment is most clearly articulated in the fact that developed countries take on specific commitments that are not required from developing countries. The Convention also implicitly adopts other principles that have been generally evolving in international environmental law, such as the prevention principle. Thus, it focuses, for instance, on the necessity to prevent land degradation as one of the first of the three main strategies to combat desertification. At the implementation level, it also emphasizes the need for preventive measures to avoid degradation where it has not yet taken place.

Under the Convention, member states undertake to fulfill a number of obligations which can be characterized as being general and vague. Thus, the first obligations of all member states is to adopt an integrated approach addressing the physical, biological and socio-economic aspects of the processes of desertification and drought. One characteristic of the Convention is to provide general obligations applicable to all states and obligations which apply only to one specific group of countries. Article 5 and 6 thus outline the obligations of states which are affected by desertification and the special obligations of developed country parties. Affected country parties are, for instance, requested to give priority to combating desertification and to allocate sufficient resources to this aim. Developed country parties, whether affected by desertification or not, undertake, for instance, to support the efforts of affected developing countries, to provide financial resources, promote the mobilization of funding and to promote and facilitate access to appropriate technologies and knowledge. These different commitments reflect the principle of partnership and the different capacities that states have to tackle desertification. However, the Convention does not go far in spelling out the 'differentiated' situation of developed and developing countries. While the Climate Change Convention specifically indicates that developed countries should take the lead in combating climate change, the Desertification Convention puts most of the burden on affected countries, whether developed or developing countries.

Overall, the Convention leaves member states immense latitude to interpret its provisions. This is reflected in several areas. The basic principles outlined above are cast in such a way that they represent in practice extremely general aspirations which cannot be enforced against member states. These principles in effect constitute guides for member states' policies but can hardly serve as yardsticks against which to measure states' implementation of their commitments under the Convention. Specific commitments also indicate the same tendency towards providing open commitments whose exact interpretation is mostly left to the discretion of member states. The first regional annex which focuses on Africa seeks to delimit more precisely African states and developed countries' obligations. However, Article 4.1 which specifies African states' commitments indicates that states must only 'undertake' to fulfill these obligations and that they should do so according to their 'respective capabilities', in effect giving these states complete discretion over the extent to which they want to implement their commitments.

While commitments are rather open-ended on the whole, the Convention, like most other environmental treaties, also falls short of providing strict procedures for the enforcement of the member states' commitments. The main instrument for monitoring states' implementation of their obligations is the reports that member states must submit to the Conference of the Parties. The reports of affected countries must indicate what strategies have been put in place to combat desertification and report on their action programs while the reports of developed countries must focus on measures taken to assist affected countries in the preparation and implementation of action programs.

The Convention provides, however, that member states must adopt mechanisms for resolving questions of implementation. An institutional regime for this purpose could not be adopted during the negotiations in 1993-1994 and the task was left to the Conference of the Parties. As in other environmental treaties where similar mechanisms are being developed, the regime to be adopted for the Desertification Convention will constitute an avenue to avoid direct confrontation among member states and therefore reduce the chances of formal disputes. While emphasizing at Article 27 the need to develop mechanisms to solve problems with regard to implementation in a non-confrontational manner, the Convention also provides a framework for the settlement of formal disputes among member states. In such cases, it generally encourages states to negotiate. It gives member states the possibility to declare that they want disputes to be solved through arbitration or to be submitted to the International Court of Justice. An annex on conciliation and arbitration could not be adopted before the signature of the Convention. A draft Annex which is largely modeled after existing similar procedures has now been put forward.

The Convention in Practice

The framework for putting the states parties' obligations in practice is given in Part III of the Convention which calls for the setting up of action programs at different levels. Countries are encouraged to prepare national action programs that should provide the central element of their anti-desertification strategies. The Convention specifically requires that available financial assistance should be used in priority for supporting action programs. These programs include national, subregional and regional programs. The former are meant to identify factors contributing to desertification and highlight practical measures which can be taken to combat desertification.

The Convention is innovative in a number of ways. It calls for effective participation of all relevant non-governmental actors in planning policies, taking decision and implementing and reviewing action programs. It also recognizes that a number of areas must be tackled concurrently to address the desertification problem effectively. These include a number of socio-economic factors from the promotion of alternative socio-economic livelihoods, the eradication of poverty and food insecurity to the sustainable management of natural resources including sustainable agricultural practices. Further, it emphasizes the need for all actors, from donor and affected governments to local community groups to work cooperatively.

One of the specificities of desertification is that its direct impacts range from the local to the regional levels. This explains the relevance of the regional annexes which come to clarify and further specify countries' obligations with regard to tackling desertification in the particular region covered. The regional annex for Africa gives, for instance, more substance to African countries' commitments and focuses on initiatives which can enhance cooperative measures within the region. It also specifies developed countries' obligations with respect to this particular region. The Annex also highlights the broad contours of the national action programs. These should, for instance, be based on past experiences in combating desertification, should identify factors contributing to desertification and seek to increase people's and local organizations' participation. The plans are also to focus on issues which have a direct bearing on the success of anti-desertification measures, such as the eradication of poverty, the sustainable management of biological resources or measures to foster better knowledge concerning land degradation.

In practice, all African countries are involved in the preparation and implementation of national action programs, a sign of their interest in making the Convention a reality on the ground. Further, plans are also being prepared at the sub-regional and regional levels in Africa. In preliminary stages, these processes have, for instance, led states to formally recognize the synergies that may exist concerning various areas such as the management of shared water, animal and plant resources, scientific and technical cooperation or early warning systems. The Secretariat's assessment of these processes has been to acknowledge the goodwill of relevant actors despite the difficult circumstances they often face, in particular with regard to the allocation of resources for this process and the lack of commitment by donor countries.

The Convention also tries to address some of the factors which often constraint effective participation of member states in international meetings, in particular the costs involved for small developing countries. As in the case of the Climate Change Convention, a voluntary fund was thus set up already during the negotiations for the Convention to allow developing countries to participate fully and effectively in the negotiation process. The Conference of the Parties (CoP) decided to maintain this scheme and expand it to include a Special and a Supplementary Fund. The Special Fund aims at supporting the participation of developing countries' representatives in the meetings of the organs of the Convention while the Supplementary Fund supports the participation of non-governmental representatives from developing countries and generally facilitates developing countries' efforts to fulfill their substantive obligations. Both Funds depend on voluntary contributions.

Financial Issues

It is estimated by UNEP that an effective 20-year international effort to tackle desertification would cost between $10-20 billion a year. While it is difficult to estimate exactly how much is spent on anti-desertification measures, it is known that the main source of funding until now has been affected countries themselves. The implementation of the Convention requires the allocation of substantial resources. At this level, the principles of partnership and differentiated responsibilities has been interpreted in a manner which differs from other environmental treaties of the same period. This is due to the marked reluctance of the donor community to commit substantial funds to the problem of desertification. The result is a complicated structure which tries to take into account the interests of the various groups of countries.

The Convention generally recognizes that all member states should make efforts to ensure the availability of adequate resources according to their own capabilities. In practice, developed countries are required to mobilize financial resources, facilitate technology transfer and explore ways to mobilize other sources of funding such as those of foundations and other private sector entities. Developed countries' obligations thus do not go much beyond having to 'mobilize' resources. This can be contrasted with the financial provisions of the Biodiversity Convention which requires them to provide new and additional financial resources. Another significant distinction between the two conventions concerns the importance of financial commitments for the overall effectiveness of the treaty. The Biodiversity Convention provides that the extent to which developing countries will effectively implement their commitments will depend on the effective implementation by developed countries of their commitments related to financial resources and transfer of technology. On the other hand, the Desertification Convention provides only that full implementation by affected developing countries will be greatly assisted by the fulfillment by developed countries of their obligations regarding financial resources and transfer of technology. Indeed, under the Desertification Convention, affected developing countries must themselves mobilize adequate financial resources for the implementation of their national action programs.

One of the most significant differences between the Rio Conventions and the Desertification Convention concerning financial issues is the fact that desertification is not one of the focal areas of the Global Environment Facility (GEF), a financial mechanism which was set up specifically to support measures to solve global environmental problems. The GEF is meant to provide funding to meet the incremental costs of measures to achieve agreed global environmental benefits in the areas of climate change, biological diversity, international waters, and the depletion of the ozone layer. Desertification is not completely absent from the GEF but activities concerning land degradation can only be funded if they relate to one of the four focal areas.

With the realization that desertification cannot be seen in isolation from the management of biological resources or policies to mitigate climate change, the GEF has progressively started showing more interest in land degradation. The main linkages between land degradation and GEF's focal areas have been found to include the enhancement of dryland soils as carbon sinks, the utilization of dryland biodiversity to provide alternative livelihoods or the reduction of sediment or salt pollution in water sources. Further, the Operational Strategy of the GEF specifically recognizes the existence of linkages with land degradation. In the case of biodiversity, for instance, GEF will fund activities which protect biodiversity and promote sustainable use in arid and semi-arid ecosystems and activities which prevent deforestation and promote the sustainable management of forest resources.

While the GEF was not chosen as the financial mechanism for the Desertification Convention, the negotiators agreed on the importance of financial resources for the effective implementation of the Convention. The solution found was the establishment of a Global Mechanism (GM). The GM is not meant to be a fully-fledged financial mechanism like the GEF but only to serve as a conduit for channeling resources towards anti-desertification activities for the benefit of affected developing countries. Since the negotiators did not want to create a new institution, the GM was conceived as an entity to be housed in an existing structure. The International Fund

for Agricultural Development, a specialized agency of the UN whose primary focus is to mobilize resources for agricultural development in developing countries, was chosen for this purpose. The GM has been given several related tasks whose central aim is to facilitate the mobilization and channeling of financial resources for the elaboration and implementation of action programs. First, it is meant to identify existing sources of funding and disseminate information concerning their availability. It is further entrusted with providing advice to affected developing countries concerning available resources and the ways to mobilize new funds. The GM should also foster cooperation among the various existing multilateral sources of funding and promote the involvement of new donors such as private foundations. Institutionally, the GM functions under the authority of the Conference of the Parties and is fully is accountable to it. The GM started functioning in 1998. In its initial years, it has strived to support the implementation of national, sub-regional or regional action programs, to foster new approaches to cooperation with NGOs and to launch initiatives to explore new sources of funding. The latter include, for instance, carbon sequestration for which funding will probably be forthcoming in the context of the Climate Change Convention and debt relief.

Institutional Structure

The Convention sets up an institutional framework to foster the effective implementation of its provisions. This institutional set-up represents a compromise between the position of developed countries which wanted to avoid the creation of new institutional capacity and developing countries broadly seeking a treaty which would establish new institutional structures, such as regional research centers or an international mechanism for drought prevention.

The supreme organ is the Conference of Parties (CoP). It comprises all member states and will meet every two years from it fifth session held in 2001. It is meant, for instance, to take decisions concerning the progressive implementation of the Convention, to develop the institutional machinery and to adopt amendments to the Convention. The CoP adopted its rules of procedure at its first meeting but has not yet managed to adopt the article concerning voting procedures. While the principle that the CoP normally takes decision by consensus is not contested, member states have failed to agree on a majority rule in cases where consensus can exceptionally not be reached. In any case, the CoP can only take decisions if two-thirds of the member states are in attendance. The CoP is supported by a Secretariat located in Bonn which provides the day-to-day administrative capacity necessary for the CoP and more generally for the effective implementation of the Convention.

Apart from the CoP, the Convention also establishes a Committee on Science and Technology. The Committee consists of government representatives that have specific competences in the field. It is meant to provide information and advice to the CoP on scientific and technological matters relating to combating desertification. It has advisory functions which include providing scientific and technological knowledge required to implement the Convention and advising the CoP on the probable implications of the evolution of scientific and technological knowledge for the implementation of the Convention. It is also meant to make recommendations concerning research on the scientific and technological tools required to implement the Convention and concerning the identification and use of technology, knowledge and know-how that can be used in combating desertification. The significant uncertainties that still exist concerning the causes, extent and consequences of desertification imply that the Committee may come to play a significant role in the development of the desertification regime.

V. The Convention and the Realization of Sustainable Development

The Desertification Convention is the central international instrument for addressing land degradation issues. Its successful implementation is of tremendous importance for vast regions of the world where desertification impacts not only on the environment but also contributes to declining levels of socio-economic development.

Lessons from the Convention To-Date

The Convention contains a number of innovative provisions and strategies for tackling land degradation. In particular, the experience gained with the implementation of the PACD led to the realization that local people should not be seen mainly as a cause of desertification but rather as the main agents through which land degradation can be halted or reversed. The Convention thus strongly emphasizes the need for decentralized planning and the participation of local people, local communities and NGOs at all stages. The participation of NGOs has been institutionalized through the setting up of the *Réseau d'ONG sur la désertification et la sécheresse* (RIOD - NGO network on desertification and drought). The RIOD seeks to facilitate communication among NGOs working in this field and foster their participation in the implementation of the Convention. It serves as an information clearing house that allows governments and the Secretariat to better communicate with NGOs. The Convention also repeatedly draws links between land degradation, other environmental problems and socio-economic development. It recognizes the existence of a number of linkages between these various issues. It also explicitly calls on member states to coordinate their actions under this Convention with their actions under other relevant international treaties.

The experience gained over the past few years seems to indicate that the Convention has had some significant positive impacts in affected countries while a number of problems remain to be tackled. In general, a greater awareness of the issues raised by the Convention has been achieved. This has been accompanied by a greater willingness of politicians to address issues related to desertification while at the same time cooperation with civil society has become more acceptable. On the other hand, reviews of implementation in Africa find that there is still limited participation of civil society actors due in part to their own limited institutional capacities. Generally, there remain significant problems of coordination between programs specifically addressing desertification and programs addressing other issues that have a bearing on land degradation.

Mainstreaming Desertification

The widespread ratification of the Convention points to the importance accorded to this problem by the international community. However, in many ways, land degradation remains a peripheral issue which is not of central importance for all states and is not fully integrated with the other main environmental challenges addressed by the international community. It is, for instance, significant that negotiators did not manage to agree to the establishment of a financial mechanism to foster the implementation of the Convention's provisions. This was partly due to the mismanagement of resources allocated within the framework of the PACD and partly to donor resistance to funding anti-desertification measures on a large scale.

Bringing land degradation to the center stage will require a two-pronged strategy. First, within the sectoral division of environmental issues that is the hallmark of current international environmental law, desertification should be considered both in principle and in practice as one of the main environmental challenges the international community should address. Second, it is imperative that the linkages between the main environmental problems should be recognized and addressed. The Convention does call on member state to acknowledge and foster linkages with other relevant international treaties but until recently there had been little synergy between the different conventions.

Some of these linkages between the Biodiversity Convention, the Climate Change Convention, the Ramsar Convention and the Forest Principles are now acknowledged and addressed. The most significant development to-date is the adoption by the CoP of the Biodiversity Convention in 2000 of a program of work on dry and sub-humid lands. The program explicitly recognizes in several places the need for collaboration with the Desertification Convention Secretariat to provide synergy and avoid duplications. It further envisages the possibility of the two secretariats developing a joint program of work. The program as currently defined in the context of the Biodiversity Convention provides for an assessment of the state of biological diversity in drylands. The information gathered will then be used to foster the general goals of the Biodiversity Convention – conservation, sustainable use and equitable sharing of benefits – in the specific context of drylands.

The GEF is also slowly striving to develop a framework which recognizes the central importance of land degradation for the areas where its work is concentrated. It has outlined some of the activities which contribute at the same time to land degradation and one of its focal areas in an action plan to strengthen its support to anti-desertification measures. In the case of biodiversity management, these include improvements of management practices, institutional arrangements, policies and incentives in sectors of agriculture, pastoralism, agroforestry and water use. In-situ conservation in drylands and forests affected by land degradation also falls in this category.

The need to coordinate anti-desertification and other environmental measures at the national level has also been recognized. One of the problems often identified is that different environmental problems are often addressed in different ministries with little effective communication between them. Indeed, the focal point for desertification is often in the ministry of agriculture while a ministry responsible for nature conservation deals with biodiversity. There is thus a clear need for synergies at this level to avoid duplication and potential conflicts. The integration of the different environmental problems into a single national focal point constitutes a first essential step to rationalize environmental management generally. However, this is not sufficient in itself. Desertification must not only be considered together with other environmental issues but as an integral part of development policies generally. The links between population growth, water management or food production generally with land degradation cannot be dealt with one by one without jeopardizing the policies adopted concerning the other. The CoP has generally recognized this need and called for countries to integrate the Convention in their national development strategies as called for by Article 4.2 of the Convention which requires member states to adopt an integrated approach addressing the physical, biological and socio-economic aspects of desertification.

The links between food needs, population growth, biodiversity management and land degradation illustrate well the need for comprehensive strategies. It is today acknowledged that even if scientific advances such as genetically engineered seeds hold their promises, it will be extremely difficult to meet the food needs of an increasing world population in the future when hundreds of millions already go hungry today. In a context where drylands feed 20% of the world's population, it is evident that stopping the conversion of arable land to wasteland is of primary importance. Increasing or maintaining yields on existing fields is similarly important. Neither can be pursued alone and all dimensions of the problem must be addressed.

Towards a Broader Conception of Issues and Factors

The Desertification Convention provides at present a broad framework for addressing the issue of land degradation and its annexes operationalize to an extent the principles outlined in the Convention. It is by no means a very strong convention but it provides a reference point for all actors involved in fighting land degradation.

A number of significant substantive gaps can be identified. First, while the Convention does insist on the concept of partnership and the concept of participation, this only covers a limited number of actors. The omission of the private sector from the framework envisaged by the Convention is striking given the importance of private sector actors in the socio-economic aspects of desertification. The partnership envisaged does not include any mention of the private sector and the only substantive references to private sector entities concern funding for the implementation of the Convention.

A more fundamental omission in the Convention is the non-recognition of the fundamental importance of land distribution in fighting desertification. Numerous studies show clear links between lack of tenure and environmental degradation. It is therefore impossible to analyze the causes of desertification without focusing significant attention on the changing property rights structure which has been characterized in a number of areas by decreasing security of tenure and progressive reduction of areas held under common property rights regimes. Indeed, past desertification policies have focused heavily on property rights arrangements. As long as nomadism was seen as one of the main causes of land degradation, the response of governments was to foster sedentariness which required significant reallocation of property rights. The lack of a strong commitment in the Convention to addressing the issue of land tenure comes as a major shortcoming and signals an unwillingness to address land degradation in a comprehensive manner. The only reference to the importance of land tenure security is found in the annex for the African region but the structure of the provision does not indicate a strong obligation to take effective action towards land redistribution and land tenure security.

It must also be noted that while the link between desertification and biodiversity management is being addressed, the fundamental questions of the relation between desertification and the management of forests and water resources have all but been sidelined. This is partly due to the fact that the international community has found it extremely difficult to agree on a set of norms governing the management of forests and that the allocation of water resources falling under national sovereignty is even more sensitive.

VII. Conclusion

Desertification is now generally regarded as an environmental problem of global significance. The Desertification Convention constitutes the latest confirmation by the international community of the significance of land degradation. It also constitutes the only binding treaty specifically devoted to land degradation. The Convention fulfils an important mission in raising awareness in affected and non-affected countries concerning the problems associated with desertification. It is also noteworthy for the attempts that have been made to involve non-governmental actors from the negotiations to the implementation.

From a legal point of view, the Convention is a rather weak instrument whose proper implementation relies mainly on member states' goodwill. Further, it is marred by the absence of a fully-fledged financial mechanism and donors' unwillingness to commit substantial funds this problem. As noted, the Convention does not address some of the most important socio-economic factors involved in land degradation such as land tenure. The

fact that it does not tinker with some of the most sensitive economic issues may allow it to develop in a more cooperative atmosphere than in the case of other recent conventions. A case in point is the fact that the United States recently ratified this treaty while it still has not ratified the Biodiversity Convention.

On the whole, the Convention, even with its regional annexes, only constitutes a broad framework for addressing the issue of desertification. However, the fact that a convention mostly wanted by developing countries could be at all adopted provides a strong signal that even problems which affect mostly developing countries are not beyond the scope of international policy-making. Further, it constitutes a significant attempt at addressing a problem which as much environmental as it is developmental.

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