

Sustainable Use of Natural Resources – A Key to Combating Poverty

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I. Introduction

Widespread epidemic poverty is one of the world's greatest evils, and worse still, it is a plague that is far from being eradicated. Many people living in developing countries notoriously suffer from hunger and are without access to clear drinking water and adequate sanitation. For this reason the Millennium Declaration of the UN General Assembly of September 2000¹ and the Plan of Implementation adopted by States participating in the 2002 Johannesburg Summit² required actions at all levels to halve the proportion of the world's population in such living conditions by 2015³.

The Johannesburg Summit rightly declares the eradication of poverty to be the greatest global challenge facing the world today and an indispensable requirement for sustainable development⁴. Accordingly, it specifically deals with this issue in a separate chapter of the Johannesburg Plan of Implementation⁵. In addition, poverty eradication is central to the Plan's chapter on achieving sustainable development in Africa⁶.

In case of emergency, food and water supply from abroad may prove to be the only means for preserving distressed people from dying of starvation. Such short-term assistance can cure the life-threatening symptoms of poverty, but it is certainly no means for efficaciously solving the structural problems of poverty that give rise to food and water famines. Thus, any effort to combat or alleviate poverty must start by identifying its root causes.

It goes without saying that developing countries and especially the least-developed countries are highly susceptible to epidemic poverty. By viewing the African continent, where poverty continues to blatantly contrast with the prosperity of the developed world, it becomes evident that the spectrum of factors that cause epidemic poverty is extremely broad⁷. It includes the indirect causes of poverty, such as the legacy of colonialism, current wars, civil unrest, and political instability, all

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¹ UN Doc. A 55/2 of 8 September 2000, para. 19.

² Report of the World Summit, UN Doc. A/CONF.199/20, 6 et seq.

³ Millennium Declaration, para. 19; Plan of Implementation, para. 7 (a), and chapeau to para. 8.

⁴ See Plan of Implementation, chapeau to para. 7.

⁵ Ibid., Chapter II, paras. 7-13.

⁶ Ibid., Chapter VIII, paras. 62-71.

⁷ Compare e.g. World Development Report 2000/2001 (World Bank), Chapter 2 ("Causes of Poverty and a Framework for Action"), 31 at 34: <<http://www.worldbank.org/poverty/wdrpoverty/report/ch2.pdf>> (visited 5/4/03).

of which contribute to the burgeoning large numbers of refugees and uprooted people. The incidence of widespread infectious diseases and natural disasters often results in significant human, social and economic losses. It is beyond doubt that the combination of these factors is conducive to the impoverishment of affected people. Furthermore, poverty results from unsustainable population increase, high rates of illiteracy and unemployment, States' infrastructural deficiencies and excessive internal and external debt burdens, as well as from insufficient foreign investment and limited market access opportunities to developing countries. Last but not least, poverty derives from degradation of the natural resource base, such as soil erosion, desertification, deforestation and loss of biodiversity, as well as unsustainable management of natural resources that render the basis for meeting the basic needs of people living in developing countries⁸.

The Declaration on Sustainable Development and the Plan of Implementation, both adopted at the Johannesburg Summit in late summer 2003, recognize poverty eradication and protecting and managing the natural resource base for economic and social development as "overarching objectives of and essential requirements for sustainable development"⁹. The Johannesburg Plan of Implementation declares, in para. 7 (l), the 1994 Convention on Combating Desertification (UNCCD)¹⁰ "one of the tools for poverty eradication". Although this provision is the only one in the Plan which explicitly stresses the nexus between poverty and the environment¹¹, there are many others which implicitly reflect the convening States' acknowledgement that degradation of the natural resource base is a primary cause of poverty. Conversely, it is also true that poverty generates further ecological degradation, as people, having become poor, cannot afford to take measures necessary to control or redress such degradation, as they cannot even meet their basic needs¹².

While the Plan of Implementation of the Johannesburg Summit deals with almost all causes of poverty mentioned above¹³, the study at hand will concentrate on those roots of poverty in developing countries which result from land degradation, particularly in areas affected by desertification and drought, unsustainable use

⁸ For the various forms of land-cover modification, such as tropical deforestation, rangeland modification, agricultural intensification and urbanization, compare E.F. Lambin, *The Causes of Land-use and Land-Cover Change: Moving Beyond the Myths*, *Global Environmental Change* 11 (2001), 261 et seq.

⁹ See para. 11 of the Declaration (text in: UN Doc. A/CONF.199/20, 1 et seq., at 2) and para. 2 of the Plan of Implementation. According to both provisions, "changing consumption and production patterns" is a third objective of and requirement for sustainable development.

¹⁰ UN Convention to Combat Desertification in Those Countries Experiencing Drought and/or Desertification, Particularly in Africa, of 17 June 1994 (text in: ILM 33 [1994], 1328), in force since 26 December 1996.

¹¹ It should be noticed however that there is some controversy in literature whether the Desertification Convention is environmental in character.

¹² E. Brown Weiss, in: *Generational Justice* 3/2002, 1, at 5.

¹³ The Plan e.g. specifically deals with development assistance (para. 85), debt relief (para. 89), and various forms of capacity-building (paras. 7 (e)-(j), 42 (h), 46 (c), 54, 62 (h) and (n), 63, 64, 107, 108, 116, 117, 125, 127). Compare also U. Beyerlin/M. Reichard, *The Johannesburg Summit: Outcome and Overall Assessment*, in this issue 213 et seq.

of freshwater resources, and overexploitation of valuable living resources. Together they entail serious social-economic consequences for affected local communities and individuals. In the following acts, the existing international instruments designed to combat land degradation, as well as their implementation at different levels, will be discussed in some detail (II.). Then, focusing on southern Africa, the attempt will be made to show that strategies designed to halt degradation of nature and ecosystems such as sustainable land use, sustainable water use and sustainable use of wildlife resources appear to considerably contribute to alleviate poverty (III.). The study will close by briefly assessing these findings (IV.).

II. Combating Land Degradation

1. Desertification

The international efforts to tackle this problem trace back to 1974 when the UN General Assembly in its Resolution 3337 called for “international action to combat desertification”¹⁴, as a reaction to the perishing of 250 000 people from starvation and diseases after six years of drought in the African Sahel¹⁵. Pursuant to that resolution the UN Conference on Desertification (UNCOD), convened in September 1977, adopted the “Plan of Action to Combat Desertification” (PACD)¹⁶. Lastly, with Chapter 12 of Agenda 21 on “Managing Fragile Ecosystems: Combating Desertification and Drought”, being adopted at the 1992 Rio Summit, the ground was paved for forming the later UNCCD.

To date, the UNCCD is the only global¹⁷ instrument in the realm of soils protection which is legally binding in character. However, it deals only with eliminating the causes of desertification and mitigating its detrimental effects. *Ratione materiae*, it is applicable to the problems of “land degradation in arid, semi-arid and dry sub-humid areas”¹⁸. In this context, “land degradation” is understood as “reduction or loss ... of the biological or economic productivity and complexity of rainfed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from land uses ..., including processes arising from human activities and habitation patterns, such as: (i) soil erosion ...; (ii) deterioration of the physical, chemical and biological or economic properties of soil; and (iii) long-term loss of natural vegetation”¹⁹.

¹⁴ GA-Resolution of 1975, UN-Doc. A/9631 (1975).

¹⁵ Compare W.C. Burns, *The International Convention to Combat Desertification: Drawing a Line in the Sand?*, Michigan Journal of International Law 16 (1995), 831, at 849, with references.

¹⁶ GA-Resolution of 1977, UN-Doc. A/RES/32/172.

¹⁷ It is remarkable that to date the UNCCD has been ratified by 186 States.

¹⁸ See the legal definition of “desertification” in Article 1 (a) UNCCD.

¹⁹ Article 1 (f) UNCCD. “Land” means “the terrestrial bio-productive system that comprises soil, vegetation, other biota, and the ecological and hydrological processes that operate within the system”, Article 1 (e) UNCCD.

Wary of the fact that desertification stems from complex physical and social-political causes, such as overcultivation, overgrazing, deforestation, irrigation and salinization, and climatic factors²⁰, the UNCCD, in its preamble, makes plain that "desertification and drought affect sustainable development through their interrelationships with important social problems such as poverty, poor health and nutrition, lack of food security, and those arising from migration, displacement of persons and demographic dynamics"²¹. Accordingly, in Article 2, it imposes the duty on all contracting parties to achieve the objective of combating desertification and mitigating the effects of drought by pursuing "long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level"²². Under Article 4, all parties have to "adopt an integrated approach addressing the physical, biological and socio-economic aspects of the processes of desertification and drought"²³, and "integrate strategies for poverty eradication into efforts to combat desertification and mitigate the effects of drought"²⁴. Article 5 UNCCD then *inter alia* calls upon the parties affected by drought to "address the underlying causes of desertification and pay special attention to the socio-economic factors contributing to desertification processes"²⁵. The Regional Implementation Annex for Africa as part of the UNCCD even more clearly reflects the close nexus between poverty and ecological degradation, when it directs the African country parties to prepare national action programmes designed to include, *inter alia*, measures to conserve natural resources by means of ensuring integrated and sustainable management of natural resources, such as agricultural land, vegetation cover and wildlife, forests, water resources, and biological diversity²⁶. Thus it is beyond doubt that the UNCCD not only mirrors the acknowledgement that combating desertification and achieving sustainable land use and sustainable management of natural resources are closely interrelated targets, but also binds the contracting parties, in particular those affected themselves by drought to pursue integrated strategies for combating poverty and conserving natural resources as an indispensable base for meeting the basic needs of affected people.

Pursuing an innovative bottom-up approach²⁷, Article 9 UNCCD identifies the establishment of national action programmes, as well as subregional and regional

²⁰ See Burns (note 15), at 836 et seq., and S.C. Snyder/W.C. Muffet, International Protection of Soil, in: F.L. Morrison/R. Wolfrum (eds.), International, Regional and National Environmental Law (2000), 373, at 386 et seq.

²¹ UNCCD, preambular para. 9.

²² Article 2, para. 1 and 2 UNCCD.

²³ Article 4 (a) UNCCD.

²⁴ Article 4 (c) UNCCD.

²⁵ Article 5 (c) UNCCD.

²⁶ Article 8 para. 3 (b) (i) of the Implementation Annex for Africa.

²⁷ See K.W. Danish, International Environmental Law and the "Bottom-up" Approach: A Review of the Desertification Convention, Indiana Journal of Global Legal Studies 3 (1995), 133, at 158 et seq.

action programmes “as the central element of the strategy to combat desertification and mitigate the effects of drought”. Pursuant to Article 10 para. 2 (f) UNCCD the national action programmes have to be developed and implemented through participatory mechanisms ensuring the active involvement of NGOs, local populations, particularly resource users, in relevant policy planning, decision-making, and implementation²⁸. As to the design of the national action programmes to be developed, Article 10 UNCCD makes it clear that the addressed State parties must pursue an integrated and holistic approach; moreover, it provides some guidance with regard to the content of those programmes²⁹.

Under Article 9 para. 1 UNCCD affected developing country Parties “shall, as appropriate, prepare, make public and implement” the three-level programmes³⁰, without being bound by any time limit. Article 7 of the African Implementation Annex to the UNCCD requires that pending entry into force of the Convention the African country Parties “as appropriate, shall, to the extent possible, provisionally apply those provisions of the Convention relating to the preparation of national, subregional and regional action programmes”³¹.

The efficacy and strength of the UNCCD as a tool of combating desertification and poverty crucially depend on whether the affected developing country parties will properly meet their duty to develop and implement the required programmes timely. A look at the African continent reveals that to date 24 African States have submitted their national action programmes. Among States having failed to do so as yet are Algeria, Libya, Chad, Ghana, Cameroon, Zaire, Angola, Mozambique and Namibia. South Africa, the host of the recent Summit, is also among them, although more than five years have passed since its ratification of the UNCCD³². However, this failure can hardly amount to a treaty violation, because both Article 9 UNCCD and Article 7 of the Implementation Annex for Africa are rather weakly worded.

At the sub-regional level³³, the Southern African Development Community (SADC) finalized its Sub-regional Action Programme to Combat Desertification in Southern Africa (SRAP) in July 1997³⁴. This program embodies the relevant as-

²⁸ Compare also Article 8 of the Implementation Annex for Africa.

²⁹ Compare Danish (note 27), at 151.

³⁰ The role of the developed country parties to the UNCCD is constrained to supporting these programmes of affected developing country parties; see Article 9 para. 2 in connection with Article 6 (b) UNCCD.

³¹ This makes plain what is already established practice of States which are members to multilateral environmental agreements not yet in force, e.g. the Kyoto Protocol to the United Nations Framework Convention on Climate Change (KP), and its Clean Development Mechanism (Article 12 KP).

³² South Africa ratified on 30 September 1997.

³³ With regard to Africa, to date sub-regional action programmes have been submitted by the Communauté Economique des Etats de l'Afrique de l'Ouest (CEDEAO), the Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS), the Southern African Development Community (SADC), the Union du Maghreb Arabe (UMA), and the Intergovernmental Authority on Development (IGAD). See <<http://www.unccd.int/actionprogrammes/africa/africa.php>> (visited 20/3/03).

pirations of the SADC countries in rather broad terms. It elaborates upon seven priority program areas³⁵, links on-going programmes and activities³⁶ with SRAP, identifies lead institutions for the said priority program areas, establishes a Multi-disciplinary Scientific and Technical Consultative Committee (MSTCC), and gives some guidance for operationalizing SRAP in Southern Africa.

The Johannesburg Summit, in its Plan of Implementation, unfortunately contributes little to the strengthening of the UNCCD implementation process. It is satisfied with calling, in rather general terms, for actions at all levels to, *inter alia*, mobilize adequate and predictable financial resources, transfer technologies and undertake capacity-building measures; formulate national action programmes to ensure timely and effective implementation of the Convention and its related projects; encourage the three Conventions on Climate Change, Biological Diversity and Combating Desertification to continue exploring and enhancing synergies in the elaboration and implementation of plans and strategies under the respective Conventions; and to integrate measures to prevent and combat desertification through relevant policies and programmes, such as land, water and forest management, agriculture, rural development, early warning systems, environment, energy, natural resources, health and education, and poverty eradication and sustainable development strategies³⁷. Regrettably, the Johannesburg Summit does not go so far as to clearly urge the affected developing countries to adopt the national action programmes, as required under the UNCCD, nor does it provide any additional guidance as to their content.

2. Land Degradation other than Desertification

As land degradation outside arid, semi-arid or dry sub-humid areas is not covered by the UNCCD, the question arises whether there are other meaningful international instruments for protecting soils in those areas³⁸. Leaving aside the few multilateral environmental agreements at the global level, such as the Biological Diversity Convention and the Climate Change Convention, which at best contribute

³⁴ See <<http://www.unccd.int/actionprogrammes/africa/subregional/2000/sadc.org.pdf>> (visited 5/4/03).

³⁵ Capacity building and institutional strengthening; strengthening of the early warning systems; cooperation in the sustainable management of shared natural resources and ecosystems; information collection, management and exchange; development and transfer of appropriate technology to the community level; development of alternative sources of energy; socio-economic issues.

³⁶ The underlying rationale of this section is that SRAP must incorporate all relevant sub-regional institutions and actions, such as the Land Degradation and Desertification Control Programme, the Kalahari-Namib Action Plan, and the Zambezi River System Action Plan, in a unified and holistic approach to combating desertification.

³⁷ Para. 41 (a)-(d) of the Plan of Implementation.

³⁸ For a very useful survey of such instruments see K. Odendahl, Bodenschutz nach Völkerrecht: Bestandsaufnahme und Entwicklungsperspektiven, Archiv des Völkerrechts 39 (2001), 82 et seq.

indirectly to the preservation of land as a complex terrestrial ecosystem, two international treaties at the regional level are worth mentioning, although in both instruments soil protection is only one issue among others. Under the African Convention on the Conservation of Nature and Natural Resources of 15 September 1968³⁹ States must, *inter alia*, take effective measures for the conservation and improvement of soil, and, in particular, combat erosion and misuse of soil; when implementing agricultural practices and agrarian reforms they have to introduce improved farming methods for ensuring long-term productivity of the land, and control erosion caused by various forms of land-use (Article 4 of the Convention). Article 7 of the ASEAN Convention on the Conservation of Nature and Natural Resources of 9 July 1985⁴⁰ requires States to “take measures, wherever possible towards soil conservation, improvement and rehabilitation”, and “to endeavour to take steps to prevent soil erosion and other forms of degradation”.

The World Soil Charter, an FAO resolution adopted on 25 November 1981⁴¹, the World Soils Policy of 23 March 1982, elaborated by UNEP⁴², and the World Charter for Nature of 28 October 1982⁴³ are all “soft law” in character. The World Soil Charter is the most explicit of these instruments. It contains thirteen principles concerning land use, maintaining and improving soil productivity and conservation of soil resources. These principles are followed by some recommendations, including to develop a policy for “wise land use”, without specifying what this notion means. Last but not least Chapter 10 of Agenda 21, titled “Integrated Approach to the Planning and Management of Land Resources”, stresses the need to pursue an integrated approach to the planning and management of land resources; the objective of actions to be taken in this regard “is to facilitate allocation of land to the uses that provide the greatest sustainable benefits and to promote the transition to a sustainable and integrated management of land resources. In doing so, environmental, social and economic issues should be taken into consideration. Protected areas, private property rights, the rights of indigenous people and their communities and other local communities and the economic role of women in agriculture and rural development ... should be taken into account”⁴⁴.

Fortunately, the Johannesburg Summit’s Plan of Implementation, in its chapter on “Sustainable Development for Africa”, specifically deals with the land issue by calling upon African countries “to promote and support efforts and initiatives to secure equitable access to land tenure and clarify resource rights and responsibilities, through land and tenure reform processes that respect the rule of law and are enshrined in national law, and provide access to credit for all ... and that enable eco-

³⁹ Text in: 1001 UNTS 3. To date, the Convention is binding on 30 African States.

⁴⁰ Reprinted in: Environmental Policy & Law 15 (1985), 64.

⁴¹ Resolution 8/81; text in: G. Leidig, Bodenschutz im Rechtssystem. Eine nationale und internationale Bestandsaufnahme (1987), 157 et seq.

⁴² Ibid., 163 et seq.

⁴³ A/RES/37/7; *ibid.*, 167 et seq.

⁴⁴ Agenda 21, para. 10.5. Interestingly enough, Chapter 10.5. has set concrete timetables for achieving these objectives; all of these terms expired long ago.

conomic and social empowerment and poverty eradication as well as efficient and ecologically sound utilization of land ..."⁴⁵.

With the exception of the two documents mentioned last, the instruments dealt with in section II.2., may they have legally binding force or not, prove altogether so vague in substance that they cannot give any clear guidance for developing countries which feel the need to halt and overturn current trends of land degradation. Initiatives aimed at establishing a separate global convention on the protection of soil or a respective protocol to the Biodiversity Convention are not expected to succeed in the near future⁴⁶. There is hope at least that, along the lines of the recommendations by the Johannesburg Summit cited above, affected African countries will make serious efforts towards developing adequate strategies of sustainable land use at the national and sub-regional level.

III. Sustainable Use of Natural Resources: The Example of Southern Africa

This chapter is designed to give an idea how sustainable use of natural resources, such as land, water and wildlife resources, can be achieved in areas suffering from serious degradation of nature, such as southern Africa.

Any strategy aimed at achieving a more sustainable use of natural resources should meet two basic requirements. First, it should ensure that natural resources are managed in such a way that current trends of nature degradation will be stopped and reversed, taking into account the rights of local communities and indigenous peoples, as well as the interests and needs of future generations⁴⁷. Second, it should include, along the lines of the bottom-up approach pursued by the UNCCD, participatory mechanisms which guarantee the active involvement of all relevant actors, particularly the affected local populations and communities.

⁴⁵ Plan of Implementation, para. 67 (b).

⁴⁶ The 1998 Tutzing Initiative for a global Soil Convention as yet has not received any response in the international arena. Compare Odendahl (note 38), at 108.

⁴⁷ The International Law Association, in its New Delhi Declaration of Principles of International Law Relating to Sustainable Development, has rightly stressed that "States are under a duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable and safe way so as to contribute to the development of their peoples, with particular regard for the rights of indigenous peoples, and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems. States must take into account the needs of future generations in determining the rate of use of natural resources ..."; see section 1.2 of the Resolution 3/2002, adopted by the 70th ILA Conference, held in New Delhi, India, 2-6 April 2002; text in: ILA, Report of the Seventieth Conference, New Delhi, 2002, 22, at 25 et seq.

1. Sustainable Land Use

To date, southern African countries, in particular those of widespread historical settler colonization, such as South Africa, Namibia, Zimbabwe and Swaziland, are significantly affected by conflicts over land resources, which represent a serious challenge to sustainable development. In all of these countries the land question is going to become a sustainable development issue which strikes at the core of problems related to degradation of nature, poverty, food insecurity, and social instability⁴⁸. As it is impossible to give an encompassing survey of ongoing land reform processes in the southern African region⁴⁹, the following remarks will focus on South Africa.

There is evidence that in South Africa dispossession and forced removal of native Africans under colonialism and apartheid resulted not only in racial segregation, but also extreme land shortages and insecurity of tenure for the black population⁵⁰. Poverty, environmental degradation and land-related violence will continue to grow unless a major effort is made to eliminate the unjust system of land administration inherited from apartheid⁵¹. With the demise of apartheid and transition to democracy the newly elected government has started a land reform programme which needs to deal with a raft of complicated issues, such as (1) restitution of land rights to persons or communities who, in the post-1913 period, were dispossessed of their rights by racially discriminatory laws or practices⁵²; (2) land redistribution with the aim of transferring large areas of land from the privileged white minority to the historically oppressed black majority⁵³; and (3) land tenure, which is probably the most difficult problem to be solved by the South African land reform⁵⁴.

⁴⁸ See J.Z.Z. Matowanyika, *Land and the Pursuit of Sustainable Development Pathways for Southern Africa: An Overview*, Paper prepared for the Workshop on Land Rights and Sustainable Development in sub-Saharan Africa: Lessons and Ways Forward in Land Tenure Policy, February 1999, 1, at 5, 14.

⁴⁹ For a survey of tenure reform in southern African countries other than South Africa see M. Adams/S. Sibanda/S. Turner, *Land Tenure Reform and Rural Livelihoods in Southern Africa*, in: Overseas Development Institute (ODI), *Natural Resource perspectives*, No. 39, February 1999, 1, at 6 et seq.

⁵⁰ E. Lahiff, *Land Reform in South Africa: is it meeting the challenge?*, in: PLAAS Policy Brief, No. 1, September 2001, 1, at 1.

⁵¹ M. Adams/B. Cousins/S. Manona, *Land Tenure and Economic Development in Rural South Africa: Constraints and Opportunities*, in: *At the Crossroads: Land and Agrarian Reform in South Africa into the 21st Century*, published by Programme for Land and Agrarian Studies (PLAAS) (2000), 111, at 111.

⁵² It has been estimated that more than 3.5 million black people were forcibly dispossessed of their land and homes during the apartheid era; see Lahiff (note 50), at 3. The pace of land restitution (return of land or financial compensation for land lost), based on the Restitution of Land Rights Act of 1994, has rapidly risen in recent years. Of almost 69 000 land claims lodged, about half have now been settled. Some 386 000 people have received about 445 000 ha of land and R 1.2 billion in financial compensation, as well as R 1.8 billion in resettlement assistance. See: *Positive Progress in Land Reform* in <<http://www.development-sa.co.za/Land%20reform%202.htm>> (visited 1/4/03).

⁵³ The South African process of redistributing land appears to be rather in its beginnings. Government has set itself the target of redistributing 30 percent of all agricultural land to black farmers by

As required by the South African Constitution of 1996⁵⁵, tenure reform must aim at providing some kind of legally enforceable protection for long-term occupants of communal land or land which is nominally owned by the State by recognizing them "as rights holders so that they are treated and consulted as stakeholders in development, and so that they can derive the benefits accruing from the land"⁵⁶. This is all the more important, as "(g)iving people tenure – i.e. conferring 'custodianship' or 'ownership' – over the resources they live with is often the essential first step in creating incentives for efficient and sustainable use. Without tenure security, there is no opportunity or incentive to choose the most profitable or efficient resource use option, and no reason to ensure long-term sustainability"⁵⁷. However, achieving that aim is all the more difficult as in many rural areas of the former South African homelands there are deep tensions between the newly elected local government structures and traditional authorities⁵⁸ who still insist on their ownership of land and power in land allocation⁵⁹.

2015, in addition to the 13 percent already held by blacks in the former homelands and South African Development Trust areas; see again: *Positive Progress in Land Reform*, *ibid.* In April 2001 the South African government started its Land Reform and Agricultural Development Programme (LRAD) which seeks to provide government grants to black South Africans to obtain land specifically for agriculture with a view to meeting the 2015 target; improving nutrition and income of those who chose to farm; and reducing overcrowding in the former homeland areas and expanding opportunities for rural people; see M. Adams/J. Howell, *Redistributive Land Reform in Southern Africa, Natural Resource Perspectives*, No. 64, January 2001, 1, particularly at 6; Lahiff (note 50), at 4 et seq. Some 168 000 ha have been redistributed under the LRAD programme since 2001; see *Positive Progress of Land Reform*, *ibid.*

⁵⁴ There is continuing controversial debate on this issue. See e.g. Lahiff (note 50), 1 et seq.; A. Claassens, *Land Rights and Local Decision Making Process: Proposals for Tenure Reform*, in: *At the Crossroads* (note 51), 129 et seq.; L. Ntsebeza, *Traditional Authorities, Local Government and Land Rights*, *ibid.*, 280, at 292 et seq.

⁵⁵ Section 25 (6) of the South African Constitution requires: "A person or community whose tenure of land is legally insecure as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to tenure which is legally secure or to comparable redress."

⁵⁶ Claassens (note 54), at 131.

⁵⁷ L. Rihoy, *Natural Resource Tenure in Southern Africa: An Overview of Key Issues and Policy Options for Communal Areas in Southern Africa* (1998), 1, at 4.

⁵⁸ Chapter 12 of the South African Constitution simply provides that "(t)he institution, status and role of traditional leadership, according to customary law, are recognised, subject to the Constitution".

⁵⁹ Adams/Cousins/Manona (note 51), at 117, describe the situation as follows: "... there are long-standing disputes between provincial and local governments and traditional leaders about who owns and therefore controls the land. Traditional leaders complain that local government initiatives undermine pre-existing land rights, while councilors complain that tribal leaders block development so as to ensure that their authority remains intact. In the process, the views of the rural poor are ignored. Occupants are not treated as decision makers on land which they have occupied for decades". Rihoy (note 57), at 9, states: "In South Africa, as elsewhere in the region, [the traditional authority structures] had often been co-opted by the apartheid regime. Consequently new development structures are developed to replace them. Experience from the region taught us that this may promote the development of dual power structures which results in conflict and inefficient resource use." Compare also Ntsebeza (note 54), at 282 et seq.

In 2002 the draft Communal Land Rights Bill⁶⁰ was introduced in the South African Parliament. Designed to resolve urgent land tenure problems in the former homeland areas and affecting about 13 million people living there, the Bill seeks to “give legal recognition to land tenure rights held by communities or individuals on communal land; confer legal status upon certain land tenure systems and community rules based on local custom; and provide for legally secure tenure where the tenure of land is insecure as a result of past racially discriminatory laws and practices, including the transfer of communal land to communities or individuals and the registration thereof [and] of land tenure rights”⁶¹. In order to achieve this aim, the Bill allows communities to democratically appoint administrative structures to administer land in which legitimate traditional authorities may participate in an *ex-officio* capacity⁶². So far, the response to this draft has been divided. While for some the draft Bill’s land titling approach is a central element of sustainable rural development, others blame it for placing undue emphasis on the issuing of land titles and fear that the consequences of this policy could be disastrous⁶³. For traditional leaders the draft Bill “strikes at the heart of their powers of patronage, and, for many, at a key principle of African tradition of communal land ownership”⁶⁴.

In any case, South Africa is currently undergoing a difficult process of redistributive land reform which is expected to entail “a fundamental shift away from the colonial and apartheid notion of administration to a system of ‘bottom-up’ land rights management”⁶⁵. Although, this change in land policy first and foremost entails socio-economic benefits of development, such as poverty alleviation, it can also be expected to have effects for the benefit of the environment. While landless farmers lack any incentive to tend occupied land in a sustainable manner, individuals or local communities that have become holders of secure land rights are certainly much more inclined to engage in sustainable land use practices⁶⁶. Encouragingly, the Johannesburg Summit’s call for land reform processes that enable “efficient and ecologically sound utilization of land” clearly reflects this acknowledgement. Now it is up to the countries affected by degradation of land and rural poverty to develop their future land policies pursuant to this approach.

⁶⁰ Text in: Government Gazette, No. 23740, 14 August 2002.

⁶¹ Chapter II, para. 1 of the draft Bill.

⁶² Chapter VII, para. 33 of the draft Bill.

⁶³ See B. Cousins, Reforming Communal Land Tenure in South Africa: Why the Draft Communal Land Rights Bill is not the Answer, ESR Review, Vol. 3, No. 3 (November 2002), in <http://communitylawcentre.org.za/ser/esr2002/2002nov_land.php> (visited 1/4/03).

⁶⁴ Positive Progress in Land Reform (note 52).

⁶⁵ Claassens (note 54), at 140.

⁶⁶ Any such land reform is well advised, however, to also take into account the new land-owners’ needs in terms of agricultural expertise and capital.

2. Sustainable Water Use

Water scarcity combined with poor demand-and-supply management inevitably results in serious shortages of water supply and sanitation. Today about 1.2 billion people still have no access to safe drinking water and 2.4 billion lack access to adequate sanitation services. Some 2 million children die every year from water-related diseases. By 2025, at least 3-5 billion people are expected to face water scarcity. Water losses in irrigated agriculture amount to 25-40 percent of water used in agriculture⁶⁷. These figures alone demonstrate that freshwater scarcity is one of the greatest challenges the world is facing today. The water issue was therefore rightly placed at the core of the Johannesburg Summit's preparatory process.

At the Bonn Conference on Freshwater in December 2001 States' ministers stressed that "it is necessary to take into account water's social, environmental and economic dimensions and all of its varied uses. Water management therefore requires an integrated approach"⁶⁸. They further resolved that "(t)he primary responsibility for ensuring the sustainable and equitable management of water resources rests with the governments"⁶⁹. They also called "on the international community to strengthen its commitment and its efforts to enable developing countries to manage water sustainably and to ensure an equitable sharing of benefits from water resources"⁷⁰. In its "Recommendations for Action" to the upcoming Johannesburg Summit, the Freshwater Conference, *inter alia*, claimed "equitable access to water for all people, deliverance of water infrastructure and services to poor people, appropriate allocation of water among competing demands, improvement of water management, protection of water quality and ecosystems, and decentralization of responsibilities for water management to local government"⁷¹.

Chapter II of the Johannesburg Plan of Implementation propagates the target of halving, by the year 2015, the proportion of people who lack access to safe drinking water and basic sanitation, unfortunately without indicating how this aim might be achieved⁷². Chapter IV of the Plan, *inter alia*, calls for intensifying water pollution prevention, adopting prevention and protection measures to promote sustainable water use and to address water shortages⁷³, as well as developing integrated water resources management and water efficiency plans by 2005, with support to developing countries, particularly with regard to national/regional strategies, plans and

⁶⁷ See WEHAB Working Group, A Framework for Action on Water and Sanitation (August 2002), at 7.

⁶⁸ Ministerial Declaration; see <http://www.water-2001.de/outcome/MinistersDeclaration/Ministerial_Declaration.pdf*_Hlt43619302f*_Hlt43619302> (visited 5/4/03), 1.

⁶⁹ *Ibid.*, 2.

⁷⁰ *Ibid.*, 2.

⁷¹ Bonn Recommendations for Action, <http://www.water-2001.de/outcome/BonnRecommendations/Bonn_Recommendations.pdf> (visited 11/4/03).

⁷² Johannesburg Plan of Implementation, para. 8. Compare the Millennium Declaration of the UN General Assembly, Resolution 55/2 of 8 September 2000, para. 19.

⁷³ Plan, para. 25 (d) and (e).

programmes concerning integrated river basin, watershed and groundwater management⁷⁴.

The Third World Water Forum, held in Kyoto, Shiga and Osaka in March 2003, with some 24,000 participants from 182 countries, had the character of an “action-oriented” conference. More than 100 “keystone commitments” were made by participants, such as the commitment of UNDP to a Community Water Initiative, aimed at providing communities with small grants to solve water and sanitation problems, and the Indigenous Peoples Kyoto Water Declaration wherein the indigenous participants of the Forum committed themselves to forming a network on water issues that will strengthen the voice of indigenous people generally, and help empower local communities struggling to protect their water rights⁷⁵. It should be added that the Forum and the World Water Council called on the global community to meet its commitments to poor people, *inter alia*, through pursuing a “holistic approach, acknowledging hygiene, water and sanitation as a human right, and relating it to human development, the elimination of poverty, environmental sustainability, and the integrated management of water resources”⁷⁶.

Against this international background, many developing countries, particularly those facing the detrimental effects of water scarcity and mismanagement of water resources, should become active at the national, sub-regional and regional level. As a matter of fact, in recent years many States have developed or are in the process of developing new water laws. Among them is, for instance, South Africa with its new National Water Act enacted in 1998⁷⁷. The Act is designed to establish a national water resource strategy headed by the South African Government as the public trustee of the nation’s water resources⁷⁸. Its objective is to meet the basic human needs of present and future generations, to promote equitable access to water, redress the results of past racial and gender discrimination, to feature the efficient, sustainable and beneficial use of water in the public interest, to protect aquatic and associated ecosystems and their biological diversity, and to reduce and prevent pollution and degradation of water resources⁷⁹. Thus, it promises to lay ground for a sound national policy of sustainable water use⁸⁰.

⁷⁴ Plan, para. 26 (chapeau) and (a). In its chapter on Africa, the Plan recommends States to “(p)romote integrated water resources development and optimize the upstream and downstream benefits therefrom, the development and effective management of water resources across all uses and the protection of water quality and aquatic ecosystems”, and calls, *inter alia*, for initiatives at all levels to “(d)velop and implement integrated river basin and watershed management strategies and plans for all major water bodies ...”; and to “(p)rotect water resources, including groundwater and wetland ecosystems, against pollution, and, in cases of the most acute water scarcity, support efforts for developing non-conventional water resources, including the energy-efficient, cost-effective and sustainable desalination of seawater, rainwater harvesting and recycling of water”; *ibid.*, para. 66 (chapeau), (b) and (d).

⁷⁵ See: Preliminary Forum Statement (March 21 draft), at 4 et seq.

⁷⁶ Press Release of 22 March 2003, at 2. Compare in general S. Atapattu, *The Right to a Healthy Life or the Right to Die Polluted?, The Emergence of a Human Right to a Healthy Environment under International Law*, Tulane Environmental Law Journal 16 (2002), 65 et seq.

⁷⁷ Act No. 36 of 1998, assented to by parliament on 20 August 1998.

⁷⁸ Para. 3 of the Act.

Internationally, as most countries share one or more watercourses with others⁸¹, water use and protection long ago became a question of international concern. In Africa alone, more than 80 rivers and lakes are shared by two or more States. Only a few of them are governed by international agreements regulating their use and protection. However, most of these agreements do not encompass all riparian States. Accordingly, transboundary river basins or lakes entail the risk of upstream/downstream inter-State conflicts on water use and protection⁸².

The UN Convention on the Non-Navigational Use of International Watercourses of 21 May 1997⁸³, which has not yet entered into force⁸⁴, is the only one at the global level which seeks to ensure that States sharing an international watercourse will participate in the use, development and protection of that watercourse in an equitable and reasonable manner and to cooperate with each other on the basis of mutual benefit and good faith⁸⁵. However, the Convention's rather abstract framework of principles is supposed to be complemented by more definite regional or sub-regional watercourses agreements⁸⁶.

While there is no international agreement for the whole region of Africa focusing on the use and protection of shared water resources⁸⁷, a number of relevant sub-regional instruments⁸⁸ deal with this particular issue. Among them are the Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System of 28 May 1987⁸⁹, and in particular the revised Protocol on Shared Watercourse Systems in the Southern African Development

⁷⁹ Para. 2 of the Act.

⁸⁰ The most recent Draft White Paper on Water Services, published by the South African Department of Water Affairs and Forestry in October 2002, shows that South African water policy is still in progress.

⁸¹ There are more than 260 watersheds which cross the political boundaries of two or more States. The respective international basins cover about 45 percent of the land surface of the earth, affect about 40 percent of the world's population, and account for approximately 60 percent of global river flow. See A.T. Wolf, *Transboundary Waters: Shared Benefits, Lessons Learned*, edited by the Secretariat of the International Conference on Freshwater – Bonn 2001, 1.

⁸² See for more details S.M.A. Salman, *The Abuja Ministerial Declaration on Water. A Milestone or Just Another Statement?*, in: *International Water Resources Association, Water International*, Vol. 27, No. 3 (September 2002), 1, at 2.

⁸³ Text in: ILM 36 (1997), 700.

⁸⁴ To date only 12 States ratified the Convention.

⁸⁵ See Article 5 of the Convention.

⁸⁶ See for a survey of such kinds of agreement U. Beyerlin, *Umweltvölkerrecht* (2000), 91 et seq.

⁸⁷ The New Partnership for Africa's Development (NEPAD), a legally non-binding document issued in October 2001, in its para. 113, calls for sustainable access to safe and clean water supply and sanitation, as well as planning and managing water resources on the basis of national and regional cooperation and development (compare Salman [note 82], at 4 et seq.). Recently, based on the Abuja Ministerial Declaration on Water of 30 April 2002 the African Ministerial Conference on Water (AMCOW) was established which is designed to strengthen inter-governmental cooperation in order to halt and reverse the water crises and sanitation problems in Africa; for details see *ibid.*, at 5 et seq.

⁸⁸ See again Salman, *ibid.*, at 4; Beyerlin (note 86), at 103 et seq.

⁸⁹ Botswana, Mozambique, Tanzania, Zambia and Zimbabwe are parties to this agreement; see its text in: ILM 27 (1988), 1109.

Community (SADC)⁹⁰ Region of 7 August 2000⁹¹. According to this Protocol member States lying within the basin of a shared watercourse system have to “maintain a proper balance between resource development for a higher standard of living for their peoples and conservation and enhancement of the environment to promote sustainable development” (Article 2 para. 3); they must “undertake and establish close cooperation with regard to the study and execution of all projects likely to have an effect on the regime of the watercourse system” (Article 2 para. 4); and they “shall utilise a shared watercourse system in an equitable manner”, in particular with a view to “attaining optimum utilisation thereof and obtaining benefits therefrom consistent with adequate protection of the watercourse system” (Article 2 para. 6). Member States undertake to establish a Monitoring Unit, River Basin Commissions between Basin States, and River Authorities or Boards in respect of each drainage basin (Article 3), and entrust these bodies with a number of quite substantial functions (Article 5). However, the Protocol does not indicate that local communities and indigenous people should be actively involved in relevant decision-making processes. Apart from this, it appears to lay ground for developing a sound regime of cooperative sustainable use of shared water resources.

Regrettably, the Johannesburg Plan of Implementation is not explicit enough in its recommendations regarding the issue of integrated river basin, watershed and groundwater management, quoted above⁹². It even remains behind the African Ministerial Statement of October 2001 which called on the international community to “encourage cooperation among countries sharing a transboundary water resource, through the provision of financial resources and technology transfer to assist them to implement regional cooperation projects and initiatives and to develop the quality and quantity of water resources for the benefit of all riparian states, including assisting African countries in protecting the quality of water”⁹³.

3. Sustainable Use of Wildlife Resources

At the global level, most international agreements on nature conservation were made at a time when sustainable development was not yet on everybody's lips. The pertinent treaties of the 1970s, particularly the Washington Convention on Interna-

⁹⁰ The Declaration and Treaty Establishing the Southern African Development Community (SADC) was signed on 17 August 1992 in Windhoek; SADC members are Angola, Botswana, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

⁹¹ The Revised SADC Protocol was signed by all SADC member States, with the exception of the Democratic Republic of the Congo. When it enters into force, it will replace the original SADC Protocol on Shared Watercourse System of 1995; to date it has been only ratified by Botswana and Namibia. See the text of the Revised Protocol in <<http://www.thewaterpage.com/SADCProtocol.pdf>> (visited 5/4/03).

⁹² Compare paras. 26 (a) and 66 (chapeau) of the Plan of Implementation.

⁹³ African Ministerial Statement, African Preparatory Conference for the World Summit on Sustainable Development, Nairobi, 18 October 2001, para. 65.

tional Trade in Endangered Species of Wild Flora and Fauna (CITES) of 3 March 1973⁹⁴, altogether pursue a strict conservationist approach⁹⁵. However, there are good reasons for arguing that these conservation treaties should be implemented, if not even interpreted in light of the concept of "sustainable use" as employed by the 1992 Convention on Biological Diversity (CBD)⁹⁶. This concept is aimed at striking a balance between the interests of States owning valuable natural resources, on the one hand, and those States claiming access to these resources for using them economically, on the other, thereby offering both groups of States incentives for making joint efforts towards sustainable use of natural resources⁹⁷.

At the regional level, a number of international treaties deal with wildlife utilization and protection in Africa. While the African Convention on the Conservation of Nature and Natural Resources of 1968 deals with flora and fauna rather rudimentarily⁹⁸, both the agreement for the establishment of the Southern African Centre for Wildlife Management (SACWM) of 1990⁹⁹ and the Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Flora and Fauna of 8 September 1994¹⁰⁰ do not cover all facets of protecting and managing flora and fauna, but focus on the issue of illegal trade in endangered species. Most important is certainly the SADC Protocol on Wildlife Conservation and Law Enforcement which was signed by all SADC member States on 18 August 1999¹⁰¹ whose principles and rules have mere framework character. Under the Protocol

⁹⁴ Text in: ILM 12 (1973), 1055.

⁹⁵ The Ramsar Convention on Wetlands of International Importance of 2 February (text in: ILM 11 [1972], 963) is the only one which requires a combined strategy of conservation and "wise use"; see Article 2 para. 6 and Article 3 para. 1 of the Convention.

⁹⁶ According to Article 2 CBD "sustainable use" means "the use of the components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations". For a more detailed analysis of the relationship between wildlife conservation and sustainable use see U. Beyerlin, *Perspectives on Wildlife Conservation: A Critical Assessment of the Relevant International Treaties and EC Instruments*, in: T. Zhenghua/R. Wolfrum (eds.), *Implementing International Environmental Law in Germany and China* (2001), 41, at 51 et seq.

⁹⁷ For example, there is ongoing controversial debate on whether the African elephant should, or should not, be put on List I of CITES. In the author's view, there is much in favour of arguing that elephants are probably best protected if the custodial States and their local communities living with elephants can make use of them in a sustainable manner; compare Beyerlin, *ibid.*, at 55 et seq.

⁹⁸ The Convention requires the contracting States to "take all necessary measures for the protection of flora and to ensure its best utilization and development" (Article VI), and to "ensure conservation, wise use and development of faunal resources and their environment" (Article VII).

⁹⁹ The SACWM treaty, established by a pro-ivory trade alliance encompassing Zimbabwe, Malawi, Botswana and Namibia, has its origins in the polarization of the debate over the ivory trade because the SACWM States insist that the ban on the ivory trade frustrates long term elephant management in southern Africa. SACWM pursues a policy involving sustainable use of elephants and community involvement in conservation; see R. Duffy, *Resisting Environmentalism: Global Governance and Local Dysgovernance* (March 2002), in <<http://www.essex.ac.uk/ecpr/events/jointsessions/paperarchive/turin/ws10/Duffy.pdf>> (visited 3/4/03), 9.

¹⁰⁰ See <<http://www.internationalwildlifelaw.org/lusaka.pdf>> (visited 5/4/03).

¹⁰¹ Text in <http://www.iucnrosa.org/zw/elisa/SADC-Protocols/wildlife_protocol_summary.html> (visited 3/4/03). As of 25 September 2002, the Protocol has not yet entered into force.

States parties have to ensure the conservation and sustainable use of wildlife resources under their jurisdiction and to guarantee that activities within their jurisdiction do not cause damage to the wildlife resources of other States. They must secure cooperation at the national level among governmental authorities, NGOs and the private sector, take relevant policy, administrative and legal measures as appropriate, enforce national legislation pertaining to wildlife effectively, and cooperate with other parties to manage shared wildlife resources (Article 3). The primary objective of the Protocol is to establish common approaches to the conservation and sustainable use of wildlife resources and to assist with the effective enforcement of relevant laws. Among the specific objectives of the Protocol, promotion of the conservation of shared wildlife through the establishment of trans-frontier conservation areas and facilitation of community-based natural resources management practices deserve special attention (Article 4). With regard to the last mentioned issue the Protocol calls on parties to establish mechanisms for community-based wildlife management and to promote it; thereby parties must integrate, as appropriate, principles and techniques derived from indigenous knowledge systems into national wildlife management and law enforcement, and promote economic and social incentives to encourage the conservation and sustainable use of wildlife (Article 7, paras. 4, 6 and 8).

A closer look at the national and sub-regional wildlife management practice in southern Africa reveals that the SADC Wildlife Conservation Protocol is not supposed to remain dead letter. Two examples may show that today southern African States are moving towards establishing at the national level wildlife management mechanisms which are based on the idea of sustainable use of wildlife resources, combined with pursuing a community-based approach¹⁰²:

Zimbabwe's CAMPFIRE¹⁰³ reflects a policy of devolving authority over wildlife to local levels and offering incentives for local investment in the resource base. As a result of this move towards decentralization, Zimbabwe has witnessed an expansion in the land area for wildlife management from 12 to 33 percent while wildlife numbers have continued to rise¹⁰⁴. Meanwhile, this policy of decentralizing authority over wildlife appears to have been adopted by the majority of SADC States, including South Africa.

¹⁰² See for more information on programmes of community-based natural resource management (CBNRM), mainly featured by the Centre for Applied Social Sciences (CASS) (Zimbabwe) and the Programme for Land and Agrarian Studies (PLAAS), School of Government, University of the Western Cape (South Africa), N. Mohamed, Co-Governing Natural Resources in Southern Africa: Lessons from Fisheries Co-Management, Malawi and Conservation Co-Management, South Africa, PLAAS paper (not dated), and S. Shackleton, et al., Devolution and Community-Based Natural Resource Management: Creating Space for Local People to Participate and Benefit?, in: Odi Natural Resource perspectives, No. 76 (March 2002).

¹⁰³ CAMPFIRE means "Communal Areas Management Programmes for Indigenous Resources". See report "Acts, Amendments & Appropriate Authorities: CAMPFIRE's Legal Framework", in <http://www.campfire-zimbabwe.org/facts_03.html> (visited 3/4/03).

¹⁰⁴ Compare Rihoy (note 57), at 4 et seq.

In 1969 the Makuleke tribe was forcibly removed from the northern tip of the Kruger National Park. In 1996 the Makuleke, relying on the 1994 South African Restitution of Land Rights Act, lodged a formal claim for the restitution of their land. In 1998 an agreement was reached which recognized the Makuleke as owners of their ancestral land. Today, the Makuleke clan, forming a Communal Property Association (CPA), is entitled to use the land strip for purposes of wildlife conservation and commercial tourism, subjecting conservation and land management decisions to a Joint Management Board which consists of the CPA and the Kruger National Park Authority. Thus, the responsibility for achieving wildlife conservation has been moved to the grass-roots level, ensuring that the interests of the Makuleke are now bound up with those of conservation¹⁰⁵.

The Makuleke claim can be regarded as a model for integrating indigenous communities into wildlife conservation programs¹⁰⁶. Like CAMPFIRE, it clearly stands for a policy approach pursuing sustainable use of wildlife resources. Moreover, it bears testimony to a considerable shift from agriculture to wildlife-based tourism which seems to be more profitable than other forms of land-use¹⁰⁷.

Another core aspiration of the SADC Protocol, namely strengthening sustainable utilization of shared wildlife resources, is also plainly mirrored in southern African inter-State practice. An IUCN-ROSA study of 2001 on transboundary natural resources management (TBNRM) in southern Africa enumerates and describes six transfrontier conservation areas (TFCAs) (including the Gaza/Kruger/Gonarezhou TFCA shared by Mozambique, South Africa and Zimbabwe, and the Kgalagadi Transfrontier Park situated in the south western Kalahari ecosystem linking Botswana and South Africa), seven TBNRM initiatives (including the Zimbabwe/Mozambique/Zambia TBNRM [ZIMOSA] and the Zambezi Basin Wetlands Conservation and Resource Utilisation Project), and some additional informal TBNRM activities¹⁰⁸. Together they aim in some way at benefiting and empowering local communities, although they are viewed as not yet "able to address the imbalance of power between the local actors on the one hand and the state and private investors on the other"¹⁰⁹. Active participation of these communities in the

¹⁰⁵ See *ibid.*, at 8 et seq.

¹⁰⁶ Apparently there was a large number of similar land claims, e.g. the Schmidtsdrift and Kono claims in the Northern Cape, the Groote Springfontein claim in the Western Cape, and the Cremin Claim in KwaZulu-Natal; see <<http://www.polity.org.za/html/govdocs/pr/1997/pr0122a.html>> (visited 3/4/03). Compare also W. Ellis, *The Khomani San and Mier Transitional Local Council Land Claims within the Kalahari Gemsbok National Park*, in: *Commons Southern Africa*, Vol. 4 Part 1 (August 2002), at 7; in <<http://www.cbnrm.uwc.ac.za/>> under "Publications".

¹⁰⁷ There is evidence that investment in extension of, and development for, rural-based agricultural production system is on the decrease. See Y. Katerere/R. Hill/S. Moyo, *A Critique of Transboundary Natural Resource Management in Southern Africa*, IUCN-ROSA Series on TBNRM, Paper No. 1 (2001), at 19.

¹⁰⁸ See Jones/Chonguica, *Review and Analysis of Specific Transboundary Natural Resource Management (TBNRM) Initiatives in the Southern African Region* (2001), IUCN-ROSA Series on TBNRM, Paper No. 2 (2001), at 5 et seq., 22 et seq., 36 et seq.

¹⁰⁹ Compare Katerere/Hill/Moyo (note 107), at 26.

relevant decision-making is supposed to remain one of the main challenges for the TBNRM initiatives, as long as the rights rural people hold to land and resources are insecure¹¹⁰. In this respect, the SADC Wildlife Protocol has unfortunately failed to set minimum standards for community-based natural resource management activities.

Closing with a look at what the Johannesburg Plan of Implementation contributes to ensuring protection and sustainable use of wildlife resources, its relevant recommendations are once more rather disappointing. The Plan confines itself to calling in very broad terms for the promotion of “sustainable tourist development, including non-consumptive eco-tourism”, thereby enabling indigenous and local communities to develop and benefit from eco-tourism¹¹¹, and, with special regard to Africa, it only demands support for Africa’s efforts to attain sustainable tourism through establishing national and cross-border conservation areas to promote ecosystem conservation according to the ecosystem approach, as well as respecting local traditions and cultures and promoting the use of traditional knowledge in natural resource management and eco-tourism¹¹².

IV. Assessment

Practice in southern Africa has revealed that degradation of land and nature is one of the root causes for poverty. Therefore, sustainable use of natural resources should be an integral part of any state’s strategy aimed at eradicating poverty, albeit it is certainly not the only means for achieving that aim. An integrated approach to combating poverty and degradation of nature¹¹³ for the purpose of striking a sound balance between developmental and ecological needs may prove the more promising if combined with a bottom-up approach designed to actively involve affected individuals and local communities, including indigenous people, in relevant decision-making. This approach as employed in the UNCCD should be part of the nature resource management policies pursued by affected developing countries at the national and sub-regional level. Relevant southern African practice currently mirrors the initial stages of developing such a strategy which trusts in the beneficial effects resulting from the devolution of responsibility to affected local communities and the latter’s active participation in natural resource management, particularly as far as conservation and sustainable use of wildlife resources are concerned. It can be taken as a sign that the underlying idea of the Aarhus ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters of 25 June 1998¹¹⁴ is going to spread all over the world.

¹¹⁰ See *ibid.*, at 53 et seq. 58 et seq.

¹¹¹ Plan of Implementation, para. 43 (chapeau) and (b).

¹¹² *Ibid.*, para. 70 (chapeau), (b) and (c).

¹¹³ As shown above, an integrated strategy to combat poverty and desertification constitutes the overriding objective of the UNCCD.

¹¹⁴ Text in: ILM 38 (1999), 517.

What can also be concluded from our findings is that environmental problems showing serious social-economic impacts, such as degradation of natural resources resulting in poverty, starvation and disease of affected individuals and local communities, can best be solved through policies and strategies pursuing a multi-level regulatory approach and combining "hard law" with "soft law"¹¹⁵.

Although the international community of States must take a fundamental interest in preserving the natural resource base of humankind from degradation and destruction, sustainable use of land, water and wildlife is an issue which cannot effectively be dealt with at the global level, as the modalities of structuring nature resource management are highly dependant on the geographical and socio-economic particularities on the ground. It is therefore not by mere chance that to date we do not have any global convention encompassing all facets of soil, water and wildlife management. The UNCCD is hardly a proof to the contrary, as the main reason for which it was established at the global level was the acknowledgement that developing countries combating desertification and drought were in need of being financially and technologically supported by the industrialized States¹¹⁶. Where sustainable use of natural resources cannot be achieved without the active involvement of local communities, sub-regional inter-State agreements usually appear to be better suited to provide for an adequate legal framework than universal or regional ones.

Having in mind that the higher the level of international law-making, the lower the regulatory force and density of its rules will be, agreements on issues such as shared water and wildlife resources preferably should be made between the States concerned, that is to say at the sub-regional level. The more the relations between these States are determined by the spirit of good neighbourly partnership, the greater the normative strength and density of the rules these States have agreed upon will be. In this respect, the example of the sub-regional SADC Wildlife Protocol admittedly leaves much to be desired. This might result from the rather heterogeneous interests and needs the thirteen parties to the Protocol apparently have.

The more complex and multi-layered the subject matter is, the more States will be induced to consider the pros and cons of multi-level norm-setting. This strategy aims at combining rules which have been set at different levels to a mix of norms which can complement each other well. It goes without saying that hard law can be combined with hard law, but also with soft law which originates from an international system of non-legal values, without ranking lower than hard law. Soft law becomes particularly important when governmental bodies have to cooperate with non-governmental organizations (NGOs) and private stakeholders at the international level. As private actors cannot be party to an international treaty, a legally

¹¹⁵ Compare U. Beyerlin/T. Marauhn, *Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference* (1997), at 14 et seq. and 150.

¹¹⁶ The UNCCD's Regional Implementation Annexes for Africa and three other regions reflect the acknowledgment that the regional level is better suited to the solving of desertification problems in substance than the global one.

non-binding arrangement is the only means available for making such partnerships, e.g. for the purpose of co-managing shared natural resources, reliable and stable.

A soft law arrangement can have steering effects on the parties' behaviour which can be very similar to those produced by a hard law agreement, provided that its wording is clear and precise enough. In this respect, many of the soft law instruments dealt with above prove rather deficient. Contrary to Agenda 21, which proved a very efficient instrument for determining and structuring the whole post-Rio process, the SADC Action Programme to Combat Desertification in Southern Africa, to take just one example, is so broadly worded that its impact on the implementation of the UNCCD is expected to be rather poor. Unfortunately, the Johannesburg Plan of Implementation suffers from similar shortcomings, as far as protection and sustainable use of natural resources are concerned. It can certainly take credit for having placed much emphasis on the need for combating poverty, but it will hardly prove able to substantially influence the further development of inter-State cooperation and national policies towards a more sustainable use of natural resources which is a key to effective poverty eradication. This is all the more regrettable, as to date State practice, at least in southern Africa, reveals slight signals for a move towards "greening" the combat against poverty.

