



# Environmental Governance in Sudan

An Expert Review

United Nations Environment Programme



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# Acronyms

ACTED	Agency for Technical Cooperation and Development
ADRA	Adventist Development and Relief Agency
ADS	Area Development Scheme
CBD	International Convention on Biodiversity
CBO	Community based organisation
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COOPI	Cooperazione Internazionale (Italian NGO)
CPA	Comprehensive Peace Agreement
CRP	Central Reserve Policy
CRS	Catholic Relief Service
DDPD	The Doha Document for Peace in Darfur
DLC	Darfur Land Commission
DRA	Darfur Regional Authority
EIA	Environmental Impact Assessment
EPA	Environmental Protection Act
EU	European Union
FAO	Food and Agriculture Organisation
FAR	Fellowship for African Relief
FNC	Forestry National Corporation
GEF	Global Environment Facility
GIS	Geographical Information Systems
HCENR	Higher Council for Environment and Natural Resources
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Person
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
INC	Interim National Constitution
INGO	International Non Governmental Organisation
IUCN	International Union for Conservation of Nature
MDG	Millennium Development Goals
MDTF	Multi Donor Trust Fund
MEFPD	Ministry of Environment, Forestry and Physical Development
MED	Ministry of Electricity and Dams
MEN	Ministry of Energy and Mining
MWR	Ministry of Water Resources
NAP	National Action Plan
NAPA	National Adaptation Programme of Action
NBSAP	National Biodiversity Strategy and Action Plan
NCA	Norwegian Church Aid
NCS	National Comprehensive Strategy
NDVI	Normalised Difference Vegetation Index (NDVI)
NGO	Non Governmental Organisation
NCSP	National Council for Strategic Planning
NSP	The Five Year National Strategic Plan
NWRC	National Water Resources Council
POP	Persistent Organic Pollutant
SDA	Sudan Development Association
SECS	Sudanese Environmental Conservation Society
SLUF	The Sustainable Land Use Forum
TDRA	Transitional Darfur Regional Authority
UMCOR	United Methodist Committee on Relief
UNAMID	United Nations/African Union Hybrid Mission in Darfur
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Project
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
WHO	World Health Organisation

# Foreword

This work was conceived following consultations between UNEP staff and a group of senior Sudanese environmental academics and practitioners who, between them, decided the basis and priorities for a report on environmental governance. A detailed analysis of environmental governance had emerged as a priority for the UNEP programme for two reasons.

Firstly, the practical work undertaken on water resources and forestry in Darfur had identified that supporting the policy and institutional context for management of the environment was going to be a priority in the “early recovery” phase of support to Darfur. Supporting environmental line ministries in Darfur to develop policies and institutional capacity for participatory approaches to the management of natural resources was identified as a means of supporting government efforts to reduce the prevalence of conflict over natural resources. This line of thinking was borne out by the Doha Document for Peace in Darfur which calls for frameworks and policies for natural resources to be managed to mitigate conflict and enable livelihoods in an equitable way (see Box 1).

Secondly, the work at national level relating to capacity building on major environmental themes such as Integrated Water Resources Management (IWRM), climate change, forestry – including REDD plus - and supporting pastoralist livelihoods has clear

policy and institutional implications. One aspect of this has been to ensure complementarity and coordination of approaches across the sector. This was borne out at UNEP’s 2012 project workshop<sup>1</sup> and prior to that by the recommendations in the Post Conflict Environmental Assessment<sup>2</sup>. Both of these perspectives on the need for support for environmental policy and institutions converge in the recommendations<sup>3</sup> made by Sudanese delegates on the two study tours to South Africa. This initiative straddled the practical work being done in Darfur with national level support for Sudan’s national IWRM programme.

This report is therefore intended as a platform for work to support environmental policy and institutions in Sudan. It is a review of the current situation and an analysis of where things are. It provides a baseline for policy and institutional reform and strengthening. However it moves one step beyond that by harnessing the perspective of two of Sudan’s most senior environmental experts and asks their recommendations for a way forward. Therefore, the report doesn’t represent UNEP’s perspective or views on Sudan’s environmental governance arrangement, but provides an opening to discussion and dialogue on strengthening environmental governance, in addition to laying down a factual record of where things currently stand. So the report has tables summarising legislation in the annex, in addition to analysis and recommendations for strengthening the arrangements in the main report.

## Box 1. An extract from the Doha Document for Peace in Darfur calling for the development of equitable environmental governance

172. Competition over pasture and water between herders and farmers is a serious problem in Darfur which shall be addressed in a comprehensive way by:

- i. Developing policies and projects to curb environmental degradation raise the agricultural production and improve livestock production;
- ii. Gradually shifting emphasis from quantity to quality in livestock production and animal husbandry;
- iii. Developing a framework for equitable access by various users of land and water resources;
- iv. Developing policies and projects aimed to establish agricultural, industrial and technological economy in the States;
- v. Developing research capacities in these areas.

Activity 13 in the Wealth Sharing section of the implementation plan is as follows:

Developing policies and conducting necessary studies for putting an end to environmental degradation and preserving natural resources.

The views expressed in this report are the views of the reviewers alone. UNEP trusts that this will contribute to processes of reform and strengthening Sudan's environmental policies and institutions and therefore supports this publication as a contribution to those processes. The chapter on Darfur is intended to provide specific support to the process of early recovery in which promoting equitable and sustainable environmental governance is an urgent priority.

The report is based on an extensive review of secondary and grey literature, as well as on consultations at national and state level, with key resource persons in the Ministry of Environment, Forestry and Physical Development (MEFPD), the Ministry of Agriculture, the Ministry of Energy and Mining, the Higher Council for Environment and Natural Resources (HCENR), the Sudanese Environment Conservation Society (SECS), and the Geography Department (University of Khartoum), and at state level, with representatives of relevant institutions (eg the Darfur Land Commission), agencies (eg UNDP South Darfur), government (including the Ministry of Agriculture and Forests, the Legislative Council, and the office for Land Registration, South Darfur), local NGOs (eg Practical Action) and various experts in the three Darfur states, including members of the team who worked on preparing the Darfur Joint Assessment Mission reports in 2007.

The review has been undertaken by two of Sudan's leading environmentalists Dr Yagoub Abdalla Mohamed and Dr Omer Egemi. In additional contributions have been made by three further experts – Dr Hamid Omer, Dr Abuelgasim Abdalla Adam and Dr Abdulrahman Mohamed Tahir. The report was then reviewed by three further experts: Dr Ahmed Abusin, Dr Atta Batahini and Dr Musa Abduljalil. The combined output was rich, but complex with editing and streamlining assistance provided by the UNEP team to bring these important contributions together.

This report is one of three reports to be produced by UNEP on the general theme of environmental governance as part of the programme in Sudan. The other two are:

- "Governance for Peace over Natural Resources – a review of transitions in environmental governance across Africa as a resource for peace-building and environmental management in Sudan"

- "Relationships and Resources" – which looks at the links between peace-building over resources and promoting participatory governance, and how the quality of relationships can be assessed and promoted amongst stakeholders in the environment. Stakeholders in this context refer to communities, government and other organisations.

The way in which these reports support UNEP's wider engagement on its main themes of IWRM, climate change and forestry, pastoralist livelihoods and community-based natural resources management, are discussed in the UNEP 2012 Programme Consultation which is posted at: [www.unep.org/sudan](http://www.unep.org/sudan)

**Dr Yagoub Abdalla Mohamed** holds a BA (Hons) and MA from the University of Khartoum, and a PhD from Liverpool University (UK) specialised in Agricultural Geography. He was Associate Professor and former Director of the Institute of Environmental Studies, University of Khartoum and worked as a national project manager at Capacity 21 programmers in Sudan. He has also been a consultant to the Higher Council for Environmental & Natural Resources (HCENR), as well as to many international organisations. Dr Yagoub has published a number of research papers on environmental issues, with a particular emphasis on Darfur and the impacts of development and conflicts on the environment. He is now chairman of the Environmentalist's Society.

**Dr Omer A Egemi**, is an expert in natural resource management, land tenure, and resource-based conflicts, especially between farmers and herders, with a focus on the Red Sea, Kordofan, Darfur, Blue Nile, and Upper Nile. He has had more than ten papers published on political ecology and land, and natural resource management issues. He has also contributed to a variety of national and international conferences. Between 2005 and 2007, he was the Team Leader of the Conflict and Environment Section of UNDP Sudan. He worked as a member of the UNEP research team in Darfur for the preparation of the Sudan Post-Conflict Report, 2006; as a resource person (Land Tenure and Conflict) for the Workshop on Wealth and Power Sharing in Darfur, organised by the World Bank and IGAD, Nairobi, November 2005; and as a resource person for the Darfur-Darfur Dialogue Consultation. Egemi has a BA (1st Class Honours) and an MA (Geography) from the University of Khartoum, and a PhD from the University of Bergen (Norway).

# 1 Introduction – Environmental governance in a changing context

Equitable and sustainable management of natural resources and of the wealth derived from their use and utilisation is essentially a function of good environmental governance. Environmental governance denotes a broad concept encompassing the organisational structures, decision-making processes and environment management activities of all levels of governance, be they central, regional or local as well as the judicial and executive organs of government. It also incorporates civil society organisations in their capacity as participants in shaping, reshaping and influencing public policy that affects environmental decisions and actions (Al Hardallu, 2001; Sida, 2008). UNEP's report "Governance for Peace Over Natural Resources"<sup>4</sup> provides the following definition of environmental governance:

*"The norms, rules and institutions that regulate the actions and interactions and decisions of government, civil society and the private sector in relation to the environment" (UNEP, 2012)."*

In the context of this report, however, the focus is on formal policies and institutions. Environmental governance is connected to development through access to productive resources, poverty reduction strategies and environmental protection. Natural resources are also critical assets holding the prospect for employment opportunities and generation of budget revenues as well as security of businesses and attraction of capital investment.

Weak management of the environment is widely recognised as a contributing factor to poverty and conflict in Sudan, especially in areas where livelihoods are highly dependent on the direct utilisation of natural resources. This report argues against a prevalent and pervasive natural resource abundance mentality in Sudan and advocates for effective environmental governance to address and reverse social and economic vulnerability allowing for flexible, adaptable economies and societies in a climate renowned for great variability, and an overall context of scarce resources and vulnerable ecosystems.

Sudan is a federal country where there are three levels of authority - national level, state level and locality

level. The powers over land and natural resources are divided among the various levels as follows:

- At the national level, the federal organs exercise the powers of planning, legislation and execution on federal lands, natural resources, mineral and subterranean wealth, inter-state waters, national electricity projects, and disaster management. The state organs within the boundaries of the state exercise powers over; state lands, natural resources, animal wealth, wildlife, non-Nile waters and electric power. There is, at present, some ambiguity as to what constitutes state versus federal land. However, the interpretation is that any land that falls within a particular state's boundaries is land belonging to that state, unless it is explicitly attributed to a specific federal institution.
- There are concurrent powers, where both federal (national) and state organs exercise powers on education, health, environment, tourism, industry and meteorology.
- Chapters 11 and 111 in the Interim Constitution (linked to the implementation of the Comprehensive Peace Agreement (CPA)) provided for the creation of commissions, particularly on land to assume, among others, planning and division of lands and forests between federal and state authorities. As per the interim constitution, land commissions have been established at state level (e.g. the Darfur Land Commission). However a land commission at federal level has not yet materialised<sup>5</sup>.

Rainfall in Sudan is characterised by enormous variability over space and time, and is at its lowest along the edges of the Sahara, at less than 150mm, to more than 700mm towards the south. Drought is a recurrent climatic phenomenon and the historical landscape of Sudan is littered with references to severe droughts that have had disastrous effects on livelihoods and environmental conditions.

The Republic of Sudan covers an area of about 1.87 million km<sup>2</sup>, (UN and Partners Work Plan, 2012)<sup>6</sup> and FAO, 2012. In general terms, desert and semi desert conditions cover between 60-70 per cent of



the country's total area (between 1.13 - 1.25 million km<sup>2</sup>), (Shazali and Abdul Ghaffar, 1999; Government of Sudan, 2007)<sup>7</sup>.

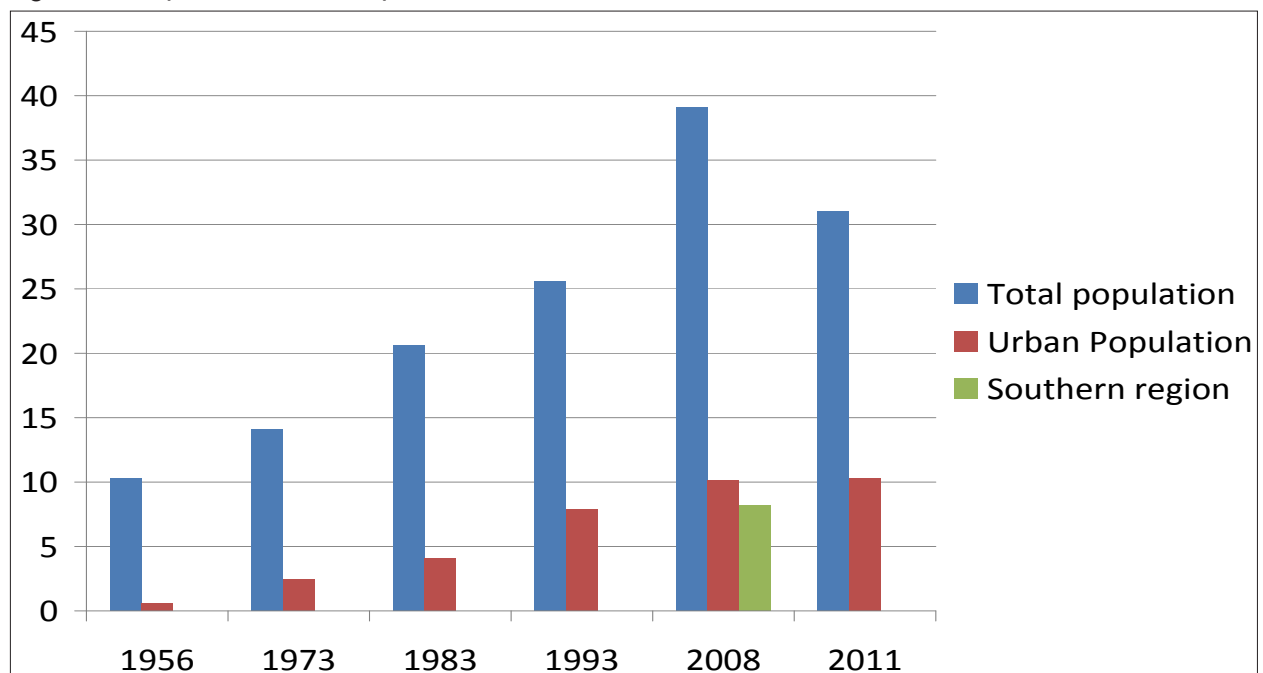
The latest estimation of the land cover of Sudan completed and released in April 2012 by FAO with part-funding by UNEP. Much of the interpretative work on imagery was made by Sudanese teams at the Remote Sensing Authority. The assessment has shown that some 50.7 per cent of this surface area is classed as bare rocks, bare soil and other unconsolidated materials (such as wind-blown sands free of vegetation in hyper-arid areas). A further 10% is classed as trees, 11.8% as shrubby vegetation, and 13.8% as herbaceous vegetation (Figures 2 and 3, on the next spread). Figure 2 gives a very clear spatial image for those areas of bare lands and shows they are mostly confined to the latitudes north of Khartoum and in all the northern States; in these areas agricultural land use is largely confined to the strips of suitable soils along the Nile and Atbara Rivers. In all some 12.6% of the land of Sudan is cultivated, mostly under traditional rainfed agriculture.

This data challenges the mindset of Sudan having an abundance of natural resources. A mind-set of scarcity would not only reflect the reality, but would also place more emphasis and investment in to the sustainable management of the resources.

Sudan remains essentially rural with the majority of the population dependent on the country's natural resources for their livelihoods. However, rapidly-increasing urbanisation is also being seen, with an estimated report of nearly 40 per cent of Sudan's population living in urban centres prior to secession (Assal, 2008, in Pantuliano et al, 2011). Rural-urban migration is attributable to a variety of 'push' factors such as insecurity in rural areas as well as 'pull' factors such as better education opportunities in urban areas. The reality is that many urban residents live in severe poverty with limited livelihoods opportunities (Pantuliano et al, 2011), with higher rates of natural resource consumption (e.g. forest resources) around urban areas (UNEP, 2007).

The population of Sudan has grown, and continues to grow rapidly - from 10.1 million in 1955/56 to 39.2 million in 2008 - an average annual growth rate of 2.6 per cent; (Sudan National Census, 1955/1956; Sudan National Census, 2008). In Figure 1 the total and the urban population for the Republic of Sudan is shown. In 2008 the component for Southern Sudan is also shown. The 2011 figure is for the Republic of Sudan which is lower than the 2008 figure as a result of secession of South Sudan. This overall picture of population growth is coupled with an increasing trend of urbanisation (UN and Partners Work Plan, 2011; Pantuliano et al, 2011). This, in turn, leads to a growing demand for food and, by definition, a need for land and natural resources.

Figure 1. Population of the Republic of Sudan



Source: Sudan National Population Council (2011) National Population Policy: The Current Situation, Challenges and Perspectives

Figure 2. Land Cover of Sudan – Seven Aggregated Land Cover Classes (FAO, 2012)

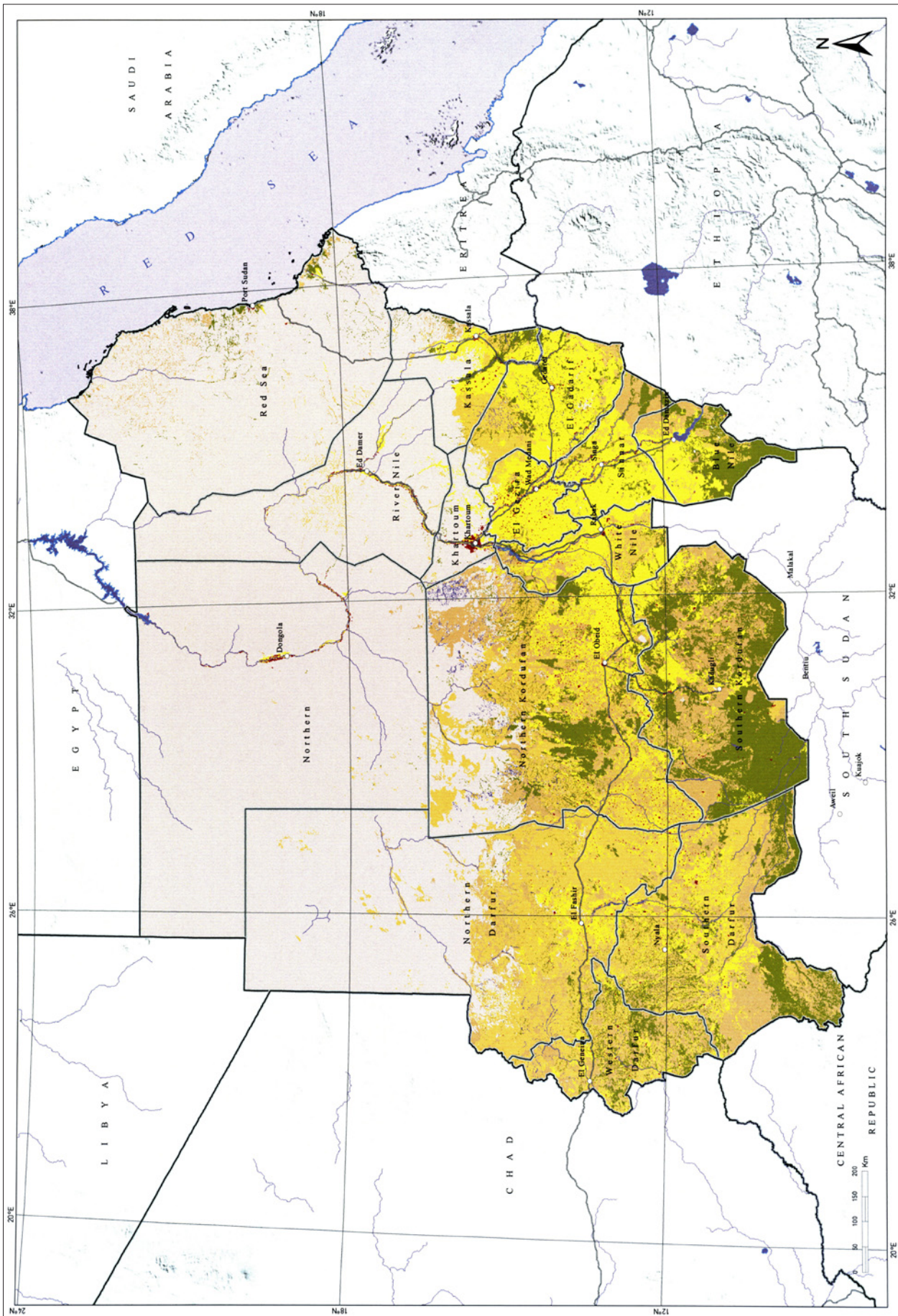


Figure 3. Land Cover of Sudan - Data for aggregated land cover classes (FAO, 2012)



The period between the late 1960s and early 1990s was marked by increasingly severe droughts and a scarcity of natural resources that resulted in famine conditions, population displacement and economic disruption. For example in Darfur, the normal southward migration of pastoralists, following a well-known seasonal schedule, was affected by severe climatic conditions. Drought pushed the early migration of pastoralists into farming land before the end of harvest season, which was one of several factors that precipitated clashes with settled farming communities. Tensions and conflict between the two livelihood groups was also compounded by policy-linked changes in land use patterns, including agricultural intensification and commercialisation, expansion of land under cultivation and increased land enclosures. These changes represent long-term systemic changes which, in the current context, negatively influence the way livelihood groups relate to one another, and also challenge the ability of some groups to adapt to the changing context.

Sudan is currently witnessing a conspicuous shift in leadership and social contract, particularly in areas across the country, such as Darfur and South Kordofan, where there has been widespread conflict and displacement of people. Tribal structures (the Native Administration system), which historically related to land and natural resources management, have been weakened over time. In some conflict-affected areas the emerging structures, comprising more militant youth, are contesting the leadership of tribal chiefs. This raises significant concerns about the possible appropriate institutional arrangements for the management of resources and conflict at local levels and also about how to reconcile indigenous structures and the emerging new political forces.

Pastoralism and agriculture have historically evolved and survived as complementary livelihood and economic systems, characterised by mutually beneficial exchange processes. In many places though, this historical relationship seems to have been altered significantly, with the two systems competing rather than complementing one another. The situation is aggravated by resource scarcity and degradation, growth in human and livestock populations, and increasing incidences of drought and unpredictability of rainfall. This creates challenges for the balance of traditional and formal governance systems of rural Sudan creat-

ing a further driver of change in environmental governance.

Some parts of Sudan that were previously agricultural and pastoral have become deserts. Although the notion of an advancing desert (Stebbing, 1953; DECARP, 1976) has since been disputed in academic settings,<sup>8</sup> there remains an ongoing debate over why desertification occurs, and to what extent. On one side is the argument that desertification is largely the result of the misuse and degradation of land by rural communities, augmented by drought (Ibrahim 1978; Ibrahim 1984), but there is another argument that claims that 'desertification' is a more complex process linked to the characteristic behaviour of dryland ecosystems.

Climate change is expected to have a more severe impact on the poor in peripheral areas, especially in northern arid areas, especially along the southern margins of the Sahara in Darfur, Kordofan and East Sudan. In the absence of support to adaptation, and the decreasing resilience of socioeconomic systems (pastoralists and farmers), the diversion of livelihoods to maladaptive alternatives is expected. Following the severe drought of 1983/84, pastoralists from North Kordofan and from Darfur were displaced to the western outskirts of Omdurman, where they settled in Abuzeid and Muwelih. A large proportion of this population remains there to this day, engaged in urban income-generating activities. In contrast, coping strategies in rural areas include firewood selling and charcoal making, which have become important livelihood strategies in the absence of sustainable livelihood and diversification options and opportunities, and which contribute substantially to environmental degradation.

In addition to the above, the following major challenges are stretching the systems of environmental governance:

- Proliferation of conflict over natural resources, especially in rain-fed areas away from the banks of the Nile
- Deforestation and loss of biodiversity
- Unsustainable exploitation of the natural resource base
- Climate change
- Drought and flood disasters

- Soil erosion and land degradation
- Environmental pollution and contamination of water and soil resources resulting from the uncontrolled use of chemicals
- The environmental impacts of the oil industry
- Desert creep over the banks of the main Nile
- Degradation of marine ecosystems resulting from increased marine activities, overexploitation of fish resources and oil pollution
- Rapid population growth



Illegal charcoal production is a major cause of deforestation in Southern Kordofan

## 2 Legal frameworks by sector

Sudan was one of the first African countries to promulgate legislation concerning the management and protection of the environment dating back to the early years of the 20<sup>th</sup> Century. A study carried out by Magzoub in 1998 showed that there were approximately 150 acts, orders and related regulations addressing environmental issues for Independent Sudan. However, this has been confronted from the very beginning by challenges of legislative and institutional dualism at national, state level and local levels, as well as between the three levels, and difficulties building a unified and socially acceptable system of environmental legislation.

Pre-colonial, colonial and post independence norms and regulations grounded in customary and statutory procedures have evolved in tandem, with little coordination. One consequence has been regular conflict over access to land and natural resources - what De Wit (2001) highlighted as the conflict between "legitimacy" and "legality", communal tenure rights versus private and state land ownership.

A table which sets out the acts and legislation concerning environmental governance in Sudan is in Annex 1. The degree to which legislation translates into action varies, partly as a result of a limited capacity to enforce legislation and partly due to political will.

In principle, the sub-national level, states and localities have the power to adjust national legislation to suit the local context, in the form of state legislation and local orders. Legislative bodies at state and locality levels pass such laws and local orders with the provision that they do not contradict national laws. Some federal legislation also gives authority to state governments to define by-laws, which provide more concrete guidance on how legislation can be applied. However, by-laws at state level are only sometimes defined. A noted exception is the Khartoum State Environment Law, which is based on the National Environment Law of 2001.

At the locality level, there is an institutional structure in place to deliver on governance responsibilities (a commissioner, an administrative setup including

various sectoral departments, a legislative body made up of sectoral committees), but often there is limited capacity in terms of adequate training and resources at this level to ensure that the locality can deliver on its responsibilities in an efficient and informed manner.

### 2.1 Land tenure

Land tenure legislation and policies are highly elaborate compared with other natural resource legal frameworks in Sudan. In part, this is a legacy of the colonial system of land ownership and user rights, which was semi-codified and reasonably well developed. These were largely effective and contributed to creating a basis for preservation of the traditional subsistence based livelihoods in rural communities (IFPRI, 2006). Today the interface between statutory and customary land laws and legislation is complex, and is partially the result of changes in both, which have their roots in the colonial period.<sup>9</sup>

The Title to Land Act (1899) and the Land Settlement and Registration Ordinance (1925) addressed land tenure prior to independence. The 1899 Act recognised private property in north and central riverain Sudan (not considering land tenure in the rest of the country), while the 1925 Ordinance listed the criteria for registered land, noting that all unregistered land was to be considered as government property (Section C). The Ordinance did, however, allow the space for land claims to be verified with various authorities, both statutory and customary. The Ordinance describes in detail the process of determining land rights and other rights attached to it, and defines the formation of land committees and the appointment of land registration officers to discuss competing land claims.

Though the 1925 Ordinance was designed to allow for land registration, all registration occurred in Khartoum to register riverine lands and large agricultural schemes (like the Gezira Scheme) (IFPRI 2006). In peripheral regions like Darfur, land continued to be allocated according to customary rules and regulations.

Other laws that were enacted in the colonial period extended government entitlement to forests. The Central Forest Act (1932) and the Royalties Act (1933), extended government entitlement to forests, granting the government access to wood fuel for transportation development.

The Unregistered Land Act was passed in 1970. Its application was country-wide, including the peripheral regions of Darfur, Kordofan, Blue Nile, East Sudan and what is now the Republic of South Sudan, which have or had no previous system of land registration. Article 4 (1) states that: *"All land of any kind whether waste, forest, occupied or unoccupied, which is not registered before the commencement of this Act shall, on such commencement, be the property of the Government and shall be deemed to have been registered as such, as if the provisions of the Land Settlement and Registration Act, 1925, have been duly complied with"* (Sudan Government, 1970)

In effect, the 1970 Unregistered Land Act served to nationalise all unregistered land across the country and, in doing so, established the concept of land as a commodity that could then be further privatised and transferred to individual ownership. The impacts of the Act were disproportionately borne by pastoralist communities. As the Act did not recognise customary land arrangements, groups of pastoralists were left disenfranchised from their traditional homelands, and practically prevented from user access rights to water and land for grazing (IUCN 2007). According to the Act "if any person is in occupation of any land which is registered or deemed to be registered in the name of the Government, it may order his eviction from such land and may use reasonable force if necessary" (Government of Sudan, 1970). The Act also deprives prior land users from the right to compensation for the loss of land or for the opportunity to be generated from the use by the government or the private sector.

The 1970 Unregistered Land Act came into force in a prevailing situation of intense environmental pressure for rural populations in Sudan, serving to compound the concurrent phenomena of widespread and severe drought, population displacement, and expansion of urban agricultural enterprise into rural areas (Young, H., A. M. Osman et al., 2009). The dissolution of the Native Administration had also left an apparent governance gap at community

level, especially in relation to conflict and disputes over land. Although the Native Administration was, to some extent, reinstated in 1987, by this time the authoritative strength of customary leadership and tribal chiefs had diminished, and in later years the credibility and legitimacy of the tribal leadership of some groups also came into question (Abdul Jalil et al, 2007). In spite of this, tribal institutions remain one of the key actors in relation to land and have recognition by the State, although their relationship to other levels of governance is not entirely clear.

The 1970 Unregistered Land Act was repealed by the 1984 Civil Transaction Act which articulates the legal framework regarding land access. Importantly, the Act asserts that registered usufruct rights have equal legal weight to registered ownership. The Act also includes provisions of Sharia Law, whereby it guarantees in some instances rights to access formerly unregistered land (urf), however reaffirms the State as a land owner. The primacy of the state is enshrined by the Act, which removes jurisdiction from any court to receive complaints that "go against the interest of the state" (Government of Sudan, 1984)

The Local Government Act 1998 was an attempt to restore the land management and administration vacuum at the local level created by the abolition of the Native Administration system in 1971 (De Wit, 2001). According to De Wit, the Act confers important responsibilities to the States and localities (*mahaliyya*) and calls for:

- Identification of territories of jurisdiction that reflect rural reality with the possibility of identifying territories of local governance that coincide with customary land management territories
- Setting and functioning of land management committees. These committees exist in every locality (for example, in Darfur) and are functional. The committees are made up of participants from various sectoral departments and contribute to decision-making on validation of land claims to allow registration. A similar over-arching committee exists at state level, usually linked to the Ministry of Agriculture, which performs a similar function
- Development of local bylaws for regulation of land management, including grazing lands and

transhumance routes. For example, there are committees at state and locality level whose function it is to determine bylaws on grazing land and transhumance routes, as dictated by the state acts which regulate grazing and farming

- Active and legal involvement of customary authorities and land users in land management. For example, the Act gives states the authority to formulate their respective Native Administration State Acts
- Accountability for proper land management.

Sudan's 1998 Constitution, based on the philosophy of federalism (adopted since 1992) provided for the rights and duties of the states over land and resource management; however, the division of powers remained unclear and there were no means of verification on implementation of the law. According to the Constitution:

- The States have competence to exclusive jurisdiction in relation to states lands, natural resources, animal wealth and wildlife resources<sup>10</sup>.
- The States are competent to exercise concurrent jurisdiction in relation to the environment.
- The extent of jurisdiction and share of revenue out of land and forest resources will be defined by constitutional mechanism or by federal Act. For example FNC pays 40 per cent out of their revenue to the State Ministry of Agriculture in all states (see Council of Ministers Decree No. 40, 1997 and the Memoranda of Understanding between FNC and the States regarding division of authority and forestry revenue of the state).

The Interim National Constitution of Sudan (2005) provided specific articles for the ownership of land and the management of natural resources, thereby giving impetus to socially informed land tenure policy and legislation. The Interim Constitution called for competency in land administration and provided for the incorporation of customary laws and practices. It stipulated the creation of four Land Commissions<sup>11</sup> for the purposes of arbitration, entertaining claims against the relevant government or others in relation to land, assess appropriate land compensation, and make recommendations on land reform policies and recognition of custom-

ary land rights or law (Interim National Constitution of Sudan, 2005). The Constitution also gives each state the right to the "development, conservation and management of state natural resources and state forestry resources" (ibid, pp. 104). This raises the challenge of institutional arrangements that would ensure inclusive, just and equitable use and management of land and natural resources. Land Commissions stipulated under the Interim Constitution face considerable challenges, including:

- The commissions, where created, are mandated to make recommendations only. The Darfur Land Commission, however, is also empowered in matters of policy development and monitoring. In addition, it has the mandate to arbitrate on disputes related to land rights and assess relevant compensation for applications that are brought before it. (DDPD, Art 201) How claims to rights are to be made, re-made, legitimated and contested and whether claims to rights are to be made on an individual or collective basis is unclear
- Recognition of customary rights in the Interim Constitution also raises the question of the position and mandates of customary structures and institutions, and the way in which they relate to formal institutions at various levels of governance.
- It is not clear whether the National Land Commission should be centralised or decentralised and the Interim Constitution does not clarify this.
- The rights of representation of pastoralists and farmers in the Land Commissions are not reflected in The Interim Constitution.

## 2.2 Water

Acts relating to water include the Nile Pumps Control Act, 1939; the Nile Pumps Control Regulations, 1951; Civil Transaction Act 1984; Irrigation and Drainage Act, 1990; the Water Resources Act, 1995; the Groundwater Regulation Act (1998); and the Public Water Corporation Act (2008).

The Civil Transaction Act (Section 592) stipulates the following:

- Rights to develop and access water resources cannot be separated from rights which are



exercised over the land, as long as permission is granted by the respective water authority whose job it is to ensure that the water point in question has no harmful side effects.

- Access to public water sources is given to all people, subject to the parameters listed by existing legislation. This access is ceded through the licensing of a contract.
- All water resources that are constructed are recognised as private property, and therefore access rights must be negotiated with the owner of the land on which these resources are found.
- In the event that a tenancy agreement is in place, a landowner will bestow the relevant rights of access to the tenant, including the right to use water.

At Darfur State level, the most important pieces of legislation are the Water Resources Act, the Public Water Corporation Act, the Groundwater Regulation Act and the North, South and West Darfur Water Corporation Establishment Act (Ali, 2009). This is because they all coincided with, or came after, the creation of the State Water Corporation, which is the implementing arm at state level, and all perform an important regulatory role in the water sector at that level.

The 1995 Water Resources Act, described as a major institutional reform, was concerned with the Nile and Non-Nilotic surface waters as well as with underground water. In that sense it supersedes the 1939 Nile Pumps Control Act that was confined to pumping from the Nile waters only. In terms of institutions, the Act in effect:



A fisherman at the Gezira irrigation scheme

- Dissolved the national Rural Water Corporation and Urban Water Corporation under the Ministry of Irrigation and Water Resources, and replaced both of these bodies with the National Water Corporation, which functions as the main, centralised responsible body (changed to the Public Water Corporation following the 2005 CPA, and now the General Directorate of Water Supply under the Ministry of Water Resources). The mandate of the General Directorate of Water is to oversee nationally and internationally funded projects, to develop overall water policies and standards, and to provide capacity building for the water sector
- Allowed states to establish State Water Corporations as the lead authorities on water resources development, utilisation and management at the state level<sup>12</sup>
- Grouped all agencies and bodies<sup>13</sup> working in the water resources sector under the Ministry of Irrigation and Water Resources
- Stipulated the establishment of the National Water Resources Council (NWRC), which is an advisory body to the Ministry of Irrigation and Water Resources at national level, with representation from the state level. It is mandated to advise on the formulation of water policies, management of water resources, protection of water resources, regulation of drilling of boreholes and digging of wells, issuance of licenses for the abstraction of water from various sources, dealing with water disasters (droughts and floods), research, review of water related legislation, supervision of water abstraction from the Nile, non-Nilotic sources and ground water, and planning for long term water resources use and development<sup>14</sup>.

The Act also stipulates that:

- The State has the right to the flow of water, its control, its use, and all that is related to water resources at state level.
- People have the right to use the water for various purposes in accordance with the provisions of the Act and any other pertinent Act.
- Anybody, public or private, who desires to abstract water, for any purpose, from the Nile,

the Non-Nilotic systems and underground water must obtain a license from the Ministry of Irrigation and Water Resources with the relevant by-laws and regulations that define the procedures and regulations for licensing.

The Groundwater Regulation Act (1998) mandates the Groundwater and Wadis Directorate as the sole government technical organ to explore, develop, monitor and protect wadis and groundwater, and to issue permits for constructing water points (Ali, 2009).

The Public Water Corporation Act (2008) gives authority to central government for national planning and investment in the water supply sector, to promote water supply research and studies, and to set policy and legislation on water development (ibid).

One of the major challenges in the water sector is the lack of any link being made between water development and management to other natural resources issues; in effect, failing to recognise the fact that water functions as part of the broader environment, and therefore the fact that water developments have an impact on the wider natural resource base.

## 2.3 Pasture and grazing

The Civil Transaction Act is one of the few statutory legal provisions that provide regulating access to pasture land (De Wit, 2001). The Act (Section 565) treats as pasture all fallow land in the country. Nevertheless it stipulates the right of government to impose temporal or spatial restrictions on grazing in these areas or to allocate land for grazing for the benefit of an entire community or for the protection of wildlife. The Act, as outlined in De Wit (2001), stipulates that:

- All fallow land is pasture
- State authorities may impose restrictions on grazing as to time and space
- State authorities may allocate land for grazing for the benefit of the whole community and the protection of animal resources

Access to pasture land is vaguely described by the Act, with the identification of pastureland obtained through subtraction from other lands (agriculture

and forests). Although the Act offers the opportunity to allocate, and possibly to register, pasture land in the name of the community, it paradoxically gives the authorities the right of restricting and cancelling such benefits (ibid). The day-to-day realities of rural Sudan are such that economic activities (agriculture, pastoralism, forestry etc) are inextricably linked and so any livelihoods strategy that regarded them holistically, rather than in isolation would, arguably, have more relevance and prove more effective.

To partially overcome these limitations, the 1996 Range Protection and Pasture Resources Development Bill was introduced. The Bill put forward a framework defining what constituted pastureland. In addition, it proposed measures for participatory natural resource management that empowered communities to manage pastoral reserves under the overall authority of the State Range and Pasture Departments.

Due to a lack of political endorsement, the Bill was not ratified at the time, and it was only in 2002 that the Government passed a Forest and Renewable Natural Resources Act. The Act recognised the access rights of pastoralists for grazing and clear passage. Unfortunately, due to provisions that gave

a discretionary power to the Forestry Corporation to, in some cases, limit access rights, the Act was perceived as being biased in favour of sedentary communities. Although these provisions were put in place with the given intent of giving the Forestry Corporation oversight over land use for environmental protection, this perception limited the acceptability and practical effectiveness of the Law. (IFPRI 2007)

In Darfur, the relevant legislation is the Farming and Grazing Regulation Act. In West Darfur, where the legislation was amended in 2009<sup>15</sup>, the Act officially recognises seven grazing routes (or corridors), determines their width at 100-150m, sets the annual migration schedule which determines when pastoralists can move with their animals, and outlines rights and obligations for both pastoralists and farmers.

## 2.4 Forests

Legislation concerned with Sudan's forests dates back more than one hundred years. In 1901, the law of Forests and Bush Lands was promulgated.



Sudanese Environmental Conservation Society have been active in promoting community-managed forests to provide firewood and act as shelter belts and buffer zones around villages

In 1932 the Central Forest Reserves and Provincial Forests Ordinance was declared and continued to hold for nearly fifty years until it was amended by the Forests Policy in 1986. By 1989, The Forests Act and the Forests National Corporation (FNC) Act were declared and implemented. The most recent law is the Law of Forests and Renewable Natural Resources declared in 2002. One of the general features of the law is the inclusion of FNC Act of 1989 (administrative) and Forests Policy Act of 1989 (technical) in this new law as a single law to facilitate its implementation. It also brings together the renewable natural resources of forests, soils and pastures under one law, an essential step to deal holistically with natural resources rather than sectorally as prevailed before. The idea was good and could have yielded positive results, but it remains a piece of legislation that is little known outside of the FNC, which is regrettable given that it is meant as a sectorally-unifying Act. Such an approach is also challenged by the existing institutional structures based on small administrative enclaves fragmented between different departments. Recognition and emphasis placed on the role of traditional leaders and the native administra-

tion in natural resource management are also challenged by the weak capacities of these institutions and the contestation of their legitimacy at local level. Provisions for the rights of local communities of establishing village and community forests have been criticised for leading to encroachment on pastoral routes and fuelling conflict between pastoralists and settled communities.

There has also been a confusion of roles between federal and state levels when it comes to forests. Federal forest lands lie in various states. While in the 1960s and 1970s these gazetted lands lay far from residential areas, today they fall much closer due to expanding urban landscapes. This has made it increasingly difficult for state authorities to realise that these forest areas are national property, and can therefore only be confiscated for alternative use by Presidential Decree. However, states claim benefits from national forests that fall within their territories. This is highlighted in the Council of Ministers Decree No. 40, by which FNC pays 40 per cent of royalties generated from the forest to the Ministry of Agriculture in that State.

# 3 Strategies, policies and international agreements

## 3.1 Strategies and policies

Following the first national Ten Year Development Plan 1960-1970, Sudan adopted a number of policies to deal with development issues (Five-Year Plan 1970-1975; Six-Year Plan 1975-1981; National Economic Framework 1986). These frameworks largely prioritised irrigated and mechanised agriculture. Environmental considerations were not well addressed. Additional environment-related policies have been put in place since 1990 include the following list. (See also the section on International Agreements.)

### Decentralisation of Natural Resources Management Policy

The 4th Constitutional Decree of 1991 recognised Sudan as a federal country, and elaborated on important aspects of localities, including their functions and financial mechanisms. The Decree gave the States the responsibilities over their lands and management of their natural resources.

### The National Comprehensive Strategy (NCS) 1992-2002

The NCS was formulated, endorsed and ratified into law and adopted just before the convening of the Earth Summit in Rio in 1992. It is the first strategy with a dedicated section on the environment. The NCS spelled out the objectives and priorities for sustainable development while incorporating the framework of the country's environmental strategy. According to the NCS, environmental issues must be embodied in all development projects. Poverty alleviation, popular participation and incorporation of indigenous knowledge were recognised as key elements for sound environmental management. The NCS stressed the adoption of the following policies and directives:

- Planning of development project must consider continuous productivity, renewal of resources and application of technology appropriate to environment and life styles
- Environmental Impact Assessment (EIA) is a requirement for any development project

- Establishment of national body with branches in the states to guide, coordinate and supervise environmental activities
- Improvement and updating of environmental legislation
- Use of incentives, charges and taxes to encourage environment friendly activities and interventions

The NCS has faced numerous challenges including limited emphasis on capacity building and coordination. A particular challenge has been curbing the negative environmental impacts of the expansion of agriculture.

### National Action Plan to Combat Desertification 1998

On the basis of public consultations at federal and state levels, a National Action Plan (NAP) to combat desertification was completed in 1998 for 13 States classified as degraded. The NAP document provided a description and analysis of the scale and magnitude of desertification in the country and proposed actions to be undertaken besides the establishment of a national council to combat desertification with a general secretariat at federal level, councils at state level with monitoring and coordination units and local committees at the level of implementation. However, the NAP is still not widely known and needs more emphasis on the linkages with other sectors.

### The Five-Year National Strategic Plan (NSP) (2007-2011)

The NSP provides a framework for focussing and co-ordinating Sudan's peace processes and development efforts. Prepared by the National Council for Strategic Planning (NCSP), on the basis of public participation at federal and state levels, the NSP was intended to set Sudan firmly on course to achieve its Quarter Century year vision. NSP focusses on five key result areas, namely: promoting sustainable economic development; sustaining peace and stability; reducing poverty and making progress towards achieving the Millennium Development

Goals (MDGs); strengthening public accountability, good governance and the rule of law; building capacity of public institutions and civil society at state and local levels and strengthening the social fabric of the nation. The NSP recognises the environment as a cross-cutting issue together with: security peace and unity, strengthening the social fabric; strengthening the federal system; Institutional reform and capacity building, balanced sustainable development, infrastructure development and scientific research. The NCSP Five Year Plan stipulates the following activities for environmental protection:

- Integration between the various environmental survey systems together with provision of the required data
- Allocation of indicators for measurement
- Establishment of environmental monitoring and early warning systems
- Protection and maintenance of plant, soil, and crops
- Improvement and development of international relations with development partners and augmenting mechanisms for benefiting from the latest research, expertise and technology
- Review of legislation that can secure the safety of the environment, and enforcement of such legislation
- Outlawing of harmful practices, customs and traditions that are not environmentally friendly

### **Draft National Water Policy (1999 amended in 2006)**

A draft National Water Policy was prepared in 1999. The policy document assessed the water situation in the country, existing legislation and policies and outlined the main policy principles and statements. Policy principles were illustrated under the sub-headings: water resources, water utilisation, water and environment, international issues, socio-economic issues, disaster management and institutions and capacity building. It also recommended the development of strategic plans for the water sector<sup>16</sup>. The aim of the policy is to ensure "sustainable and integrated management of available water resources through the adoption

of cost effective and appropriate technologies, research, public and private sector partnership, cost sharing and cost recovery mechanisms and recognition of water as an instrument for conflict resolution" (Ali, 2009).

### **The National Water Supply and Sanitation Policy (2009)**

The thrust of the policy is to ensure equitable and sustainable utilisation and provision of safe water and sanitation, with a view to achieving the MDGs (Ali, 2009). This policy still awaits endorsement at the national level.

Currently a national vision-building process is underway for IWRM in Sudan. It is being led by the Ministry of Water Resources.

## **3.2 International environmental agreements**

Sudan has recognised the importance of natural resources management since the beginning of the 20<sup>th</sup> century and first passed legislation relating to forests and wildlife in 1902. Sudan also participated in the Stockholm Conference (1972) on Environment and Human Development, and established the first committee dealing with the environment in the National Council for Research in 1977. In fact, Sudan signed more than nine conventions and agreements before the Stockholm Conference. After Stockholm, Sudan signed and ratified more than eight conventions covering issues such as cultural heritage, endangered species, law of the sea, conservation of the Red Sea and Gulf of Aden, combating oil pollution, the Vienna Convention for the Protection of the Ozone Layer etc.

Sudan was also a party to the Earth Summit in 1992 and committed itself to its recommendations and decisions. In the same year, Sudan signed the United Nations Framework Convention on Climate Change (UNFCCC). Hence, an enabling activity for climate change was funded by the Global Environment Facility (GEF) and UNDP and implemented by the Higher Council for Environment and Natural Resources (HCENR), which was a precursor to the National Adaptation Plan of Action (NAPA) for Sudan.



Protected areas: Baboon in Dinder National Park, Sennar state

Sudan also signed and ratified the International Convention on Biological Diversity (CBD) and received funding for the preparation of National Biodiversity Strategy and Action Plan (NBSAP). Sudan also signed and ratified the United Nations Convention to Combat Desertification (UNCCD) and prepared a National Action Plan to combat Desertification. Sudan also ratified the Kyoto Protocol as well as Cartagena Protocol on Biosafety and the Stockholm Convention on Persistent Organic Pollutants.

Sudan, being a party to the Earth Summit in 1992 and the follow up on implementation of Agenda 21 in Johannesburg in 2002 and Rio in 2012, agreed to follow a road map to implement activities that enhance equitable resource use promoting human welfare. At the Rio+20 conference in 2012, countries including Sudan agreed to promote the Green Economy in the context of sustainable development. The document presented by Sudan at Rio+20 reflected its commitment to incorporate the principles of the Green Economy into its Five Year Plans.

## Conventions and agreements issued before the Stockholm conference:

- Convention concerning the Use of White Lead in Painting, Geneva (1921)
- Convention Relative to the Preservation of Flora and Fauna in their Natural State (1933), London. Ratified 1935
- International Convention for the Protection of Birds, Paris (1950)
- International Plant Protection Convention, Rome (1951). Ratified 1971
- Treaty Banning Nuclear Weapons Tests in the Atmosphere, in the Outer Space and Under Water, Moscow (1963). Ratified 1966
- Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed or Ocean Floor, Washington (1961)
- Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Near East, Rome (1965). Ratified 1967
- African Convention on the Conservation of Nature and Natural Resources, Algiers (1968). Ratified 1973
- Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar, Iran, 1971. Ratified 2005.

## Conventions and agreements issued after the Stockholm conference:

- Convention Concerning the Protection of World Culture and Natural Heritage, Paris (1972). Sudan membership 1973
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1973. Ratified 1982
- Convention on the Conservation of Migratory Species of Wild Animals, Bonn 1979, Ratified 2002
- United Nations Convention of the Law of the Sea, Jamaica, 1982, Ratified 1985

- Regional Convention for the Conservation of the Red Sea and Gulf of Eden, Jeddah, 1982. Sudan joined 1985
- Protocol Concerning Regional Co-Operation in Combating Pollution by Oil and Other Harmful Substances in Cases of Emergency, Jeddah, 1982. Sudan joined 1985
- Vienna Convention for the Protection of Ozone Layer, Vienna, 1985 Ratified 1995
- Convention on Early Notification of a Nuclear Accident, Vienna, 1986. Ratified 1986
- Montreal Protocol on Substances That Deplete the Ozone layer. Montreal 1987. Ratified 1993
- Basel Convention on the Control of the Trans-Boundary Movement of Hazardous Wastes, Basel, 1989. Ratified 2006
- Bamako Convention on the Ban on the Import into Africa and the Control of Trans-Boundary Movement and Management of Hazardous Wastes, Bamako, 1991. Ratified 1993
- Nile Basin Initiative, Tanzania 1999

## Rio Convention (1992) and related agreements:

- United Nations Framework Convention on Climate Change (UNFCCC), Rio de Janeiro (1992). Ratified 1993
- International Convention on Biological Diversity (CBD), Rio de Janeiro 1992. Ratified 1995.
- Convention to Combat Desertification (UNCCD) in countries experiencing serious drought and/or desertification particularly in Africa, Paris, 1994. Ratified 1995
- The Kyoto Protocol, Kyoto – Japan, 1997. Ratified 2005
- Internationally Legally Binding Instrument for the Application of Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in international Trade, Rotterdam, 1998. Ratified 2004.



- Cartagena Protocol on Biosafety to the Convention on Biological Diversity Montreal, 2002. Ratified 2005
- Stockholm Convention on Persistent Organic Pollutants, Stockholm, 2001. Ratified 2006

Being party to these conventions, Sudan has set national priorities in regard to them and implemented programmes for capacity building on Persistent Organic Pollutants (POPs) and National Adaptation Programme of Action (NAPA) to address priority activities on climate variability and climate change, within the context of economic development priorities.

It is worth noting here that most of the conventions signed by Sudan before the Stockholm conference were sectoral in nature and concerned individual environmental concerns such as the protection of birds, plants, endangered species etc. The Stockholm conference was more comprehensive looking at the environment in a holistic manner. Hence, conventions after the Stockholm Conference became more concerned with problems of a trans-boundary nature and the need for regional cooperation to contain these problems. Post-Rio conventions were more international in nature and required commitment to work with the international community to face the challenges of the 21<sup>st</sup> century.

Sudan's willingness to embrace the principles of global thinking through the adoption of international agreements is to be applauded. However, limited capacity, resources and weak coordination mechanisms have undermined implementation, with few projects that resulted from these conventions reaching the local or state level. An important exception is the UNDP/HCENR- led NAPA process, whose implementation is donor-funded and driven with good civil society and grassroots involvement in some states (e.g. South Darfur). However the main point still remains: greater effort is needed to translate international initiatives to action on the ground.

However projects such as Capacity 21 and the Nile Basin Initiative have implemented small projects and capacity building activities at state level through community-based organisations (CBOs). The Capacity 21 project succeeded in involving a

broad cross-section of Sudanese societies in defining their local agendas and priorities and to implement small-scale projects through funding from international agreements. The project played an important, catalytic role in promoting community level environmental protection.

Through the Capacity 21 Project, an attempt was made to decentralise environmental actions, through building capacities at state levels and preparing action plans. The project, through mobilising state level authorities and technical staff and local leaders, managed to prepare an Environmental Action Plan for North Darfur. However, the plan was not implemented for a number of reasons, including financial constraints. Nevertheless, following the issuance of the National Comprehensive Strategy (NCS) and adoption of Agenda 21, the Government of Sudan, often in collaboration with the UN, has launched a number of initiatives, notably:

- the National Biodiversity Strategy and Action Plan, 2001
- the Capacity 21 Project
- the National Action Plan to Combat Desertification, 1998
- Enabling Project to Mitigate Climate Change
- Towards a National Environmental Action Plan (produced by the HCENR, Friedrich Ebert Institute, and SECS)
- the National Water Policy, draft 1999
- Towards a National Sustainable Development Strategy<sup>17</sup>

Implementation of these initiatives has been hampered by weak coordination and budget constraints. The proposed National Sustainable Development Strategy is intended to harmonise policies and activities suggested in these action plans and to ensure that these plans are implemented in a mutually-reinforcing manner. It also intended to institutionalise the process of consultation at national and state levels and to follow a 'bottom up' approach. The new thinking is considered a follow up to early projects supported by UNDP that promoted an integrated development

approach focussing on local people and building their capacities in project design and implementation. These projects, called Area Development Schemes (ADS), were implemented in five ecologically distinct areas. Darfur implemented two projects in Um Kedada and Idd El Fursan<sup>18</sup>. In these projects, environmental, institutional and productive capacities received high priority with an emphasis on upgrading the skills of the local leadership. This was achieved by using either existing viable institutions or helping communities choose the type of organisations they felt would best serve their needs. For example, in Idd Elfursan, CBOs decided to collaborate to form a company to manage funds and resources after the closure of the project, to ensure continuity.

International conventions did, in some cases, help build the capacity of some national institutions and drive the development of some projects, which responded to felt environmental problems at state level. As part of this effort, Sudan developed the NAPA with projects that target five states facing serious problems related to impacts of climate change. South Darfur received one project with the objective of reducing vulnerability of local communities to drought through improved water harvesting practices, improved grazing resources, diversification of household income and development of social forestry schemes. The NAPA process facilitated the participation of stakeholders to link the adaptation project selected to government policies and plans and responded to perceived needs. The NAPA also targeted policy strengthening in resource management to avoid conflicts and frictions between farmers and herders and to develop locally- driven initiatives to strengthen local institutions.

Under the above agreements, and as Sudan is adopting a federal system of governance, there are several levels of decision-making. Hence insti-

tutional reform and capacity building is needed at all levels to strengthen environmental governance, particularly when it comes to cross-cutting conventions. Since the United Nations Conference on Environment and Development, (UNCED) a number of strategies and plans have been formulated. However, a shift in attitudes is needed to achieve real participation of all stakeholders. For example, women have largely been excluded at policy level with regard to environmental programmes. One exception is the Capacity 21 project which paved the way for a more proactive participation of local communities, with strong women involvement in all activities. However, the process of change remains slow. Women are still not sufficiently integrated into the development process. In fact, nearly all development strategies failed to design projects with targets for the integration of women in the development process. Most women activists feel that what women received was only a minor package of social and welfare services incorporated into some projects. New policies are needed to build upon previous efforts and gains, especially with regards to gender.

This review shows that international conventions, to some extent, have influenced policies, especially those articulated around environmental issues which emerged as a result of the various international conventions. It also shows that, in some cases, national activities initiated under those conventions were also adapted at local level, with strong community participation, albeit to a limited extent. There is a need to translate the directives of the conventions into a larger base of interventions at the state and locality level. The start made by the NAPA on climate change must be supported and expanded to include other areas and its approach provides a model to be replicated by other conventions and strategies developed. Political will and commitment is required for the implementation of strategies which are based on signed conventions.

# 4 Federal institutions

The key institutions for the environment at federal level are the Ministry of Environment, Forestry and Physical Development (MEFPD) and the Higher Council for Environment and Natural Resources (HCENR). Other important institutions at the national level include: the Ministry of Tourism and Wildlife, the Forests National Corporation of the MEFPD, the Ministry of Agriculture, the Natural Resources Administration of the Ministry of Agriculture, Desertification Control and Coordination Unit of the Ministry of Agriculture, and the Ministry of Industry, the Ministry of Water Resources and Ministry of Electricity and Dams (at the time of going to production these last two were being merged to create the Ministry of Water Resources and Electricity – a change that supersedes certain aspects of the analysis of this report and demonstrates the challenges of a changing institutional environment). This is in addition to the Environment Unit of the Ministry of Health, the National Council for Strategic Planning and the National Population Council which also hold special environment-related mandates and responsibilities. The HCENR is mandated to assume the role of coordination between the various concerned government agencies and between national and state government on efforts related to the environment and natural resource management.

## The Ministry of Environment, Forestry and Physical Development

The MEFPD was established in 2003 with a mandate covering surveying, construction, urban planning and, more recently, environment, which is derived from the Environmental Protection Act (EPA) of 2001. Establishment of the Ministry was by Presidential Decree (2003), and the HCENR was annexed to it under the direct supervision of the Minister.

## The Higher Council for Environment and Natural Resources (HCENR)

The Council was established in 1991 under the supervision of the President and in 1995 it became affiliated to the newly-established Ministry of Environment and Tourism, and later affiliated to the Ministry of Environment and Physical Development which was established in 2003, under the chairmanship of the Minister.

The HCENR was envisaged mainly as a coordinating and supervisory body for the Ministry of Environment and Physical Development and other line ministries. It performs its function through a general secretariat, headed by a Secretary General. The main functions of the HCENR, according to the 2001 Environmental Act, include the following:

- Laying down general policies and long term plans for environmental protection and sustainable use of natural resources
- Coordinating efforts on environment and natural resource management among concerned government agencies and between the federal and state governments
- Periodic reviewing of environmental legislation to make them more effective instruments for sustainable development
- Encouraging and supporting research on environment and natural resources
- Promoting environmental awareness and education.

The HCENR is also supposed to encourage state governments to establish State Environmental Councils (SECs) with a similar mandate to exercise functions related to environmental protection at state and local levels, based on guidelines to be provided by the HCENR and state jurisdiction according to the 2005 Interim Constitution. At present, only five state councils are found in Gedarif, River Nile State, North Darfur, Sinnar, and Khartoum States. Although these institutions are in place, increased funding and capacity building efforts would increase their effectiveness.

As an advisory and coordinating body, the HCENR is mandated to handle broad issues of policy formulation and integration of sectors to achieve sustainable management of natural resources. Programme implementation, development, and conservation of natural resources are undertaken by the line ministries and state authorities according to national guidelines. A key function of the HCENR is that of focal point for international liaison and agreements.

## The Ministry of Energy and Mining

The General Administration for Environment and Safety is one of the administrations of the Ministry of Energy and Mining. Members of the administration have the following mandate:

- Setting strategies, policies and environmental plans
- Supervising the adherence and application of environmental laws by commercial energy companies
- Protecting the environment and biodiversity
- Setting an integrated energy information system by establishing an energy database
- Contributing to environmental awareness
- Spreading a culture of environmental protection
- Forging partnerships with local, regional and global actors for the promotion of the environment

The administration has a recognisable role by commercial companies involved in the oil sector. The main limitation of the administration is that it is still under-staffed and the technical capacity of the existing staff is insufficient to effectively carry out the administration's mandate.

## The Forests National Corporation (FNC)

The FNC was established in 1989 to perform the following functions and responsibilities:

- Laying down the general policies for forests, the growing stock and development thereof, and making the rules and methods which secure the good utilisation of the stock and protect the environment
- Proposing laws which achieve the implementation of the approved policies for the development of forests
- Following-up the implementation of the forests' general policies
- Technically supervising all forests at the country level
- Disseminating awareness with respect to forests and trees among responsible persons, citizens and investors
- Conducting studies and laying down the necessary plans for taking stock of forests, and the surveying and development thereof at the country level
- Increasing the reserved forest areas up to a minimum of 20 per cent of the country's total area



A commercial mahogany stand in the Nuba mountains, Southern Kordofan

- Intensifying tree planting for the purpose of protection and production and rallying peoples' efforts in this respect
- Encouraging the establishment of forests and striving to provide seedlings and technical advice
- Developing the production of gum, especially Gum Arabic and caring for other minor forest products
- Coordinating between the various bodies in order to implement general forest-related policies particularly to preparing and implementing desertification control projects
- Coordinating with the competent bodies by specifying aspects of land use and investment for establishing forests and encouraging tree plantation
- Coordinating with the bodies in the field of forest research and encouraging applied research.

The FNC is governed by a Board of Directors appointed by the Council of Ministers and answers directly to Minister of Environment, Forestry and Physical Development<sup>19</sup>

The main challenge faced by the FNC is the sheer scale and magnitude of the environmental issues that confront it. The task of halting desertification, conserving forests, national resources and protecting the environment is a massive undertaking for the FNC. The fact that it is a self-financing institution requires the organisation to generate revenue from forest products which themselves are diminishing with an average deforestation rate of 2.2 per cent per annum, following the secession of South Sudan. Greater financial support and other income streams are needed to support the FNC in fulfilling its mandate.

### The National Drought and Desertification Control, Coordination and Monitoring Unit

As one of the structures of the Ministry of Agriculture, and under the General Directorate for Natural Resources, the mandate of the Unit includes:

- Collecting scientific data and information covering areas of soil, water, rainfall, forests, range,

animal resources, population and other information pertaining to desertification and drought

- Updating the inventory of the implemented projects and those under implementation within the National Plan and its programme of action
- Preparing maps of the affected areas
- Monitoring and evaluating the implementation of projects within the National Plan and all other relevant projects
- Preparing the scientific information and the documents to be discussed in the Coordination Council according to the situation in the field
- Following-up the execution of the directives of the Coordination Council
- Searching for ways and means of obtaining funds, from local and international organisations, to implement the projects within the National Plan
- Updating the National Plan and Action programmes based on the most recent information and the analysis and evaluation of these data using Geographical Information Systems (GIS)
- Acting as a focal point for the International Convention to Combat Desertification and to update the Sudan Programme
- Formulating the general policies and programmes for combating desertification and curtailing the effects of drought
- Publishing the Desertification Bulletin to raise awareness
- Linking the various programmes in the affected areas
- Organising seminars, workshops and conferences on desertification and drought problems.

### The Ministry of Industry

The Ministry is responsible for formulating industrial policies, strategies and programmes in consonance within the overall national objectives. To achieve this, the Ministry has an environmental unit that performs promotional and regulatory functions that include:

- Industrial planning
- Issuing licenses and following up investment projects
- Controlling all industrial enterprises including import licenses and the allocation of some domestic raw materials for factories
- Controlling quality and determining standard specifications for industrial products
- Collecting and analysing data on industry
- Facilitating and organising the flow of technical assistance to the industrial sector
- Undertaking and, in part, assessing environmental impacts of projects.

## The Ministry of Water Resources

Objectives and responsibilities include:

- Setting national water resources policies, strategies and plans
- Assessing, observing and developing water resources to meet national needs
- Applying research in irrigation, hydraulics and water resources engineering aiming at efficient utilisation and management of water resources and promoting irrigation and drainage services including sedimentation, river morphology and training, banks erosion and aquatic weeds control
- Utilising Sudan's share of Nile Waters
- Developing the cooperation between the Nile Basin countries
- Exploring, assessing and evaluating non-Nile water resources
- Monitoring ground water basins
- Contributing to environmentally sound socio-economic development
- Controlling and mitigating the effects of floods using hydraulic structures and modern flood forecasting techniques.

## The National Population Council

The council is affiliated to the Ministry of Social Planning. Its main task is to coordinate and oversee

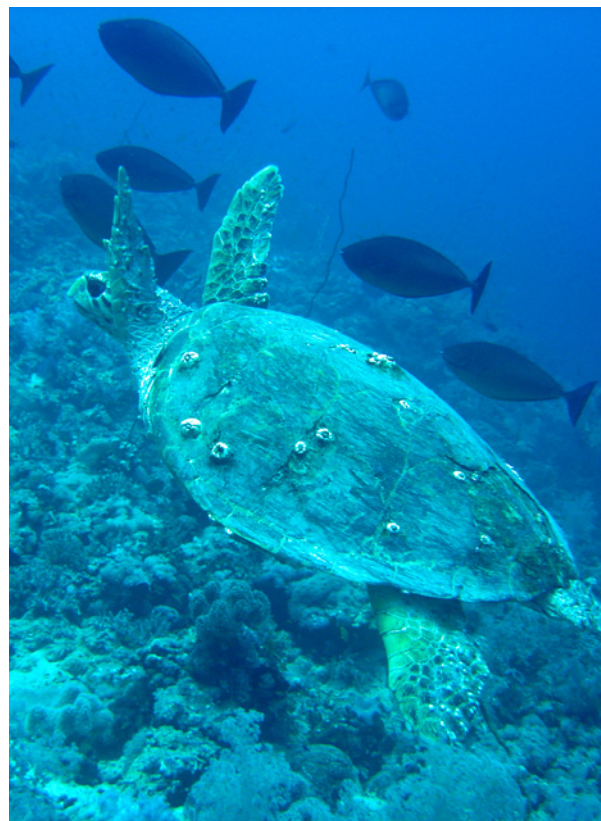
the implementation of national population policy that advocates for reproductive health, integration of population issues in development plans, poverty alleviation and environmental protection. The Council's effectiveness in carrying out its responsibilities would be enhanced with increased funding support and a strengthening of its technical capacities.

## The National Council for Strategic Planning

Established in 2005 by Presidential Decree and under his chairmanship, the Council's main task is to coordinate and supervise the implementation of the Quarter Century Strategic Plan (2005-2030), of which the Five Year National Strategic Plan is a part. The Council has autonomous branches in all northern States.

## The Ministry of Tourism and Wildlife

Its role includes the management of all wildlife issues in Sudan, including playing a key role in the management of marine protected areas and national parks. As such, it also regulates the use of national parks by pastoralists.



Marine Wildlife in Sanganeb Marine National Park

## Research Institutions

Environmental education in Sudan is limited but gradually expanding. Most of the universities have environmental studies programmes although most of the teaching tends to be theoretical due to a lack of funds and the limited capacities of the universities. There is a need for upgraded text books and for students to gain experience 'in the field'. Realising the pressing needs of Sudan to deal more effectively and rigorously with environmental issues, and the need to establish concrete links between social and natural sciences to address environmental issues in the country, the University of Khartoum in January 2011 has upgraded the Geography Department into a full faculty under the name "Faculty of Geography and Environmental Science" which is the first faculty of its kind in Africa.

The University of Khartoum, through the Institute for Environmental Studies (IES), has long championed environmental concerns. In 1978, the University started collaborating with the United Nations University, and from this association evolved the diploma and MSc programmes on environmental studies, followed later by a PhD programme in 2000. From the late 1970s, the University of Khartoum has been generating knowledge on environmental issues in Sudan, especially on drylands and desertification. Though it has had a long and rich history, the IES currently suffers acute underfunding for research activities.

The Geography Department also has had a long history of engagement on environmental issues. Since its establishment in the early 1950s, the department has focused on the environment as a legitimate field of geographic research. In recent decades, a number of research projects have been undertaken including on water and on land degradation (including in North Darfur, South Kordofan, Lower Atbara and Gedarf State). Numerous Masters and doctoral studies have also been undertaken on themes such as desertification, land degradation, pastoralism, land tenure and management of natural resources in Sudan.

The general map of universities and research institutions also includes: the Faculty of Engineering and the Faculty of Science (University of Khartoum); Desertification Studies Centre (University of Khartoum); College of Natural Resources and Environ-

mental Studies (University of Juba); Departments of Geography and Anthropology; Institute of Environmental and Natural Resources of the National Centre for Research; the Energy Research Institute of the Ministry of Science and Technology and the Institute of Disaster Management.

## Civil Society

Civil society is an important player in the field of environmental management. The main modern civil society groups focusing on environment include:

(i) the Sudanese Environment Conservation Society (SECS), established in 1976, as the first Sudanese civil society group concerned primarily with the issue of environment. The mandate of the SECS is to raise environmental awareness and to advocate for environmental management and accountability. SECS activities are organised around three main programmes: Institutional development and capacity building, environmental rehabilitation and, environmental education. At present the SECS has more than 120 branches distributed all over the country including South Sudan and Darfur.

(ii) The Environmentalists' Society: Another active civil society group established within the premises of the IES in the early 1980s. At present it has a total membership of more than 500, the majority of whom are graduates. The stated objectives of the society include: encouragement of studies and research in environment; strengthening links with local, regional and international organisations concerned with the environment; and linking Sudanese society with the IES and cooperation with the studies and research it carries out.

(iii) The Sudanese Social Forestry Society: A charitable, voluntary society aimed at: promoting the concerns and practices of community forests through networking and links between local communities and extension departments; enhancing awareness and promoting community participation in environmental enhancement; encouraging applied scientific research in social forests; assisting in fund raising for community forests projects; sharing of knowledge and best practices for the promotion of community forests; preservation of forests as national cultural heritage; and promotion of links and networking with local, regional and international actors concerned with the environment.

(iv) The Engineering Society aims to develop and share the experience and knowledge of its members in the engineering profession. Management of the urban environment constitutes a thematic focus for the society. How such societies are operating in Darfur is an issue that needs thorough field investigation.

(v) The Sudan Development Association (SDA) is made up of development experts, as well as environment and gender advocates. Its main objective is promoting sustainable development in realising its stated vision, which is a 'just, inclusive and peaceful Sudan'. The SDA has been the Sudan focal organisation for the regional network 'the Sustainable Land Use Forum' (SLUF).

(vi) The Farmers and Pastoralists Unions work to improve the service and production environments for their respective members and to advocate for members' concerns with government and non-government actors. Under proposed legislation<sup>20</sup>, these Unions are likely to be merged into one Union.

(vii) International actors: International NGOs, UN Agencies and donors have been engaged in a variety of natural resource management and land-related initiatives. Among the key INGOs in this area are Practical Action and SOS Sahel. Practical Action's work includes climate change adaptation activities focused on drought mitigation, the sustainable use of natural resources and the rehabilitation of degraded ecosystems and livelihoods. Practical Action projects have included initiatives to ensure sustainable water resource management, and trainings for building technologies that reduce the need for wood. Practical Action has recently launched the PROLINNOVA (Promote Local Innovation in Agriculture and Natural Resource Management) Programme which seeks to use indigenous knowledge to help farmers adapt to the processes of change in Darfur, and to develop participatory institutions for resource management to guarantee food security and environmental and livelihood sustainability. SOS Sahel, through the UNDP funded project 'Reduction of Resource Based Conflict' which continued for almost six years (2002-2008), advocated for pastoralists' rights together with institutional and legal reform in natural resource

management and land rights. In the process, considerable knowledge had been generated and published. The project has been currently transformed into the Conflict Reduction Programme (CRP) which is functional in South Kordofan and is in the process of being extended in Blue Nile. SOS Sahel also works on peace-building as well as the demarcation of pastoralist migration corridors in South Kordofan. FAO was largely engaged with the National Constitutional Review Commission in the research and drafting of the draft Land Commission Act. UNHCR and UN-Habitat are also involved in one way or another, according to their mandates, with UN-Habitat focusing primarily on urban land issues.

The International Fund for Agricultural Development (IFAD) has been active in supporting natural resource management in North Kordofan, South Kordofan, Butana and land tenure institutional reform in the Gash Agricultural Scheme in Kassala State. IFAD, through its Western Sudan Natural Resource Management programme, is also active in supporting management of pastoral corridors. A similar component is included in its newly developed livelihoods project, to be implemented in Sinnar State. Support to the management of pastoral routes is also provided by the Multi Donor Trust Fund's (MDTF) livestock project implemented by the Ministry of Animal Resources in Sinnar and Blue Nile States. USAID had been engaged, since the signing of the CPA in 2005, in supporting a number of land projects in South Sudan, Blue Nile and South Kordofan focusing on community-based negotiated and agreed customary boundaries, registration and administration of land holdings. In partnerships with the Federal Ministry of Agriculture and the Ministry of Agriculture of the Red Sea State (East Sudan) the EU is currently supporting an agricultural project that has specific components on land reform and administration. The EU Programme "Support to Non-State Actors", based on the provision of grants, also has an environmental dimension targeting of natural resources. Climate change has also generated the attention of many actors, such as Practical Action (in Darfur) and Christian Aid, which is now in the process of developing its programme. Currently a network of NGOs coordinated by SECS is forming to address issues of climate change.



# 5 Environmental institutions in Darfur

## 5.1 Government institutions

Institutional arrangements for environmental governance in Darfur are characterised by the presence of a large number of institutions (Table 1 below) where more than 25 institutions have direct links to the issue of land and natural resource management. Each of these institutions also relates to one or more institutions at the Federal level.

Inevitably, this presents a challenge in coordination and ensuring complementarity in roles, mandates and responsibilities, both among the institutions at state level and with respect to the implementation of decentralisation and, consequently, also over coordination with central government institutions. An example is provided by the Livestock Routes Demarcation Committee, established by Presidential Decree in 2005, whose recommendations have been disputed by farming communities and, as a consequence, progress on this issue has been undermined.

Complexity over environment and land management is also attributable to ambiguity over the categories of government land, state land and community land. The Darfur Peace Agreement DPA (2006),<sup>21</sup> the Comprehensive Peace Agreement (CPA) (2005), and the Interim National Constitution (INC) (2005) recognise customary tenure and call for its incorporation in land legislation while stating that government land is to be administered through the respective levels of governance. The Doha Document for Peace in Darfur (DDPD, 2011), echoes this sentiment, stating “tribal traditional land ownership rights (*hawakeer*), historical rights to land, traditional and customary livestock routes and access to water sources shall be recognised and protected. All relevant levels of Government shall initiate and complete a process to progressively amend relevant laws to incorporate customary laws, in accordance with international trends and

practices” (DDPD, 2011, para. 188, p. 42). Recognition of customary law in Darfur is a *de facto* recognition of the hakura system. What constitutes government land is an issue that needs to be resolved within the ongoing peace processes.

Two important institutions directly relating to land in Darfur are the Native Administration and the Darfur Land Commission. The Darfur Land Commission is an institution established as part of the DPA (2006) and is now being carried over, with a seemingly more prominent role, under the DDPD (2011). It is producing a Darfur States Land Use Mapping Database, which will be reviewed and updated every five years, and is also intended to inform State legislation (DDPD, 2011). This may have a considerable impact on land use policy and practice in Darfur.

Specific to Darfur, a number of international organisations’ work deals with (or affects) natural resources or natural resources management. In North Darfur, the main actors include Practical Action, the Italian NGO Cooperazione Internazionale (COOPI), Plan Sudan, German Agro Action, Partner Aid International, Oxfam America, Relief International, and Save the Children Sweden, alongside UN entities including UNEP, FAO, WHO, UNICEF, UNDP, UNFPA, WFP, UNHCR, and UNAMID. In South and East Darfur, the same UN entities operate alongside international NGOs such as ZOA, World Vision, United Methodist Committee on Relief (UMCOR), the International Committee of the Red Cross (ICRC), Norwegian Church Aid (NCA), and Tearfund. In Central and West Darfur, international agencies include the NCA, Fellowship for African Relief (FAR), Tearfund, Save the Children Sweden, Catholic Relief Service (CRS), CONCERN Worldwide, Intersos, Triangle, War Child Canada, Adventist Development and Relief Agency (ADRA), World Relief, and ACTED. UN entities include UNDP, FAO, WFP, UNICEF, UNAMID, UNHCR, and UNOCHA.

**Table 1. Land-related Institutions in Darfur, 2009**

Border Demarcation Committee (North Darfur and Northern State)	– On the basis of 1956 boundary, as stipulated by the DPA
Native Courts	– Arbitration of conflicts over land. If disputes are not resolved at this level, the case is transferred to a Civil Court.
State Governor	– Authority to appropriate and reallocate land – Appointment of Native Administration leaders – Allocation of land – Establishment of local councils
Darfur Land Commission	– Arbitration – Recommendations for land reform – Restitution and legal frameworks reform – Provide for the incorporation and harmonisation of customary law – Conduct research on land tenure and land use – Recommendations on measures for institutional reform
State Security Committee	– Reporting on land and resource-related conflicts
Council for the Development of Nomads	– Coordinate the opening of routes with the relevant authorities – Promote services and coordinate development for nomads with relevant state ministries – Improve livestock production and improve the environment for livestock, with a view to promoting export – Promote peaceful coexistence between pastoralists and farmers
National Council for Physical Development and Land Disposition <sup>22</sup>	– General policies for urban planning – Drafting of laws and regulations concerning physical planning – Training of staff
Physical Planning and Land Disposition Committee	– Approval of locations and purposes of land use – Designation of governmental land for institutions, individuals and corporations
Land Disposition Committee	– Allocation of agricultural land – Policy making on agricultural land uses
Physical Planning Administration	– Establishment of branch committees – Preparation of physical plans for approval – Implementation of socio-economic studies for planning and establishment of rights, on behalf of the state
Land Administration	– Deals mainly with allocation and coordination of urban land, under the Ministry of Physical Planning. – Support to land registration at the judiciary after approval
Minister of Physical Planning	– Approval of housing plans – Approval of changes in village boundaries – Looking into appeals pertaining to land within the power of the Ministry
Department of Surveying	– Surveying and mapping of lands – Preparation of land maps – Information centre for land issues – Physical handover of land to those entitled
Land Registration Offices	– Keeping land registers of the town – Information centre on town land and planning
Range and Pastures Department	– Mapping and demarcation of livestock routes – Protection and management of range lands
Forests National Corporation	– Reservation, protection, conservation and afforestation
Mechanised Farming Administration	– Allocation of land and management of the mechanised sector (in South Darfur only)
Investment Administration	– Identification of land for agricultural, industrial and other purposes
States Council of Ministers	– Final approval of housing plans
Locality Executive body	– Issuing of certificate that the specific piece of land is void of conflict – Approval of temporary locations for services and related uses
Locality Legislature	– Establishment of administrative units
Locality Security Committees	– Resolution of conflicts over land
Native Administration	– Application of customary law to land management – Resolution of conflicts over land
State Fund for Housing and Rehabilitation	– Security of housing to the poor through rental and sales
Nomads Commissions	– Policy making for the development of pastoralists – Mapping and demarcation of pastoral routes – Advocacy for and defending of pastoral rights

Source: Adapted from UN-HABITAT, 2009

## 5.2 Traditional Leadership

Traditional leadership in Sudan is still commonly known by the term “Native Administration”: the name given for the formal system established in early 1930s during the British colonial period. Among the powers and responsibilities of the Native Administration system were the management and conservation of the environment and natural resources, and resolution of conflict over land and natural resources. However the system, as it exists today, is markedly changed from the institutions that existed in colonial and pre-colonial times, and is under severe pressure, with most of its historically-mandated responsibilities overtaken by formal governance institutions.

The system was formally dissolved in 1971 during Nimeiri’s regime (1969-1985) amid accusations that it was outdated and insufficiently transparent. When the institution was reinstated in 1987, it was significantly different from what it had been during the colonial and pre-colonial periods, in places losing a sizeable share of its economic power and some of its legitimacy among local constituencies. The legitimacy and power of the Native Administration continues to be weakened, some commentators suggest as a result of an upward accountability, which is perceived as making it less representative of its local constituency (Morton, 2011). The Native Administration finds itself between the parallel agendas of its constituencies and the government, who do not necessarily share common priorities. Allegations of politicisation still exist around the role of the Native Administration (Abdul Jalil, 2007) and the limited role of women is another criticism that arises (although notable exceptions exist at the Sheikh level). Some Native Administrations have responded to the changing context in Darfur by promoting young and educated leadership to hold posts, and by bringing on board university graduates – among them, for example, the Mima, who appointed a university graduate as deputy paramount chief in 2005 (ibid).

Despite the above weaknesses and challenges, traditional leaders carry with them an institutional memory regarding traditional land boundaries, grazing routes and land management mechanisms that have worked effectively in the past and continue to be applied where the Native Administration is functioning (see box 2). Within the current context in Darfur, it may not be realistic to go back to the situation pre-conflict, given the fundamental institutional, social and environmental changes since then, particularly since it was those pre-conflict conditions that contributed to the conflict in the first place. However, environmental governance mechanisms in some countries with similar environmental and social conditions demonstrate that customary systems, in their traditional or adapted forms, can exist and evolve alongside, or as part of, statutory governance institutions in a way that allows for sustainable natural resource management (UNEP 2012). Resolving the issues around the mandates and capacity of traditional and formal government in Darfur remains a major challenge in re-establishing rural environmental governance. Parts of Darfur have youth bulges that are among the highest in the world – 52 per cent of the population is under 16 in North Darfur (Sudan Census Bureau 2009), and many of these youth have grown up in IDP camps and so have not gained indigenous knowledge of natural resource systems. This creates a further challenge for the Native Administration and the government in the emerging patterns of governance emerging from the conflict.

### Box 2.

According to accounts from the 1960s, the Berti implemented strict management of water wells. A rota manager organised access and levied fees, and an *aqid al birr* maintained the well’s structure as well as its ritual significance. Deviations from the rules and skirmishes over water were usually dealt with by the rota manager, who could fine offenders. More complicated offences would be passed to the *aqid al birr*, and if still unresolved would go to the *omda* and ultimately to the tribal court (Morton, 2011).

## 5.3 The Darfur Land Commission

The Darfur Land Commission (DLC) was stipulated by Darfur Peace Agreement to address traditional and historical rights of land and to review natural resources management in accordance with Article (20) of the DPA.

The Commission was established in 2007 as an integral part of the Transitional Darfur Regional Authority (TDRA). The Commission has been functional since its establishment with three working offices in the three Darfur States (North, South and West Darfur). Headed by a Commissioner, the Commission includes a general secretariat, a 12-member advisory board, and seven specialised administrations which are:

- The Planning and Engineering Administration (includes the Survey and Planning Unit, Planning and Housing Unit, Social Studies Unit and Engineering, Construction and Projects Unit)
- the Land Administration (includes the Arbitration Unit, Land Use Unit, and Dispute Resolution Unit)
- the Natural Resources Administration (includes the Agriculture, Animal Resources and Fisheries Unit, Water and Mineral Wealth Unit; Forests and Pastures Unit, Wildlife Unit, and Environment and Tourism Unit)
- the Research and Statistics Administration (includes the Research Unit, Statistics Unit, and Translation and Documentation Unit)
- the Investment and Development Administration
- the Legal Administration Department (this is the legal arm of the Commission and is charged with documentation of customary laws on land, harmonisation of customary and statutory laws, laying out arbitration procedures, reception of arbitration requests, collection of historical documents pertaining to land, and establishment of an open legal library)
- the Financial and Human Resources Administration.

The main role of the DLC is to generate knowledge and provide advice. For example, it is intended

to inform arbitration, but has no executive role; it provides advice on boundary locations but cannot enforce implementation. Since its establishment, the DLC has been very active and recognisable to a wide range of stakeholders inside and outside Darfur, with a large number of experts, both national and international engaged in its activities (see Table 2 for some of the DLC's activities). But in spite of its recognisable achievements and apparent visibility, the DLC faces considerable challenges in pursuing its objectives. Major among these are:

- Delays in the establishment of a legal framework that defines the horizontal and vertical institutional relationship between the Commission and other relevant government structures related to land
- the delay in establishing the National Land Commission to provide a Federal context for the work
- the disagreement over the DPA among the various rebel groups has created a negative perception of the TDRA of which the Commission is part

At present the DLC, as an institution, has been carried over and included in the DDPD (2011), ensuring its continuity, and it continues to be engaged in two large and ongoing projects, namely the Darfur Land Use Mapping Project (being undertaken by the German consultancy company GAFAG) and the collection of Darfur Customary Land and Natural Resource Management Systems. In addition, the DLC is in possession of probably the richest data bank system in relation to land and environment issues in Darfur. Historical documents have been collected from different libraries inside and outside Sudan, including the Sudan archives at the University of Durham in the UK as well as historical documents that had been kept by tribal leaders and elders in Darfur.

Through the numerous workshops and consultation meetings in Darfur, the Commission managed to bring together a wide range of stakeholders including IDPs, government officials, tribal leaders, pastoralists and civil society activists to debate and discuss various issues related to environment, natural resource management and conflict over

Table 2. The strategic projects of the DLC Commission and achievements 2006-2009

Project	Objectives	Outputs
Establish the conceptual framework of the DLC	<ul style="list-style-type: none"> <li>– Develop and publicise the guiding rules and principles governing DLC, its legal framework, mandate, structure, approach and scope of work</li> </ul>	<ul style="list-style-type: none"> <li>– Twenty-five participatory workshops discussing and debating aspects of the framework were held</li> <li>– The conceptual framework was developed, published and disseminated in two books (Arabic and English)</li> </ul>
Awareness raising about DLC and its conceptual framework	<ul style="list-style-type: none"> <li>– To disseminate information and awareness raising at local level</li> </ul>	<ul style="list-style-type: none"> <li>– Nine workshops were held in the three Darfur States</li> <li>– Numerous consultation meetings with related government institutions in Darfur</li> <li>– Discussion meetings at the level of State Legislative Councils in the three States undertaken</li> </ul>
Consultation meetings on the collection and codification of customary land law	<ul style="list-style-type: none"> <li>– To prepare the grounds for the collection and codification of customary land law</li> <li>– To inform the process through discussion and participation of communities and their respective organisations</li> </ul>	<ul style="list-style-type: none"> <li>– Four consultative workshops were held in the capitals of the three States attended by more than 1000 people representing various groups, government institutions, tribal leaders and the international community</li> <li>– Three books summarising the proceedings of these workshops were produced, published and disseminated.</li> </ul>
Natural resources and land use database map of Darfur	<ul style="list-style-type: none"> <li>– Provision of basic land resources data to be used as the basis for regional development planning in Darfur</li> </ul>	<ul style="list-style-type: none"> <li>– Ongoing</li> </ul>
Collection and codification of land customary law	<ul style="list-style-type: none"> <li>– Inventory of tribal lands and the customary law and traditions that historically governed land uses and relations between groups</li> </ul>	<ul style="list-style-type: none"> <li>– Field work finished in three Darfur States</li> <li>– Draft report expected by end of February 2011</li> </ul>
Surveying and mapping of Darfur internal and external borders	<ul style="list-style-type: none"> <li>– To prepare the maps of Darfur borders since 1800 on maps</li> </ul>	<ul style="list-style-type: none"> <li>– Historical documents available in Sudan and abroad were identified, collected and consulted</li> <li>– Draft report supported with maps and historical documents since 1800 produced.</li> </ul>
Establishment of GIS and map production lab	<ul style="list-style-type: none"> <li>– Production of maps</li> </ul>	<ul style="list-style-type: none"> <li>– Laboratory established and equipped</li> <li>– Required available information stored</li> <li>– Training of 13 staff members undertaken</li> <li>– Maps produced</li> <li>– Library established</li> </ul>
Production of Darfur regional planning map	<ul style="list-style-type: none"> <li>– Support to and implementation of regionally balanced development interventions</li> <li>– Peace building</li> <li>– Human capital development</li> </ul>	<ul style="list-style-type: none"> <li>– Planned towards mid 2011</li> </ul>

Source: Darfur Land Commission, 2010

resources. In the process, guidelines to inform future policy-making and reform in land use had been provided. As intended, through the completion of its strategic programmes, the Commission will be well-positioned to inform environmental governance and regulatory frameworks for effective environmental and natural resource management, not only in Darfur but throughout Sudan.

## 5.4 Land in Darfur

In Darfur, land tenure was historically based on a customary regime founded on the *hakura* system established and constituted during the Fur Sultanate since the middle of the 17<sup>th</sup> Century (Darfur Land Commission, 2007; Abdul Jalil et al, 2007). Within the *hakura* system, the collective security of the

tribe is assured and individual rights to land were recognised and could be inherited but remained under the ownership of the tribe. Reciprocity, rendered imperative by ecological variations, among the various *hakuras* was common. This meant that if climatic variability rendered a particular area unproductive, people were not obstructed from moving to and using others' land, as long as the visitors acknowledged the customary land rights of the existing residents. According to Morton (2011, pp 17) this relied on "two fundamental social obligations: the payment of tax and the acceptance of justice". In this setting, the first group to arrive in a territory becomes the representative of society, and assumes the role of tax collector and justice provider. Under this arrangement, access to the territory and its resources was open subject to the 'visitors' agreeing to abide by the existing political and judicial structure. Those with no title to *hakura*, especially some camel pastoralists in North Darfur (e.g. the Northern Rizaygat), are secondary rights holders and have traditionally accessed resources through such established relations negotiated between tribal leaders (Shazali, 2002).

The most fundamental principle underpinning this manner of customary land tenure concerns the authority of the native customary institutions, as it relates to the governance, administration and settlement of disputes over land (Abdelrahman, 2006). This right was consolidated during the British period through the institutionalisation of the Native Administration, based on the principle of Dar, or 'tribal homeland', and reinforced by economic and legislative mechanisms and local orders. The British put in place a "practical form of administration and control that would leave the local population free to manage their own affairs through their own rulers, under the guidance of the British staff, and subject to the laws and policy of the administration" (Abdul Jalil et al, 2007, pp 6). This system was legalised through a series of Ordinances in the early 1920s which were consolidated in the Native Courts Ordinance of 1932, and put executive, financial and legislative powers in the hands of tribal leaders (ibid).<sup>23</sup>

From a legislative perspective, of particular importance to the current issue of land and environmental management in Darfur are the 1925 Land Settlement and Registration Act, the 1930 Land Cancellation Act, the 1970 Unregistered Land

Act, and the 1984 Civil Transactions Act. The Land Settlement and Registration Act, which is still in force, addresses the identification and registration of land rights in urban land, and that agricultural land which has been developed with infrastructure (De Wit 2001). However, the Act does not recognise customary land rights away from the Nile in Darfur or in other rain lands in Blue Nile, East Sudan and Kordofan. Land registration is less prevalent in the regions away from the Nile, although more recently, a few incidences have occurred with registration offices now located in the main towns,<sup>24</sup> (Head of the Land Registration Authority, Nyala, *personal communication, 2011*). In Nyala, registered land lies mainly but not exclusively along Wadi Nyala in the vicinity of the main town.

The 1930 Land Cancellation Act, also still in force, allows the appropriation of land by government for public purposes, also in regions like Darfur. However, the absence of an official land licence (or similar documentation) often excludes land owners from compensation.

The 1970 Unregistered Land Act established the government as the sole owner of unregistered lands in the country (which includes all of Sudan's rain lands). This continued to render customary land tenure arrangements vulnerable by creating two main challenges. Firstly, the Act did not contain provision to compensate groups for livelihood losses incurred as a result of no longer having access to the land, or from new use for economic activities by the government and private actors (Darfur Land Commission 2007). Secondly, the law heralded a rise of challenges to the *hakura* system. The Zaghawa and various camel herders of North Darfur who were forced by the severe drought of 1984 to move to the ecologically-rich areas of Jebel Marra and West Darfur, contested the *hakura* rights held by the Fur and Masalit groups by evoking the argument that land in Darfur is government land according to the 1970 Land Act, and as Sudanese nationals they had equal and inalienable rights to it (De Wit, 2001; Young et al, 2009). This contributed to the escalation of conflict.

Besides the institutions and policies/legislation linked to land, processes such as massive population growth, mobility, resource degradation and rising stakes over resources have generated new claims over land held historically on a customary basis.

Land tenure security in Darfur is, as a result, under extreme pressure; a development noted since the 1980s. This has been exacerbated by conflict-related drivers including land grabs and forcible occupation and, furthermore, by economic drivers including the commercialisation of land, notably along wadis.

The restitution of lost land and property is now highlighted as a core issue linked to peace and stability in Darfur. There are formidable issues associated with this, including re-occupation of land, damages to

land assets, IDP occupation of abandoned property, sale of unregistered plots, possession of property by military, public bodies and newcomers, multiple allocation of the same plot by local administrations, unauthorised building on unregistered property and establishment of IDP camps on lands owned by recognisable individual farmers (Darfur Land Commission, 2007; Egemi, 2011). Understanding land use arrangements and the various relationships around land, given the context of conflict, is therefore critical to create an environment for durable solutions and peace in Darfur.

# 6 Conclusion and recommendations

Considerable environmental, social, and political changes over the last few decades, exacerbated by intensified pressures on livelihood systems in Sudan, have put great strain on environmental governance arrangements. Efforts to reform environmental governance arrangements have been made across Sudan, however the challenge remains to build these efforts into a well-coordinated overarching strategy. Coordination of effort, alignment and complementarity of mandates emerges as one of the most pressing priorities. Thereafter, the challenges are to develop capacity and sound cost recovery and funding arrangements.

For this to happen, commitment at the highest level is needed. To achieve this, the case needs to be made for the environment on economic terms. As Sudan stands at a point of shifting its economy from a predominantly oil-based economy to one in which agriculture plays a much more prominent role, the case can be made. Sudan's economy will depend on a well-managed natural resources base for sustainable economic growth.

The National Council for Strategic Planning (2008) outlines the main priorities facing strategic planning in Sudan (which has clear implications for the environment) as follows:

- To improve the dissemination of government decisions and address the need for evidence-based policy and decision-making
- To prioritise the implementation of existing environmental policies and strategies.
- To strengthen monitoring and performance evaluations
- To build greater Institutional and administrative capacities of the civil service, especially at state level, and modernise administrative processes and systems
- To address the need for greater community consultation and participation in governance processes

- To re-examine the regime of government taxes and fees for various transactions and services in addition to the highly-regulated economic activities
- To expand the use of data to inform policies and meet the need for greater capacity in monitoring and evaluating their impact
- To ease access to investment finance
- To re-examine operating costs associated with depreciation, the difficulty in replacing productive assets and the high production costs across sectors.

The current state of environmental governance is exacerbated by a lack of a shared vision or coordination between institutions – statutory and customary – that are mandated to manage natural resources and the environment. This has resulted in an ambiguity over roles and responsibilities and a failure to capitalise on the wealth of knowledge and experience that each structure has to offer. The system is beset by the challenges of legislative and institutional pluralism at national and state levels, making it all the more difficult to formulate a unified and widely-accepted system of environmental governance that is underpinned by levels of participation that cut across all sectors.

Strengthening environmental governance is an important entry point for promoting an equitable and sustainable sharing and management of natural resources that yields dividends for communities. The effectiveness of environmental governance varies greatly between areas, with some communities benefiting more than others. The reasons for this need to be explored and understood, with successful modalities being supported, while systemic challenges and gaps are highlighted. Support and capacity building needs to be provided to statutory and customary institutions, with effective links established between them, focusing on the positive roles of each - for example, the role of government as a credible enforcer of the law, and the role of customary leaders as custodians of natural resources, as peace builders and as local development



agents. This should be done within the context of the day-to-day realities of Sudan where economic activities (pastoralism, agriculture, forestry, and urban livelihoods) are interconnected and integrated, and should not, therefore, be examined in isolation.

Realising effective and transparent environmental governance requires a broad holistic approach which is rooted in the link between governance, peace, security and development. This involves:

- Building the capacities (legal, organisational, technical, financial, human) of institutions for effective, transparent and socially responsible natural resource management at all levels of governance
- Promoting transparent and effective participation and representation of communities and their organisations in development planning and in the decision-making process
- Securing access to and use of land and water as assets for the livelihoods of rural populations. This includes promoting constructive dialogue between resource users at a local level on issues of natural resources management and access, and also at a higher level between the Republics of Sudan and South Sudan
- Establishing adequate regulatory frameworks for equitable and inclusive natural resources management
- Establishing an adequate regulatory framework for private and public sector investments in extractive natural resources and resource-based industries
- Promoting adherence to the principles of Corporate Social Responsibility founded on the UN 2000 Global Compact principles, to guide the actions of the private sector
- Supporting the emergence of a strong and vibrant civil society (both traditional and modern) to promote and sustain social dialogue, and to engage with government institutions on environmental governance issues
- Building effective research capacities and linking research to policy making including via the training of university staff, availing research funds, increasing exposure to international and regional experiences, and supporting undergraduate and graduate research projects
- Promoting the role of women and youth in decision making over the environment
- Promoting a national campaign to enhance and promote awareness about environmental governance at various levels of governance, from federal level to local level, through effective partnerships and utilisation of the mass media. In this respect access and engagement with basic and secondary education schools is of paramount importance
- Establishing environment information resource centres within the ministries of environment and/ or proposed environmental authorities, accessible to researchers and to the public
- Promoting sustainability measures for the conservation and expansion of the natural resources base.

## Annex

### Summary of main environment-related legislation<sup>25</sup> (Adapted from IFPRI 2006)

Year	Legislation/Policy Decision	Remarks
1899	<b>Title to Land Ordinance</b>	The Ordinance recognised private property in the form of individually-registered cultivated lands in the extreme north and central riverain Sudan. During the colonial period, land ownership was pursued through a series of land legislation. One major policy of this Ordinance was “to expand cultivation while safeguarding the inhabitants’ rights and encouraging the formulation of a Sudanese proprietary class.” (Warburg, 1970: 156 cited in Komey, 2009: 4). Towards that end, a number of land settlement commissions were appointed in the northern and central districts. Similar structures did not exist in the Nuba Mountains, Darfur, southern Blue Nile and South Sudan, and no land registration was pursued in these areas. Consequently, no individual private land ownership was formally recognised in these regions (Bolton, 1954: 187 and Warburg, 1970: 159 cited in Komey 2009).
1925	<b>Land Settlement &amp; Registration Ordinance</b>	The Ordinance consolidated a 1903 Land Acquisition Ordinance, which empowered the government to acquire land for irrigation schemes and other public purposes, and a 1905 Land Settlement Ordinance, which established an adjudication system to settle claims to waste and unoccupied lands. Such lands were declared government property barring evidence to the contrary. This Ordinance is the main reference for land settlement and registration procedures in Sudan, including Darfur. Some adjustments have been made to this Ordinance, in 1984, to align it with the 1984 Civil Transaction Act.
1930	<b>Land Property Cancellation Act</b>	This Act stipulates that if the Wali deems a piece of land anywhere as permanently or temporarily required for public purposes, an announcement is made in the Gazette, and based on this it becomes possible to anyone delegated by the Wali to perform any of the following activities: <ul style="list-style-type: none"> <li>• Enter any land in the area of interest and survey it</li> <li>• Dig the land</li> <li>• Prepare the land for whichever purpose it is needed for</li> <li>• Demarcate the boundaries of the land of interest</li> <li>• Cut and remove any crops or trees if they hinder demarcation. No one is allowed to step in that land without prior permission of the owner, unless the owner has received a one week notice.</li> </ul> According to the Act, the Government pays compensation of damage caused by the above activities, if any, and the Wali pays or expresses willingness to pay an amount that will cover damage that might have been caused by the above-mentioned activities.
1932	<b>a) Native Courts Ordinance b) Central Forests Act</b>	a) The Ordinance consolidated a series of previous documents defining the respective roles of Native Administration authorities in the judicial sphere, setting up a system of local courts alongside state courts. b) Affirms government ownership of forests and responsibility of forests protection.
1951	<b>Local Government Act (or Ordinance)</b>	The Act came in the wake of a series of initiatives paving the way for local government-building during the 1930s and 1940s. The Ordinance sanctioned the creation of local councils entrusted with collecting taxes and providing social services. Local security and conflict management remained responsibilities of the NA.
1961	<b>Local Government Act</b>	The Act established local councils at the district level, led by a government-appointed commissioner and with members chosen from among local rural and urban elites, the NA, and leading civil servants. The main implementing party was the Ministry of Interior, which took over local government responsibilities from the Colonial Administrative Secretary.

1968	<b>Establishment of Mechanised Farming Corporation MFC</b>	The MFC was established as an autonomous agency operating under the Ministry of Agriculture and Natural Resources. MFC managed the mechanised sector and provided technical assistance, credit, and market support to farmers in mechanised rain-fed areas
1970	<b>Unregistered Lands Act 1970</b>	The Act declared all waste, unregistered, and forest land to be government property, withdrawing de facto recognition of customary land claims other than as usufruct rights. The Act formally abolished the power of the NA to allocate land rights in rural communities and dissolved the legal basis of the notion of tribal homeland, or Dar.
1971	<b>Abolition of Native Administration<sup>26</sup></b>	The document abolishing the Native Administration, issued by the country's leadership at the time, is generally considered a historically significant document as it replaced customary authorities and institutions with leaders chosen on a political basis.
1974	<b>Survey Department Act</b>	The Department has existed since the beginning of 20 <sup>th</sup> Century, but the Act reflected a desire to modernise its work and regulate the use of then new technologies, such as aerial photography and remote sensing.
1974	<b>Livestock Routes and Veterinary Service Stations Act</b>	The aims of the Act, whose implementation was the responsibility of the then regional Ministries of Agriculture, were (i) to establish stock routes for transhumant herders and their animals from areas of production to local and international markets; (ii) to regulate veterinary services and standards to ensure the good quality of animals for the market. Both goals reflected a primary preoccupation with the market rather than with livestock production as such.
1975	<b>a) Mechanised Farming Corporation Regulations b) Environmental Health Act (amended in 1993)</b>	a) Policy served to define MFC responsibilities in relation to proper utilisation of natural resources in areas of rain-fed mechanised farming. b) Addressed in a comprehensive way environmental problems that may affect natural resources including water. However, local and state-level agencies entrusted with environmental assessments and conservation rarely work in consultation with groundwater authorities or include groundwater specialists.
1980	<b>Regional Government Act</b>	The Act divided Sudan into six regions, in addition to Khartoum as national capital. Regional Councils were also formed, with members chosen by locality councils.
1981	<b>Peoples' Local Government Act</b>	The Act divided regions into localities, more or less corresponding to the rural councils of the colonial era.
1984	<b>Civil Transaction Act (amended in 1990, 1991, and 1993)</b>	The Act repealed a series of previous acts, including the 1970 Unregistered Land Act. The 1984 Act builds on Islamic Sharia in that it recognises land as belonging to God, and man as the guardian of land. It gives Government administration rights over land and recognises usufruct rights as well as individual property rights. It also regulates civil transactions over land, including title to land, means of land acquisition, and various aspects of land use. The Act declared the responsibility of the government to conserve surface and underground natural resources.
1986	<b>Land Appropriation Act</b>	The Act defined the right of the government to sell and rent government land, as well as to allocate it for specific uses and to grant licenses to investors. Land included in the Act included that registered as government property according to the 1925 Land Settlement and Registration Act, as well as land expropriated for the public benefit or considered as belonging to the state by default based on the 1970 Unregistered Land Act.
1987	<b>Native Administration Bill</b>	The Bill stipulated the selective reinstatement of varieties of native administration, ostensibly to cater to regional and/or tribal variations. Among pastoral groups, native administration was to have administrative, judicial and security powers, whereas among sedentary populations its judicial powers were limited.

1989	<b>Forestry National Corporation (FNC) Act</b>	This Act repealed the 1932 Central Forests Act and Forests Subordinate Directorate Act, without thereby invalidating legislation issued under these two Acts. The main objective of the Act was to define the functions of FNC, notably the formulation of general policies concerning forests and environmental protection. In addition, the Act aimed to increase the size of areas to be preserved as forests to a minimum of 20 per cent of the territory of Sudan.
1989	<b>Forests Act</b>	This Act was the most important in the field of forest protection. It resulted from the merger of two previous Forests Acts issued in 1932 and 1974, all aiming to regulate the protection of tree species, soil and water resources, pastures, and any other natural resources present in forest areas. Under the 1989 Act forest areas were for the first time classified with respect to different kinds of entitlements over them, including private and community entitlements. Implementation was entrusted to the FNC and to locality Commissioners who were also empowered to enforce the Act.
1990	<b>Irrigation &amp; Flood Control Act</b>	The Act asserted state authority over the Nile and surface waters in general. In particular, it affirmed the power of the state to issue licenses for any activity concerning irrigation and discharge into surface water, as well as to specify the amount of water that each licensed party can draw and what time. Implementation was entrusted to the Ministry of Irrigation and Water Resources, and stakeholders were primarily farmers and schemes owners.
1990	<b>Native Administration Act</b>	Followed by the 1998 Local Government Act, which gives states the authority to formulate their respective Native Administration State Acts.
1990	<b>Agricultural Council Act</b>	The Act aimed to establish an Agricultural Council that would organise and develop the agricultural sector in coordination with concerned agencies (including research institutes). However, there is no evidence that this Council has been operative and/or effective to date.
1991	<b>4<sup>th</sup> Constitutional Decree and Local Government Act (LGA)</b>	Under the Constitutional Decree and the LGA, Sudan was declared a federal country. The Act redefined to some extent the setup, functions, and financial bases of localities, State Councils and Ministries, Governors, and various central government agencies such as those responsible for Local Government, Finance and the zakat.
1992	<b>Organisation of Nomads and Farmers Act</b>	The Act aimed to establish institutional structures to organise nomads and farmers and to assist in the implementation of government programs for rural development. In particular, a Higher Council for Farmers and Pastoralists was supposed to be established to implement the Act. To date the Act is still by and large awaiting implementation.
1994	<b>Disposition of Lands and Physical Planning Act</b>	This Act regulates the designation of land for different purposes and urban planning
1995	a) <b>National Water Commission Act (NWCA)</b> b) <b>Water Resource Act (WRA)</b> c) <b>Local Government Act</b>	a) The NWCA repealed the National Commission for Rural Waters Act and the National Commission for Town Waters Act of 1986, without thereby abrogating regulations issued under them. Its objective was to establish a national water commission that could undertake water planning, coordinate water use, protect the environment, and carry out research on water sources and their sustainable exploitation. The National Water Commission was to be set up in the Ministry of Irrigation. b) The WRA is the main piece of legislation concerning freshwater. It states that water is government property and entrusts primary responsibility for its management to the Ministry of Irrigation at federal level and to walis and the Ministries of Engineering Affairs at state level. c) The Act cancelled the 1991 LGA without invalidating regulations issued under it. One main aim of the 1995 Act was to plan village lands according to a Disposition of Lands and Physical Planning Act. The Act aimed to define stock routes so they would remain clear of agricultural lands, as well as to provide for the development of pastureland, pest control, and development and conservation of farmland and forests.
1996	<b>Range Protection and Pasture Resources Development Bill</b>	Not ratified. Aims at instituting a general framework that maps out areas comprising pastureland and defines the types of pasture and their management. Also distinguishes areas of farming and herding and aims to curb FNC's ability to annex vast tracts of prime grazing areas as 'forest reserves'. Also endorses the principle of popular participation by promoting the notion of community pastoral reserves which should be directly managed by local communities, supervised by the Range and Pasture authorities (UNDP, 2006; Babiker, 2008).

1998	<p>a) <b>Constitution of the Republic of Sudan</b>  b) <b>Local Government Act</b></p>	<p>a) The Constitution came into force in June 1998 reaffirming, among other things, the federal structure of the country and the foundational role of the Shari'ah in Sudanese laws and political institutions. The Constitution also determined the respective responsibilities and financial resources of the federal government, states, and local councils. Since replaced by the 2005 Interim National Constitution of the Republic of the Sudan.</p> <p>b) The Act cancelled previous LGAs without abrogating regulations issued under them. Its main goal was to organise the activities of local government authorities in each state. One of its provisions was the establishment of Provincial Councils based on criteria of population size, and with borders the economic and social variables and the suitable number of the localities.</p>
1999	<p><b>Livestock Production Organisation Act and Animal Disease Control Act</b></p>	<p>These Acts aim mainly to organise the production of livestock for internal and export markets, whether this occurs on a mobile (nomadic/transhumant) or sedentary basis. In particular, they provide for a series of services to be made available to livestock producers, including veterinary and marketing services operating on the basis of revolving funds. The record of actions undertaken under the Acts is rather mixed to date: for instance, initiatives to concentrate livestock in small, "disease-free" grazing areas has had negative environmental impact in some areas, while initiatives such as free animal immunisation programs have been quite successful, also thanks to the support of livestock owners.</p>
1999	<p><b>Investment Encouragement Act</b></p>	<p>Repeals 1996 Investment Act without invalidating regulations issued according to that Act. Explicit reference to the environment is sparse in the Investment Encouragement Act, under the wider Investment Act. The Act outlines that the Minister of Environment may be referred to on environmental issues. However, no explicit mention is made of taking the environment into account prior to any investment. For example, the Act in chapter 4, Article 20, says "it is not possible to give licenses, privileges or guarantees, as mentioned in this Act, to any project unless a technical and economic feasibility study is presented." However, there is no specific mention of performing an Environmental Impact Assessment (EIA) as a precondition.</p> <p>With regards to land, the Act states that the Minister of International Cooperation and Investment<sup>27</sup> has the right to allocate the needed land free of charge for strategic projects, and at a competitive price for non-strategic projects, in coordination with concerned parties<sup>28</sup>. This land is to be subtracted from the total land area that has been allocated for investment in coordination with the concerned parties. The broad nature of the investment priorities and vague reference to 'concerned parties' raises questions regarding how much alignment there actually is between the Ministry of International Cooperation and Investment and other sectors concerned.</p>
2001	<p><b>Environment Protection Act</b></p>	<p>This Act replaces the Higher Council for Environment and Natural Resources Act of 1991. It transfers over some of the contents of the original Act (which defined the institutional structure and mandate of the HCENR), and focuses on the role of various authorities at federal and state levels in terms of environmental protection, entrusting overall responsibility in this realm to the Higher Council For Environment and Natural Resources. The Higher Council also has the function of drawing general policy, in coordination with the competent authorities, on natural resources, including "determining development and rationalising the means of use, management and protection, from deterioration thereof, in an integrated and balanced form" (Government of Sudan, 2001).</p>

2002	<b>Forest and Renewable Resources Act</b>	<p>The Act replaced the Forests National Corporation Act and the Forests Act of 1989, without thereby invalidating regulations issued under them, and also established a Forests and Renewable Natural Resources Corporation with the same functions defined by the Forest National Corporation Act. The main goals included the organisation of a Forests and Pastures Administration, enlarging the area allocated for forest reserves to 25 per cent of Sudan's territory, and paving the way for a Pastures Act in Sudan. Moreover, the Act sought to settle disputes between states and Federal Government over the ownership of forest resources and royalties derived from forestry products. The formula adopted to solve such disputes has been one of revenue sharing whereby states get 40 per cent of revenue from forests located on their territory, while the FNC receives 60 per cent of it (out of which one third is to be reinvested in forest development). One main problem faced in implementing the Act is the lack of clear rationale and sensitisation campaigns in support of the 25 per cent goal.</p> <p>With regards to property cancellation for the purpose of forests reservation, "the Competent Minister is not entitled to declare the reservation of any area without cancelling the property of land in such an area in accordance with the provisions of the 1930 Land Property Cancellation Act. However, the officer in charge of the property cancellation and before acting in accordance with the provisions of article 14 of the mentioned act, shall have to send a list to the corporation with the rights claimed by any person in relation to the area for the purpose of identifying the rights which the corporation doesn't wish to cancel so that no cancellation of rights shall take place without this review." (Forest and Renewable Natural Resources Act, 2002)</p> <p>(2) The competent Minister shall declare, after completing the specified procedures, indicated in item (1) in accordance with an order published in the Sudan gazette that such an area is reserved. The order shall consist of the following:</p> <ul style="list-style-type: none"> <li>• Whether the area is a forest or a reserve.</li> <li>• The non-confiscated rights and the name, names or entity that shall enjoy that right.</li> <li>• The Declaration of Reserved Areas on the Basis of a Request Extended by the Owners.</li> </ul> <p>If a shareholder whose shares are not less than 2/3 of the prospective reserved area requests the competent Minister to declare such an area as being reserved in accordance with the provisions relating to compensation and reservation duration, the competent Minister, after consulting with the stakeholders who oppose such a demand shall declare that land reserved by virtue of an order published in the gazette.</p> <ul style="list-style-type: none"> <li>• Declaration of Reserved Areas for Public Interest</li> </ul> <p>By virtue of the 1930 cancellation of the land property act and for public interest, any land can be declared reserved in accordance with the provisions of this act.</p>
2002	<b>Regulations for the Protection of the Environment in the Petroleum Industry</b>	The Regulations were intended to protect and preserve the environment in areas of oil industry.
2003	<b>Local Government Act<sup>29</sup></b>	<p>This Act repeals the 1998 Local Government Act without invalidating regulations issued under it. The 2003 Local Government Act (LGA) called for more devolution of power to the locality level, while simultaneously reducing the number of localities to about 20 per cent of what they formerly were. Localities are officially formed by presidential decree in consultation with the State government, and the Act describes the guidelines for locality formation and also gives the locality the power to issue local orders through its Legislative Council (the State Government has a one month window in which to contest or amend local orders reported by localities). The Commissioner was declared the head of the executive branch of the locality government, along with five administrative departments (Agriculture, Animal and Natural Resources, Finance and Planning, Health, Education, and Public Affairs, Engineering) and Town Planning). The Native Administration was not mentioned in the 2003 LGA, and states were instructed to withhold any initiative in this regard until framework legislation was issued at the federal level.</p>
2005	<b>Interim National Constitution of the Republic of the Sudan</b>	Replaces the 1998 Constitution. "As a transitional constitution, it regulates and defines powers, principles and institutions throughout the interim period from 9 July 2005 until six months before the end of the year 2011; the Interim National Constitution will remain valid until replaced by a permanent constitution" (Fadlalla, 2009). Stipulates that the national government, South Sudan government, and state governments exercise concurrent powers, including on environmental management and environmental protection and conservation (ibid) <sup>30</sup> .

Source: In-house review of Sudan laws and legislation; UNDP, 2006; IFPRI, 2006; Carpano, 2007; Babiker, 2008; Takana, 2008; Fadlalla, 2009

# Bibliography

- Abdul Jalil, M.A., Mohammed, A.A., Yusuf, A.A. (2007) 'Native Administration and Local Governance in Darfur: Past and Future' in War in Darfur and the Search for Peace, de Waal, A. (ed), Justice Africa, Global Equity Initiative: Harvard University
- Al Khalil, Ibrahim (2008) Environmental and socioeconomic impacts of oil industry in West Kordofan, unpublished paper.
- Ali, Hamid Omer (2009) Institutional Framework and Water Policies in Darfur. The Darfur Water Resources Study, World Bank Khartoum.
- Al Hardallu, Adlan (2002) Environmental Governance in Sudan. Chapter VI in *Sustainable Development in Sudan: Ten Years After Rio Summit, A Civil Society Perspective*. Ed. Hassan A. Abdel Ati. Proceedings of the National Civil Society Preparatory Conference 2-4 October 2001. Environmentalists Society, EDGE for Consultancy and Research and Heinrich Boll Foundation Regional Office Horn of Africa.
- Al Midan Daily Newspaper (2007) Land occupation in Darfur, September 2007
- Babiker, Mustafa (2008). Communal Land Rights and Peace-Building in North Kordofan: Policy and Legislative Challenges. SWP 2008:3. Chr Michelsen Institute.
- Bai, Z. G.*et al.* (2008).  
Global assessment of land degradation and improvement: Identification by remote sensing. World Soil Information Report 2008/01. FAO/ISRIC, Rome, Italy/Wageningen, The Netherlands.
- Bolton, A.R.C. (1954) "Land Tenure in Agricultural Land in Sudan". In *Agriculture in the Sudan, being a Handbook of Agriculture as Practiced in the Anglo-Egyptian Sudan*, ed. J.D. Tothill. London: Oxford University Press: 187-97.
- Buchanan-Smith, M., McElhinney, H., with Bagadi, H., Abdul Rahman, M., Dawalbeit, A., Dawalbeit, Khalil, M., Abdalla, B. (2001). City limits: urbanisation and vulnerability in Sudan. Nyala Case Study. Humanitarian Policy Group, ODI.
- Bromwich, Brendan (2009a) Analysing resource constraints as one dimension of conflict in Darfur. In *Environment and Conflict in Africa: Reflections on Darfur*. Ed. Marcel Leroy. University for Peace, Africa Programme. pp. 110-122

Bromwich, Brendan	(2009b) Environmental Impacts of Conflict: The Loss of Governance and Routes to Recovery. <i>In Environment and Conflict in Africa: Reflections on Darfur</i> . Ed. Marcel Leroy. University for Peace, Africa Programme, pp.309-319
Carpano, Francesca	(2007) Assessment of IFAD Approach to Land Tenure Interventions in the Sudan Programme and Lessons Learned from other Donor and Country Interventions
Central Bureau of Statistics, Sudan	First Population Census of Sudan 1955/1956. Final Report.
Concordis International	(2010) More than a line: Sudan's North/South Border. Concordis International Sudan Report
Darfur Land Commission	(2007) Conceptual Framework, Khartoum
De Wit, Paul	(2001) Legality and legitimacy: A study of the access to land, pasture and water. A study financed by the European Community prepared for the IGAD Partner Forum Working Group on Planning for Peace in Sudan by the Food and Agriculture Organisation of the United Nations.
DJAM	(2007) Darfur Joint Assessment Mission Report
Doha Document for Peace in Darfur	(2011). Agreement signed between the Government of Sudan and the Liberation and Justice Movement (LJM)
Egemi, Omer	(2010) Darfur Women's land rights, paper presented to Peace Institute, U. of K. and UN Women joint Workshop on "advocacy for Darfur Women in the Doha Peace Process", Dec 2010
Egemi, Omer	(2011) Rangelands and pastoral issues in Post Secession South Sudan, Paper presented to Sudan Environment Conservation Society Workshop on "Environmental Implications of South Sudan Referendum", January 2011, Khartoum
Fadlalla, Mohamed	(2009) The Regulation and Meaning of Concurrent Powers in the Interim National Constitution 2005 of Sudan, <i>Recht in Afrika</i> , Volume 12/1, Köln, pp. 131.
Friends of the Earth Middle East	(2008) Environmental Peace Building: Theory and Practice, Amman
German Agro-Action Sudan (GAA)	(2006) 'Western Kordofan (South Kordofan) Animal Health Care Project (SDN 1024)'. Project Evaluation Draft Report.
Government of National Unity	(2009) Fifth Population Census of Sudan 2008. Final Report.
Government of National Unity	(2009) Assessment of institutional arrangements and institutional capacity/capability in environment, Report, Ministry of Environment and Physical Development
DECARP	(1976) Sudan's Desert Encroachment Control and Programme, Ministry of Agriculture and National Council for Research.



Government of National Unity	(2009) Assessment of institutional arrangements and institutional capacity/capability in environment. Ministry of Environment and Physical Development.
Government of Sudan	(1925) Land Registration and Settlement Act. Khartoum
Government of Sudan	(1944) Soil Conservation Committee Report, McCorquodale &co. (Sudan) Ltd.
Government of Sudan	(1970). Unregistered Land Act. Khartoum
Government of Sudan	(1984) Civil Transaction Act. Khartoum
Government of Sudan	(1992) The Comprehensive National Strategy 1992-2002
Government of Sudan	(2001) Environment Protection Act. Ministry of Environment and Physical Development. Higher Council for Environment and Natural Resources Secretariat General. Khartoum.
Government of Sudan	(2007) National Adaptation Plan of Action. Ministry of Environment and Physical Development. Higher Council for Environment and Natural Resources.
Government of Sudan	(2009) West Darfur State Farming and Grazing Regulation Act. Decree Number 62, Session No. 16, 17 <sup>th</sup> June 2009.
Ibrahim, Fouad N.	(1984). Ecological imbalance in the Republic of Sudan - with reference to desertification in Darfur: Bayreuther Geowissenschaftliche Arbeiten Ed. Bayreuth Verlagsgesellschaft mbh.
Ibrahim, Fouad.	(1978). The problem of desertification in the Republic of the Sudan, with special reference to Northern Darfur Province. Khartoum: Development Studies and Research Centre, Faculty of Economic & Social Studies, University of Khartoum.
IFPRI	(2006). Empowering the Rural Poor under Volatile Policy Environments in the Near East and North Africa Region Research Project: Sudan Case Study. With support of the Ministry of Finance and National Economy of the Republic of the Sudan and the International Fund for Agricultural Development (IFAD).
Ijaimi, Abdelatif Ahmed	(2010) Horizons of Agricultural Development in Sudan Ten Melting Pot States, Workshop Paper, Kadugli.
Komey, Guma Kunda	(2009). Communal Land Rights, Identities and Conflicts in Sudan: The Nuba Question. Paper presented at The Human Rights Dimensions of Land in the Middle East and North Africa. MENA Land Forum Founding Conference. Cairo, 10-12 May, 2009. Organised by the Housing and Land Rights Network, Habitat International Coalition.
Ministry of Agriculture and Forests	(2006) Time Series of Area Planted, Harvested and Yield 1970/71-2004/05, Vol 1, Department of Agricultural Statistics. General Administration of Agricultural Planning and Statistics

- Ministry of Agriculture and Forests (2009) Study of the sustainable development of the semi-mechanised farming, MDTF Report to Government of National Unity
- Mohamed, Y.A. (2002). Sudan Policy and Institutional Changes for the Implementation of Agenda 21 . In Hassan Abdel Ati (2002) *Sustainable Development in Sudan*. Environmentalists Society, Khartoum.
- Mortimore, M. *et al.* (2009) Dryland Opportunities: A new paradigm for people, ecosystems and development, IUCN, Gland, Switzerland; IIED, London, UK and UNDP/DDC, Nairobi, Kenya.
- Morton, J. (2011). How to Govern Darfur? Sir William Luce Memorial Lecture, Durham University, June 16<sup>th</sup> 2011 .
- National Council for Strategic Planning (2008) The Five-Year Plan 2007-2011 , Khartoum
- Norwegian Development Assistance (2010) Analysis of partners and thematic areas in Blue Nile and South Kordofan states, Sudan, Report
- Pantuliano, S, Egemi, O. *et al.* (2009) Put out to pasture: War, oil and the decline of Misseriyya Humr pastoralism in Sudan. Humanitarian Policy Group, Overseas Development Institute (ODI), London.
- Pantuliano, S., Buchanan-Smith, M., (2011) City limits: Urbanisation and vulnerability in Sudan.
- Metcalfe, V., Pavanello, S., and Martin, E. A Synthesis Report. Overseas Development Institute.
- Shazali, Salah and Abdul Gaffar M. A. (1999) Pastoral land tenure and agricultural expansion: Sudan and the Horn of Africa. Issue paper no. 85. London: International Institute for Environment and Development (IIED)
- Shazali, Salah (2002) Share the land or part the nation: pastoral land tenure in Sudan. Report to UNDP
- Sida (2008) Natural Resource Tenure, Position Paper
- Stebbing, E.P. (1953) The creeping desert in the Sudan and elsewhere in Africa 15 to 30 degrees latitude. McCorqudale, Khartoum, Sudan.
- Sullivan, P. J and Nasrallah, N (2010) Improving natural resource management in Sudan, Special Report, United States Institute of Peace USIP
- Takana, Yousif (2008). The Politics of Local Boundaries and Conflict in Sudan: The South Darfur Case.
- See: <http://www.cmi.no/sudan/doc/?id=967>
- Tanner, Victor (2005), Rule of lawlessness: roots and repercussions of Darfur Crisis. Khartoum-Inter Agency Paper for Sudan Advocacy Coalition
- (2006) Soil and Oil: dirty Business in Sudan; Washington DC, Coalition of International Justice

Tarig, Magzoub	(1998) Pastoral-related legislation in North Kordofan, Report to SOS Sahel UK
UN Three Areas Steering Committee	(2009) Stability and Development Strategy
UN and Partners Work Plan	(2011) Sudan Work Plan 2011.
UN Advance Mission in Sudan	(2005) The Comprehensive Peace Agreement
UNDP	(2006). Share the Land or Part the Nation: The Pastoral Land Tenure System in Sudan. Study 3.
UNDP	(2007) Aspects of land tenure in Sudan, Report, Khartoum
UNDP	(2010) The Real Wealth of Nations, Human Development Report, 2010
UNDP	(2012) Human Development Index
UNEP	(2007) Sudan Post Conflict Environmental Assessment
UNEP	(2012) Governance for Peace over Natural Resources: A review of transitions in environmental governance across Africa as a resource for peace building and environmental management in Sudan
UN HABITAT	(2009) Land Issues in Darfur, Report
UN Peacebuilding Support Office	(2008) The Role of Natural Resources and Environment, Briefing Paper
Warburg, Gabriel	(1970). The Sudan under Wingate: Administration in the Anglo-Egyptian Sudan 1899-1916. London: Frank Cass & Co. Ltd.
Watson, J.	(1975) "Livestock Census in Northern Sudan." Unpublished report submitted to the Government of Sudan.
Young, H., A. M. Osman et al.	(2009) <i>Livelihoods, Power and Choice: The Vulnerability of the Northern Rizeigat, Darfur, Sudan</i> . Medford, MA: Feinstein International Center.

# Endnotes

- 1 Sudan Integrated Environment Project 2012 Programme Consultation
- 2 See Chapter 13 Sudan Post Conflict Environmental Assessment UNEP 2007
- 3 Darfur - South Africa IWRM Technical Study Tour Vision Statement and Recommendations, Cape Town 28 May 2010, Vision Statement; & South Africa Integrated Water Resource Management (IWRM) Decision-Makers' Study Tour, Recommendations made at wrap up meeting in Cape Town, 6 November 2010. See Consultations at [www.unep.org/sudan](http://www.unep.org/sudan)
- 4 "Governance for Peace over Natural Resources – A review of transitions in environmental governance across Africa as a resource for peace-building and environmental management in Sudan"
- 5 The Darfur Land Commission has been carried over into the Doha Document for Peace in Darfur (DDPD, 2011), so it continues to function. However, the fate of the proposed National Land Commission remains unclear as this is linked to the future constitution of the country, which is in the process of being formulated.
- 6 Information on South Sudan is included as writing of the report predates the secession of the Republic of South Sudan.
- 7 Conservative estimates are from Sudan's National Adaptation Plan of Action (2007).
- 8 Drylands are often found in close proximity to deserts, whose boundaries naturally tend to oscillate over time (Mortimore et al, 2009).
- 9 It is expected that issues related to land and natural resources will be taken up as part of the discussions on the country's new Constitution.
- 10 Though it remains vague, what is state versus federal land, natural resources, animal wealth and wildlife resources.
- 11 A Land Commission at National level, one in what was South Sudan, and one for each of South Kordofan and Blue Nile States.
- 12 But in practice the State Water Corporation mainly covers the operation and maintenance of existing water points, and the development of water projects funded by the state.
- 13 These include the various Directorates of water resources, Nile and Non-Nilotic Departments, Dams as well as their Technical Water Resources organs, the Irrigation Works and Earth-moving corporation, the National Irrigation Water Corporation, the Drinking Water Supply Corporation, as well as executive agencies for the major water resources development projects such as the heightening of Roseires Dam, the Merowe Dam, Kenana and Rahad Irrigation Schemes, in addition to Drilling Contracting Company and Water Equipment Manufacturing Company.
- 14 Hamid Omer Ali, personal communication, Sudanese-German Cultural Society and Ministry of Irrigation and Water Resources, 1997
- 15 Passed by Legislative Council Decree Number 62, Session No. 16 on 17th June, 2009
- 16 So far this has been done by the Public Water Corporation for the WASH sector, dealing with rural and urban water supply. A strategic plan for water resources as a whole still does not exist.
- 17 This emerged from the Capacity 21 Project, which was followed by a series of workshops held to raise awareness on sustainable development. There was no funding to roll out next steps, so follow up never occurred.
- 18 These projects were funded by UNDP, and implemented by government and CBO staff as part of specialised Project Management Units.

- 19 Previously FNC answered to the Minister of Agriculture.
- 20 The 2010 Agriculture and Animal Producers' Act
- 21 Since replaced by the Doha Document for Peace in Darfur, signed in July, 2011.
- 22 This body is responsible for setting overall national strategies and policies. At state level, Physical Planning Committees are in place to adopt and adapt these national strategies and policies, and to make recommendations.
- 23 The Native Administration has gone through many changes since then. Powers of the Native Administration have been reduced drastically over time, starting with limiting the scope of its judicial authority (it could only deal with smaller crimes whereas the State would enforce the law for more serious crimes), to the removal of financial and executive powers in 1951 which were previously held by tribal leaders, to later changes including political appointment and administrative manipulation.
- 24 Land registration offices did not appear in Darfur until the 1960's, with the first office opening in El Fasher. Offices have been opened in Nyala, Geneina and Zalingei later on.
- 25 Some of these laws are obsolete but are included here to highlight how some of the legislation has evolved over time.
- 26 See Takana, 2008
- 27 Representing a ministry that has since split into two separate ministries.
- 28 The Act encourages investment in agricultural activities, industry, energy, mining, transport, communication, tourism, environment, storage, housing, contracting, foundational infrastructures, economic services, management and investment services, information technology, health and education services, water, information and culture, and other aspects identified by the cabinet of ministers.
- 29 States have their own Local Government Acts, which build on national law. For example, South Darfur State's Local Government Act was issued in 2006, and amended in 2009.
- 30 According to Fadlalla (2009), "In the case of conflict between the provisions of national law, Southern Sudanese law and/or state law on matters of concurrent powers, priority will be given to the law which most effectively deals with the subject matter of the law with regard to recognition of the Sudanese nations' sovereignty, in respect of the autonomy of Southern Sudan or of the states, whether there is a need for national or Southern Sudanese norms and standards, the principles of subsidiarity, and the need to promote the welfare of the people and to protect each person's human rights."



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