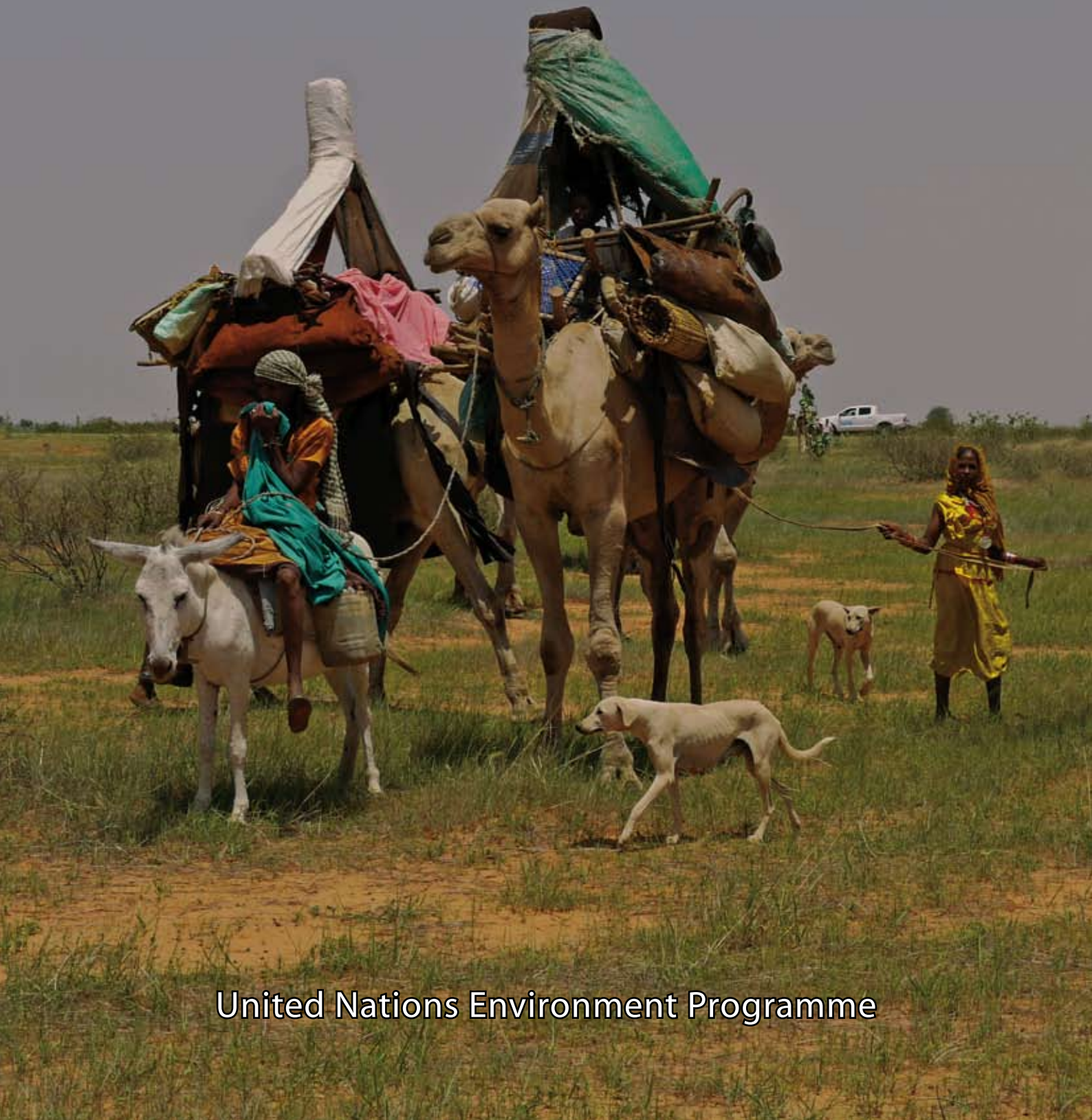
Relationships and Resources

Environmental governance for peacebuilding and resilient livelihoods in Sudan



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United Nations Environment Programme

Table of contents

Acronyms . . . 3

Acknowledgements . . . 4

Executive summary . . . 5

Preface . . . 7

1. Introducing and integrating conceptual frameworks: livelihoods, environmental governance and resilience . . . 10
   - 1.1 Setting the scene: adopting a livelihoods perspective in Darfur . . . 10
   - 1.2 Linking livelihoods, environmental governance and resilience . . . 12

2. Relationships in governance and local peacebuilding . . . 16
   - 2.1 Mapping and categorizing relationships . . . 16
   - 2.2 Demonstrating relationships analysis in Sudanese governance . . . 20

3. Describing qualities of relationships . . . 22
   - 3.1 Relationships in detail: the five main dimensions . . . 22
   - 3.2 Practicalities: governance in relational terms . . . 24

4. Measuring progress in relationships . . . 27
   - 4.1 The *measured pathway* of developing relationships . . . 27
   - 4.2 Case studies . . . 29

5. Putting it together as a programme . . . 33
   - 5.1 The Integrated Environment Project concept . . . 33
   - 5.2 Relationships and the theory of change . . . 34
   - 5.3 Case Study: Rebuilding governance – Integrated Water Resource Management in Wadi El Ku . . . 38

6. Conflict and Reconciliation in Darfur . . . 40
   - 6.1 Three levels of conflict . . . 40
   - 6.2 A long-term perspective . . . 42

7. Governance and peacebuilding in practice: Technical and political tracks towards peace . . . 44
   - 7.1 Relationships, governance and peacebuilding . . . 45
   - 7.2 Multiple routes towards peace . . . 45

8. Conclusions and recommendations . . . 48
   - 8.1 Conclusions . . . 48
   - 8.2 Recommendations . . . 51

References . . . 53

Annex 1. The development of the *measured pathway* . . . 55

Annex 2. Generic examples of the *measured pathway* in three categories of relationships . . . 56

Annex 3. CBNRM and development of relationships . . . 57

Annex 4. Expanding the case study: Outcomes promoting IWRM . . . 58

Annex 5. Workshops that build collaboration and shared understanding . . . 60

Endnotes . . . 62

Acronyms

CBNRM . . . . . Community Based Natural Resource Management
CBO . . . . . Community Based Organisation
CEAP . . . . . Community Environment Action Plan
CPA . . . . . Comprehensive Peace Agreement
DCPSF . . . . . Darfur Community Peace and Stability Fund
DDR . . . . . Disarmament, Demobilization and Reintegration
DDRA . . . . . Darfur Development and Reconstruction Agency
DDPD . . . . . Doha Document for Peace in Darfur
DFID . . . . . Department for International Development (UK)
DIDC . . . . . Darfur Internal Dialogue and Consultation
DJAM . . . . . Darfur Joint Assessment Mission
DPA . . . . . Darfur Peace Agreement
DRA . . . . . Darfur Regional Authority
EC . . . . . European Commission
GDP . . . . . Gross Domestic Product
GWWD . . . . . Groundwater and Wadis Department (Now GWWU)
GWWU . . . . . Groundwater and Wadis Unit (part of MWRE)
ICRAF . . . . . World Agroforestry Centre
IDP . . . . . Internally Displaced Person
IWRM . . . . . Integrated Water Resource Management
IT. . . . . Information technology
IGAD. . . . . Intergovernmental Authority on Development
LJM. . . . . Liberation and Justice Movement
LPG . . . . . Liquefied Petroleum Gas
MEFPD . . . . . Ministry of the Environment, Forests and Physical Development
MDG . . . . . Millennium Development Goal
MWRE . . . . . Ministry of Water Resources and Electricity
MoU . . . . . Memorandum of Understanding
NGO. . . . . Non-Governmental Organisation
NRM . . . . . Natural Resource Management
OCHA. . . . . Office for the Coordination of Humanitarian Affairs
ODI. . . . . Overseas Development Institute (UK)
OECD . . . . . The Organisation for Economic Co-operation and Development
PCEA . . . . . Post-Conflict Environmental Assessment
PIPs . . . . . Policies, institutions and processes
RRR. . . . . Return, reintegration and recovery
SIEP. . . . . Sudan Integrated Environment Programme
UK. . . . . United Kingdom
UN . . . . . United Nations
UNAMID . . . . . African Union-United Nations Hybrid Operation in Darfur
UNCT . . . . . United Nations country team
UNDP . . . . . United Nations Development Programme
UNEP. . . . . United Nations Environment Programme
UNISDR . . . . . United Nations Office for Disaster Risk Reduction
UNISFA . . . . . United Nations Interim Force in Abyei
USAID . . . . . United States Agency for International Development
VDC . . . . . Village Development Committee
WASH . . . . . Water Sanitation and Hygiene
WES . . . . . Water and Environmental Sanitation Project

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About Relational Research

UNEP has drawn on the identification of five dimensions of a relationship first published in 'The R Factor' (Schluter and Lee, 1993). This laid the foundation for the Relational Proximity model which has been used by Relationships Foundation to assess relationships in both the public and private sectors in the UK, Australia and South Africa. It provided the framework for analysis of new primary care organisations established as part of the British National Health Service reforms in the 1990s. The approach also was the subject of a UK Cabinet Office strategy unit seminar in 2009.[1] The Relational Proximity model is now the focus of a project to develop new ways of reporting on stakeholder relationships in the context of the new corporate governance code in South Africa. More information on Relational Research can be found on their website.

http://www.relationalresearch.org/

Executive summary

The links between natural resources and violent conflict are complex. This is particularly true for Darfur where any one episode of violence may relate to a number of grievances operating at different levels. These can be politically motivated, such as the conflict between rebel groups and the government at the national level or may occur more at the local level relating to control of land and natural resources. Regardless of the driver, violent conflict has a fundamental impact on natural resources as well as systems of environmental governance.

These impacts have important implications for stability and peace in Darfur. Indeed, the Doha Document for Peace in Darfur calls for a new "framework for equitable access for various users of land and water resources". Based on this need, the report argues that developing such a framework requires an approach that includes both technical work to restore degraded natural resources and rebuild new forms of environmental governance and political work capable of establishing a shared vision, resolving conflicts and advancing new forms of governance. This report describes practical experiences undertaken by UNEP and numerous partners in government and civil society between 2007 and 2014 to support Darfur's own efforts to develop new inclusive and participatory approaches to environmental governance.

The approach is anchored in the idea that building and restoring cooperation over natural resources and the environment is important for both peacebuilding and governance. This approach requires rebuilding trust and relationships between stakeholders and communities that have been impacted by violence. It also calls for improving technical capacity of decision-makers and communities to advance new approaches for environmental governance and views local ownership and innovation as foundational to such efforts. Over time, improving cooperation over natural resources can have important "spill over" effects, often leading to cooperation in other domains and establishing a basis of trust for continued joint action.

At the core of this report is the idea that rebuilding good resource governance requires practical steps to restore collaborative relationships amongst communities, institutions of government, civil society and the private sector, with each group pursuing their respective objectives in an equitable manner. In Darfur, many of these relationships have been destroyed by conflict and peace cannot be rebuilt until trust is re-established between these groups and with their governing institutions. This report demonstrates how relationships of three types need to be restored as a prerequisite to rebuilding good governance: (A) institution to institution; (B) institution to community; and (C) community to community.

Adapting and strengthening environmental governance is an essential agenda for Darfur, not just to end cycles of violence, but also to support resilient livelihoods given the numerous environmental and social changes Darfuri communities are facing.

This report is the third in a series of reports addressing the development of new forms of environmental governance in Darfur and Sudan more broadly. The first report, "Environmental Governance in Sudan: an Expert Review" was a self-diagnostic on the current situation. The second report "Governance for Peace over Natural Resources" considers how environmental governance is changing across Africa and provides a range of new approaches for practitioners in Darfur.

This third report focuses on the process by which governance and peacebuilding may be promoted using natural resources as the basis for rebuilding key relationships and trust. This was achieved through vision building followed up with collaborative project planning and implementation. The attention given to these elements of the project demanded a new approach to describing these "softer" project outcomes, alongside more tangible results (such as construction of water harvesting structures etc.).To achieve this, the report defines five main dimensions of a relationship together with a *measured pathway* for monitoring progress. The five relationship dimensions cover: Directness (good communication); Commonality (shared purpose); Continuity (time together and a shared history); Multiplexity (mutual understanding and breadth); and Parity (fairness).

Based on these five dimensions, the report introduces a theory of change for integrated environmental programming based on the following interventions:

- Direct implementation of improved environmental practices
- Capacity building of government institutions
- Improving institutional collaboration across government, civil society and the private sector
- Mainstreaming and advocacy to increase the uptake of environmental best practices by other organisations
- Awareness raising across all environmental stakeholders and communities

The application of relationships thinking is useful to a variety of different disciplines covering governance, community resilience, climate change adaptation, conflict prevention and peacebuilding, precisely because these agendas all rely on improved relationships. The relationships perspective also enables analysis of development interventions intended to have an impact on improving collaboration over natural resource use and management.

The report concludes with a series of recommendations for practitioners in Darfur as well as a broader set of recommendations for the wider international aid and peacebuilding community. These include the following:

- **Pursue a holistic and long-term strategy with both a technical and political tracks to end conflict over land and natural resources in Darfur.** This strategy should ensure coordination and dialogue between political and technical tracks on resolving conflict over natural resources and should be informed by other forms of environmental governance in similar contexts.

- **Ensure environmental governance is included as a long-term goal for peacebuilding and conflict mitigation in situations where there is conflict over natural resources.** Environmental Governance should therefore be an important theme in work on livelihood resilience in the Sahel and the Horn of Africa. The "Integrated Environment Project" concept may inform this approach.

- **Use the techniques and indicators developed in this report to enhance capacity building components of programme delivery and improve their overall quality.** This particularly applies to programmes that aim to enhance part or all of a sector – such as water, forestry, livestock, agriculture etc.

- **Support further research and development of the relationships based approach.** This may include the establishment of a community of practice with development and peacebuilding practitioners.

Preface

Natural resources such as freshwater, cropland, rangeland, forests, fisheries and wildlife are vital for the livelihoods of many communities worldwide. Various groups use these resources in different ways and then collaborate through trade and exchange to meet the needs of their families and communities. The basis on which these groups interact over the management of natural resources is determined by governance arrangements, both customary and formal. However, in environments characterized by conflict, governance arrangements may be undermined or destroyed. Conversely in contexts characterised by weak governance, tensions over resource use are more likely to result in violent conflicts.

Analysis suggests that in Darfur both of these processes have taken place. (Young, 2005; Abdul Jalil et al, 2007; De Waal, 2007, Bromwich 2009). In some areas of Darfur, violent conflict over resources is still raging. More people were displaced in the first half of 2013 than in 2011 and 2012 combined. A new upsurge in violence has occurred in 2014. Cessation of violence is an urgent priority. At the same time, new forms of environmental governance must be rebuilt that are adapted to local conditions, developed through legitimate processes and that can effectively resolve resource conflicts in a non-violent manner.

But how can new systems of environmental governance be built in Darfur where relationships between livelihood groups have been destroyed and where national and local institutions lack the capacity and, in some cases, legitimacy to engage in effective resource management. This is the key challenge addressed by this report.

In 2007, the United Nations Environment Programme, together with a range of local and international partners sought to develop, introduce and pilot new forms of environmental governance that have the potential to contribute to community resilience and peacebuilding in Darfur. While work covered numerous technical themes, such as climate change, community based natural resource management (CBNRM), forestry, pastoralism and water, they were all united by a single idea. That

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Orange trading in Jebal Mara. Trade is a vital component of relationships between different livelihood groups

good resource governance reflects a network of collaborative relationships amongst communities, institutions of government, civil society and the private sector, with each group pursuing their respective objectives in an equitable manner. Within this relationships based analysis linkages between governance and peacebuilding are explored.

UNEP's work in Darfur, known locally as the Sudan Integrated Environment Programme or SIEP, demonstrates that natural resources can be used as a platform for rebuilding trust and relationships between stakeholders and with their governing institutions. UNEP is pioneering a new approach which aims to encourage local innovation and support Darfuri technocrats and decision-makers to drive forward a holistic and locally owned approach to environmental governance. Overtime, this cooperation over the environment and natural resources can have important "spill over" effects. This may be seen when local initiatives to build collaboration between communities are replicated and expanded. It is also seen within government as representatives with diverse political affiliations collaborate on research and development for new approaches to environmental governance, as this report describes, and then build on this collaboration through additional initiatives. Both processes contribute to a holistic effort to support the emergence of a lasting peace.

This report discusses the methodology developed under the SIEP programme.[2] Rather than resolving specific local conflicts over resources, the work is intended to support peace in Darfur by enabling new approaches to environmental governance

This well managed watering of a herd of camels in West Kordofan demonstrates a collaborative approach to water management from the transhumant herdsmen; local water users; and the government who built the small reservoir

that will help break the chronic cycle of violent conflict over resources. This process draws on governance arrangements within Darfur and on other methods from across Africa.

Using case studies, the report demonstrates how collaborative relationships over natural resources between organizations and communities form an essential component of good governance. The relationships are categorized in three types: A – collaboration between institutions – predominantly across government; B – collaboration between government/institutions and communities; and C – collaboration amongst different communities. An approach for measuring and monitoring the development of these relationships is proposed.

The overall approach and interventions described in the report are informed by an analysis of local livelihoods. A livelihoods analysis can help explain why communities make certain decisions about natural resources and how they interact and compete with other resource users. The report draws on extensive local analysis in Darfur[3] and also regional analysis of climate change, migration and conflict in the Sahel.[4]

This report suggests that improved relationships over natural resources can contribute to peacebuilding and good governance, leading to resilience. However, while natural resources and their management are an important element of the conflict in Darfur – these issues must be considered alongside other political dimensions of the conflict. This report discusses the need for a nuanced and strategic approach to rebuilding governance and the value of political endorsement for such arrangements. Ultimately these two tracks come together with the adoption of new forms of governance that are supported by stakeholders and seen as legitimate.

This report is the third in a series of reports on environment and resource governance written to support the implementation of the Doha Document for Peace in Darfur.[5] The Doha Document calls for reforms to local governance with the development of "a framework for equitable access by various users of land and water resources".

The first report, "Environmental Governance in Sudan: an Expert Review" was a self-diagnostic on the current situation. The second report "Governance for Peace over Natural Resources" considers how environmental governance is changing across Africa and provides a range of new approaches for practitioners in Darfur. This third report focuses on the process by which governance and peacebuilding may be promoted using natural resources as the basis for rebuilding key relationships and trust. This report is divided into a series of eight chapters.

Chapter one provides an introduction to the livelihoods approach and how it can be used to understand environmental change and conflict in Darfur. Chapter two then articulates how different relationships over natural resources support the restoration of governance and peacebuilding. This chapter uses two detailed case studies from the Sudanese water sector.

Chapters three to five outline three progressive elements of the relationships-based approach to building governance. Chapter three introduces five basic dimensions that can be used for describing the quality of a relationship. Building on this, chapter four introduces a six step *measured pathway* for assessing progress of relationships that are improving. Chapter five then demonstrates how this relationships based approach has been applied in UNEP's country programme to support good resource governance in Darfur and Sudan.

Chapters six and seven look beyond the discussion of governance to consider the context in Darfur and how this work contributes to the wider search for lasting peace. Chapter six discusses the long term patterns of conflict in Darfur taking place at three levels – local, national and regional. Chapter seven then looks at what would be needed to form a long-term strategy for promoting peace in Darfur and in similar contexts.

Chapter eight draws conclusions and makes recommendations for practitioners and policy makers in Darfur as well as for the broader peacebuilding and development community. With Darfur as a stark warning, the report calls for greater attention to strengthening environmental governance in areas of Sudan and elsewhere facing risks of conflict over natural resources.

1 Introducing and integrating conceptual frameworks: livelihoods, environmental governance and resilience

Key points:

- *Livelihoods analysis is important for understanding how communities respond to shocks and stresses. It reflects decisions communities make – what they do with the assets they have in the context they face. Resilient livelihoods and communities are strengthened by effective relationships within their groups and with other livelihood groups and institutions.*

- *Governance is a key factor in enabling a community to pursue its livelihood objectives and in regulating the relationships among different communities with respect to natural resource use. Environmental governance supports communities in escaping chronic cycles of violent conflict over resources and in developing environmentally sustainable livelihoods.*

- *Darfuri communities are adapting their livelihoods concurrently to economic, environmental and social change, in addition to coping with devastating impacts of conflict. Good relationships enabling collaboration in the management of natural resources are a vital element of both the recovery and peacebuilding agenda and of adaptation to social and environmental change.*

1.1 Setting the scene: adopting a livelihoods perspective in Darfur

The situation in Darfur is complex. The challenges faced by Darfuri communities can be seen to cut across both development and peacebuilding activities when seen from a livelihoods perspective. Indeed, no Darfuri farmer goes to his field to work on a post-conflict recovery programme one day and climate resilience the next. Livelihood strategies are developed in the face of a wide range of challenges – the impact of conflict, the challenge of poverty, a changing climate and more. A farmer in this context needs to adapt his livelihood, cope with risks and provide a better, and more resilient, living for his or her family and community.

Livelihoods are therefore significant in that they are the point at which individuals and communities make decisions in response to the concurrent challenges they face. In this sense, they provide a unifying perspective for analysis of the political and environmental complexity of Darfur.

Livelihood decisions include how natural (and other) resources are used, what one wants to achieve with what one has, and how one will collaborate, or compete, with others to achieve these goals. The environmental, institutional, political and social context shape the constraints and opportunities in which livelihood choices are made, confirming livelihoods as a critical entry point for understanding the interaction of communities and their broader social and geographical habitat.

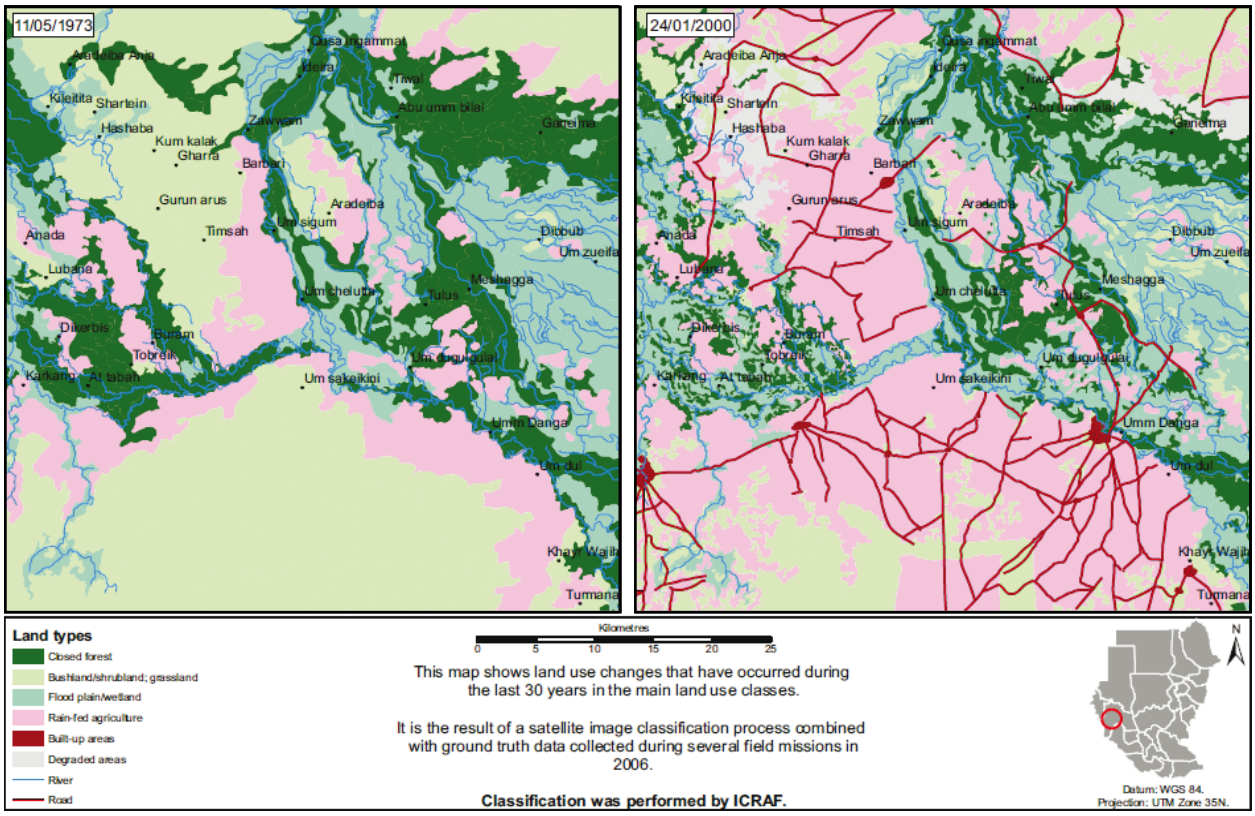
The livelihoods approach has important connections with two other conceptual frameworks: environmental governance and resilience. These are defined in the next sections of this chapter.

An important theme that unites the three frameworks of livelihoods, governance and resilience, involves relationships – in other words the choices made by people and communities on whom and how to interact with others. A livelihood group needs to organize itself to interact with others who want to use and manage the same natural resources. The group knows that to achieve its aims, it will have to trade, exchange and collaborate with other livelihood groups.

The utility and significance of understanding relationships between livelihood groups is demonstrated by the example below of land use change in Um Chaloota in Central Darfur (Figure 1.1).

The maps on the following page show changes in land use in a 10 km by 10 km area in Central Darfur near Um Chaloota between 1973 and 2000. The most significant change is the increased area used for rain fed agriculture (shown in pink). Much

Figure 1.1 Land use change in Um Chaloota 1973 to 2000 (UNEP 2007)



of this has come at the expense of rangeland (light green) and forests (dark green). At the same time, the population of greater Darfur quadrupled during this period, which was a significant driver for the increase in land use for agriculture.

The area in light green is important to pastoralists who use it for grazing cattle and for herding their livestock from one area to another. In addition, they need access to seasonal watercourses, known as wadis, for watering their livestock. This access needs careful management, as the wadi area (shown in blue) is also important for farming activities such as growing vegetables. A common flashpoint for clashes between pastoralist and farming communities is where the access for livestock to wadis is restricted by the surrounding fields.

Pastoralists move their herds over longer distances at certain times of the year. Routes need to be kept open and well managed. Appropriate oversight and herding of transhumant animals is needed to protect the surrounding fields from grazing by straying cattle or camels. Such migrations are managed in family groups with scouts going on ahead and agreements being made with local tribal leaders for access to land and water.

A long distance migrating group would need to make many such agreements over the course of their seasonal migration that may be 500 km from north to south[6]. From a relationships perspective it is clear that it would be significantly more convenient to make these arrangements with the open land use pattern in 1973, than with the more congested land use pattern in 2000. In 1973, it was likely that a sheikh leading the migration personally knew a larger proportion of the people along the route with whom he negotiated access. However, by 2000, the route was more complex and a larger number of people were involved in the negotiation process.

It follows that a different means of interaction is needed – an adaptation of governance that enables the migration to be managed with a greater number of stakeholders involved. A new system will need increasing formalization, such as the physical demarcation of the livestock routes and clarification and protection of legal rights. Finding new approaches to governance should be understood as a conflict prevention and mitigation measure as it reduces the risk of violent clashes between livelihood groups by providing an agreed framework for peaceful resolution of disputes.

In Darfur, both customary and formal governance arrangements have been undermined by the ongoing conflict as social relations and trust between livelihood groups have been torn apart. Restoration of governance arrangements between these groups emerges as a core component for achieving lasting peace in Darfur.[7] Equally important, the governance systems that emerge must have the capacity and legitimacy to handle localized conflicts as well as other shocks and stresses that materialize in the coming decades. In other words, they must be resilient. These governance systems and their contribution to resilience are explored in more detail in the following subsection.

In order to provide humanitarian and development support to communities, livelihood groups may be provided with assets such as seeds and tools or through support aimed at strengthening institutions and reforming policy. In the immediate aftermath of emergencies, it may be that assets are the priority whereas in protracted humanitarian responses or development contexts supporting institutions and policies may be more appropriate (e.g. removing restrictive trade regulations).[8] For natural resource based livelihoods, the institutional and policy context is crucial in governing how different groups interact, as it regulates how they each have access to the same pool of natural resources.

1.2 Linking livelihoods, environmental governance and resilience

Understanding how livelihoods, and the relationships upon which they depend, respond to environmental and social change needs to be informed by two additional concepts: environmental governance and resilience. A review of these concepts helps identify linkages between the shocks and stresses faced by communities, the risks of conflict, and how good governance can mitigate such risks and support communities in managing change.

Environmental Governance

To promote peaceful use of shared resources, the governance arrangements relating to each livelihood sets the stage for how resources will be shared and disputes resolved. Governance is a key factor that influences people's decisions around livelihoods, their interaction with the environment and the interaction of different livelihood groups over natural resources.

The link between resource use and social relations is clear: if one group overuses a resource it is not available for another.[9] The role of governance is to regulate use and consequently set the framework for interactions between resource users. As an interlocutor on a Darfuri study tour to Kenya con-

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Range management in North Darfur. Livelihoods are central to decisions communities in Darfur make about the management of natural resources

cluded, "Land tenure became important in the constitution because it is critical to social relations" (UNEP, 2014b).

The definition of environmental governance in 'Governance for Peace over Natural Resources' (UNEP, 2013) highlights the importance of "norms and rules that regulate the decisions and actions that shape relationships among and between institutions, such as levels of government, civil society and the private sector, in relation to the environment."

Regulating use of shared resources involves both the relationship between the government and the resource users, and relationships among the different resource users. A government can take the role of broker or arbiter between different resource users. Resource users could be individuals, but are also private sector businesses, livelihood groups or communities. Different forms of governance weight these relationships differently.

The legacy of colonial systems remains in much of Africa, and has cut across customary forms of resource governance, which often rely more on locally negotiated access and control than more centralized technocratic management. In many cases customary law has not provided protection for resource users as it has a lower legal standing than formal legal frameworks. As a result, an uneasy interaction often exists between government, traditional leadership and community groups as each has different aspirations for the use of resources. In some cases the interaction brings about successful mutually beneficial results. In others, they fail as arrangements favour one group over another, creating resentment and ultimately conflict.

One alternative, with a greater emphasis on collaboration, power sharing and representation of resource users, is known as co-management. Borrini-Feyerabend et al (2007) define co-management as "a process of collective understanding and action by which human communities and other social actors manage natural resources and ecosystems together, drawing from everyone's unique strengths, vantage points and capacities".[10] It benefits from statutory law, local collaboration and power sharing as well as indigenous knowledge of customary systems. In this way, co-management may be a development of community-based management, linking formal and informal organizations, in which different users of natural resources make decisions in a collective and consultative way on the basis of shared planning. Examples of co-management include community forestry, river catchment management and group ranching.[11]

The emphasis on inclusivity and power sharing makes co-management of particular interest to the peacebuilding community. The potential for enhancing legal frameworks around formalized co-management regimes is also significant. Co-management draws on the communities' abilities to collaborate locally and manage resources using a framework mutually agreed on and overseen by government: it can therefore be a lower-cost and more responsive form of governance than a straightforward service provision arrangement.

For example, looking at forest management across the Sahel, Kerkhof (2000) concludes that there is a need for "a new social contract between governments and local communities" allowing for local management to be negotiated between the various stakeholders involved. He suggests that if the natural woodlands are to be managed effectively, it will have to be done on a voluntary basis by local communities operating within certain agreed constraints and restrictions. This reflects government working in partnership with communities and acting as custodian of legal frameworks rather than simply as a service provider.

While co-management regimes are being developed in different parts of Africa, another important dynamic is the change in the respective roles of customary and formal government. According to opinion polls, many African communities aspire to increasing the significance of traditional forms of governance particularly with respect to land management and dispute resolution (Logan, 2011). In Darfur, the respective roles of government, traditional leadership and community-based co-management regimes are a central issue in the development of post-conflict governance arrangements.

Another important consideration of environmental governance is how coordination will take place between the different sectors. Whether natural resources are managed from the perspective of a livelihood or a region, landscape or ecosystem,

A sand dam and well in the Red Sea Hills. Maintenance in this catchment management project relies on collaboration of the communities in the valley who contribute labour and money to safeguard water resources and reduce soil erosion

there are multiple demands from multiple resource users, and different technical disciplines and institutions need to be involved. The UNEP expert review, *Environmental Governance in Sudan* (2012), undertaken by two senior Sudanese environmentalists, concludes:

> *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.*

Effective environmental governance can be considered in terms of effective collaboration among and between resource users and managers in both communities and government. As explained in the next subsection, effective governance is vital to supporting community resilience and mitigating conflict risks in Darfur and other conflict-prone environments facing major ecological, environmental and social change. The government has a role in brokering and managing these relationships through the policy and institutional context it establishes.

Resilience

As demonstrated in the proceeding section, environmental governance establishes the norms and rules in which livelihood groups interact to develop and harvest shared natural resources and resolve disputes in a non-violent manner. The concept of resilience shows the importance of social connectivity in enabling communities to cope when faced with shocks and stresses. Therefore, building governance that strengthens relationships amongst

communities is an important element of promoting community resilience. In livelihoods terms this equates to rebuilding social capital.

While there are many emerging definitions of resilience, the approach adopted by this report comes from the UK's Department for International Development (DFID) - "The ability of countries, communities and households to manage change, by maintaining or transforming living standards in the face of shocks or stresses – such as earthquakes, drought or violent conflict – without compromising their long-term prospects" (DFID, 2011).

Resilience as DFID (2011) suggests is ultimately determined by a system's sensitivity and adaptive capacity, which in turn depends on the pool of available assets and resources. It also points out that a comprehensive approach to resilience requires a focus on institutions, and the collaboration of diverse disciplines, interests and groups. The US Agency for International Development (USAID, 2012) highlights the importance of "functioning institutions of good governance" to developing adaptive capacity, emphasizing the significance of livelihood assets and the institutional and policy context in particular.[12] Much of the resilience of any given system is driven by the quality of relationships within that system.

There are many examples of social resilience playing an important role in enabling people to cope with the impacts of the Darfur conflict. Jaspars (2010) relates how blacksmiths had been able to improve their incomes and earn increased social respect after the international NGO Practical Action supported the formation of such networks for livelihood support prior to the conflict. The network of blacksmiths was available to coordinate aid in the face of massive displacement that affected both them and their communities. Practical Action was one of the first organizations to provide assistance in Abu Shouk IDP camp in North Darfur, by coordinating the distribution of aid through the livelihood networks established.

In considering livelihoods, it becomes clear that good relationships increase people's access to assets in times of shock, thereby enhancing their resilience. Such relationships can be enabled, at the policy and institutional level, by improved governance. It is equally clear that violent conflict can tear such relationships apart. In conflict-prone areas, resilience, governance and peacebuilding cannot be considered in isolation. The manner in which relationships over natural resources can support both improved governance and peacebuilding is explored in the next chapter.

2 Relationships in governance and local peacebuilding

Key points:

- *Local peacebuilding has the objective of restoring collaboration at the local level. Reconciliation may be brokered by external actors but in the long term it is the role of government to mediate relationships for shared use of natural resources. This routine work of mediation is a function of governance and establishing this as routine is the objective of good peacebuilding programmes.*

- *In reviewing good environmental governance as a network of effective collaboration over natural resources, relationships can be mapped and categorized as being one of three types: Type A - institution to institution; Type B - institution to community and Type C - community to community.*

- *Relationship-based analysis of three governance contexts in Sudan shows the inter-related nature of the different types of relationship A, B and C.*

2.1 Mapping and categorizing relationships

The element of the conflict in Darfur that relates to natural resources, particularly land, takes place primarily at the local level. At the peak of the fighting in 2003-2005, the conflict was largely aligned between pastoralist and agriculturalist/agro-pastoralist livelihood groups. Collaboration between these groups over resource use was effectively destroyed, and along with it many of the traditions and practices of customary governance.

Over the last 11 years of conflict there have been numerous attempts at local level peacebuilding

Figure 2.1 Peacebuilding and governance at the local level

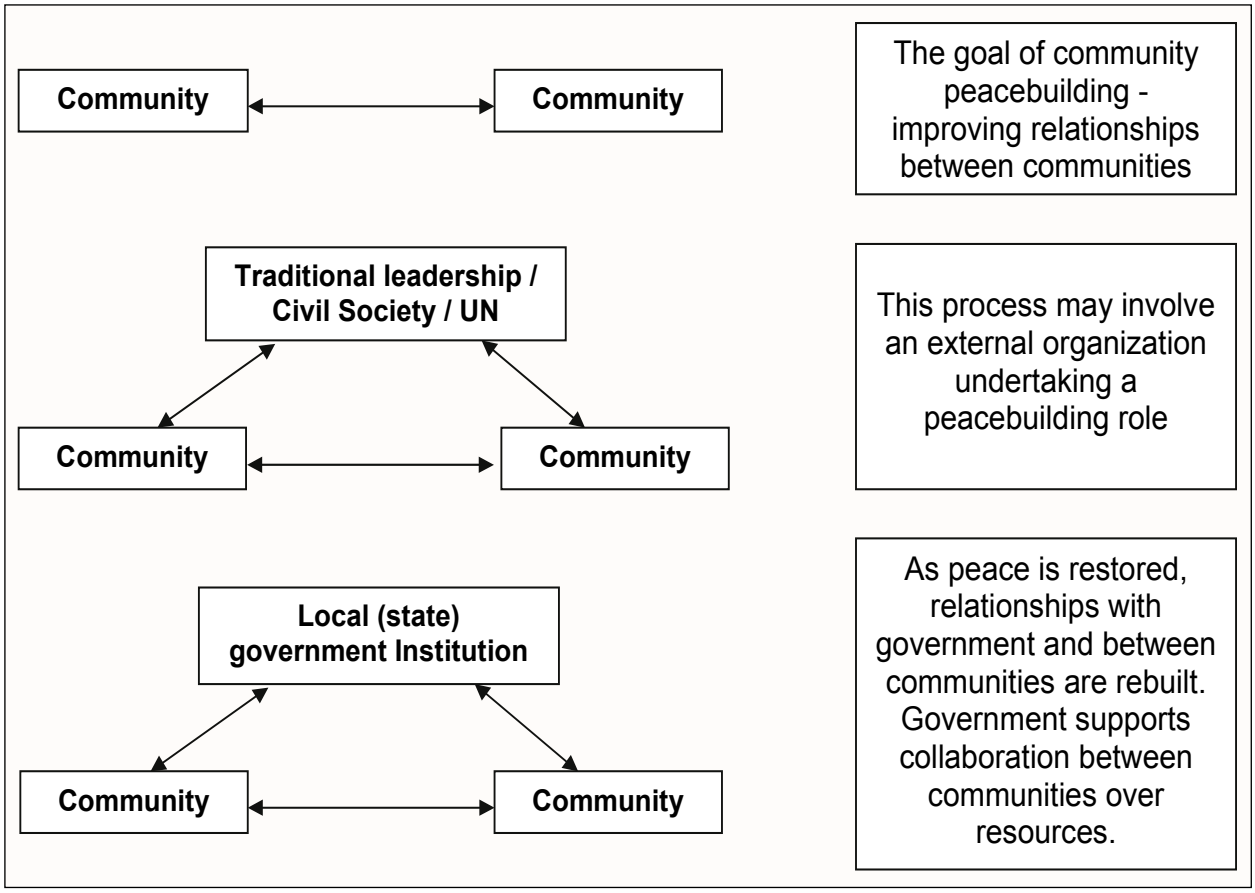
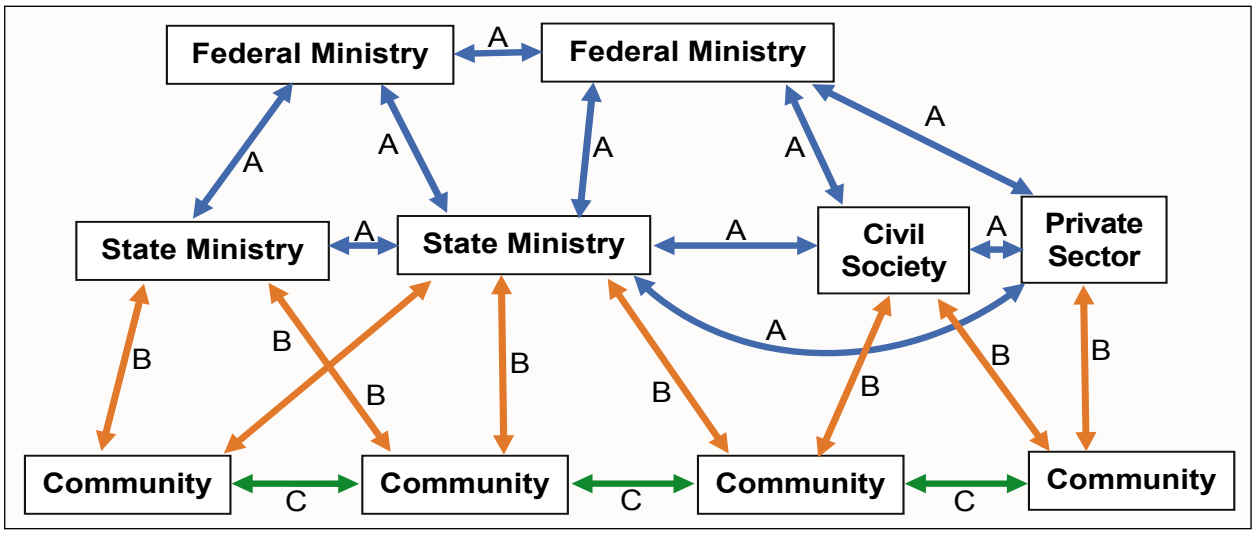


Figure 2.2 Core network of institutions and relationships for governance



by the communities themselves, by government and by international actors.[13] Currently, the involvement of external actors is valuable. In many disputes government bodies may not be accepted as mediators due to their roles in the conflict and perceived bias. However this is not a long-term solution. Peacebuilding should also be seen as restoring trust and strengthening the relationship between communities and government. In time, government ministries should take the place of external peacebuilding actors, becoming the mediator in disputes over natural resources. This process can be conceptualized as the restoration of relationships for good governance as depicted in Figure 2.1 on the preceeding page.

This diagram shows the objective of local peacebuilding as the restoration of relationships between communities that have been impacted by conflict. When an external organization helps to broker reconciliation between such communities, the work makes a direct contribution to local peacebuilding.

When this mediation is done in an ongoing role by state authorities it is more a function of governance rather than peacebuilding. To enable government to resume this role after periods of conflict however, it may be necessary, as part of the peacebuilding process, to restore relationships between government institutions and communities.

As the function of government has declined in the conflict, fragmented approaches across government sectors may emerge. This fragmentation may be exacerbated by politicization of government roles, but would also be a function of limited capacity for coordination. In both cases a third element of rebuilding governance in peacebuilding contexts would be to strengthen relationships for collaboration between government institutions. This enables government to function better both in providing services for communities and in mediating shared use of natural resources amongst communities. In summary, the key relationships which must be rebuilt as part of restoring effective governance can be divided into three categories as follows. (See Figure 2.2).

- **Type A: Institution – Institution:** Effective Type A relationships include increased collaboration and coordination within and between government organizations and other institutions, such as civil society, international organizations or the private sector. Cross-sectoral and intersectoral cooperation has a multiplying effect on the capacity of each part of government to implement its own mandate.

- **Type B: Institution – Community:** Effective Type B relationships between government and communities are characterized by consultations, participation in decision making, accountable and effective service delivery, cost recovery and timely maintenance.

- **Type C: Community – Community:** Effective Type C relationships cover collaboration at the community level, including agreements over access to resources and trade between livelihood groups.[14]

While the focus of this report is on strengthening the core network of organizations for environmental governance as shown above, there is a need to consider the wider institutional network, particularly to address issues of conflict. Not all of the groups are targets for inclusion in governance-building programmes. Some, such as criminal networks, need to be considered and controlled rather than included. Others, such as the private sector, need engagement, but in a different manner than government institutions or civil society are engaged. These different groups and the relationships amongst them are discussed below and further elaborated in Figure 2.3.

1. **Democracy and the social contract between government and citizens.** Type B relationships between government institutions and communities gain confidence and credence though accountability. The president can demand accountability of his or her government ministers, and a citizenry can enforce an expectation of accountability on all elected officials at the ballot box. Similarly parliamentary oversight holds ministries accountable, and through parliament so too can the electorate. It establishes popular legitimacy for the role of government, validating the relationship between the people (communities) and government. Hence the significance of elections in the process of post conflict recovery. Rebuilding the tax base is also important in this relationship as tax is part of the transaction between a population and its government. Tax revenues finance both the services government provides and the offices of government themselves. Where offices are funded from other sources (such as mineral rents, or other governments) then this may be relevant to the perceived quality of relationship between the government and populace.

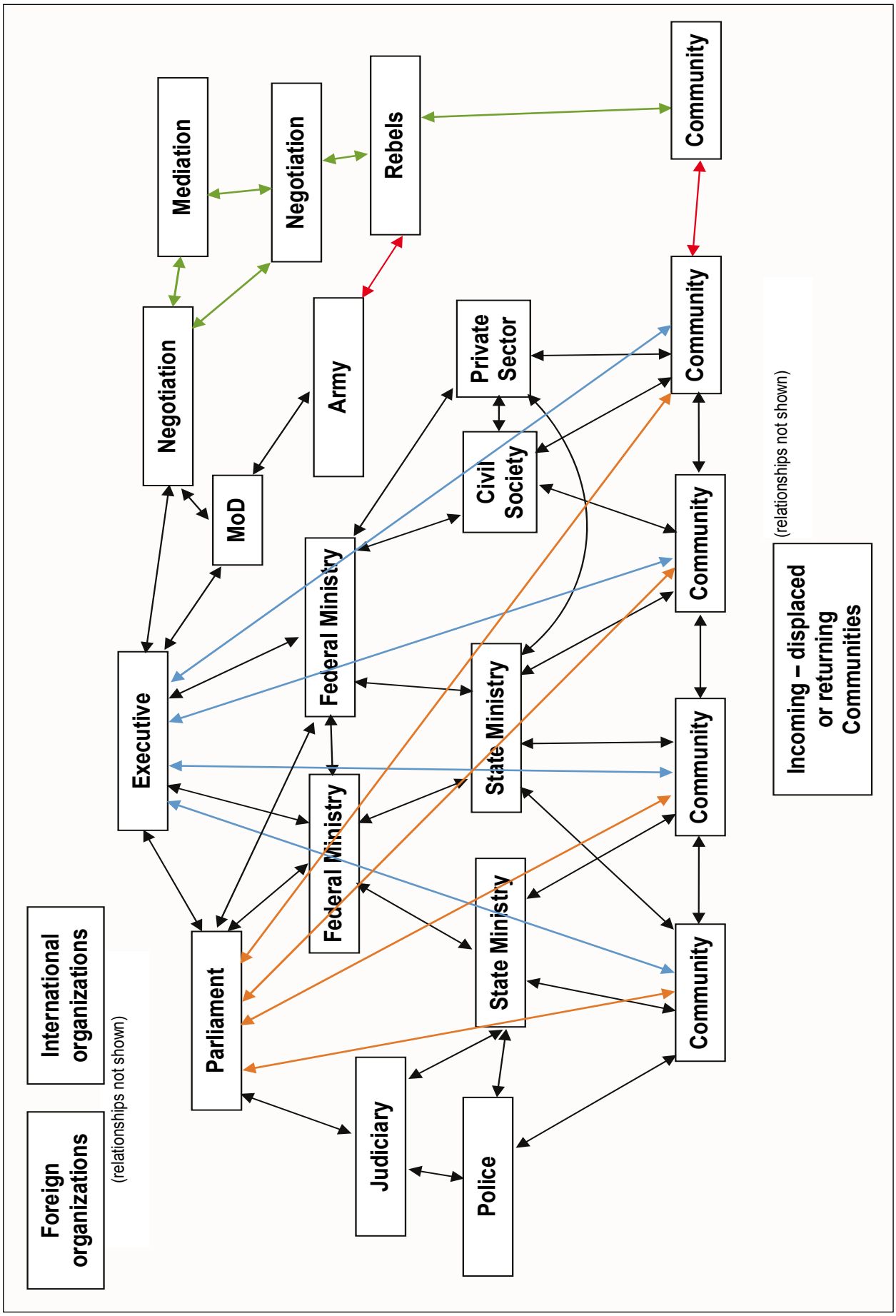
2. **Law-making and enforcement.** Parliament enacts laws, working with the relevant ministries, informed through consultations with communities, civil society and the private sector engaging in a Type B relationship. Police have a role working with local government organizations in enforcement. In some cases other enforcement agencies exist, such as forestry officers, border officials etc. Enforcement requires collaboration with the judiciary through the courts. Criminal networks are significant in the environment, particularly where natural resources are being traded illegally. This may include animal products such as ivory, or plant based narcotics.

3. **Resolution of conflict with rebel movements.** The situation in Darfur, in which political conflict between rebel movements and the government occurs alongside local conflict between different communities, is relevant for the broader peacebuilding process. This experience demonstrates the multiple aspects of conflict in any one region and the need to restore all three types of relationships concurrently (Types A, B and C). Examples abound of both rebel movements and government forces exploiting natural resources illegally. Both the former and the latter have links with the private sector, in some cases to generate revenue for their operations. Following the money is often key for understanding the economy of a given conflict. There may be significant trade in natural resources, such as timber or gold, in Darfur. And the trade may be with criminal networks rather than the legitimate private sector.

4. **Displaced and returning communities.** Both displaced and returning communities have a demand for natural resources, which needs to be addressed through Type C relationships and local environmental governance. Working out how this will be done equitably requires "host" communities and appropriate decision making mechanisms, including both government and civil society organizations. Land is particularly significant in this context.

5. **The private sector.** The private sector is engaged in some Type A and some Type B relationships, however the nature of these relationships is different from government interactions. Both institutions and communities can be target markets for the private sector in which case collaboration is in the form of sales. In other cases their Type B relationship may be between communities who are not markets but rather third parties who may be affected by the private sector activities. This category is important in commercial extraction of natural resources such as oil, timber, minerals etc. These relationships need particular attention in cases of foreign investment as decisions driven by markets in one country affect local communities in another.[15]

Figure 2.3 A full network of institutions and relationships for governance and peacebuilding



6. **The international community.** The role of the international community is relevant for a number of reasons: there may be shared natural resources such as transboundary rivers and aquifers; international relations, both environment-related and not, affect national government agendas; international trade and the allocation of foreign concessions of domestic natural resources; international funding agencies; and technical environmental agencies. Therefore, in some cases Type A relationships between national organizations and international organizations exist.

For good governance some institutions should not have close relationships, but should be more distant – such as those between business and the judiciary for example. While any government may legitimately have a stake in or own businesses, checks and balances may be brought in, such as commitments to transparent business operations. This is significant for natural resource management, given the complexity around enforcement, such as providing forest officials the authority to stop military units from harvesting timber and exacerbating deforestation (UNEP, 2008a). Independence of the judiciary or a free press would be other examples where distance in relationships is needed to promote conditions for good relationships across society.

UNEP's experience suggests that the three categories of relationships have the potential to reinforce or undermine each other and must be addressed holistically. Frameworks developed by other development actors such as UNDP and the World Bank have reached similar conclusions about the need for restoring the collective work of government.[16] The relationships analysis in this report adds value to these approaches by assessing how to strengthen interactions amongst organizations and communities.

2.2 Demonstrating relationships analysis in Sudanese governance

This section discusses three examples demonstrating a relationships approach to governance in Sudan.

Example 1. Port Sudan's water crisis: Poor collaboration between institutions (Type A and Type B)

As in many coastal cities across the Middle East, Port Sudan's water comes from a combination of desalinated seawater, groundwater and surface water held by dams. During the summer of 2013, water supplies to the city were very scarce and demonstrations were occurring. There were a number of reasons for the low supplies including poor rains for two years, which meant that water storage at the main dam was low. Another important contributing factor was that only 3,000 m^3/day of the installed 20,000 m^3/day desalination capacity was operational due to a lack of maintenance. The poor services and demonstrations are clear evidence of a poor Type B relationship between the water institutions and the communities served.

The lack of maintenance at the desalination plants is related to complex institutional arrangements behind their operation and finance. In contrast to the work of the State Water Corporation that maintains the pipe network and the dam in Port Sudan, the desalination plant is owned and run by Federal government based in Khartoum. Revenues from water sales are therefore sent to Khartoum rather than managed locally in the state. As a result, when funds for spare parts and maintenance are needed an application for finance must be sent from Port Sudan to the capital.

Faced with growing water scarcity, the State Water Corporation passed the problem up to the state governor, who dispatched a delegation to Khartoum. Concurrently with this the authorities of Red Sea State (of which Port Sudan is the capital) had been advocating for an ambitious project to transport water in a pipeline of more than 400 km from the Nile over the Red Sea hills to Port Sudan. At this stage the problem of the underperforming desalination plants was masked by the national dialogue that ensued over whether federal funding would be available for a pipeline.

As a result of poor collaboration between offices in Khartoum and Port Sudan (Type A relationship), essential maintenance was not undertaken at the desalination plants and a major water shortage in the city was exacerbated. By improving the support provided to the management of the desalination plants, a significant increase in water for the city could be made – and this in turn would reduce tension between the state and the capital. This indicates that improving Type A relationships in governance has potential to improve service provision locally, which in turn would enhance Type B relationships between communities and government.

Example 2. Al Khewei effective management and good services for pastoralists and local residents (Type B and Type C)

Al Khewei is an important livestock trading town in West Kordofan. Large numbers of pastoralists come to Al Khewei to sell their animals either for transport to Khartoum or for export via Port Sudan. There is an innovative and effective institutional arrangement in Al Khewei that ensures the provision of water for the villagers and for mobile communities outside the village who visit the area.

The village residents joined together to take out a loan from the Agricultural Bank and purchased the water yard (comprising a bore-hole and elevated water storage tank) from the State Water Corporation. A large population in the village are shareholders in the company. They benefit from the services of the water yard and provide oversight through the annual election of the management committee. Type B relationships are therefore strong.

For non-residents water is transported in bladders and tankers to remote locations. This is one of a number of means of interaction between the residents of Al Khewei and the seasonal pastoralist visitors who have a degree of mutual dependence on their livestock, particularly in the synergy between livestock producer and the traders in Al Khewei. The reliable supply of water for pastoralists is a contribution to maintaining good relationships between these two communities contributing to Type C relationships.

The water yard at Al Khewei. A bladder of water is being filled for transport to remote communities and livestock

Example 3. Government authorities and South Darfur's groundnut traders (Type A and Type B)

The discussion in chapter one on livelihoods indicated how the institutional and policy context that the government establishes is an important expression of its relationship with a given livelihood group. Recent research on the groundnut trade in Darfur provides a striking example.

> *The economy has contracted [during the conflict], yet state and local authorities are increasingly dependent on raising revenue to pay for the services for which they are responsible, local taxes have escalated. In 2007, taxes on groundnuts were reported to have increased two to four-fold compared with pre-conflict levels. The picture in 2013 is very similar. Within Darfur there is no evidence that the federal government's policy of no taxation on agricultural commodities is being implemented.*
>
> *Despite the very heavy taxation of groundnuts, no trader interviewed for this study was able to cite how that revenue is being re-invested back into the sector and this was confirmed by officials from the Ministry of Finance in South Darfur. This is causing a great deal of resentment. High taxation in such a challenging trading environment is also encouraging tax evasive behaviour by traders. This ranges from traders choosing routes out of South Darfur that will minimize taxation payments along the way –to bribery, storing stocks out of sight of tax collectors, and under-counting the number of sacks per truck.*
> (Buchanan-Smith et al., 2013)

The heavy taxation and poor services reflect a difficult institutional and policy context for the groundnut trading livelihood. This and the consequent tax evasion represent a poor Type B relationship between this livelihood group and the state government.

Also evident in this example is the inconsistent approach of government to this sector representing poor Type A relationships. The state government tax on agricultural commodities is at odds with federal policies designed to promote agricultural production. This however needs to be seen in the context of low investment in Darfur by Khartoum - one of the grievances underlying the conflict.

3 Describing qualities of relationships

Key points:

- *Given the importance of relationships in rebuilding good governance, a qualitative diagnostic approach is needed to understand how relationships are evolving.*

- *Relationships can be considered as comprising five dimensions: Directness (good communication); Commonality (shared purpose); Continuity (time together and a shared history); Multiplexity (mutual understanding and breadth); and Parity (fairness). These can be used to describe the attributes of a relationship and to assess progress where it improves.*

- *The use of a relationships-based approach can be illustrated with practical examples from Sudan's water sector. This indicates that effective relationships among organizations and communities are an essential element of good service provision for all water users.*

The previous chapters explored the importance of relationships in restoring good governance and introduced the three main categories of relationships (Type A, B and C). This chapter discusses how the quality of these relationships can be described and measured, and reviews examples in governance and peacebuilding contexts in Sudan.

3.1 Relationships in detail: the five main dimensions

UNEP has drawn on the work of Schluter and Lee (1993) and, in consultation with the Relationships Foundation and Relational Research, applied that work to its programme in Sudan. The three categories of relationships can be measured against five dimensions of relational proximity: Directness, Commonality, Parity, Multiplexity and Continuity.

- **"Directness" relates to communication and the sense of connectedness:** The directness of a relationship is influenced by the method, frequency and participants involved in communications. The degree of directness affects the sense of connection and engagement in the relationship. The issue is more complex than simply measuring time spent face-to-face. A relationship may be mediated or unmediated; technology used for communication will influence the directness, with implications for the clarity and effectiveness of communication. Key indicators would include the frequency, representation and form of interaction. For example, when considering a relationship between two organizations regular face-to-face meetings indicates a higher degree of directness than exchanging emails.

- **"Commonality" describes the presence of a shared purpose in the relationship:** Common purposes and goals influence the rationale for being in the relationship as well as the conduct of that relationship. Shared purposes increase motivation in a relationship. Well-established shared purposes may underpin the development of a collective identity. Poorly defined, evolving or multiple purposes, as well as different time horizons may impede relationships. Key indicators to assess the level of commonality include the use of 'we' language rather than a 'them and us' mentality, the ability to articulate win-win scenarios, and the identification of shared goals in institutional mission statements, for example.

- **"Parity" relates to power and the extent to which mutual respect and fairness are established in the relationship:** There are many different forms of power in a relationship: money, knowledge, formal authority, capacity to use force, legal agreements. The way in which power is used influences the perceptions of fairness and respect and thus engagement and participation in the relationship. Fairness is not the same as equality. Where roles are unequal, they may still be perceived as fair or unfair. Agreements after conflict may be free and consensual or coerced and exploitative. Misaligned power dynamics may lie behind problems in these areas. The misuse of power

and unfair treatment can undermine respect. Status and identity matter, and threats to them can impede constructive participation. Key indicators would include mutual consent to the agreed terms of the interaction and compliance with those terms.

- **"Continuity" relates to time, and the development of a shared story in the relationship:** Relationships are made up of multiple interactions carried out over time. Continuity builds up a shared narrative of the relationship, which underpins the sense of rootedness, belonging and commitment. At the organizational level, a lack of continuity can be a product of staffing changes, failure to manage the time between interactions effectively, or unilateral shifts in strategy and direction that change the basis of the relationship. In relationships between groups and organizations it is important that the story of the relationship is maintained, even if there are different actors. This may be through formal documentation, having some people who are the guardians of the relationships, or through effective handovers. Continuity does not preclude change and growth: what matters is the underlying sustainability of the relationship through change. As will be discussed in chapter 4 the existence of a precedent is an important key indicator of continuity – whether the relationship is established and routine or tentative and exploratory.

- **"Multiplexity" relates to the breadth of interaction and mutual understanding:** What we know about other parties in a relationship aids the management and conduct of the relationship. Increasing the breadth of knowledge in a relationship provides an understanding of why actions are taken by partners in a relationship. With limited information, skills may be under-used and pressures, interests and values misunderstood. Knowledge can be gained through various encounters so that parties are exposed to a wide range of behaviours and pressures. This may come from multiplying the channels of formal interaction or from adding an additional arena—such as meeting for social or cultural events in addition to the transaction core to the relationship. Being part of a wider network of relationships can multiply the breadth of knowledge that parties have of each other. Key indicators would include both the diversity of points of interaction and the degree to which each party can articulate the objectives, fears and culture of the other.

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Markets, such as this one in Kutum are important for relationships. People meet, exchange news and make deals to further their livelihoods

The five dimensions of a relationship can be better understood by examining relationships where these qualities are lacking. Lack of directness equates to remoteness. The absence of commonality equates to divergent or conflicting interests. Without parity, relationships are unfair or even coercive. A lack of continuity indicates that a relationship is new and uncertain. A lack of multiplexity is expressed in a one-dimensional relationship, without broader understanding. Markers of these different aspects of relationship are shown for the three types of relationship in Annex 1.

Alternatively, understanding these five dimensions of a relationship can help explain ways in which organizations should not be too close. For example, in the situation where government and business are too close and the relationship is corrupt. Inappropriate commonality is a conflict of interest. If one group has unfair access or directness to a bidding or judicial process, it may undermine parity with other groups engaged in the same process.

Trust is a complex concept, but it is clear that it can be enhanced by increased relational proximity in these five dimensions:

- Directness - We trust them more since we established regular meetings
- Commonality - We trust them because they want what we want
- Parity - We trust them since they signed a clear written agreement with us
- Continuity - We trust them because we had a successful joint project
- Multiplexity - We trust them more because we know them better

These relational metrics have been found useful in work on governance and peacebuilding in two ways. Firstly, as a diagnostic tool, they provide language that helps describe relationships, thereby enabling the design of interventions to enhance these relationships. This includes enabling individuals and organizations to manage and develop their own relationships more effectively. They also inform how policies, structures and working practices can create environments that make effective relationships more or less likely to develop. Secondly, the metrics can be used as a framework to measure processes of change as relationships develop. In this case the five dimensions can be used as indicators to measure the impact of development and peacebuilding interventions.

3.2 Practicalities: governance in relational terms

In restoring resource governance in Darfur, a balance must be struck between customary systems, a more centralized service-delivery model by government ministries, and co-management arrangements which combine bottom up and top down approaches. The implications of different options can be analysed more comprehensively and systematically using the relationships terminology.

Customary governance involves close working relationships, reflecting a high degree of directness as people meet regularly; multiplexity as interlocutors know each other through extended cultural and personal interaction, rather than meeting on resource management committees alone; and continuity as the same people may be involved for a generation. However weaknesses may occur in terms of parity as customary law does not have the same weight as other legal systems. Therefore a local community reliant on customary governance and customary law may be unable to protect their traditional rights if these are in conflict with other formal legal systems. In addition some groups, such as women have a history of marginalization under customary arrangements.

A centralized service delivery model for natural resources has a number of weaknesses in the relationships it relies on. Government officers may live and work far from those that are directly using the natural resources in question. This means the relationships lack directness and multiplexity. Commonality may also be lacking if the federal and state government have different development objectives (see example 2 below). This arrangement may be advantageous for the federal government particularly with regards to parity – the legal arrangements may work in the federal government's favour. However if the arrangement lacks parity then this is likely to be a driver of unrest in the long term.

In contrast, a co-management arrangement has many of the benefits of directness and multiplexity that are derived from it being locally organized. With a formalized legal framework, often requiring

representation of women, it may be able to address some of the problems of parity associated with traditional arrangements.

Three examples follow in which the five dimensions are used to help describe environmental governance arrangements.

Example 1. The Nile Basin Initiative

The Nile has a central role in the national identities of Egypt and Sudan, and in regional discourse. Like other transboundary water-sharing nations, perceptions of equitable management of the river vary profoundly amongst upstream and downstream nations. Under the 1958 treaty Sudan and Egypt agreed to a split in the water allocation between them. This created a legal framework that Ethiopia and the other upstream riparians (who were not party to the 1958 treaty) considered to be deeply unfair.

In the process of achieving a new framework for sharing water on the Nile, the Nile Basin Initiative (NBI) has worked hard to promote mutual understanding amongst the riparian countries: all staff employed by the NBI are citizens from countries in the Nile Basin; offices in country capitals are headed by individuals from other countries; and there has been a six year process of dialogue on diverse topics related to the river, natural resources, economics and environment.

In relational terms, this arrangement was designed to promote mutual understanding or multiplexity. The relatively long timeframe also enabled a degree of continuity to be developed among the network of people involved with the process. This has enabled new perspectives to be developed and shared within the Nile and for progress to have been made towards inclusive management of the Nile. Currently the arrangements for the Nile are in a state of transition. The work of the NBI means that there is more mutual understanding of the perspectives of the different nations would otherwise be the case.

Example 2. Groundwater depletion in Darfur and institutional relations

Groundwater depletion in Darfur's IDP camps is a considerable problem. Two camps have faced severe loss of water resources and are now served by pipelines from elsewhere and 20 others have been identified as vulnerable (Tearfund, 2007; UNEP, 2008b). In addition to the physical scarcity of water there are funding and institutional arrangements that exacerbate the challenge of managing the groundwater resources. At the core of this is the problem that aid funding that is routinely channelled to government projects for groundwater abstraction is not reflected in the same funding streams for groundwater management. Declining groundwater levels reflect this institutional imbalance.

Abstraction of groundwater for use in IDP camps is rightly seen as a humanitarian priority. As a result of this, humanitarian funding streams are deployed through a government account under the auspices of the joint project of UNICEF and the Drinking Water Unit of the Ministry of Water and Electricity (MWE). The project is known as the Water and Environmental Sanitation project (WES). WES has produced impressive results and has grown to become a major national organization. Numerous donors, international humanitarian funding sources and the Government of Sudan contribute to support WES. WES has been able to recruit a strong cadre of technical staff and has been well resourced for equipment and vehicles.

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This post in Al Salaam camp is painted by water managers to inform the community of the status of groundwater levels at the nearby well. This forms the basis for community based contingency planning for water shortages

The chairman of the management committee for Al Khewei presents the spare parts stored for future use in the water yard

Management of groundwater comes under the auspices of the Groundwater and Wadis Unit (GWWU) of the MWE. The GWWU does not have an account for humanitarian funding and so are not able to receive funds directly from international organizations. Staff retention has been a challenge in the context of the burgeoning job market in the humanitarian water sector, as staff have taken work with WES, UNAMID and others.

The lack of a project bank account has led to a considerable lack of parity in the Type A relationship between WES / drinking water unit and the groundwater and wadis unit. This lack of balance in funding and therefore in action by GWWU is a factor in declining groundwater levels. Greater parity in access to aid funding would enhance capacity to manage water resources sustainably.

Example 3. Comparing Port Sudan and Al Khewei (refer to pages 20, 21)

Within the water yard in Al Khewei there is an impressive store of spare parts for maintaining the supply. There is both a spare generator and spare electrical switch-gear available for use in the event of a breakdown. Given the remote location of Al Khewei, a breakdown of these parts would result in several months of in operation. Purchasing the spare parts in advance is therefore a wise precaution. This practice, however, is not common in rural water supplies in Sudan as evidenced by the desalination plants in Port Sudan described earlier. The different management arrangements of these two water supply plants provide some important lessons. Firstly, in Al Khewei there is a high degree of directness between water users and decision makers on procurement – water users are represented on the board. In Port Sudan, however, decisions on expenditures are made 600 km away in Khartoum. Secondly, decision makers in Al Khewei are accountable to water users through the annual elections and through their interaction within the village. In Port Sudan, water users could not express their grievances to decision makers in Khartoum nor could they hold them accountable. This shows that in the Type B relationship between the water users and the management of the desalination plant in Port Sudan a lack of directness and a lack of parity exists, yet in Al Khewei both dimensions are strong.

4 Measuring progress in relationships

Key points:

- *A six-step tool to assess how relationships progress and improve called the measured pathway is identified and presented.*

- *The measured pathway comprises: (1) meeting to assess potential commonality; (2) identifying the pre-requisites for joint action; (3) achieving those pre-requisites; (4) implementing the joint action, thereby establishing a precedent for collaboration; (5) repeating or diversifying joint action; (6) collaborative action becomes routine. The pathway hinges on step four, where a substantive precedent for collaboration is established.*

- *Relationships may not progress through all these steps, but the pathway is useful for describing both relationships that follow this pattern and those that diverge from it.*

- *The use of the measured pathway is demonstrated in case studies in the three types of relationships A, B, and C. The case studies examine governance and peacebuilding contexts with a focus on conflict related work in Darfur.*

The *measured pathway* presented in this chapter is used to assess progress in relationships that improve over time. It was developed to gauge the results of governance and peacebuilding work and is based on a number of case studies.[17] When these relationships were analysed using the relational metrics outlined in chapter three, a strong pattern emerged consistent with the way that many successful relationships form and grow. The method of analysis was formalized and became the *measured pathway* to assess progress in the formation of relationships. It can also be used a basis for assessing relationships that diverge from the pattern. More details on how this pattern was identified are provided in Annex 1.

This analysis assumes either a new relationship or a significant process of renewal in an existing but perhaps lapsed relationship. In the case of renewal the previous history may be key to understanding the opening dynamics. An additional factor is the role of third parties in brokering new relationships.

4.1 The *measured pathway* of developing relationships

At the outset of a new relationship between communities or institutions, the parties meet and assess whether a new process of building a relationship is desirable. Step 1, **meeting and scoping**, establishes a degree of directness. It explores whether there is potential commonality and whether both parties agree that a new joint initiative would be mutually beneficial. If joint work is not desired, the relationship moves no further. The progression to step two occurs when both parties agree that a renewed relationship, enabling substantive collaboration, is worth exploring.

Step 2, **assessment**, identifies prerequisites for joint action, notably determining potential commonality and parity. Will the outcomes be fair? How are costs and risks shared? During this period, multiplexity grows as each side gets to know the other. This is a period of negotiation. The step concludes when agreement is reached on how the benefits and risks are shared and what would be needed prior to activities beginning. If the collaboration requires a legal agreement, then core terms of the agreement are established at this stage. The decision to implement on those terms may still be outstanding.

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Negotiation of a trade deal for cattle in Jebal Mara. Setting the terms for collaboration is step 2 of the *measured pathway*

Step 3 is **preparation** for joint action, as each party follows through on accomplishing agreed prerequisites. Confidence grows as each party sees the other making their own preparations for action. This stage concludes when the preparations are substantially complete and a firm commitment to implement the joint action exists.

When the prerequisites have been met, the joint action takes place, Step 4. This is a key **precedent-setting** move, as it introduces a degree of continuity to the relationship that did not exist previously. A shared story now exists. If the outcome was successful, a change in the level of trust has been achieved because the relationship has seen words supported by action.

Thereafter the relationship can grow in two ways: by repeating the joint activity, in which case the relationship extends continuity, or by broadening the interaction to other fields, amounting to a growth in multiplexity as well as continuity.

Where the relationship grows beyond the precedent-setting joint action, Step 5, an **established and growing** relationship, is achieved. Over time, the relationship's development will plateau. The extent of the commonality between the partners has been reached. Ongoing interaction on a range of issues occurs, and common gains can be achieved at a cost acceptable to both parties. At this stage, the growth of the relationship will be cyclical.[18]

When the relationship has reached this steady state it may be described as **mature**, which is Step 6. A regular pattern of interaction is maintained. Changes may occur from time to time, but these can be managed through the trust that has been built on a foundation of mutual understanding (multiplexity) and a shared story (continuity). Periodic negotiation and joint action become cyclical elements and ensure commonality and parity are actively renewed. Directness is also maintained.

This is not to say that problems do not occur in well-established relationships. However, this model describes a norm that can be used to describe the progression of relationships and points of divergence.

This process is shown in Table 4.1; generic examples of its use in relationships of Type A, B and C are shown in Annex 2; and an example of its application in CBNRM is shown in Annex 3.

Sheep being herded for loading to trucks at the market in Al Khewei. Preparation for the delivery represents step 3 in the *measured pathway*

Table 4.1 The *measured pathway* of developing relationships

Step	Prerequisite	Action	Key relationship step	Outcome
1 Meeting and scoping	Willingness to meet and explore potential collaboration	Groups meet to ascertain if there might be benefits to collaboration	Directness starts First scope of potential for commonality	Both parties identify potential benefits from joint action
2 Assessment	Both parties identify potential benefits from partnership	Identifying the preconditions for joint action	Commonality identified and preconditions to ensure parity determined	Preconditions for joint action identified
3 Preparation	Preconditions for joint action are known	Action in progress to meet the preconditions for joint action	Preconditions to ensure parity implemented	Preconditions for joint action are established
4 Precedent-setting	Preconditions for joint action are in place	Joint action is taken	A shared story established: the relationship now has continuity	Joint action implemented A precedent for further joint action now exists
5 Established and growing	A precedent exists that can be built on	The joint action is repeated or other action is taken together	Growth in continuity and in multiplexity where diversification occurs	Relationship moves towards steady state
6 Mature	Ongoing relationship at a steady state	A regular pattern of interaction is maintained	All strong, ongoing monitoring and management of the relationship	Ongoing relationship at a steady state

4.2 Case studies

This section presents three case studies that demonstrate how the *measured pathway* can be used to describe relationship progress in three different contexts. Annex 3 provides a further example of how the pathway can be applied to the development of Community Based Natural Resource Management using the Community Environmental Action Plan (CEAP) methodology.

Case study 1. Collaboration in the pastoralist sector

Pastoralist activities in Sudan may account for as much as 90 per cent of the livestock sector. The livelihood, however, is poorly reflected in national economic planning since most of the trading involved is outside of the formal economy.[19] There is a strong perception of marginalisation amongst pastoralists, who suffer from low literacy, limited access to financial services and other challenges related to their remote and transitory existence. Given their contribution to the national economy, pastoralists are advocating for greater recognition of and support for their work. A research programme by Tufts University has played a significant role in enabling a clear agenda for pastoralist development in Darfur. This case study also demonstrates how collaboration was built across the sector.

The role of some of the nomadic groups in the Darfur conflict has been a matter of notoriety associated with the horrific violence that has taken place. However, as a livelihood, pastoralism has been facing considerable challenges. During the conflict, pastoralists' livelihoods have suffered from reduced trading and migration opportunities, as areas have become insecure. As a result, some have adopted livelihood choices that exacerbate the conflict, such as joining government militia or harvesting timber from forests whose owners are displaced (Young et al., 2009a). What emerges is the importance of finding livelihood-based solutions for affected communities as part of the search for long-term resolution of conflict.

The groups involved in this case study include:

- The Ministry of Animal Resources, Fisheries and Range is the national body mandated to support the livestock sector. Their focus is on sedentary livestock production such as ranching, with less interest in the informal migratory sector. As such, they are an important target audience for pro-pastoralist advocacy that promotes support for migratory livestock production.

- The Council for the Development of Nomads is a presidentially appointed group intended to give a voice to nomadic communities. It has its origins in the Darfur crisis with the mandate for voicing pastoralist concerns in the peace negotiations. The Council has a particular constituency of camel herders in North Darfur.

- Al Massar is an NGO representing pastoralist views, with strong grassroots membership of cattle herders in West Darfur.

- SOS Sahel is an NGO that has recently registered in Sudan as a national organization. SOS Sahel has an ongoing project in Kordofan and has a long history of working to promote improved understanding of pastoralism, notably with an emphasis on migratory livestock production.

There is significant political diversity amongst these groups, given their respective affiliations and the violent role of some pastoralist groups during the Darfur conflict. However, given their historical marginalisation, there was a need to promote a coherent livelihoods-based agenda for pastoralists. This is essential to support lasting peace in Darfur: a peace in which pastoralists as well as sedentary groups have equitable access to natural resources and trust in governance arrangements that support their livelihoods. Tufts University established credibility with all of these groups through work it did in 2008-2009. SOS Sahel worked in partnership with Tufts. Tufts and SOS Sahel worked with each of these groups separately and developed formal agreements with each of them. This culminated in the publication of a report on the livelihoods of camel herders in North Darfur during the Darfur conflict. In 2012, Tufts began a new study and brought these groups together once again.

Step 1 of the process, was to meet and decide if there was interest in joint action. Despite the political diversity of the groups, there was enough interest in meeting, in part due to the reputation and credibility of Tufts and SOS Sahel.

Step 2 comprised the process of developing the objectives and terms of reference for the study. This involved allocation of roles, including for logistical support, in their respective areas of activity.

Meeting the preconditions for the joint activity, Step 3, faced a particular challenge: importing devices to track the cattle on long distance migration. The government and non-government organizations were best placed to approach relevant government bodies for approval to import such sensitive instrumentation. The groups collectively solved the problem, which helped establish the preconditions of joint action. Though the focus of meeting preconditions is on achieving parity and commonality (i.e. establishing a fair outcome), solving the problem brought multiplexity as they came to know each other and continuity because the collective problem-solving became a milestone in the developing story of the relationship. The partnership could now proceed with Step 4, the implementation of the study.[20]

Through this process these four key stakeholders in the pastoralist sector have developed a precedent for collaboration (continuity) and a much stronger understanding of each other's objectives (multiplexity) that has bridged the distance that existed prior to their active collaboration. The relationship has moved to Step 5. A pastoralist forum comprising these four organizations, the Pastoralist Union and University of Sudan now meets every two to three months to discuss topics of pastoralist interests.

This case study shows how an external intervention with one goal – the study - can help solidify a relationship necessary for the goal, but can have broader impacts as well. It also shows how research sets the foundation for more diverse and long-term relationships.

Case study 2. CARE's peacebuilding work in Kass

A good example of relationship-based programming in community peacebuilding can be seen in the work of CARE in the Kass area in 2005-2007. Under the project, Village Development Committees (VDCs) were formed, with representation from communities between whom significant tension existed. Community projects were to be delivered through these committees in a participatory manner, thereby incentivizing the collaboration.

At the outset, it took nearly 14 months of negotiation to form the committees in order for aid to be delivered. This was a period of substantive community level peacebuilding, although at that time there were no indicators available to express these results. CARE's ability to broker the selection of independent and trustworthy committee members was enabled

by their established track record working in the area and their relationships with the communities.

Moreover, once these programmes had reached the point of delivery, the community representatives on the VDCs began to extend their collaboration to other issues beyond the project. Most significantly, a number of pre-existing but now abandoned peace committees were re-established based on revival of personal relationships. The peace committees were effective in negotiating security for pastoralists migrating through the area, resolving disputes over cattle theft, managing grazing and tree felling and other matters. They essentially performed local governance functions that had previously been undertaken by more traditional systems, but updated and adapted in ways that increased inclusivity (Auzimor Just and Kleinman, 2008). The relationships improved through CARE's project and brought benefits well beyond the scope of the programme.

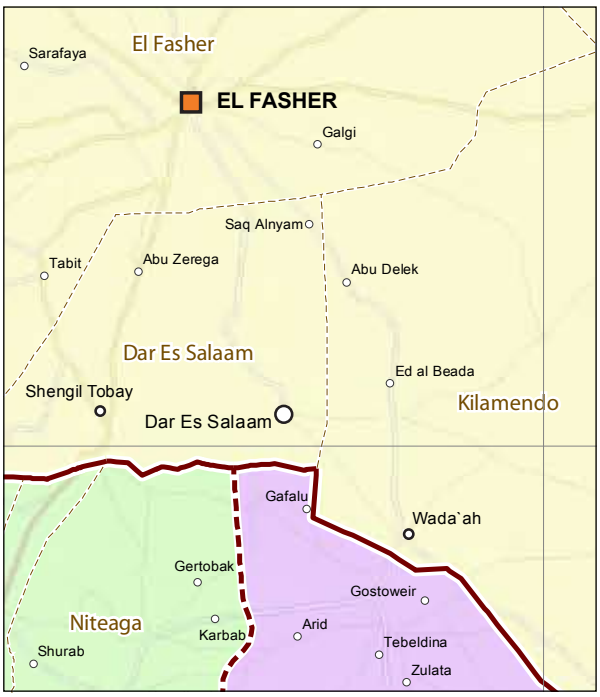
CARE's role in brokering this collaboration was principally through providing a source of commonality in the relationship – both communities gained access to assistance the VDC provided. This leveraged the engagement of the groups and established directness. During the course of the negotiations, the village development committees were established in a manner acceptable to both parties. The fact that they operated effectively and led to further cooperation indicates that a degree of parity had been established. The broadening of this programme over time, including the restoration of other joint programmes through peace committees, demonstrates increasing multiplexity and continuity. This shows how the five dimensions can be mutually reinforcing.

This case study shows the significance of Step 4 in the *measured pathway*. Whilst steps 1 to 3 took a long period of time encountering numerous setbacks, Step 4 was a decisive moment – when the VDC started to implement practical activities. Thereafter the relationship had a basis to expand; in this case by increasing the breadth of interaction to other peacebuilding activities and then to working collectively to restore social relations with other communities

Case study 3. SOS Sahel Peacebuilding in Dar Es Salaam Locality

Dar Es Salaam is a locality in North Darfur with three administrative units: Dar Es Salaam, Shengil Tobay, and Abu Zerega. Ethnic groups in Shengil Tobay and Dar Es Salaam are largely made up of Berti, Tunjur and Falata. Abu Zerega is mostly Zagawa. People from Dar Es Salaam and Shengil Tobay administrative units have been in conflict with the Zagawa and have been unable to cross Abu Zerega to get to the state capital, El Fasher.

Figure 4.1 Dar Es Salaam locality (Source: UNAMID)



Abu Zerega was a rebel held territory for much of the period between 2004 and 2010 when it returned to government control. This rebel group was largely made up of Zagawa so the relationship between the government and the communities in Abu Zerega is one of suspicion. Consequently the local government officers were unwilling to travel in Abu Zerega to issue new identity cards.[21] These cards are required for all legal transactions and interaction with government offices. The tribal groups in the other administrative units were aligned with the government, and so the relationship between them and the Zagawa in Abu Zerega broke down.

This shows two forms of conflict: the alienation of the Zagawa in Abu Zerega from the government because of the rebel groups' conflict with the national government; and a local conflict between Zagawa and adjacent tribal groups based in Dar Es Salaam and Shengil Tobay. The tribal groups in Dar Es Salaam and Shengil Tobay were on good terms with the government.

The rapprochement between the Zagawa in Abu Zerega and both the government and the other tribes Dar Es Salaam and Shengil Tobay happened over three phases of SOS Sahel programming. In the first phase of programming there was a series of three workshops in El Fasher that brought people together from the different administrative units.[22]

After the workshops, follow up activities were undertaken in the administrative units to extend the messages of peace. As a result of this process, two important events demonstrated the significance of the relationships that were developing. Firstly, the Dar Es Salaam and Shengil Tobay people began to travel freely through Abu Zerega again without the armed militia escorts they had been using. Secondly, the groups began to cooperate on combatting the problems of banditry. Hitherto banditry had been a significant trigger for violence between the groups, particularly when bandits were pursued from one jurisdiction to another. Around this time a notable event in the renewed collaboration occurred when officials in Abu Zerega apprehended a vehicle stolen from Dar Es Salaam and returned it to their owners. These events provided the precedents to show that the improvements in the relationships between the groups was significant.

During the first phase, the relationship between local government and the people of Abu Zerega had also improved. A delegation from government had come to the area for a week and undertaken the issuing of new identity cards.

The second phase of programming included additional meetings held in El Fasher and in the three administrative units. Two peace committees were formed: one in Shengil Tobay/Dar Es Salaam and one in Abu Zerega. Representation, terms of reference, and work plans were established for the committees.

At this time other government functions were restored, with an increasing number of teachers deployed to the area. The administrative unit officer returned to take up his duties, and delegates from Abu Zerega administrative unit rejoined the locality council meetings with the Dar Es Salaam and Shengil Tobay administrative units.

During the third phase of the project the three administrative units joined together in a committee as Dar Es Salaam locality and with representatives from the neighbouring Kilamendo locality worked on a broader peacebuilding initiative.

With respect to the *measured pathway*, the meeting in El Fasher was critical in establishing directness so that the different tribal groups could assemble together, along with the government representatives. Directness was critical in this case because each group had felt unsafe away from their own location. When the meeting took place considerable progress could be made in articulating what was needed to restore relationships (Step 2) and making commitments to undertake these actions (Step 3). In this case the timing of the event that set a precedent for collaboration between the different tribal groups was established by an external occurrence: the need to collaborate over the stolen vehicle. This event established a precedent for genuine collaboration (Step 4). Meanwhile, the Type B relationship between the Zagawa of Abu Zerega and the government was improving as the government came and issued new ID cards enabling the community to re-engage with the processes of government (Step 3 – puts in place prerequisites for collaboration). Step 4 in the Type B relationship was achieved when government services were re-established in Abu Zerega locality. The case study concludes with the Type C relationship moving to Step 5 as the communities work together collectively on a new initiative building on the trust established so far.

Three additional observations can be made from this case study.

First, it was a concurrent process in which Type C relationships were restored between the people of Abu Zerega and Shengil Tobay / Dar Es Salaam, and Type B relationships were restored between the locality government and the people of Abu Zerega. This is a very tangible example of the overlap between governance and peacebuilding.

Second, the broader situation in conflict resolution became conducive to peace at the local level – the higher-level conflict that had seen rebel authority over the wider area had passed, so the way was cleared for the lower level conflict to be resolved.

Finally, higher levels of conflict affect the process – the need for new ID cards is a result of the separation of South Sudan. Not having these ID cards was preventing the reintegration into the society of the Abu Zerega community following the departure of the rebel group.

5 Putting it together as a programme

Key points:

- *The approaches described in this report have been developed under UNEP's Sudan Integrated Environment Project (SIEP). The Integrated Environment Project concept works to reduce fragmentation in the environmental sector while working with partners on the development and promotion of environmental governance. The participatory, integrated and evidence-based way of working demonstrates approaches to promoting good governance within the sector.*

- *The project uses a relationships-based theory of change to describe the means by which different outcomes restore good governance and benefit local communities.*

- *A review of the work undertaken on integrated water resource management (IWRM) in the project shows how five different types of outcome have led to the development of catchment management in North Darfur, which is enabling rebuilding of relationships of all three types (A,B and C) that have been weakened or destroyed by conflict.*

In Sudan, environmental governance suffers from a high degree of fragmentation among key stakeholders. Efforts to rebuild environmental governance must therefore aim to improve coordination and be based on a sound analysis of existing environmental problems as well as the social and political context. This chapter explores how UNEP has used the relationships-based approach to reduce fragmentation and, in turn, promote more effective environmental governance. The chapter also demonstrates the process for applying a relationships-based approach and showcases the tangible benefits that have resulted from its use. Although this chapter largely focuses on the technical, apolitical work of rebuilding environmental governance, it recognizes that political work on conflict resolution must help inform the process.

5.1 The Integrated Environment Project concept

Sudan is facing numerous processes of change that are undermining formal and traditional systems of environmental governance. In this context, UNEP has sought to rebuild environmental governance through sector-wide interventions that were complimentary and coordinated. In 2007, UNEP launched the Sudan Integrated Environment Project (SIEP)[23] to "promote sustainable and equitable environmental governance to create peacebuilding and development impacts."

The Sudan Integrated Environment Project aimed to bring about change across five themes: climate change, community-based natural resource management (CBNRM), forestry, integrated water resource management (IWRM) and livelihoods. For each of these themes, there were five areas of action: direct implementation work; strengthening government capacity; improving collaboration across government; mainstreaming environmental practice and raising awareness.

The Integrated Environment Project model is founded on several key principles:

- The project supports complementary work across sectors through participatory, ecosystems based environmental governance. The inclusion of similar practices in each theme means that the project outcomes promotes a more integrated environmental sector.

- The project is implemented in a way that builds partnerships across the sector setting precedents for government entities to collaborate more systematically. Therefore the project process promotes a more integrated environmental sector (in addition to the outcomes described above).

- Within each theme, a range of interventions are undertaken, including, implementation of new approaches to the environment, capacity building, policy formulation, coordination, research, advocacy and awareness raising.

- The project achieves results by enabling a coordinated approach from government to better manage competing resource use amongst communities. Enhanced relationships (Type A, B and C) are core to this approach.

Sudan's negotiators at the Warsaw climate change negotiations in 2013. This team was informed by a process of dialogue conducted across 16 states in Sudan. Such widespread coordination is important not just to ensure communication from the states to national planning and negotiation processes, but also to reduce the fragmented approaches to the environment within and between states

The way the SIEP is governed reflects and models best practice in environmental governance: a strong technical, evidence-based approach; consultation and participation; integration and coordination across the themes; and genuine partnership with organizations mandated in each field. In this way, the programme itself and how it works provides a tangible example of building good governance.[24]

Another key characteristic is the importance of local ownership. Ideas and models of environmental governance such as IWRM and CBNRM were introduced by UNEP but these were not prescriptions.[25] It is the role of Sudanese organizations and environmental stakeholders to lead the uptake and adoption of these broader approaches, informed by local knowledge. Flexibility in programme activities and outputs is important as it reflects genuine co-ownership of the project with national partners and is also necessary in a complex and variable working environment.

The SIEP put a significant emphasis on developing partnerships as part of its overall approach. Fostering partnership between two different parts of government can help set a precedent for long-term collaboration. This is particularly relevant when the ministry with the environmental mandate is relatively low in the ministerial "pecking order". Establishing an ongoing partnership with more powerful ministries – such as energy/petroleum or agriculture - can help extend the reach, impact, and sustainably of the project's achievements.

Within the project a balance is needed on practical short-term results and longer-term processes. Activities such as tree planting may look impressive, but without the longer-term work on institutions and policy, the project makes little real change over time. Short-term, practical results are important within the broader project as they help secure support from stakeholders, which is needed for longer term processes of institutional and policy change. Practical implementation can also play an important role in demonstrating and developing "proof of concept" for new ideas.

5.2 Relationships and the theory of change

The SIEP adopts a theory of change based on the relationships approach. In development language, a "theory of change" tells the story of how the project *activities* create *outputs* that combine with the work of programme partners to produce a shared project *outcome*, which contributes to a higher-level *impact*.[26]

The impact of the project is a higher-level goal, to which the project contributes, but which would not be achieved by the project alone. The *route to impact* is how the project's activities and interven-

tions will make a difference to communities. The route to impact is described in relationships terms based on the network of relationships identified in chapter two. The SIEP works in the following technical themes: climate change, CBNRM, forestry, IWRM and livelihoods (pastoralism and markets). Under each of these themes a selection of the following types of intervention are made.

1. The first outcome is **direct implementation** of field projects, undertaken with partners or independently. These activities generate practical results, which is important for the project's overall credibility. These may not have lasting impact without the institutional reforms that are essential in a project focussed on addressing problems of governance, but they are important for developing local support for the project: developing proof of concept and demonstrating new approaches; and providing a context for on the job training and capacity building.

   The route to impact: The project benefits are felt directly by communities. An important component of natural resource management projects is **enhancing Type C relationships**.[27] In livelihood terms the enhanced relationships at community level reflect social capital. Direct impacts exist in other categories – other livelihood assets (the provision of seeds and tools) or in basic services – so the scope goes beyond relationship concerns.

2. **Building government capacity** to develop and implement new policies and practices at scale is the second outcome. Whilst much of the work in this area is internal to institutions (enhancing management processes, IT, training staff, etc.) the value of these is seen with respect to the improved performance for communities.

   The route to impact: The capacity is built within the institutions, but the benefits are gained by the communities they serve: **the benefits of enhanced institutional capacity pass to communities through the enhanced Type B relationship**. In livelihoods terms, capacity building has the effect of improving the institutional and policy context a government sets for livelihoods to work within and is a core element of the government's interaction with communities building the Type B relationship (and enabling Type C).

3. The third outcome area is **building collaboration and coordination across government**. If government is fragmented in its approaches it undermines the impact of each organization. If government is coordinated then the impact of organizations are multiplied as synergies are developed across government. A discussion of approaches to running workshops to build a shared understanding amongst organisations is given in Annex 5.

Community analysis of natural resources in North Darfur. The work on Community Based Natural Resource Management was one of the areas of direct implementation under the SIEP. The implementation was also linked with capacity building and training outcomes in partnership with the Forestry National Corporation

The route to impact: The work of government institutions is more efficient, coordinated and strategic with **enhanced Type A relationships**. In essence, from the perspective of the communities, **the benefits they perceive are similar to the second outcome** – government is "working for them better". This will be seen as a more coherent provision of services and a more supportive institutional and policy context for their livelihoods, enhancing Type B relationships (and enabling Type C).

4. The fourth outcome area, **mainstreaming and advocacy** of environmental best practice amongst aid programmes, multiplies the number of organizations that are directly implementing enhanced environmental practices.

   The route to impact: Other organizations undertake activities reflecting outcome 1 (direct implementation) and outcome 2 (capacity building). This has a **multiplying effect on outcomes 1 and 2**.

5. The fifth outcome area is **awareness raising**. This is in many ways the least direct and least targeted outcome. An increase in knowledge improves relationships across the network of actors. In all cases this directly enhances multiplexity in relationships as the concepts under consideration are better understood by all parties to the relationship. This also has benefits with respect to parity (knowledge is available to all rather than a few) and to the development of commonality as shared developmental aspirations can be articulated.

   The route to impact: Increased knowledge and greater parity **enhance all three relationships Types (A, B and C)**, by improving the capacity of institutions (and communities).

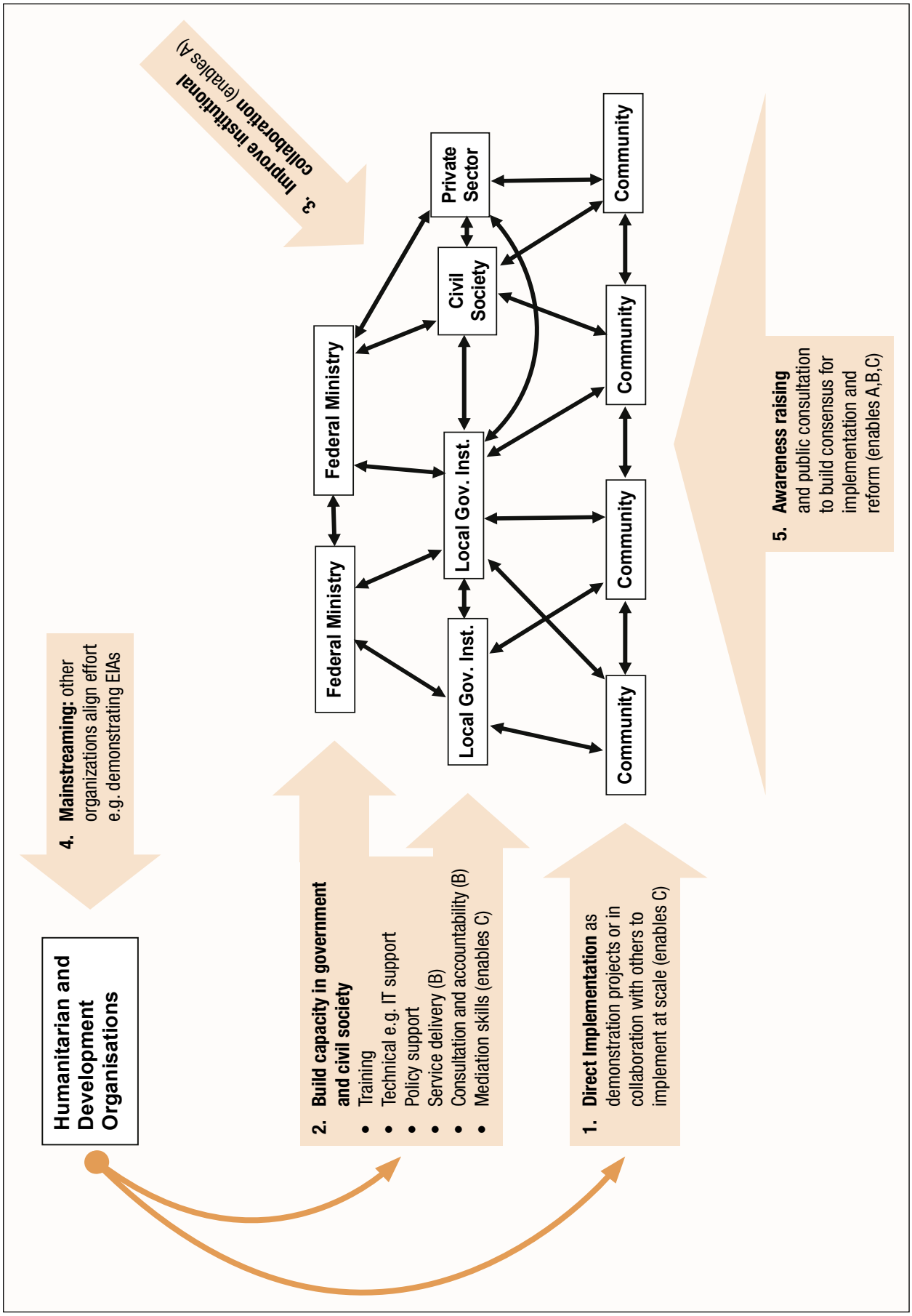
These interventions are shown graphically in Figure 5.1 and examples of practical indicators are shown in Table 5.1.

It is worth noting the importance of flexibility in implementation within the broader context of this theory of change. As Eyben (2006) notes: "Recognizing complexity does not justify complex aid interventions. Rather what may be required is a 'planned opportunism'." Establishing an overall framework for the project must leave space for genuine partnership and therefore enough flexibility to enable a shared result.

Table 5.1 Outcome areas for a relationships-based Theory of Change

Indicator	Comments
1. Direct implementation	
– Number of rainwater harvesting structures built with community participation – Number of CBNRM committees established	The rainwater harvesting indicator represents physical assets for livelihoods, and the CBNRM social assets/capital. The CBNRM result builds Type C relationships.
2. Capacity building	
– Number of government personnel trained in CBNRM implementation – Number of CBNRM schemes implemented by government partner with support from the project	The first indicator could be linked with the direct implementation above. The second extends this with more emphasis on the partner organisation delivering results for communities. Strengthening Type B relationships is implicit in both indicators.
3. Institutional collaboration	
– Number of partnerships supported to reaching Step 4 of the *measured pathway*	This could be a higher level outcome – building on the outcomes articulated under each theme. This is how it was used in SIEP. Step 4 is significant in that it can be easier to identify in practice than other steps and is an important contribution to making a lasting result. ("Action speaks louder than words" – so joint action is a turning point in the relationship).
4. Mainstreaming and advocacy	
– UN and other workplans screened for environmental impact – Funds brokered for other agencies based on project research – For example annual humanitarian workplans (UNDAF)	Screening workplans provides a demonstration in aid projects of how screening is done that can be adopted for national programmes. It also ensures numerous environmental actions take place across the UN programme to mitigate environmental impacts. Brokering funds for others was a particularly useful indicator as it helped link UNEP's research and analysis with UN project development – it had a strong multiplying effect on the impact of UNEP's work.
5. Awareness raising	
– Press coverage of project messages – Number of documents made available online through development of environment and development archive in partnership with government departments	Indicators in this category may vary widely – responses in the press indicate widespread publication. The environment and development archive in SIEP provides a strong technical contribution to environmental governance in Sudan but doesn't have the same public profile.

Figure 5.1 Project outcome areas mapped against the core network of institutions and relationships for governance



5.3 Case Study: Rebuilding governance – Integrated Water Resources Management in Wadi El Ku

The following case study looks at the work undertaken to promote Integrated Water Resources Management (IWRM) in Darfur. This case study demonstrates how project outcomes have led to a new form of environmental governance in North Darfur. Activities were undertaken in all five of the project's outcome areas. These are described in Annex 4 and summarised below.

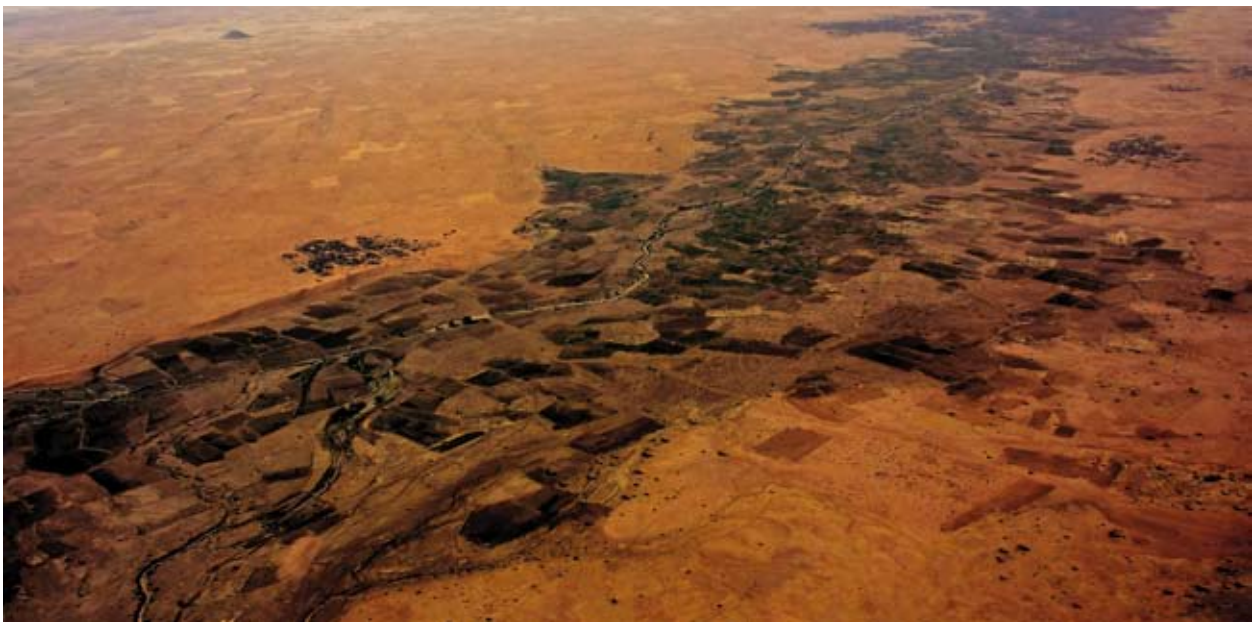
- Direct implementation: construction of small dams in the project area, groundwater monitoring of vulnerable aquifers, community based natural resources management
- Capacity building: support to the Groundwater and Wadis Unit (GWWU) of the Ministriy of Water and Electricity on hydrological management.
- Institutional collaboration: supporting a common vision on IWRM across government; improving collaboration between GWWU and the Water and Environmental Wanitation project (WES)
- Mainstreaming and advocacy: leveraging funds for UNOPS to work on urban water management in the catchment in El Fasher; promoting IWRM in the Darfur International Water Conference (a donor pledging conference).
- Awareness raising: training workshops, publication of reports, Facebook and email updates.[28]

Of particular significance in this process was the development of the shared vision and political leadership for IWRM. This was developed over two study tours to South Africa undertaken in 2010. The first of these comprised technical representatives from across the three states of Darfur and the second comprised senior government representatives, who gave political endorsement to the recommendations made by the technical group.

Four other factors emerged as critical to the impact of this work. (1) It was important that the policy dialogue was supported with practical project work in the form of dams being built and urban water supplies repaired – this showed tangible results of the intervention. (2) The messaging was being undertaken by Sudanese interlocutors, both within the UNEP team in Sudan and by a critical partnership with Sudanese diaspora in South Africa.[29] (3) For the messaging on IWRM to be mainstream both in Darfuri government and in the international aid community took seven years work on the different activities. (4) The messaging on water was mutually reinforcing with messaging in other sectors – for example, the CBNRM work was principally a forestry initiative and climate messaging was reinforcing the importance of catchment-based approaches.

CBNRM works as a component part of catchment management. At the most local level CBNRM enables resource users to manage resources in an integrated and participatory way. Catchment management can be established by linking up CBNRM programmes along the catchment and developing a strategic approach to natural resources along the whole watercourse.

Senior Darfuri and National Government representatives at the South African Houses of Parliament in Cape Town. The delegates held discussions with South African Legislators about the role of parliament in water resources management



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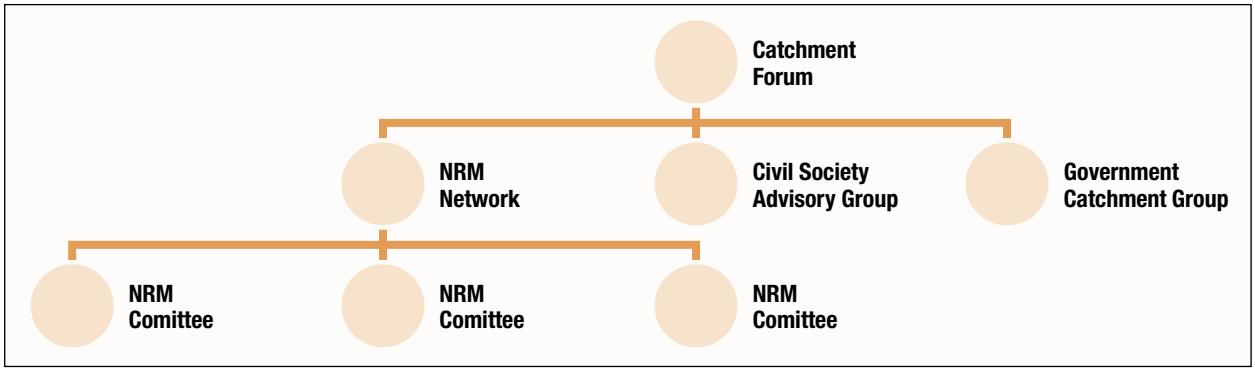
Wadi cultivation within the catchment of Wadi El Ku in North Darfur

The culmination of the effort under SIEP is being taken forward by Darfuri stakeholders, establishing a renewed set of relationships for governance comprising the three types of relationships: A, B, and C. This work is receiving on-going support from UNEP under a new project known as the Wadi El Ku Catchment Management Project.[30] Type C relationships are promoted through a network of CBNRM committees at the different villages along the wadi catchment.[31] These committees will promote local natural resource management and livelihoods at the village level. Type A relationships are promoted by the formation of a cross-government catchment management group that will support integrated planning for the catchment, including agriculture, livelihoods, natural resources, water, and other concerns. Finally Type B relationships are promoted by bringing these two groups together in a catchment management forum, supporting dialogue between communities and government. Type B relationships are also enhanced by improved service delivery by government, enabled under the project. A civil society advisory group joined the committee to enhance the work done by the forum. The overall arrangement is shown in Figure 5.2.

This case study demonstrates that new approaches to governance can be achieved through a combination of technical work with appropriate political endorsement and leadership. However, building consensus and developing new contextualised practical approaches to governance should be seen as a long term activity with a focus on locally owned action rather than external support. The external support, whilst making important practical contributions such as construction of dams and capacity building, is not centre stage in the rebuilding of governance, which has to be indisputably a locally led process with external actors taking a subordinate role.

Figure 5.2 Institutional arrangements for the Catchment Management Forum in Wadi El Ku



6 Conflict and Reconciliation in Darfur

Key points:

- *The conflict in Darfur can be understood as having three levels:*
  - *local level conflict between tribal groups in which natural resources are significant*
  - *national level conflict between rebel groups and the ruling government of Sudan*
  - *international/regional level conflict in which regional dynamics are prevalent*

- *These levels interact with each other and have played out over different time periods. This is not a new pattern of conflict as it has striking similarities to earlier periods of Darfur's history.*

There is a cyclical link between conflict and failing environmental governance in Sudan. Failing governance creates conditions in which tension over resources can spill over into violence. Conflict also destroys the systems of governance, both customary and formal, that are needed to restore equitable management of resources (Bromwich, 2009).

This is a particular problem in Darfur, as is acknowledged in the 2011 Doha Document for Peace in Darfur (DDPD). This agreement, signed by the government and the rebel Liberation and Justice Movement (LJM), created the new Darfur Regional Authority (DRA).[32] The agreement states that "competition over pasture and water between herders and farmers is a serious problem", and must "be addressed in a serious way". The agreement highlights the need for improved analysis of the context, shared strategies and policies under the auspices of a new regional institution. It acknowledges that there are multiple levels to the Darfur conflict, and that identifying holistic and integrated solutions to the local-level governance issues, contributing to resource-based conflict, also requires engagement at a higher-level of government. UNEP contends that the relationship approach outlined in this report can make an important contribution to restoring local level governance in an integrated manner.

6.1 Three levels of conflict

The three-levels of conflict in Darfur are shown in Table 6.1. At the local-level there is ongoing fighting between different Darfuri groups, often self-defined in tribal terms, in which control of land and natural resources plays a significant role. There have been continued efforts to bring reconciliation at this level, both through traditional and other locally owned reconciliation mechanisms and by external actors. Box 1 describes two local level agreements, ongoing efforts to restore environmental governance, and the impact of wider conflict dynamics.

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The aftermath of conflict in Khor Abeche in South Darfur, Conflict has a devastating effect on lives and livelihoods

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Signing of the Doha Document for Peace in Darfur on 14 July 2011

Table 6.1 Three levels model of conflict and conflict resolution in Darfur

Levels of conflict & Actors engaged		Reconciliation processes
Regional conflict / tension	– Central African Republic, Chad, Libya, Sudan, South Sudan, Uganda	– Bilateral international relations, African Union, UN, IGAD
National conflict	– Government of Sudan – Rebel Movements – Militia	– Darfur Peace Agreement 2008 – Doha Document for Peace in Darfur 2011 – UN / AU Political Affairs
Local conflict	– Tribal groups – Militia	– Local reconciliation processes – Darfur Internal Dialogue and Consultation – UNAMID Civil Affairs – Others

There is also conflict at the national level, with rebel factions opposed to the Khartoum-based government and voicing grievances over the marginalization of the Darfur region. This is evidenced by the fact that the government, in the DDPD, signed a wealth and power-sharing agreement with the rebel movements. This is significant because since the agreement addressing the concerns of the national level conflict relate to political issues (power sharing and wealth sharing), then the issues of access to water and other low value natural resources is not a component of this national level of the Darfur conflict.

Box 1. Two local level agreements in Darfur (Source: UNEP, 2014a)

The Limo-Suq agreement in 2005-2006, was one of the early initiatives between the SLA-Abdul Wahid and baggara Arab pastoralists, for example the Ta'alba and the Hottiya. It involved the return of lost and stolen livestock and also facilitated trade from SLA-controlled parts of Jebel Mara to major markets in government-held areas, such as Kass and Nyala (Tanner and Tubiana, 2010). The agreement advocated a return to traditional practices whereby water is regarded as a common good, available to all. The agreement banned the burning of grazing resources. It set a date (1st March) for the beginning of the Talga, at which point the harvest must be in and livestock could graze on the farmers' fields. It banned the cutting down of trees except for dead trees.

The Golol agreement crafted in 2007-2008, is another example of a local arrangement between mainly baggara pastoralist groups and the SLA-Abdul Wahid with a significant natural resource component. This agreement also set the terms for grazing by livestock owned by pastoralists in SLA controlled areas: animals were to be kept away from farmland until after the harvest, their movement was to be restricted to certain areas to control grazing as grass is also an important source of income for local people, branches of trees could be lopped off but the whole tree could not be cut down, and pastoralists could only access SLA areas unarmed. This agreement also allowed a number of markets to re-open. However, as the conflict dynamics in the Jebel Mara area shifted, the agreement collapsed.

Finally at the regional level, there is also an acknowledged interplay between fighting in Darfur and historic regional rivalries between Sudan and neighbours, such as, the Central African Republic, Chad, Libya, South Sudan and Uganda. In the 1980s for example, Darfur was in many respects the theatre for a proxy conflict between the government in Khartoum and the then-Libyan leader, Colonel Gaddafi. Since the secession of South Sudan, fighting between the Sudanese government and the Darfur rebel Justice and Equality Movement has often spilled across the border, with allegations of support for the rebels from the government in Juba, which is itself backed by the leadership of Uganda.

Ten years after the Darfur conflict exploded to the huge proportions seen in 2003-2005, some progress has been made in addressing higher-level conflicts. The conflict between Chad and Sudan has been resolved, with joint border patrols and significantly improved security in Geneina. However, there are concerns related to the recent deterioration of security in the Central African Republic, which also borders Darfur and Chad, and ongoing tension in the region, not least between Sudan and South Sudan.

At the national level, the political conflict between Darfur and Khartoum is being addressed through the mechanisms of the Doha Document for Peace in Darfur and the formation of the DRA. The process is far from complete, with key steps, such as the Darfur Internal Dialogue and Consultation and the implementation of the Darfur Development Strategy, scheduled to take place over a number of years. However, security conditions in parts of Darfur have undermined implementation. In addition, non-signatory rebel movements reject these developments and remain engaged in a violent conflict that still requires resolution. Efforts are ongoing to address these issues.

6.2 A long-term perspective

While the scale of violence in the last decade has been larger than anything that has come before, conflict at the local level should not be viewed in isolation of the history of previous conflicts at the three levels. The Arab-Fur war of 1985-1987, and the Masaleet-Arab war of 1995-1997, were both primarily local conflicts over land resources and power. However, regional dynamics with Libyan and Chadian involvement became concerns. The three-levelled pattern goes back much further, to the devastating tribal violence and displacement of the Turkiyya (1874-1882), Mahdiya (1882-1898) and Darfur Sultanate (1898-1916) which all showed local, national and regional levels of conflict (O'Fahey, 2008; Daly, 2010; De Waal, 2005).[33]

The upsurge of conflict in 2003 was triggered by national political dynamics, notably the lack of Darfuri representation in the Comprehensive Peace Agreement (CPA) negotiations between Khartoum and southern Sudan. The national conflict flared up at a time of particular tension in Darfur, as there were ongoing local clashes between Fur and Northern Rizaygat, over control of grazing on the slopes of Jebel Marra; and between Northern

Rizaygat and Zagawa, over control of access to the northern rangelands. To a large degree these conflicts reflect a clash between pastoralist and farming communities.[34] The interaction of the national and local conflicts made the situation particularly explosive.

A decade later, the local conflicts remain unresolved and have increased in complexity. The increase in violence in 2013, is largely amongst Arab tribes (such as Rizaygat and Bagarra tribal groups) practicing similar pastoralist livelihoods in contrast to the earlier patterns of conflict between pastoralists and farmers. Aspirations within these groups for control over land are increasing and are exacerbated by discoveries of minerals. The conflict for control of artisanal gold mining in Jebel Amir between the Beni Husein and Rizeygat tribes is an example of this pattern (Tubiana, 2014). An important factor in conflict over land is the ongoing displacement of some two million people from the traditional farming communities of the Zaghawa, Fur and Masaleet, leaving large areas of land vacant or only seasonally occupied for farming purposes.

In 2014, there has been a new surge in violence. Whilst tribal violence has continued, the violence in 2014 has a greater element of the second level of conflict – between rebel groups and the government of Sudan. A major decline in the economy of Sudan has occurred as a result of the loss of oil revenues following secession of South Sudan. This economic hardship has fuelled urban unrest, as evidenced by rioting in Khartoum in October 2013, and an upsurge in activity from rebel groups.

This overview of the conflict in Darfur has significant implications for the formulation of a relationships-based approach to building peace and restoring environmental governance. First, the complexity of the conflict means that any given episode of violence rarely has one single explanation. There are often multiple drivers behind clashes. This is important because it means that there must also be multiple layers of resolution. With conflicts over natural resources, establishing equitable arrangements for governance will need to be complemented by overarching resolution of the higher levels of conflict. Conversely, an overarching political peace will also depend on the equitable governance of resources – as called for in the DDPD.[35] The need for resolution of conflict at these different levels draws out the relevance of rebuilding relationships for good governance in a holistic way as described in this report. Finally, the complex environment of Darfur demonstrates the need for *both* political progress *and* technical improvements in environmental governance if lasting peace is to become a reality.

7 Governance and peacebuilding in practice: Technical and political tracks towards peace

Key points:

- *Peacebuilding requires both political work to end hostilities and apolitical, technical work on strengthening and reforming environmental governance arrangements. Each of these tracks can be enhanced with an understanding of the other.*

- *Ultimately the tracks of rebuilding governance as presented in the integrated environment project model and political peacebuilding work need to come together and receive political endorsement to enable lasting peace.*

- *Ongoing peacebuilding initiatives need to be aware of the many influences on natural resources governance, such as customary law, indigenous peacebuilding initiatives, governance arrangements from elsewhere that have been set up to address similar challenges, international environmental governance, research and consultations.*

Peacebuilding that breaks cycles of conflict requires intervention to both end hostilities and to strengthen and reform governance arrangements. While the first intervention is highly political, technical work on environmental governance is likely to benefit from being apolitical. It is generally advantageous for the technical and political processes to remain distinct. Progress on developing environmental governance may be jeopardised if initiatives become politicized or are drawn into ongoing disputes. However, in order for the new governance arrangements to be adopted and serve as a forum for dialogue, political endorsement and leadership is essential.

The development of IWRM illustrates the interaction between the technical and political arenas. Technical work on groundwater monitoring, dam building and urban water supplies facilitated dialogue amongst the water management community in Darfur. Further, the technical study tour to South Africa provided the Darfur water management community with additional insight on how a

Representatives from federal government, South Darfur state government and the Transitional Darfur Regional Authority review IWRM arrangements in the Hex Valley, South Africa, to draw ideas for rebuilding governance in Darfur

new arrangement for water governance could be established. The arrangement would support the participation of all water user communities, establish clear roles and mandates for institutions and help align bureaucratic and environmental concerns. The delegates on the technical tour proposed a follow on tour for political decision makers that took place later in the year. These decision makers endorsed the new governance approach and the idea was taken forward within government across Darfur. As the work progresses with the establishment of the Wadi El Ku catchment forum, political dialogue both with the government and between communities will take place within this newly established forum.

The focus of the two tracks (political and technical) described here can be identified on Figure 2.3. The more political efforts aimed at conflict resolution occur in the "arm" of the diagram on the right and include rebel groups, militia, negotiators, and mediation. The work on governance focuses on the main institutions at the core of the diagram – the part also shown in Figure 2.2.

7.1 Relationships, governance and peacebuilding

This report considers both governance and the conflict in Darfur as having multiple levels. In mapping the three levels of conflict against the governance arrangements, the following observations can be made:

- Conflict over natural resources takes place at the local level and is therefore primarily a factor in Type C relationships. However in order to effectively manage Type C relationships, Type B and Type A relationships must also be strong.
- Given that different institutions within government have allegiances to different groups of communities, conflict has undermined the interaction between institutions.
- The national conflict has also undermined coordination across government institutions.

The focus of this report has been on rebuilding governance of natural resources so that institutions collaborate better in order to provide more effective governance and therefore enable communities to restore relationships. This means that the work described in the theory of change relates to peacebuilding in three ways:

- Some small amount of peacebuilding will be done where CBNRM is implemented within the project. Some examples of where this work bridges different communities across conflict lines have been provided.
- The larger impact comes as government adopts these governance arrangements and applies them at scale. The implementation of the Wadi El Ku project is an example of this advancement.
- The project also contributes to peacebuilding by strengthening dialogue amongst organizations that have different affiliations at the national level of conflict. An example of this would be where new approaches to governance are being developed in partnership with the Darfur Regional Authority, state governments and the federal government in Khartoum. Fractures exist between these three groups as a result of the national political dimension of the Darfur conflict, and yet they have collaborated on IWRM and other environmental governance in order to rebuild good governance in Darfur.

7.2 Multiple routes towards peace

This report describes efforts to promote peace based on the work of external actors, whilst acknowledging that the work of building peace is in the hands of Sudanese stakeholders. This peacebuilding work is significantly broader than the rebuilding of environmental governance alone, important as this is. In addition to the national and international processes of reconciliation, there are local endogenous initiatives for peace being pursued by traditional tribal authorities, government and by the rebel movements. Interactions amongst these groups are more complex and do not fit a binary definition of conflict or peace. Agreements may be freely entered into or may be coercive. The type of local level agreements being developed within Darfur fall into four categories (UNEP, 2014a):

1. Government-initiated and brokered local agreements
2. Agreements involving rebel movements, often initiated at community level

3. Community-organized local agreements, in which different tribal groups meet as equal partners, based on traditional mechanisms for conflict management

4. Community-organized local agreements where unequal power relations between the participating tribal or livelihood groups have resulted in a level of exploitation of the less powerful group by the more powerful.

The agreements have drawn heavily on elements of customary law. It is clear that not all forms of these agreements have led to satisfactory outcomes for all involved. Community-based local agreements, which most closely follow traditional conflict resolution mechanisms, have tackled some of the key underlying issues in the local conflict in Darfur, notably those relating to livelihood outcomes based on access to natural resources. The relevance to consolidating peace more broadly is that where these agreements work, they have elements that can be built on in the emergence of wider systems of governance.[36]

This expands the list of contributing experiences and processes that can inform development of governance to secure peace in Darfur. In addition to the technical project work and the local endogenous peace initiatives, other sources would include:

- Emerging local indigenous peace initiatives
- Darfur's own customary governance systems[37]
- National law, constitution and previous peace agreements[38]
- Governance arrangements in similar contexts elsewhere in Africa[39]
- Research projects on governance, livelihoods, and natural resources and project studies and archives[40]
- National commitments and international agreements which discuss principles of environmental governance, such as the Rio Declaration[41]
- Dialogue and consultations on governance arrangements including those that emerge from practical project work such as SIEP and the Wadi El Ku catchment management project.[42]

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Darfur NGO and traditional leaders meet to discuss approaches to local peacebuilding in North Darfur

In order to develop a long-term strategy for supporting peace in Darfur all of these sources will need to be considered in the development of new governance arrangements. An important challenge lies for donors, the UN and other aid actors to develop a holistic approach to Darfur that supports both the short-term immediate needs and these longer-term concerns. Perhaps this needs to become more strategic and contextually nuanced as an overriding concern for recovery and peacebuilding work internationally.[43] An evaluation by international donors looking at conflict prevention and peacebuilding activities in Southern Sudan between 2005 and 2010, concluded:

> *In part, the problem lies in the conceptual vacuum around 'statehood', as well as unclear identification of critical conditions that lead to peace, or to conflict, or the lack of sustained attention to them. Neither GoSS nor donors produced a convincing and consensual model of what Southern Sudan as a 'state' would look like in say, ten years. From the donors, the reticence to produce such a model may have been because of their commitment to the CPA and 'unity'. However it also reflected the tendency to approach the challenge purely as a technical exercise in capacity building and service delivery. (Bennett et al, 2010)*

A lack of strategic awareness on emerging visions of statehood arrangements may also be problematic at the project level. For example, the transition of service provision from an NGO to the state needs careful management. If an NGO has been providing water services without local contributions (in kind or cost recovery), then when it pulls out the community may simultaneously experience a drop in service and the need to pay. This undermines efforts to rebuild the social contract (relationship Type B) between the community and the government. In order to mitigate this effect, humanitarian assistance should be provided with both immediate and long-terms goals.[44] In this case, the humanitarian work by the NGO needs to be aligned with a strategic approach to rebuilding water governance in the post conflict recovery process. This, however, needs the development of a locally owned vision for possible forms of governance. But this vision needs support from government and donors to be developed concurrently with efforts to address immediate humanitarian needs.

8 Conclusions and recommendations

Key points:

- *This report has shown that relationships amongst communities, government, civil society and the private sector need strengthening as part of rebuilding good governance for natural resources. In short, good governance both enables and relies on good relationships.*

- *A key element of the combined process of adaptation, recovery and building resilience is developing a shared vision of how environmental governance arrangements will be adapted to meet the new challenges in the post-conflict context. Developing and implementing this shared vision needs both political and technical tracks.*

- *With respect to Darfur, this work is urgent, both to implement the DDPD and to support efforts to escape the cycle of conflict related to land and natural resources. A holistic and long-term approach is needed to support Darfur's emergence from chronic cycles of violence, which relate in part to control of natural resources.*

- *The breakdown of traditional and formal environmental governance in Darfur is a stark warning for areas elsewhere in Sudan, the Sahel and the Horn of Africa. It creates an urgent and compelling case for strengthening environmental governance in these areas to reduce risks of similar devastating conflict related to natural resources.*

8.1 Conclusions

This began with a consideration of the multiple processes of change affecting livelihoods in Darfur. Social, political and environmental transitions all require adaptations in livelihoods and forms of governance. Peacebuilding in this context involves the restoration of a network of relationships, in essence, new arrangements for governance. These arrangements are needed in a manner sufficiently resilient to withstand future shocks, such as droughts, disputes over land and other social upheaval without new upsurges in conflict.

Key questions faced by Darfuris as they seek to establish new arrangements for environmental governance to escape the chronic cycles of conflict over resources will include:

- How will the interface of customary and formal governance operate with respect to land and natural resources?

- What is the potential role of co-management regimes, such as registered group ranches, wadi catchment management agencies and community forestry associations? In other words, what will be the balance between potential government roles of service provider or convener of co-management/customary management of resources?

- How will natural resource management be funded, and how will contributions from resource users be collected and then deployed to have the best effect?

All three of these questions address the nature of relationships between communities and government institutions will be arranged in the post-conflict context. How will relationships be rebuilt in a manner best suited to the challenges ahead and with best practices from across Africa informing the new arrangements?

This report discusses what has been learnt through a programme cycle promoting environmental governance in Darfur. It makes an important contribution to linking livelihoods, natural resources and peacebuilding through a theory of change. In addition to Darfur, this approach can be applied in contexts facing similar challenges in which governance of natural resources is undermined by conflict.

A new approach on measuring project outcomes in terms of relationships has been developed. This report has proposed three uses of a relationships-based approach. Firstly, the work enables improved analysis of governance and peacebuilding contexts. While mapping relationships is not new

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The International Donor Conference for Reconstruction and Development in Darfur. A strategic and sustained effort on re-establishing environmental governance will be needed as part of Darfur's recovery effort

to conflict analysis, the use of relational metrics (Commonality, Directness, Parity, Multiplexity and Continuity) in the three types of relationships (A,B,C) and the use of the *measured pathway* to describe improving relationships extends the availability of practical tools for nuanced analysis in the fields of conflict and governance. There is a particular synergy in using these tools together with livelihoods analysis, given its value in indicating why communities make the decisions they do and therefore how they interact with other resource users.

Secondly, measuring the impact of interventions is enhanced through the formulation of the *measured pathway* against which developing relationships can be compared. Arranging the metrics in six steps enables an analysis of relationship progress: a new contribution to relationships-based work. The programme so far has demonstrated how the metrics have a particular relevance as an indicator for sector-wide capacity-building strategies and programmes where the work is done in a way that builds collaboration across institutions. The indicator can also be used to analyse attribution in processes of change.

Thirdly, the approach provides a new way to design interventions. At one level this builds on the use of the relationships approach as a diagnostic tool – if problems can be identified in relationships terms then the solution may be tailored accordingly. At a larger scale the relationships-based theory of change provides a narrative of how effort in aid leads to impact for communities that can be applied in many contexts in which governance and peacebuilding are relevant.

This report is complementary to two earlier reports, 'Environmental governance in Sudan: an expert review' and 'Governance for Peace over Natural Resources'. The first of these was a self-diagnostic of environmental governance in Sudan that highlighted challenges within a fragmented natural resources sector. The second reviewed elements of governance that exist in other African countries facing similar challenges as Darfur. This third report focuses on how to support the process of developing post-conflict environmental governance.

In some locations in Darfur, work on equitable environmental governance can progress, and should be promoted. The Wadi El Ku project developing new practical approaches to natural resource management combining CBNRM and IWRM at the village and wadi scale respectively is an important new initiative in this regard. In other

Lack of investment and conflict have left environmental infrastructure such as this weir at Golo reservoir in disrepair. This visit could only be made with a UNAMID escort, demonstrating one way in which insecurity undermines natural resource management

areas ongoing violence relating to natural resources (such as the Jebal Amir gold mines) means that relationships between communities are so hostile as to make technical trials and demonstrations of new environmental governance impossible. In these places conflict resolution is required first. But where progress can be made, support should be given to the emerging initiatives on governance, these should not be delayed until a time when all of Darfur is ready to engage. Such an approach would empower spoilers of peace.

Underlying all the work in this report is the observation that conflict damages or destroys systems of environmental governance that are crucial to enabling communities to manage their natural resources for mutual benefit of different livelihoods. Good governance is an essential element both to avoid sliding into conflict and to enable emergence from cycles of conflict. This underpins the three main messages of the report.

A network of relationships essential to building lasting peace and resilient livelihoods can be managed within a framework of environmental governance. This framework of governance needs adapting in the face of the numerous concurrent changes Darfur is facing and in order to rebuild social relations that have been torn apart as a result of the conflict. Contributing elements on the form of governance that may emerge in Darfur come from within Darfur and from across Africa. This report adds discussion of how external actors may support a Darfuri-owned process for the development of such governance arrangements.

For post conflict recovery where conflict has undermined environmental governance, parallel tracks of technical and political work on restoring governance should be undertaken. This enables technical work on practical forms of governance to be developed away from the shocks and strains of recurring conflict. However, the new governance approaches need to inform political dialogue to provide a vision of how lasting peace can be maintained. Likewise any such arrangements developed by technocrats, civil society and communities will need political endorsement as part of the conflict resolution and the transition to a paradigm of lasting peace.

This report makes a compelling case, with Darfur as the warning, to work on strengthening environmental governance in areas at risk of conflict, but which have not yet suffered the type of devastat-

ing violence that makes progress in strengthening governance so difficult. This applies to areas across the Sahel and the Horn of Africa in addition to other regions in Sudan.

8.2 Recommendations

This report offers two sets of recommendations. The first set focuses on actors in the context of Sudan while the second focuses on the wider international aid and peacebuilding community.

In the context of Sudan

1. **Pursue a holistic and long-term strategy with both a technical and political focus to end conflict over land and natural resources in Darfur.** This strategy should ensure coordination and dialogue between political and technical tracks on resolving conflict over natural resources and should be informed by other forms of environmental governance in similar contexts.

2. **In Darfur a dialogue around potential models for post-conflict environmental governance is needed, within government and more broadly.** This is stipulated in the Doha Document for Peace in Darfur in relation to the Darfur Internal Dialogue and Consultation. This dialogue should be supported in areas where security conditions are suitable.

3. **Support should be given to continue exploring appropriate approaches to models of environmental governance, learning from success stories across Africa.** This should be a strategic planning priority for government, the UN and donors.

4. **Projects to implement the Darfur Development Strategy should be undertaken in a way that builds collaboration and relationships between the DRA, state ministries, communities and federal government.**

5. **The development of resilience- based approaches in Darfur should be continued.** Environmental governance that promotes collaboration between communities in natural resource use and management should be emphasised within this context.

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Young Darfuri men learn new approaches to Community Based Natural Resource Management in Mile refugee camp in Chad. By integrating these approaches into humanitarian work, the environmental impacts of camps are reduced and skills are learnt that will contribute to rebuilding environmental governance when these men return

For the wider international aid and peacebuilding community

6. **Ensure environmental governance is included as a long-term goal for peacebuilding and conflict mitigation in situations where there is conflict over natural resources.** Environmental Governance should therefore be an important theme in work on livelihood resilience in the Sahel and the Horn of Africa. The "Integrated Environment Project" concept may inform this approach.

7. **Use the techniques and indicators developed in this report to enhance capacity building components of programme delivery and improve their overall quality.** This particularly applies to programmes that aim to enhance part or all of a sector – such as water, forestry, livestock, agriculture etc.

8. **Support further research and development of the relationships based approach.** The following actions should be taken forward:
   - Research should be undertaken to explore the applicability of the *measured pathway* for the three categories of relationship. This work should review the development of relationships in the context of peacebuilding such in treaty negotiations, establishment of democratic processes, local governance, state fragility, etc.;
   - A community of practice should be established amongst development and peacebuilding communities to extend the use of the approach in practical contexts. In addition to extending work in governance / peacebuilding contexts particular attention should be given to projects for state-building, resilience, and work with ex-combatants: Disarmament Demobilization and Reintegration (DDR) Reintegration, Rehabilitation and Recovery (RRR);
   - Following this additional exploration of the approach, a training programme should be developed to enhance relationships based approaches in peacebuilding and development communities.

9. **Expertise on the development of equitable, participatory environmental governance as a component of conflict resolution should inform the work of peacekeeping missions where conflict over resources is a relevant concern**, such as UNAMID and UNIFSA.

10. **RRR and DDR should be undertaken in a way that promotes the integration of the returnee/ demobilized combatant into the local context of environmental governance.** The livelihood analysis of the programme of reintegration should include consideration of the means by which access to resources, such as land, forest products, grazing is controlled and allocated, and how extension services are provided.

11. **Environmental mainstreaming in the UN needs to promote good environmental governance practices in addition to new technology or other predominantly assets-related work.** CBNRM as part of camp management is a priority as this both mitigates the environmental impact of camps, and builds capacities useful for the displaced population when they return. In the situations of displacement and return there is potential for tension with other communities over control of natural resources so promoting environmental governance is a priority.

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Annex 1. The development of the *measured pathway*

The relational *measured pathway* was developed in the following way.

1. Potential markers in a relationship were identified for each category of relationship. These are listed in Table A.1.
2. For each type of relationship these were arranged into a pattern and reviewed against case studies in the experience of UNEP and partners in Sudan.
3. The relationships analysis was applied to this work, starting with a review that applied the metrics to the markers identified in Table A.1. See Table A.2.
4. On this basis the patterns of developing relationships were revised and three prototype versions of the pathway were made. These are shown in the briefing notes for this work dated November 2011 and 2012, during which period the work was reviewed and revised. This work was used in the SIEP project reporting and assessment of the impact and development of new projects.
5. In 2013, the work was revisited on the basis of the intervening experience and it became clear that the three pathways could be simplified into the single version used in this report.

Table A.1 Potential markers of relationships

Category	**A Institutional relationships**	**B Institutions with communities**	**C Inter-community relationships**
Potential indicators	Meetings - frequency, representation Appointment of focal points Joint research Workshops Joint vision statement / document Joint visits / study tours Formal agreements Joint implementation – budget, staffing Cash transfer Relational impact on policy and institutional reform	Representation Meetings Dialogue Project implementation Project management and maintenance Assessments Communications Campaigns Voting	Trade Ad-hoc agreements Natural resource management Blood money and restitution Agreement frameworks Traditional agreements Role of mediators Marriages Cultural Security

Table A.2 Categorization of the potential markers of relationships

	A Institutional relationships	**B Institutions with communities**	**C Inter-community relationships**
Directness	Meetings, communications, colocation, study tours	Democratic election	Meetings – frequency, level
Continuity	Issues resolved, projects completed, shared evaluation	Effective project delivery	Crises resolved, festivals events, time
Multiplexity	Breadth of interaction, shared evaluation	Communications – media, assessments, evaluations	Cultural events, breadth of trade
Parity	MOUs, effective and fair funding stream, project board, joint account	Form of representation Impact on project design Transparent assessment M&E, Taxation and investment	Formal agreements
Commonality	Vision statements, aligned mandates, policy	Local Investment	Trade, livelihoods, security

Annex 2. Generic examples of the *measured pathway* in three categories of relationships

STEP	Institutional collaboration (Type A)	Local government rapprochement (Type B)	Community trading (Type C)
1. Meeting and scoping	The organizations meet and review their strategic objectives, agreeing that there is a significant degree of commonality. On review of each other's strategies, the organizations agree to draw up a concept note outlining potential collaboration.	Meetings between community representatives and government. An exchange of information on community needs, perhaps reopening of the school or clinic, and articulation of government concerns.	Traders from two hostile groups meet and express a desire that a market closed during the conflict be reopened. The traders advocate for mediators to be appointed (according to customary practice) to explore the potential for resolving the conflict.
2. Assessment	A joint site visit to an existing project might be made so that the ideas are well communicated and the delegates have the chance to interact. The concept note is drafted (with revisions being shared en route), identifying what a potential project would achieve and indicating the budget. Legal and financial advisors indicate what form of agreement is to be produced, with what type of supporting documentation.	An assessment of the priorities for government support in the community – the school or clinic is visited. Arrangements for community leaders and government to improve security are under negotiation.	Tribal elders confirm that for the hostilities to cease there is a need to resolve outstanding payments of blood money and to establish a formal agreement between the two tribes relating to security, including the resolution of future disputes.
3. Preparation	A detailed agreement is finalized, including a workplan based on the original concept note. Legal documents are signed. A joint project account is established.	An agreement is reached on the number of teachers and health workers to be appointed and support provided to the institutions. Agreements are reached on security.	Blood money is paid, the formal agreement is negotiated and the market is rebuilt.
4. Precedent-setting	Funds are transferred and the project is implemented.	Equipment is provided and the school or clinic reopens, salaries are paid to staff and the community benefits from the services.	The market reopens and trading is re-established.
5. Established and growing	The project results are reviewed, with a joint site visit at senior level, and a decision is made to further the collaboration. A new project is prepared taking the scope of work forward. Project development is easier this time round as a result of the mutual understanding of the two organisations, so the scope and complexity may be increased.	The initial collaboration is extended as confidence builds. At some stage a security incident occurs and is resolved jointly by government and community leaders. A government office may be opened as part of the transition to full restoration of government community relations.	The market begins to grow, as more commodities are traded.
6. Mature	The two organizations work together regularly on a clearly defined range of activities with mutual confidence. The partnership accommodates change mutually as the collaboration evolves. Specific agreements may be made on charge rates and commitments on continuity of programming, enabling savings to be made. Transaction costs are reduced as the commonality and parity of the relationship is refined.	The full functions of government have been restored in the community. Electoral processes, taxation and service delivery are operational.	After some time, collaboration is well established and social and cultural events occur, increasing multiplexity.

Annex 3. CBNRM and development of relationships

A community environmental action plan (CEAP) is a toolkit for developing local co-management of natural resources. It is made up of five stages, in which different tools of rural development are used. For example, the community would work together to map the natural resources in a village as part of the mutual assessment phase, a process that develops a shared understanding, or multiplexity. These maps show how the participants would like the village to look a number of years into the future, thus promoting a shared vision, or commonality. The stages of the development and implementation of a CEAP are:

- **Stage 1: Starting together** – getting organised, rapidly assessing the environmental situation and identifying and involving different stakeholders.
- **Stage 2: Assessing together** – learning more about the specific environmental situation and the issues different people face, and identifying possible solutions.
- **Stage 3: Planning together** – prioritising issues and deciding how to solve them.
- **Stage 4: Acting together** – taking action and implementing activities to address the situation.
- **Stage 5: Monitoring and evaluating together** – considering the results and impact of activities, and using monitoring information to adjust plans.

Features of the CEAP process are that they bring about collaboration in the context of the provision of external funding. This funding provides a significant shared incentive to work together to implement a CEAP. The commonality here is significantly augmented by the presence of the external funds. The most lasting value of such an arrangement lies in the potential for the collaboration to be self-sustaining.

This therefore requires a caveat in terms of the progression beyond the precedent-setting level of collaboration. CEAPS have been running in Eastern Sudan in refugee camps with external funding. In this context, where livelihoods are unlikely to be sustainable as a result of the inflated population drawing on limited resources, then it is reasonable to suggest the relationship has moved beyond the precedent-setting, as numerous cycles of CEAP work have been done, but the ongoing external assistance makes it difficult to describe the relationship as 'mature'. In other contexts, processes similar to those used in CEAP have resulted in ongoing long-term collaboration at the local level that has proved lucrative to the communities and has been self-sustaining. These examples have certainly moved to Stages 5 and 6.

Step	Key relationship step	
1 Meeting and scoping	Directness starts First scope of potential for commonality	Sensitisation Stage 1: Starting together
2 Assessment	Commonality identified and steps required to ensure parity determined	Stage 2: Assessing together – learning more about the specific environmental situation and the issues different people face, and identifying possible solutions. Stage 3: Planning together – prioritising issues and deciding how to solve them.
3 Preparation	Steps required to ensure parity implemented	
4 Precedent-setting	A shared story established: the relationship now has continuity	Stage 4: Acting together – taking action and implementing activities to address the situation. Stage 5: Monitoring and evaluating together – considering the results and impact of activities, and using monitoring information to adjust plans. A second cycle of implementation indicates a developing relationship.
5 Established and growing	Growth in continuity and in multiplexity where diversification occurs	
6 Mature	All strong, ongoing monitoring and management of the relationship	Implementation without external support would indicate a maturity and sustainability of the ongoing relationship.

Annex 4. Expanding the case study: Outcomes promoting IWRM

Building on the case study in chapter five this annex provides more information on the different outcomes undertaken through the course of the SIEP (and the preceding project work 2007-2009) leading up to the inauguration of the Wadi El Ku Catchment Management Project. The work under the five outcome areas includes the following.

1. Direct implementation

a. Small scale – groundwater monitoring (2007- ongoing). As part of a joint project with UNICEF, groundwater monitoring at IDP camps was introduced in 2007. This was the precursor to the SIEP and ran until 2014. Building on this information UNEP worked with IDP camp committees and WES to maintain a watch on water resource vulnerability at IDP camps and to keep an updated schedule of drought contingency plans at camps vulnerable to severe groundwater depletion.

b. UNOPS dam building project (2009-2013). As part of the SIEP, UNOPS implemented a dam-building project that saw the construction of seven structures and with a population of 160,000 served. Two of these structures were built on Wadi El Ku.

c. Large scale – Wadi El Ku Catchment management Project (2013-2016 expected). This project builds on all the other elements of work described in this case study. The aim is to develop a network of village develop committees (Type C relationships) along the wadi and support them in undertaking CBNRM (Type C) and improving livelihoods. These committees will form the basis of a catchment management forum, working with a committee of government representatives and civil society (Type A and B relationships).

2. Capacity building

a. GWWU (2007 – ongoing). – An ongoing programme to assist Wadis with groundwater monitoring, and management was undertaken alongside the work in IDP camps described above. In addition, support was given for the development of a national groundwater database in 2013-2014.

b. Policy dialogue (2010-2011). A national level IWRM policy dialogue was held in 2010-11 with participation across 11 government ministries (Type A relationships).

c. Environmental screening (2009-2013). UNEP deployed a senior Sudanese environmental consultant to undertake environmental screening of the UNOPS dams projects. This process saw the development of a pro-forma for environmental screening and was accompanied by the production of a guidance note and training with government staff in Darfur.[45]

3. Building collaboration

a. The development of a Darfur sector wide joint vision for IWRM was built through two study tours to South Africa in 2010. The first tour comprised technical delegates who advocated for a second tour for senior decision makers (state ministers, members of state legislatures). This developed commonality and directness across Darfur's water sector. (The vision statement is available at the consultations tab at www.unep.org/sudan.)

b. Following this a joint concept note was developed and a formal request was made by the Federal Minister of Irrigation and Water Resources to UNEP to follow up on the tours and promote IWRM. The concept note was endorsed by MEFPD and the Higher Council of Environment Forests Physical Development, UNDP and UNOPS making a significant contribution to building relationships across

the water sector and aid community. (The concept note is available at the consultations tab at: www.unep.org/sudan) This was the stage at which the national vision building process occurred.

c. In the Darfur International Water Conference a funding allocation of 70% to 30% for water supply to water resource management was decided – thereby redressing some of the imbalance in the sector and increasing parity between the two different groups. (See Example 2 in Section 3.2 for background.)

d. Ultimately this relationship building effort has reached Step 4 with the joint implementation of the Wadi El Ku project, which requires cross-government collaboration for its implementation. As Wadi El Ku progresses, greater emphasis will come on to the building of relationships amongst the communities (Type A) and then bringing a network of communities together with a cross government committee rebuilding Type A relationships.

e. Assisting GWWU to engage in humanitarian coordination functions enabled support to the relationship between GWWU and the DWSU. Project funding will be available to GWWU under the WEK project addressing in part the underfunding of GWWU for support to humanitarian activities.

f. As part of the SIEP messaging on climate change, pastoralism, IWRM, and CBNRM is mutually integrated across the project themes. For example, participants on the UNEP IWRM programme in government were part of the steering group for the climate change work to develop Sudan's National Adaptation Plan.[46]

4. Mainstreaming and Advocacy

a. UNICEF IWRM programme (2007-2013). The joint project with UNICEF and UNEP enabled water resource concerns to be integrated within the emergency WASH sector. UNICEF hosted a UNEP staff member in their offices to implement this work in partnership with a UNICEF recruited national staff member who had dual reporting lines to the UNEP staff and to the UNICEF WASH coordinator.

b. UNOPS Urban Water supply (2010-2014). In addition to the £3.9M on dam building that UNOPS undertook within the SIEP, UNEP worked with UNOPS, the TDRA and DFID to develop a project of £6.6M for UNOPS to apply IWRM principles in Darfur's urban areas. UNEP's analysis had identified the urban areas as being acutely vulnerable to the impact of drought compounding the problems of mass displacement from rural areas to the cities.

c. Agency strategies. (2007 – ongoing). Building on UNEP's research and analysis, UNEP provided a "help-desk service" to support other UN agencies (e.g. UNDP, FAO) in the development of NRM work in concept notes and strategies.

d. Strategic planning processes (2007 – ongoing)Research and analysis undertaken within SIEP is reflected in the UN and government strategic plans for this period.[47] For example, UNEP chaired the natural resources management working group in the Darfur Recovery Strategy launched in 2013.

5. Awareness raising

a. Social media.[48] Information on IWRM is disseminated through UNEP's website, social media and mail shots and press releases.

b. UNEP publications. For example, UNEP's 2009 report 'The case for drought preparedness', which drew attention to the risks of groundwater depletion in Darfur's cities and IDP camps and identified the potential for IWRM in Darfur. UNEP's report 'Governance for Peace over Natural Resources' was launched at the 2013 Donor conference in Doha, which also saw the launch of the Darfur recovery strategy.

c. Parliamentary briefings, for example at the federal parliament, North Darfur and South Darfur in 2011, by a senior water resources specialist from the Sudanese diaspora in South Africa. This was part of a significant "south-south" collaboration on water that raised the profile of IWRM in government circles significantly.

d. Participation in events such as the 2010 Darfur International Water Conference, which received high media profile and in annual World Water Day celebrations.

Annex 5. Workshops that build collaboration and shared understanding

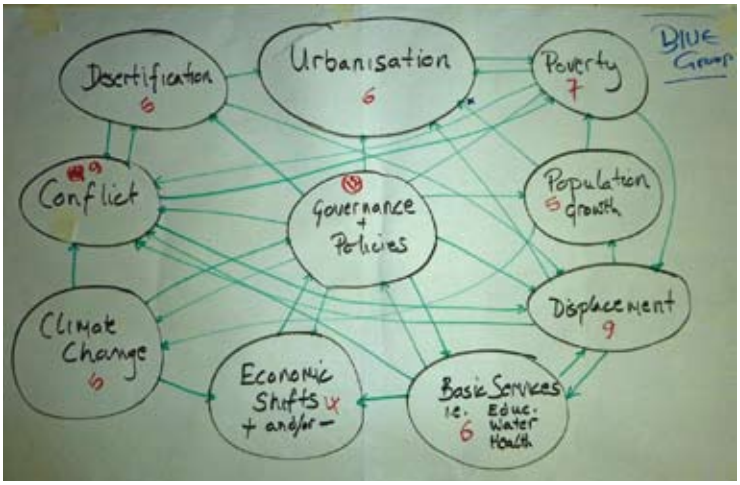
Given the complexity of the social and environmental dynamics relating to conflict in Darfur, no simplified model of causality is going to receive universal acceptance. In fact, the presentation of cause and effect by an outside body may polarize arguments, rather than bring a consensus that provides a platform for problem solving. An alternative approach to establishing shared understanding as a platform for action exists in bringing the right groups together for a joint problem analysis and development of a shared vision and priorities for action. This is an approach that seeks to acknowledge this complexity and work with it, assisting decision makers and project stakeholders to explore the issues in a manner that is accessible but avoids oversimplification.

These joint approaches have been a critical element of the SIEP and relate to the work reducing the fragmentation of the environmental sector. Workshops in which the right actors - those with access to relevant knowledge, influence and resources attend and have featured highly. Structured dialogue in the workshops, informed by research undertaken by a number of organizations present, and concluding in the production of a document that is endorsed by the participants have enabled a deepening of understanding and the emergence of shared agenda for change.

One such example was the SIEP 2012 programme consultation in which 18 organizations were represented. The workshop included the development of a shared problem analysis, identification of means of enhancing the internal integration of SIEP and a foundation of planning for a follow on programme. The workshop included rich contextual analysis by the expert participants convened, the main conclusions were recorded but the dialogue could not be captured in its entirety. What was significant however, was that the mutual understanding of the context was enhanced by the interdisciplinary dialogue – comprising thousands of exchanged amongst informed individuals – and collectively this process was acknowledged as the platform for refining the design of the ongoing project.

Another example was held in March 2010, and is known as the El Fasher Climate Conference hosted by the UN Resident Coordinators office. This workshop endorsed the analysis that Darfur was adapting to concurrent processes of change and that reforming environmental governance was a key strategic objective to support livelihoods in Darfur. This work provided the foundation for the UN recovery planning in Darfur at the time as published in the report 'Beyond Emergency Relief: Longer-term trends and priorities for UN agencies in Darfur' (United Nations, 2010).

The climate workshop reflects some standard features of the two-day workshop processes UNEP held over the course of the project.



Sample output from an interdisciplinary working group contributing to the shared problem analysis for livelihoods in Sudan. This group highlighted the central importance of governance and policy issues by locating that in the centre of the diagram. Linkages between these issues are drawn on the diagram and then the number of linkages to each issue is counted to give an indication of its significance. Governance and policy was given 12 linkages, and the next highest is for conflict with 9. Source: SIEP 2012 programme consultation. Source: UNEP (2012b)

- An opening session with dignitaries from participating organizations provided political endorsement for the process (directness enhanced by high level engagement).
- Presentations by key participating organizations (promotes parity where all relevant organizations have a voice)
- Working groups discussed subtopics in detail, which promoted multiplexity as depth of understanding is shared.
- Results from working groups were shared with a gallery walk that allowed comments between participants of different working groups – enhanced multiplexity, particularly as a result of the interdisciplinary nature of this element.
- End of Day 1. The workshop secretariat prepared a vision statement on the basis of the outcomes of the working groups.
- Panel Discussion opened Day 2. Enhanced parity as it reinforced engagement of hosting organizations who selected panel members and voice for all present – everyone had a chance to "have their say" to the wider group in the plenary session. The informed discussion continues to contribute to multiplexity.
- Returned to working groups. The vision statement is reviewed.
- Comments were fed back for the vision statement to be refined.
- The final version of the vision statement was endorsed in a plenary session by a show of hands.

The result of this process is that:

- A shared vision statement was articulated and endorsed – a milestone in developing commonality in the relationships of organizations present.
- Continuity was enhanced through the shared experience of achieving this shared vision.
- Multiplexity was enhanced by the mutual understanding.
- Directness was strengthened by the engagement in the process of the organizations (particularly at higher level as discussed).
- Parity was enhanced through the shared nature of this process.

The clear articulation of shared priorities for action mean that the production of shared vision documents fit well at Step 1 of the *measured pathway* described in this report. The two main results that these documents contributed to are the production of a joint concept note that identifies the steps towards concrete shared action (as per Step 2 of the progression) and influencing documents produced for wider awareness raising. The climate document was used in the UN recovery planning as described above. Both of these apply to the IWRM example in which the vision statements from the study tours were used for the joint concept note on IWRM – ultimately endorsed by MIWR, MEFPD, the Higher Council for Environment and Natural Resources (HCENR), UNEP, UNDP and UNOPS, and included in the appeal document for the Darfur International Water Conference.

The two-day format for consultations described above was used for work on LPG in addition to the El Fasher Climate Conference. The work on LPG had a particular emphasis on supporting collaboration between the Ministry of Petroleum, the Forestry National Corporation and the MEFPD. Production of vision statements based on study tour group work was used both for the IWRM work and for a land management study tour with cross-government participation from Darfur in 2011. One of the most detailed examples was undertaken by the Resident Coordinators' Support Office in Darfur in 2007, with technical support from Tufts University, which comprised four two-day consultations on livelihoods in different parts of Darfur (Young et al., 2007). This consultation provided a platform for the subsequent work on trade and markets for pastoralist livelihoods. It established a dialogue between as many as 160 Darfuri livelihood professionals and Tufts University who then led strategic research programme on these themes.

Endnotes

1 http://www.relationshipsfoundation.org/Web/News/News.aspx?news=35&RedirectUrl=~/Web/Search/Default.aspx?Search=cabinet%20office

2 See www.unep.org/sudan

3 See in particular the collaboration between UNEP and Tufts with reports such as "Livelihoods Power and Choice The Vulnerability of the Northern Rizaygat, Darfur, Sudan" (Young et al. 2009)

4 See UNEP, IOM, OCHA, UNU, and CILSS. (2011) Livelihood Security: Climate Change, Migration and Conflict in the Sahel.

5 See UNEP (2012) 'Environmental Governance in Sudan – An Expert Review' and UNEP (2013) 'Governance for Peace over Natural Resources – A Review of Transitions in Environmental Governance Across Africa as a Resource for Peacebuilding and Environmental Management in Sudan'

6 The actual route travelled may be considerably further than this, particularly where direct routes are not viable as a result of conflict. Young et al (2013) record one group travelling 1,373 km within less than three months.

7 See, for example the emphasis on rebuilding governance in the El Fasher Climate change vision document (2010), which recorded results of a consultation process to establish priorities for recovery programming. See also 'Beyond emergency relief' (UN, 2010). Similarly, the EU-UN guidance note on conflict prevention over renewable resources makes the same point: *"Non-violent resolution of conflict is possible when individuals and groups trust their governing structures to manage incompatible interests. When mechanisms for managing and resolving them break down, conflict becomes problematic and may give way to violence. Weak institutions, fragile political systems and divisive social relations can perpetuate cycles of violent conflict."* (EU, UN 2012)

8 Both development and humanitarian responses are relevant in different parts of Darfur.

9 This is the link between sustainable development and social relations, and consequently key to the interface between peace and development. See the discussion in 'Governance for Peace over Natural Resources' (UNEP, 2013) for more on this.

10 See 'Governance for Peace over Natural Resources' (UNEP, 2013) for a more detailed discussion of co-management.

11 Where co-management arrangements are undertaken in a holistic way aligned to the environmental context, they are referred to as "ecosystems based approaches". These add value by being aligned with the natural processes of the environment, for example erosion control in Integrated Water Resources Management.

12 The livelihoods model has placed the shocks and stresses in the same box as institutions and policies, as they all comprise the context in which the decision to deploy a livelihood strategy to make use of the existing assets is made.

13 Most of these community-based efforts have been through traditional mechanisms, through government initiatives and through international organizations working in Darfur (notably project work funded by the Darfur Community Peace and Stability Fund and through UNAMID Civil Affairs).

14 This includes both "bonding" and "bridging". Bonding relates to building relationships within a group, and bridging between groups (Putnam 2000)

15 Efforts have been made to regulate this type of inward investment, but they often rely on codes of practice that do not carry the same weight as international law. If the local community is reliant on local courts or customary law to maintain traditional rights to resources these may not provide adequate protection. See Ismar (2013) for a discussion of governance in these contexts. See also Deng (2012) on how the South Sudan Law Society has developed guidelines for private sector engagement with communities.

16 UNDP's work on governance in post-conflict recovery reflects the importance of a network of relationship and is described in 'Governance for Peace: Securing the social contract'. UNDP identifies the four key objectives: 1. Building responsive and accountable institutions; 2. Promoting inclusive political processes; 3. Fostering resilient state-society relations; and 4. Promoting partnerships.

The World Bank World Development Report took the theme of Conflict Security and Development in 2011. The report was built around a model that showed the cyclical process of transforming insti-

tutions and restoring confidence on the transition from "Violence and fragility" to "Citizen Security Justice and Jobs" (World Bank 2011) . The relational language is clear – in this case focusing on Type B relationships around the confidence citizens have in institutions. This emphasis was within a wider agenda of conflict reduction and justice relating to Type C relationships. This link is seen in the main message of the report: "strengthening legitimate institutions and governance to provide citizen security justice and jobs is crucial to break cycles of violence". Similarly the 2004 World Development Report 'Making services work for the poor' (World Bank, 2004), included another relationship-based analysis, with a framework comprising clients, providers and policy makers. The report argues that the poor fare worse in holding providers accountable for the provision of education, electricity, health, sanitation and water than the rich, as a result of accountability being via policy makers to whom they also have less access. Social exclusion (poor Type C relationships) were linked with ineffective Type A and B relationships.

17 Of the numerous case studies examined, three are discussed in this chapter. UNEP had direct involvement with examples of building collaboration between institutions (Type A relationships). Partner organisations provided case studies of all three relationships (Type A, B, C) given their greater engagement at community level.

18 Pasterur (2006) stresses the importance of the cyclical nature of "double loop learning" for aid organizations. The relationships they have enable their assumptions about a country to develop rather than simply responding to stimuli according to the assumptions they hold. This represents a genuine growth in multiplexity between a donor organization and its in-country partners.

19 The absence of reliable data on the national herd size means the real value is not known (Behnke, 2012).

20 See Young et al. 2013 'Pastoralism in Practice: Monitoring Livestock Mobility in Contemporary Sudan'

21 New identity cards were issued in Sudan following the secession of South Sudan.

22 The three sets of meetings were: 1. Civil society including Community Based Organizations; 2. Traditional leadership, professionals and government officials, 3. A training event for activists promoting social peacebuilding activities. This work was undertaken with support from AECOM and USAID.

23 See www.unep.org/sudan

24 See the SIEP 2012 programme consultation for a practical example of this approach (UNEP, 2012b).

25 The policy-influencing approach of technical UN agencies is classically 'advisory', in that it is evidence-based and focused on lobbying, cooperation and inside-track; rather than 'advocacy' evidence-based and outside track, focused on activism. (Stuart and Hovland, 2004; Jones, 2011).

26 Terminology for these stages varies, with "project purpose" sometimes being used in place of "outcome", and "project goal" in place of "impact". In addition, institutions differ as to whether a project can have one or more defined outcome, or whether there can be "intermediate states" between the outcome and the ultimate impact at the community level. This report understands that the key feature of an outcome is that it is a result shared between the work of the project and of partners. It is a critical stage in the theory of change. It takes the view there can be a number of outcomes – under the different technical themes in the IEP – each one in collaboration with a different part of government as the lead partner – forestry, water resources etc. This underpins the IEP object of bringing coordination across government.

27 This includes both "bonding" and "bridging". Bonding relates to building social capital (relationships) within a group, and bridging between groups.

28 See www.unep.org/sudan and https://www.facebook.com/UNEPSudan?ref=ts&fref=ts

29 See the South South Cooperation Case Study on the interaction with South Africa on this work. Within UNEP the reliance of a national voice and decision making within the programme was a strong team ethos and a strategic priority so that emerging approaches to governance had a maximum of national ownership.

30 This project is set to run form 2013-2016 and is being implemented with EU and Sudan government funding.

31 The work is being undertaken by Practical Action who have a strong track record and are well known to the communities in this area – they therefore have access, trust and convening power to achieve this work.

32 The Darfur Regional Authority was set up in 2012 under the Doha Document for Peace in Darfur signed in 2011. It provides greater regional autonomy for Darfur. It supersedes the Transitional Darfur Regional Authority that was set up in 2007, following the Darfur Peace Agreement signed in Abuja in 2006.

33 The suffering of this period was also compounded by famine, particularly severely in 1888-92. It is noticeable that during this longer period there was conflict internationally with the contraction of the Turkiyya and the First World War, conflict nationally between Khartoum and Darfur, and conflict at the tribal level.

34 It should be noted that Fur for example, would more accurately be described as agropastoralist as they practiced pastoralism with shorter-range migration in addition to farming activities. This is a predominantly sedentary way of life rather than the migratory pastoralism of groups such as the Northern Rizaygat or Bagarra.

35 These different levels of conflict operate over different time scales – this fact will need to inform ongoing resolution efforts.

36 The interface between government and traditional leadership in these agreements is also important. In 2010, the governor of South Darfur announced that the government would no longer pay blood money in the resolution of tribal disputes recognizing that this undermines the bilateral relationship between the communities. The move was designed to strengthen customary conflict resolution by reducing the role of government as a third party to what was considered to be an issue for tribal authorities.

37 The Darfur Land Commission has undertaken a project to record the customary law over natural resources. See Tubiana, et al (2012) Tanner, and Abdul-Jalil.

38 See the review undertaken by two senior Sudanese environmentalists in 'Environmental Governance in Sudan: an expert review' (UNEP, 2012).

39 See 'Governance for Peace over Natural Resources' (UNEP, 2013) that reviews governance elsewhere in Africa. Study tours make a similar contribution. See also UNEP's South – South Exchange programme for a resource on approaches to knowledge sharing. The Sudan - South Africa exchange programme undertaken in SIEP is described as a South – South Exchange case study. http://www.unep.org/disastersandconflicts/portals/155/countries/Sudan/pdf/SouthSouthCooperationCaseStudy.pdf

40 See the research and study programme as per the publications at www.unep.org in particular the studies on pastoralism, trade and markets. UNEP undertook a major scanning exercise to create a digital archive of 1,300 reports and 2,000 maps relating to Sudan and Darfur in particular. This one of a number of significant Sudan archives. See also the Durham University Sudan Collection and the Rift Valley Institute Sudan Open Archive. https://www.dur.ac.uk/library/asc/sudan/ http://www.riftvalley.net/project/sudan-open-archive#.U2t8iZUU_IU

41 See Governance for Peace Over Natural Resources – Chapter 4, for a discussion of this issue. (UNEP 2013)

42 See consultation documents on climate change El Fasher 23-24 March 2010, IWRM – study tours 28 May and 9 November 2010. See Consultations tab at www.unep.org/sudan See also consultation on land and natural resource management (UNEP, 2014b)

43 Eyben (2006) makes the case that a relationships based thinking to the process of aid itself is required in order to "take collective responsibility for shared transformative learning – that is learning that results in action leading to irrevocable changes to the better."

44 See Buchanan-Smith and Bromwich (2014) for a discussion of short-term and long-term goals for humanitarian programming and peacebuilding in Darfur.

45 This focused work on dams was in addition to the environmental mainstreaming on UN humanitarian workplans.

46 For an example of how this integration was achieved see the 2012 SIEP programme consultation.

47 See UNDAF 2009-2012, UNDAF 2013-2016, UN and partner Humanitarian Work Plans 2008-2014. See also the Darfur International Water Conference (Donor conference) and "Beyond emergency relief" UN (2010).

48 See www.unep.org/sudan and https://www.facebook.com/UNEPSudan?ref=ts&fref=ts

Further technical information may be obtained from the UNEP Post-Conflict and Disaster Management Branch website at: **http://www.unep.org/disastersandconflicts/** or by email: **postconflict@unep.org**

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