



Putting it into practice

Selected case studies on CBNRM projects in Sudan



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PUTTING IT TO PRACTICE - SELECTED CASE STUDIES ON CBNRM PROJECTS IN SUDAN

1. BACKGROUND

Across Sudan, local communities are facing a number of concurrent processes of change, including climate change, drought, population movement and, in places, conflict. These processes threaten the natural resource base communities rely on for their livelihoods. Understanding the dynamics of and changes in natural resource use and availability at the community level is considered a key component of UNEP Sudan's work and informs UNEP's engagement with all partners. Working with communities to understand and to enhance community, local-level natural resource management will help empower communities and increase their resilience to changing climatic and economic conditions.

This report shares case studies that were presented at the Community-Based Natural Resource Management (CBNRM) policy workshop held in Khartoum, 8–10 October 2013. The workshop brought together practitioners in the field of CBNRM and community members to discuss lessons learned from previous CBNRM processes, to identify common challenges and to define a strategy on how to scale-up CBNRM processes and make them available to a greater number of communities throughout Sudan.

The case studies presented in this booklet formed the basis for the discussions during the workshop and informed the recommendations that were agreed on by the end of the workshop. The case studies are not meant to form an exclusive list of approaches to CBNRM; instead, the case studies should be considered a tool to inspire and facilitate dialogue on past experiences and best practices, with the aim of increasing the understanding and the scope of community-based engagement with respect to natural resource management.

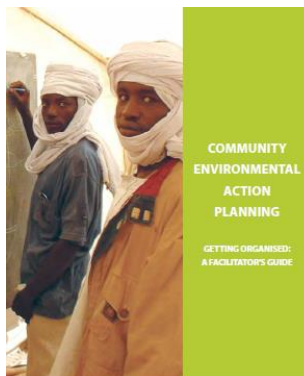
One of the recommendations evolving from the discussions at the workshop was that community-based approaches have a strong impact at the community level but need to be better reflected in donor and government policies, in order to sustainably change practices on the ground. This set of case studies forms part of the documentation that UNEP hopes will support policy dialogue at all levels.

CEAP toolkits and manuals

There are many entry points and a wealth of methodologies for CBNRM; the case studies presented herein only provide a small glimpse of approaches used in Sudan and are by no means exhaustive. The approaches selected for a CBNRM exercise depend greatly on the community, the natural environment in which the process is to take place, cultural norms of the people involved and the individual preferences and skillsets of facilitators.



Over the course of the Sudan Integrated Environment Programme, UNEP Sudan and its partners have initialised and carried out various CBNRM processes, under the name of CEAP—Community Environmental Action Planning. This experience has been captured in a set of publications that will support CEAP practitioners and facilitators in carrying out community-based natural resource initiatives. These publications also aim to increase the understanding of what a CEAP process is, and what impact it can have on local communities and the environment.



The Synthesis Report provides an ideal introduction to the methods and concepts that constitute a CEAP process, which is then elaborated further in three technical reports. The Synthesis Report will be of interest to both practitioners and decision makers dealing with CBNRM, and others who wish to gain a basic understanding of the CEAP approach.

The **CEAP Facilitator's Guide** introduces participatory tools to engage with communities, facilitate discussions and mobilise community members. It offers essential tips for facilitation, site selection, identification of topics to explore and selection of tools to be used.



The **CEAP Handbook for Practitioners** provides an overview of tools and approaches that could be used by individuals, groups or organisations to plan, carry out and evaluate environmental management activities on a participatory and sustainable basis, either on their own initiative or with outside facilitation and assistance.

The **CEAP Toolkit** also addresses practitioners and presents the 40 most tried-and-tested participatory tools and approaches that can be used in a CEAP process or in community workshops in general. The concept and design of the publication allows for facilitators to make well-informed decisions as to which tools are the most useful for their respective projects.



The full CBNRM policy workshop report, the CEAP Synthesis Report, and the three CEAP technical reports are available on the website of UNEP Sudan, www.unep.org/sudan.

2. CASE STUDIES

2.1 COMMUNITY-BASED FOREST RESOURCE MANAGEMENT IN SUDAN

Forests National Corporation (FNC)

Summary

- Sudan can demonstrate a number of different interventions where CBNRM has been a central part of community forestry development and application. However, the extent to which lessons have been learned from these experiences is not clear.
- Many positive actions have been determined, which have encouraged and enabled the engagement of communities in forest-related CBNRM. Some less positive experiences have also been identified, which are equally important from a learning perspective.
- The biggest community plantation programme that made a breakthrough in social forestry in Sudan was the restocking of the gum Arabic belt project (1981-1996), where more than 100 million seedlings were distributed and planted on communal land.

Project background

Policies and laws related to community forestry

Sudan's first forest legislation was enacted in 1901, followed by subsequent revisions in 1908 and 1917. In 1932, a forest policy was declared, primarily to resolve conflict between central- and local-government authorities over the management and administration of forest resources, by defining the functions and responsibilities of each. This policy articulated the concepts of community forestry by advocating that farmers be encouraged to grow trees and regard their value as similar to that of field crops.

In 2005, a new forest policy proposal was formulated through an extensive community consultation process. Drivers for this review included poverty reduction; improvement of livelihoods; improvement of the physical environment, including combating desertification; development of oil production; economic reform for stabilisation and liberalisation; the 2005 Comprehensive Peace Agreement and the demand for better governance and commitment to international conventions.

Sudan's experience in participatory approaches

Community forestry in Sudan is defined as "any forestry activity by individuals or groups in the community to improve their income and protect the environment and appreciate the environmental value of forests in meeting their essential needs."¹

The practice of community forestry started in Sudan in 1978 with the establishment of tree belts in Nile State to protect agricultural land from sand encroachment and to promote a revival of traditional agricultural land. To address further land deterioration, the forestry administration—in collaboration with international organisations—sought to involve local communities in the process of forest planting and protection.

¹ Abdel Magid, T.D.2011. Sustainable Forest Management through community participation. Paper presented to the Community Based Forest Management Workshop. Sahelian Center for Information and Forestry Training SACIFT-Forests National Corporation in collaboration with Zain Company.

Resulting community forests have been developed for multiple purposes, the main one being the generation of revolving funds to support village development in aspects such as school maintenance, water supply development, health services, poverty reduction and the provision of wood to village inhabitants at subsidised prices.

A major driving force for community-based forest management during the 1980s was the fact that forest resources were declining at an accelerated rate, largely attributed to the lack of monitoring of illegal logging and extraction, as well as the inability to enforce forest laws. It became clear that forest policies, which excluded communities from forest management, were not working and that involving communities in CBNRM could potentially provide a win-win solution—supporting both the communities and the environment.

More formalized community forest development and management materialised around 1984 and consisted of two principal activities: the establishment of plantations and the development and management of natural forests. Other types of community forests are connected to the rights and privileges of communities living within and around forest reserves; these rights and privileges include participation in forest management, collection and sale of dead wood and non-wood forest products.

Some important and relevant community forestry projects that have boosted the concept of community-level participation have included the following:

- **Joint Afforestation Project.** This project between the government of Sudan and the Sudan Council of Churches in the Northern Region (presently, River Nile and Northern states) ran from 1977–1985.
- **Fuelwood Development for Energy.** A project funded by the government of the Netherlands, and implemented by the Food and Agricultural Organization of the United Nations and the Central Forests Administration, started activities in Khartoum and the Central and Eastern states in 1984. Activities included community woodlots and extension programmes involving farmers, school planting and the manufacture and dissemination of improved and fuel efficient stoves.
- **Sudan-Finland Afforestation Project.** Running from 1979–1991, this project included extension programmes in White Nile State and agroforestry models.
- **Restocking of the Gum Belt Projects.** With the support of the United Nations Sudano-Sahelian Office (UNSO), this project in Kordofan and Darfur states focused on training farmers, establishing decentralised nurseries, developing communications and establishing forestry extension services. It ran from 1981–1994.
- **UNSO Afforestation and Reforestation Project in Northern Region of the Sudan.** Project activities included sand encroachment controls through the establishment of shelter belts, windbreaks and land management activities, all of which were implemented with a high degree of community participation. The project ran from 1986–1995, covering 22 villages with 100 individual farmers in the Letti Basin.
- **Women's Forestry Project, River Nile State.** This project grew out of SOS Sahel's first project in Sudan, the Village Extension Scheme, in the Shendi area of River Nile State. This 1985–1993 project covered a wide spectrum of activities aimed at protecting natural resources and improving living standards through the establishment of village nurseries, woodlots and village shelter belts—all of which were achieved through the work of local people.
- **Rehabilitation of Refugees-Hosting Areas, Eastern Sudan.** United Nations High Commissioner for Refugees, in collaboration with the FNC and state authorities,

designed a focused project to support the livelihoods of refugees and local communities in refugee-hosting areas in Gedaref and Kassala states. Community-based activities included awareness raising, community mobilisation, provision of energy alternatives, agroforestry, landscape rehabilitation, capacity building and other income-generating activities.

Indicators from community forestry activities

Positive and less positive project indicators were taken from a range of different activities, where community forestry project sustainability was thought to have been more than 60 per cent. Positive indicators included the following:

- Strong structural organisation of the target groups;
- focus on local varieties of trees, and ones able to yield local economic returns to beneficiaries;
- effective extension and training programmes;
- involvement of women;
- linking of the poor and often landless—along with other beneficiaries—to the FNC;
- acknowledgement and adoption of local knowledge for agroforestry and gum production;
- sound organisational structure of beneficiary communities, focusing on strengthening and rebuilding traditional systems where possible;
- design and implementation of specialised extension programmes for nomadic and semi-nomadic farmers and women;
- enabling of changes to the land ownership system;
- resolution of natural resource conflicts between pastoralists and farmers;
- positive results of research programmes leveraged to resolve conflict and to implement forest management; contributions to the agricultural economy;
- initiation of a union of community forest owners;
- targeting of individual property; and
- acknowledgement of the importance of traditional, local knowledge.

While many activities showed a high return on “project sustainability”, other initiatives showed a particularly low degree of acceptance and uptake. It is worth considering the reasons believed to contribute to the low adoption rate; they include the following:

- community participation depended on men more than women;
- dependence on male extension agents;
- public—rather than private—ownership of forests was the focus;
- level of education;
- poverty levels;
- lack of organisational structure, for example, poor committee organisation and insufficient training received;
- lack of centralised nurseries capable of sustainable economic production;
- reliance on exotic rather than local species;
- beneficiaries’ lack of information capacity in the field of technical forest management; and
- land disputes and the conflict between nomads and farmers.

Snapshot of experiences

The **Gireigikh Rural Council** area of **Northern Kordofan State** has been the site of community-based rangeland rehabilitation, designed to promote climate change adaptation and mitigation actions through biodiversity conservation. These efforts include revegetation to help restore the balance between methane production by animals and carbon sequestration by vegetation. The social and economic welfare of communities is incorporated through the development of alternative livelihood options, which reduces stress on local biodiversity.

Sustainable grazing practices, including rotational grazing and fodder conservation, have been implemented, and farmers have been planting more drought-tolerant crops. Native tree seedlings have been cultivated to help impede the encroachment of sand dunes and provide shelter belts. The seeds of native trees, shrubs and grasses have also been spread across rangelands to help maintain vegetative cover, improve fodder production, augment soil fertility and increase carbon fixation. In areas where desert encroachment was threatening economically susceptible areas, around 5 km of denuded sand dunes were revegetated and stabilised. A further 195 km of windbreaks were constructed, buffering approximately 30 farms.

CEAP-related activities in **eastern Sudan** have had some notable success in terms of generating income and improving the environment. Continuing challenges relate to ensuring sustainable management of project activities, successful handing over of project management, identifying additional funding and assuring that the measures introduced by the project are appropriate and relevant to the needs of the people.

The **Nabag Forest in Southern Kordofan** has been a reserved forest since 1961 but has experienced considerable degradation from both natural factors and people. Raising awareness of the importance of the forest and the production of gum has led to increased individual landholders' willingness to practice agroforestry (*hashab* and crops) within their land holdings in order to boost the productivity of agricultural crops and their income.

Implementation of the rehabilitation programme through public participation, which included 500 families (about 4,000 people), played an effective role in the economic domain and resulted in some 5,000 acres of trees planted, in addition to reconstruction of private *hashab* gardens around the forest, which amounted to more than 1,710 acres. Since 2004, almost 6,000 acres of land has been rehabilitated with seeds and seedlings.

The successful implementation of this programme has raised environmental awareness amongst the participating communities and state government officials on the importance of forests and the role that could be played by these forests in the stability of rural communities, particularly in improving livelihoods and food security.

More than 90 per cent of the people confirm that revenues from the implementation of this programme have economically, socially and effectively contributed to reducing poverty in the area around the forest. Average incomes have increased by almost 150 per cent.

A project aiming to **Revitalise Sudan Gum Arabic Production and Marketing**, funded by the Multi-donor Trust Fund and the International Fund for Agricultural Development (IFAD) and implemented by the FNC, focuses on community activities in **Blue Nile, Sennar, White Nile**,

North Kordofan and South Kordofan states. The objective is to increase the production and income of small-scale gum producers through improved performance of the production and marketing systems. A package of activities were designed to bring association members and leaders to a level of knowledge and competence that would allow them to take full long-term responsibility for their own economic development, with respect to gum Arabic production and marketing (and to other applicable products). Achievements, thus far, include sector reform studies (baseline surveys, auction market studies, and value chain analysis), the design of training and capacity building programmes and microfinance support.

Growth factors shaping the evolution of community forestry schemes and other woodlots

The development of community forestry schemes in Sudan is considered an innovative approach for increasing forest cover and a contribution to economic development. The historical development of these schemes indicates that there are many factors that boost their growth.

The area of community forests has sharply increased since 1984, when conditions for such an initiative were first enabled. It is expected that the incentives provided by community forests (reflected through contributions to village development) and the incentives provided by institutional forests (indicated by contributions to the budgets of irrigation schemes and farmers' unions) are strong factors for the development and growth of these types of forests.

Historically, gum Arabic gardens have supported the Sudanese economy at both the household and national levels. In this aspect, gum Arabic is an incentive that encourages gum growers to manage the gardens in order to support their livelihoods. The large area of Sudan provides a vast land resource for forest establishments. Processing and registration of forest reserve titles, in the Sudan gazette, provides forest holders security of ownership of the land and of the trees that grow thereon, and encourages landowners to grow crops and trees. Improvement in the system of registration of forestland will encourage investors (community and private) to enter into this venture ². Moreover, improvement in the gum Arabic sector through deregulation and the removal of the price floor resulted in an increase of the gum price and revenue to small producers.

Another potential growth factor for development of community forests is the increase of tree cover in agricultural lands with agroforestry systems and in woodlots establishments. With increasing extension services, farmers will adopt such systems, which will be of great benefit to them with respect to agricultural yield improvement and provision of forest products.

With increasing development of dams along the Nile and its tributaries, the irrigation water potential will be facilitated by irrigation schemes, which will enhance increasing irrigated plantation areas. Moreover, microfinance policy currently in place encourages individuals and communities to establish their own forestlands.

² Mohamed, A. G. 2011. Forest Plantations/Woodlots in the eastern and north-eastern African countries of Kenya, Tanzania, Uganda, Burundi, Rwanda, Ethiopia and Sudan. Sudan Report. African Forest Forum

Conclusions and recommendations

This case study outlines some of the economic impacts of community forests and the policy and institutional arrangements that are in place and evolving to manage natural resources. The interaction between communities and forests in Sudan is very dynamic with wide-ranging ecological, social and economic conditions and a long narration of different community forest models, as presented by the different success stories herein. The state's role to preserve forests has increasingly diminished, with a drop in finances and reduction of expenditures to meet the running costs of forest plantation and management. Consequently, an inquiry has materialized recently as to whether the hub paradigm of forest resource management concerning protection by law enforcement is the right approach. One scheme that has come to light and provides a solid rewards base is community-based forest management. These and other developments have led to a paradigm shift: one of the feasible options for forest protection is to make the community living nearby the forests the protectors of the forest resource, and this has led to the emergence of community-based forest management (CBFM).

Devolution of administrative responsibilities to subnational entities and increased emphasis on community participation is one of the major policy and institutional changes in the forest sector in Sudan. This is an important change and underlines the need to further highlight the following:

- Collaborative forest management represents a progressive shift toward state recognition of the interdependence between the well-being of forests and the welfare of local people who may depend on forests for subsistence and livelihood needs. From attempts to create collaborative forest management in Sudan, it can be concluded that it is possible to arrange benefit sharing within a community, to motivate local people to participate in forest conservation and rehabilitation, and to achieve community-controlled forest protection.
- Exclusion of communities is not only impractical but undesirable. Increasing evidence indicates that forest-dependent villagers are well positioned to participate in the management of forestlands, especially when supported by some security of access or land tenure, and by technical assistance. There is also a need for a clear statement of policy changes in relation to community forestry development to facilitate procedures for community ownership and forest reservation
- Programmes chosen should be acceptable to the communities and should not require any complicated cultural or adaptive changes.
- Land tenure should be tackled in such a way as to secure participants' rights.
- Community forestry programmes should be part of an integrated land use plan.

2.2 COMMUNITY-BASED ENVIRONMENTAL ACTION PLANNING (CEAP), NORTH DARFUR

SOS Sahel, Sudan

Summary

- CEAP subcommittees have been established and now oversee activities such as dam construction, irrigation, rangeland improvement and provision of access to water.
- The project has stimulated a remarkable improvement in peoples' relationships to such committees, which has resulted in coordinated efforts to manage dam construction and maintenance, and farming and grazing.
- Economic ties have improved relationships between communities, for example, through farm labour, crop sharing, land rental and even providing (to friends and relatives at no charge) farmland for cultivation.
- CBNRM networking is needed.



Objective

To improve the ability of nomadic pastoralists and resident communities to manage their environment and natural resources in a more sustainable manner, and to cope effectively with environmental challenges such as climate variability and intensified land use.

Specific objectives are as follows:

- engage nomadic pastoralist communities and resident communities utilising the same landscapes in natural resource management;
- build the capacity of local nomadic pastoralist networks to enable them to lead CEAP processes and promote more sustainable environmental activities; and
- adjust CEAP approaches to the specific needs of nomadic pastoralist communities.

This project is undertaken in collaboration with the North Darfur State Ministry of Agriculture, Rangelands and Forestry, and two community-based organisations (CBOs), the North Darfur Nomadic Organisation Network and the Voluntary Rural Development Network. Additional technical support is provided by the Water and Environmental Sanitation (WES) project and the Ministry of Physical Planning and Public Utilities.

Project background

The project area is located some 40 km west of El Fasher town. It is bordered by Tawila locality to the south, and Korma and Kutum to the north and northwest, respectively.

The population—around 22,500 people grouped in some 3,200 households—is represented by pastoral nomads and agricultural farmer groups living in four village councils: Kuaim, Sarafaya, Kussa and Umassal. The main tribes are the Etifat, Eregat Arab, Zaghawa, Tongour and Berti. Predominant livelihood activities for farmers are rain-fed farming on *Goz* (sandy soils), in addition to winter cash crops on *wadi* (seasonal stream) banks. Nomads and

agropastoralists rear livestock on the surrounding communal lands and also migrate seasonally in search of better pasture and water.

This project addresses many livelihood strategies in terms of providing water, improving soil fertility and improving rangeland quality, all of which have contributed positively to both farmers' and herders' production and income.

Tensions and potential conflict have previously been experienced in the project area, primarily in relation to grazing animals on farming land, the expansion of cultivated areas onto traditional animal movement routes, the loss of access to pastureland and livestock raiding.

Since the outset of this project, community leaders have played a significant role in mobilising community participation. This has resulted in the formation of four CEAP's subcommittees and two CEAPs processes: Kuaim and Sarafaya, and Umassal and Kussa. The project has also helped to reinforce the work of existing water management committees and to revitalize other weakened institutional arrangements.

Traditional natural resource management systems were featured in the design of this project. For example, in the Kuaim CEAP, resource disputes are managed by a chancellor's council of 32 members in addition to the traditional and highly respected Ajaweed system.

CBNRM

Conflict and poor management of natural resources places stress on livelihoods and curbs future opportunities. The CBNRM approach acknowledges the fact that the livelihoods of nomadic pastoralists and farming communities are complementary and that conflict can be reduced and avoided through the use of participatory natural resource–management mechanisms, such as CEAP. SOS Sahel's prior experience with participatory approaches in Kordofan complements the CEAP methodology.

The project used the ProAct Network–UNEP CEAP framework, which outlines a participatory learning approach or natural resource management. Among the tools used were:

- environmental asset assessments;
- community mapping and visioning;
- seasonal calendars and timelines;
- problem and solution trees;
- stakeholder analyses;
- rapid environmental assessments;
- prioritization; and
- action planning.

Challenges experienced

- The complexity of the Darfur conflict, the unpredictable security situation and the involvement of many actors with different backgrounds and interests have been the most challenging elements in the field.
- The short duration of the project makes it difficult to address and support some community concerns. Longer timescales are needed to better understand and adopt the CEAP participatory approach.

- At first, communities were hesitant to engage with the CEAP approach. Through careful communications, however, people did start to show interest, and communities have now eventually started to actively participate and support project activities.
- Some priority activities are yet to be started, as they are outside the ability of communities to fund, for example, access to drinking water.



Main impacts of the projects

- Several positive developments have been observed among the CEAP community committees in terms of their commitment to work together, their self-organisation and an enhanced sense of ownership. For example, the Amassal and Kussa communities took the initiative to organise a collective work day—for which community members contributed tools and food, and without seeking assistance from SOS Sahel—to repair weakened dam structures. Likewise, at Kuaim, people have built protective shelters for the water station engines.
- The partners' interest was also demonstrated by encouraging communities to unify and pay special attention to peaceful coexistence, resulting in fewer conflicts over natural resources.
- Access to reliable drinking water improved conditions for many women, resulting in less travel and waiting times for water collection.
- The newly constructed dam at Amassal heralds a real change for nomadic communities in the area and is seen as a good opportunity for nomadic pastoralists to now diversify their livelihood strategies.
- Sarafaya and Kussa communities have seen a restoration of uncultivated lands. The check-dam bed is now full of water, and the communities are anxiously awaiting better times.
- Acceptance of SOS Sahel and the CEAP project approach has greatly improved.

Links to disaster risk reduction and climate change adaptation

- Some impacts of erratic—and often poor—rainfall and drought are being reduced through traditional and improved water harvesting techniques activities such as contour trenches, terraces (*hababis*), farm bunds and dams.
- The project has the possibility to diversify crop production—rain-fed and irrigated winter crops—and to reduce the risks of depending only on rain-fed crop production.
- Climate change mitigation measures adopted by communities to mitigate deforestation and the removal of vegetation cover are being practiced in the form of tree planting.



Twenty-four members of the North Darfur Nomad Organizations' Network meet to initiate a CEAP process. Photo: SOS Sahel Sudan.

Lessons learned

- Signs are emerging of the potential for longer-term project sustainability through the project's broad geographic coverage, inclusion of all affected communities and inclusion of all main natural resource systems.
- Years of humanitarian assistance in the form of relief has shaped the mindset of communities to be more dependent on relief assistance. An underlying principle of the CEAP process, however, aims to change this thinking toward self-reliance through collective participatory actions that will bring greater, more diverse and longer lasting benefits to communities and the environment.
- Links between communities and the SOS Sahel Communication Network—where information is regularly exchanged—have proven to be very effective, especially in ensuring staff and asset safety.
- Future CEAP projects should be designed for the longer term and be in two phases: an initial phase to develop the CEAP process, and a second phase to support and monitor implementation.
- Sustainability of community initiatives will be ensured through building the capacity of the respective communities and supporting them for at least one year after the implementation of the project. Thus, long-term CEAP projects are necessary for sustainability of the intervention.

Scaling-up

Scaling-up is a definite possibility. These CEAP pilot projects with pastoralists and farmers have added a new approach to the SOS Sahel natural resource-management system. Training provided by UNEP has been much appreciated by the communities and SOS Sahel staff. Further links between SOS Sahel's experience in Kordofan and the CEAP approach now offer great potential for working with nomads and farmers in other regions.

2.3 COMMUNITY ENVIRONMENTAL ACTION PLANNING (CEAP), NORTH DARFUR

Darfur Development and Reconstruction Agency (DRA)

Summary

- The natural resource base in Darfur is shrinking. Village elders point out void, sandy areas, which were formerly forested habitats with diverse wildlife. Accounts such as this indicate the speed of deterioration of critical natural resources.
- While not new to Sudan, this project's approach—with a comprehensive application of participatory learning with communities—represented perhaps a new level of engagement with communities, one of the main purposes of which is to build individual and institutional capacity for change, both for peoples' well-being and the environment.
- Particular emphasis has been placed on capacity building and encouraging communities to not become reliant on this project alone. Evidence of how this is working can be seen from the independent follow-up by communities with government ministries and other organisations.
- The CEAP approach offers a low-cost, user-friendly and appropriate way of engaging communities, government agencies, non-governmental organizations (NGOs) and other interested stakeholders in coming together to discuss issues and to plan for a better future, for Darfuri communities and their environment.

Objective

The project goal was to develop an approach to environmental management that is both participatory and technically informed, through the support and establishment of community environmental action plans (CEAP) in selected areas in North Darfur.

Intended outcomes include the following:

- three Community Environmental Action Plans developed by community members and representatives, with the support of DRA;
- increased local capacity for CEAP development and implementation, directly or through local partner organisations (this includes instruction of trainers and facilitators for participatory rural appraisal (PRA) and participatory learning and action (PLA) approaches in relation to CEAP development);
- enablement of community stakeholder groups to manage natural resources in a sustainable manner that also mitigates and resolves natural resource-based conflicts;
- increased capacity of selected traditional natural resource-management (and related) structures, CBOs, NGOs and international organisations to allow for planning, developing, implementing and monitoring community-based environmental management programmes; and
- increased government capacity to allow more supportive and engaged community-based environmental management.

Project background

A CEAP process was initiated in 2010 in Maba community, North Darfur, to enable rural communities to improve the management of local natural resources. Key to this process has been the establishment of a discussion forum that allows people—men, women and youth—to express their concerns, opinions and needs in relation to natural resources in an open and safe manner.

Since its launch, CEAP work—facilitated by DRA—has been expanded to four village councils in North Darfur State and three village councils in West Darfur State, targeting almost 2,000 households, approximately 12,000 people. Project areas in both states share many similar features, in particular, the manner in which most community members depend on subsistence farming for their livelihoods. Subsistence farming is often supplemented with other minor activities, such as keeping small ruminants.

In addition to working closely with the targeted beneficiary communities, close collaboration has been assured with the following:

- North Darfur and West Darfur government line ministries for water, environmental and sanitation.
- Rural water corporations,
- Forests National Corporation
- El-Faher agricultural research station
- El-Fasher University;
- Women’s Development Network Organisations;
- United Nations Environment Programme;
- World Food Programme;
- Sustainable Action Group;
- Oxfam America; and
- Practical Action.

Based on community consultations, the selected interventions that have been implemented thus far relate to water supply and management, forestry conservation and community forest planting.

As in some other parts of Darfur, the pressure on a limited and shrinking natural resource base in the project areas has been a source of conflict between the settled farmers and pastoralists. However, no serious conflict over natural resources has been reported since the project started in June 2010.

As a result of this CEAP intervention, some of the participating communities now benefit from reduced time and energy spent on collecting water, increased availability of fodder for livestock, decreased need to cut valuable trees for cooking fuel and links with service provider institutions on issues and practices such as fuel-efficient cooking technologies. People are becoming more aware of the long-term need to conserve natural resources for their own livelihoods and, more important perhaps, how communities might do this on their own in the future, without the need for external guidance or assistance.

CBNRM

Environmental degradation caused by human practices of excessive use of natural resources has left many populations in a vulnerable situation, one in which their own livelihood security might now be under threat.

A number of regions within Darfur have been adversely affected by drought, and desertification is moving fast southwards. As a consequence, there has been mass population movement from North Darfur to South Darfur, where comparatively better natural resources are available. Competition over these limited natural resources has led to conflict between different groups within the Darfur community.

When local communities participate in managing their own affairs, projects are most likely to succeed and be sustained, because community members see the results and benefits from actions taken. Communities with whom DRA has been working with, since 2010, on natural resource management have demonstrated this likelihood.

DRA has been introducing a series of appropriate participatory tools that communities find suitable to apply in planning, managing and monitoring the project performance. These tools are:

- community mapping of resources and dynamics of resource use;
- seasonal calendars;
- problem and solution tree analysis;
- feasibility matrix;
- matrix scoring; is a tool that uses agrid to list, score and compare things against the same criteria.
- trend analysis; and
- stakeholder's analysis.



Community resource mapping in Maba



Assessing together the environment (using a problem tree) in Maba

Applying these participatory tools has enabled the targeted communities to recognise their strengths and weaknesses, and identify opportunities that may be available to manage natural resources in a more sustainable manner.

Throughout the process of applying these tools, the targeted communities initiated important structures based on their knowledge, attitudes and practices; these include the following:

- Water, forest, health and rangeland/pasture committees; and
- A charitable association, which has been officially registered with the Humanitarian Aid Commission (HAC).

Main impacts

- Awareness sessions and training workshops significantly contributed to raising peoples' environmental knowledge as well as the utilization of practices to manage natural resources. This was clearly indicated in the instances of people caring for new community forests, communications with local authorities on issues related to the repair of water hand pumps and contact established with relevant NGOs to obtain fuel-efficient stoves.
- In some communities, the water supply is now far better managed because of diverse activities, including the rehabilitation of three hand pumps, the installation of four new hand pumps, rehabilitation of four hafirs and the completion of two hand-dug wells.

- Alternative cooking techniques and technologies are now being used in some communities—that is, gas and fuel-efficient stoves—which have contributed in reducing the quantity of wood used.
- Community health centre employees report that after using the newly constructed, improved latrine slabs, a decrease has been recorded in the number of reported diseases.
- Technical trainings built communities' capacity to control and manage most project activities independently
- Most of the targeted beneficiaries committees are now independently liaising with relevant ministries and organisations to enable future services and support separate of this project—a sign of improved confidence and governance, as well as outreach.

Challenges experienced

- Some of the project activities—tree planting and associated training, for example—were initially planned to be implemented during the autumn months. However, this coincided with a time when people were busy with crop cultivation and harvesting. As a result, project staff had to avail themselves according to when people were able to devote time to these activities.
- The targeted communities—as in all rural areas of Darfur—depend heavily on natural resources, for example, cutting trees for cooking fuel, shelter construction, furniture making and sale as a means of livelihood support. Of late, there have been very few alternatives to this situation. To reduce the mass exploitation of natural resources, local laws need to be strengthened and livelihood projects developed to provide acceptable and sustainable alternatives.
- Potential technical service providers are often not available locally or are not available at a suitable time. To help remedy this, the project has been working towards building local capacity.
- External factors have the ability to affect work plans; for example, insecurity in the area prohibits travel and reliable access to communities for consultations and monitoring.
- Former humanitarian agencies introduced a practice of paying cash incentives to people in order to attract greater participation in public events. Not wanting to engage in this process, DRA instead has been trying to influence meaningful community participation through dialogue—sharing information and convincing people to contribute their time for their future well-being.
- More time and financial resources are needed to allow targeted communities to examine and reveal their experiences on environmental management, as well as to establish sustained CEAP coordination and support.
- Recovery of degraded landscape and diminished natural resources takes time; in the meantime, while medium- and longer-term strategies and activities are being put in place to reverse degeneration, some people have no choice but to continue to exploit natural resources, particularly fuelwood. A decrease in this type of dependency should, however, be forthcoming.
- Some communities need extended time to understand the benefits of environmental protection and how they, themselves, could become responsible for managing local natural resources.

Governance

DRA participates in regular meetings of the NGO coordination body, led by the Office for the Coordination of Humanitarian Affairs (OCHA), as well as NGO sectoral-coordination meetings

in North Darfur and South Darfur states. CEAP project activities have benefited from this coordination, for example, in terms of training communities in fuel-efficient stove making.

The targeted communities are now in direct contact with the Water, Environment and Sanitation project to follow up with drilling of hand pump wells and managing payment for spare parts. Similar contact is established with the Forests National Corporation, which provides seedlings for community forest activities, and with Sustainable Action Group to introduce bakery stoves.

Cooperation was also evidenced between Taftu and Armal village councils while opening fire lines for cultivation: both communities coordinated work on the area, which separates one from the other. Other communities have received training on different aspects of the project and are now exchanging their experience while implementing project activities.

Links with disaster risk reduction and climate change

- The targeted communities of North Darfur State have built wind blocks to protect new, planted forests and reduce evaporation.
- Water harvesting is being practised in many communities to help alleviate water stress during the dry months.
- As a result of these activities, more fodder, which supplements summer grazing, is available for communities to harvest
- Fire lines are clearly demarcated on farmlands and pasturelands to reduce potential loss of resources in case of fire occurrence.

Lessons learned

- The CEAP process has enabled many community members to acquire valuable negotiation skills; individuals are now capable of addressing issues regarding community needs and priorities.
- Active participation by community members in CEAP processes enables communities to independently plan, implement and monitor their activities. This will greatly enhance remote monitoring of the project activities.
- New links have been made, or have been reinforced, between communities, government authorities, partners and service providers.
- Incorporation of CEAP into livelihood activities in West Darfur State contributed to the success of a livelihood project. Former livelihood options were solely based on extractive activities, which included farming, forestry, seed collection and livestock selling. New livelihoods options include, gravel collection and selling, petty trade, brick making, working with NOGs etc..
- The current relationship between government departments and the CEAP communities is a good example of positive government and local-community interaction. Communities now also have direct contact with relevant NGO partners to assist with implementation.
- Intensive awareness-raising sessions can augment communities' knowledge and skills, and can effectively change attitudes towards natural use and management.
- Coordination with other actors working in the area is necessary to effectively plan and use resources for community management of environmental activities. For example, the Quick Impact Project (QIP) of UNAMID (African Union/UN Hybrid Operation in Darfur) offers much potential for communities, if designed and applied properly.
- Introducing alternative technologies—such as soil stabilized brick making—is environmentally favourable; it reduces the quantity of wood consumption used in

energy-inefficient brick kilns. This initiative may also be considered as a livelihood option for some community members.

- Close monitoring of technical service providers is essential in order to ensure that activities are conducted correctly and according to plan. Quality control is essential, as is the need to first appraise the capability of service providers.
- Some community members have reasonable technical skills, which can be developed and can contribute to implementing project activities.
- Leveraging the specialty of the project partners—for example, Sustainable Development Organisation and Forests National Corporation—is crucial and ensures work is performed properly.

What would you change if you were to start the project again?

- Link natural resource management more closely with DRA's livelihoods project.
- Develop and hold more on-site technical trainings to further build capacity of communities and local institutions.
- Improve management of community expectations: environment-related projects usually take a long time before impacts of activities are seen.
- Expand the geographical coverage.

Scaling-up

Environmental degradation is accelerating throughout much of Darfur. Scaling-up initiatives (such as those described in this case study), monitoring progress of initiatives and applying knowledge learned to adapt and replicate similar activities in other areas is essential if environmental degradation is to be stopped and reversed. Additionally, clearer and more transparent governance at the local, community level is needed.

An essential element, however, is to not rush this participatory-based process: people need time to understand what might, for some individuals, be a radically different way of thinking, to engage in active planning and management and to increase positive practices of the concerned rural communities to collectively manage natural resources. External agencies, donors and others need to be aware of the need to take time to introduce new concepts, to gain peoples' confidence and to build what are hoped to become lasting relationships that work for communities and the environment.

In reaching out to communities, particular attention needs to be given to ensure that the principles of participation are respected, particularly by ensuring that vulnerable members of a community—the elderly as well as those who may not be able to read or easily communicate—are included throughout the consultation process and that their voices are heard and reflected in resulting action plans.

2.4 PARTICIPATORY ACTION PLAN DEVELOPMENT (PAPD)

Practical Action, Project implemented under the Darfur Community Peace and Stability Fund

Summary

- This project aimed to reach 100,000 people in some 33 communities, targeting a range of stakeholders from both farming and pastoralist backgrounds.
- Strength of the project is attributed to a core group of three local networks, supplemented with inputs and skills from a range of Darfuri interests.
- A six-stage approach was taken to build consensus between different stakeholders, each having an interest in access to and management of natural resources.
- The project's main impacts include the demarcation of 115 km of migratory routes, the construction of water points and consensus building between farmers and pastoralists in relation to natural resource management.

Objective

Support North Darfur communities by providing the tools and building the capacities communities need to plan their development and to distribute both internal and external resources equitably, thereby guaranteeing peace and stability.

The project has three intended outcomes:

- increased capacity of all project stakeholders to resolve conflicts, build peace and improve conflict-sensitive approaches to development;
- improved mechanisms for dialogue and collaboration, which restore confidence and trust between, and within, communities; and
- improved management and distribution of natural resources, thereby improving livelihoods, reducing tensions and encouraging stability.

Project background

Practical Action's Darfur Peace and Stability project is a two-year project funded by the Darfur Community Peace and Stability Fund (DCPSF). It was implemented in four localities: El Fasher, El Kuma, Dar Elsalam and Kelimondo.

Participating organisations in this project are Women's Development Association Network (WDAN), the El Fasher Rural Development Network (FRDN) and the Voluntary Network for Rural Helping and Development.

The project worked with 33 communities; each of Practical Action's three CBO-network partners (named above) oversaw 11. The aim was to reach approximately 100,000 community members, as well as a significant number of pastoralists that used the migratory routes that passed through or nearby these communities. The primary livelihood in the sedentary communities was farming or a combination of farming and pastoralism.

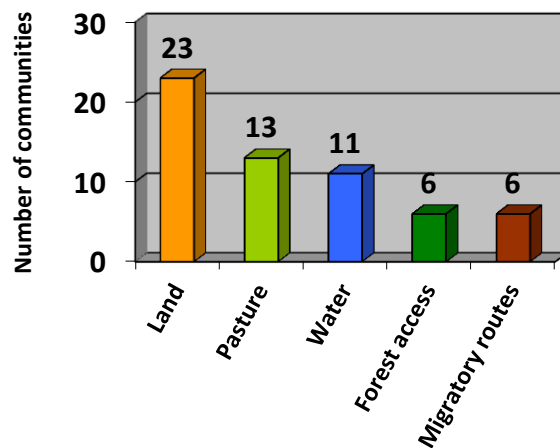
In addition to the three networks mentioned above, the project also worked with the following stakeholders:

- The Nomadic mobility organisation;
- Almasser Charitable Organisation;
- native administration;

- Farmer’s Union;
- Pastoralist Union;
- El Fasher Commissioner; and
- Department of Range and Pasture, Ministry of Agriculture

These actors came together to form migratory route committees. Coordination with the El Fasher Commissioner helped address practical security constraints, such as transporting fuel to the field needed for the truck carrying concrete posts for demarcation.

The targeted communities identified the following natural resource–related conflicts:



Specific issues regarding migratory routes involved farmers cultivating on the routes because the routes had not been widely used during the conflict, perhaps due to certain sections being in rebel-controlled territory through which pastoralists did not want to travel.

CBNRM

Practical Action used an approach called Participatory Action Plan Development (PAPD) as a means to build consensus between different primary stakeholders over access to and management of natural resources.

PAPD was typically facilitated by a team of five people—one from each of the three CBO-network partners, one from a pastoralist national NGO and one Practical Action staff member. These consultations took the form of multistakeholder gatherings and public meetings, which, in themselves, are believed to have promoted peace by building consensus between livelihood groups, tribes and local governance institutions.

The PAPD process is comprised of six steps, as follows:

Step 1. Preparation: PAPD facilitators assess all existing information regarding the communities, including a conflict assessment, baseline survey, village profiles and community maps. Primary stakeholder groups are identified and invited to attend the PAPD community meeting (Step 2).

Step 2. Problem census and prioritization: A mixed group of primary stakeholders lists and compares the most pressing livelihood problems and focuses on key concerns. Typical primary stakeholder groups often include farmers, pastoralists and transhumant pastoralists (if the community is located next to a migratory route), as well as women, labourers, youth,

native administration and popular committee members. Popular committees are committees recognized by the current Sudan constitution, they are formed at villages levels. Members of the popular committee are elected and are re-elected every 4 years (the committee is a political body)

Step 3. Information gathering: The community is expected to gather additional information on the main problems identified from secondary stakeholders such as NGOs, government officials and tribal leaders.

Step 4. Analysis of solutions: Identify realistic solutions and analyse their feasibility using STEPS analysis. Identify secondary stakeholders that need to be engaged.



Omda Osman Musa, a transhumant pastoralist leader, speaks about the need for coexistence during a public meeting in Kukul.

Step 5. Public feedback: Progress is presented to the wider community and secondary stakeholders for their input and support.

Step 6. Draft action plan: The action plan is prepared in written format, and roles and responsibilities are drawn up.

Although not directly related to PAPD, the establishment of CBO peace committees were involved with the project.

Tools and approaches used include the following:

- community natural resource mapping;
- problem trees to help analyse causes and impacts of livelihood constraints; and
- STEPS analysis of possible solutions to livelihood problems.

Challenges experienced

- Some challenges were faced when it came to the communities prioritizing their livelihood constraints and possible solutions (PAPD Step 2 and Step 4). Originally, stakeholders were encouraged to discuss and agree upon priorities after the identified

constraints and solutions had been listed. However, it was noticed that normally this meant that the community leaders—the native administration—would talk and then make a unilateral decision. In order to overcome this challenge, a voting system was introduced where each participant had one vote that they could choose to place.

- For communities located near migratory routes, it was important that pastoralists had a voice in the process. Although there was a pastoralist facilitator, this did not result in equal representation. Thus, contacts were made with nomadic pastoralist leaders, and a small number—between one to five people—were invited to join the PAPD meeting in the sedentary communities. This facilitated some excellent dialogue between farming and pastoralist groups and made sure that the pastoralist point of view was represented.
- Women should not only be present in a women’s stakeholder group but also represented in the groups of farmers, pastoralists, wage labourers and youth.

Remaining obstacles

Additional funding is needed to satisfy some of the community-identified plans (approximately 14 of 20 plans were completed during the project) and to continue working with communities to demarcate remaining migratory routes.

Main impacts of the project

- Demarcation of 115 km of migratory routes (two sections), including the demarcation of two *sineyyas* (pasture areas) and four *manazil* (nomadic sleeping points) located along the routes.
- Construction and planned construction of water points near migratory routes.
- Consensus built between farmers and pastoralists over access to natural resources.

Links to peoples’ livelihoods

The project had a specific link with livelihoods, as illustrated by the following activities under Outcome 3 of the project document:

Activity 3.1: Provide training in management and maintenance of water points, for CBOs and selected community members
Activity 3.2: Establish 18* water points (* total number is dependent upon action plans)
Activity 3.4: Supply 42 donkey-drawn water carts (21 each year)
Activity 2.12: Give one session on environmental conservation laws and regulations for local leaders, together with the Department of Forestry
Activity 3.7: Incentive-based promotion of agroforestry, for example, planting gum Arabic and baobab
Activity 3.8: Plant 15 community forests: 150,000 seedlings planted with 75 per cent survival rate
Activity 3.9: Establish and manage three forest-seedling nurseries
Activity 3.10: Hold community tree transplanting campaigns
Activity 3.11 & 3.15: Collect and distribute fodder seeds for rangeland rehabilitation, and reseed 400 ha per annum
Activity 3.12 & 3.14: Train communities in rangeland management, recovery and access controls
Activity 3.13: Conduct rangeland firebreak campaigns
Activity 3.3: Construct communal household water-harvesting infrastructure
Activity 3.5: Hold extension training courses for farmers on topics including pest control, use of certified seeds, crop rotation, and discouraging dependency on relief.
Activity 3.6: Contribute seeds to existing revolving seed funds

Links to disaster risk reduction and climate change adaptation

The PAPD process encourages communities to think about livelihood constraints and their causes (Step 2). Often this means looking, in detail, at the risk of drought, its link to climate change and possible means of mitigation through, for example, water harvesting by constructing terraces, bunds, dams and hafirs.

Lessons learned

Focusing efforts on communities situated along migratory routes provides an excellent opportunity to work with farming and pastoralist communities and to build consensus between them. Important takeaways include:

- involving nomadic pastoralists in community-based planning, and
- ensuring that the community understands that immediate funding may not be available to satisfy all action plans.



A post is painted red to signify there is intense cultivation in the area.

What would you change if you were to start this project again?

More contact with nomadic pastoralists at the start of the project, ensuring better representation of those stakeholders in community planning.

Opportunity for scaling-up

There is certainly opportunity for the replication and scaling-up of initiatives; funding, however, is required to enable this to happen.

2.5 COMMUNITY APPROACHES FOR TOTAL SANITATION (CATS)

United Nations Children's Fund (UNICEF)

Context

- Water is life and, therefore, is the most essential natural resource.
- Poor sanitation and hygiene are directly related to water pollution and disease manifestation, and can also have precarious environmental consequences.
- Communities, being the main stakeholders, play a pivotal role in the proper management of WASH (water, sanitation and hygiene).

Pillars of total sanitation include:

- water use;
- latrine use;
- personal hygiene, especially hand-washing;
- food hygiene; and
- household environment.

Approaches and tools for community action include:

- mapping;
- sanitary inspection;
- sanitation and hygiene survey and promotion;
- development of a community action plan through focus group discussion;
- implementation of a community action plan; and
- monitoring and evaluation.

Environmental issues addressed under CATS

- Achieving Open Defecation Free (ODF) status as a means to ensure a clean environment, including maintaining unpolluted precious water supply facilities, such as shallow wells, dug wells, ponds, and hafirs.
- Constructing or restoring hand pumps and water yards—the cost of which has been partially paid for by the MoYF—allow for the planting of trees, including fruit tree seedlings.
- Building latrines in locations that do not require the felling of trees.

Issues and impacts	Causes	Mitigation measures
Ecological considerations		
<ul style="list-style-type: none"> Groundwater contamination 	<ul style="list-style-type: none"> Seepage from latrines Use of chemicals Contamination through poorly constructed well heads Overutilization of ground water 	<ul style="list-style-type: none"> Proper site selection for facilities Good designs Proper distance between the boreholes and latrine facilities Awareness creation
Social considerations		
<ul style="list-style-type: none"> Waterborne diseases, such as malaria 	<ul style="list-style-type: none"> Stagnant water Lack of proper drainage in areas immediately around wells or distribution points 	<ul style="list-style-type: none"> Proper site selection and designs Malaria prevention and control Drainage management
<ul style="list-style-type: none"> Land degeneration Loss of pasture Deforestation 	<ul style="list-style-type: none"> Overgrazing around water points Crowding of animals and people Settlements leading to felling of trees 	<ul style="list-style-type: none"> Sensitization Careful selection of sites and technologies Enforcement of conservation practices
<ul style="list-style-type: none"> Conflicts over access to water and grazing Poverty and destitution Respiratory diseases Loss of social support systems 	<ul style="list-style-type: none"> Loss of pasturelands Overpopulation around water points Overstocking of livestock Loss of poverty coping mechanisms Air pollution due to dust Human migration 	<ul style="list-style-type: none"> Careful selection of sites and technologies Enforcement of conservation practices
Landscape considerations		
<ul style="list-style-type: none"> Denuded landscape Polluted landscape 	<ul style="list-style-type: none"> Erosion due to increased population of animals & people Increased cultivation Wind erosion Dumping of plastics and other non-biodegradable materials 	<ul style="list-style-type: none"> Soil conservation Sensitization and advocacy Enforcement of conservation practices
Water considerations		
<ul style="list-style-type: none"> Loss of water quality Water table falling Reduced downstream water flow Mineralization 	<ul style="list-style-type: none"> Contamination Uncontrolled utilization of water Overextraction Catchment degeneration 	<ul style="list-style-type: none"> Proper designs and site selection Strengthening of regulatory institutions Community and school training in water rights and use

3. ANNEX: Contact Persons

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