

**Node: Suite Summary<sup>1,2</sup>****Eastern Africa: Drylands livelihoods and CPRs****Context**

In the semi-arid regions of Africa, the ecological status of common pool resources (CPRs) is subject to rapid change in response to a wide variety of drivers and to multiple, often competing, claims from resource users. For example, change in CPRs can be influenced, at the local scale, by use of resources for consumption and production. On the other hand, international stakeholders (including donors) can affect CPR change through their interests in issues such as habitat preservation.

Regimes for effective common pool management must resolve the competing claims of multiple stakeholders: 'win-win' scenarios are elusive. Given the goal of poverty reduction, the challenge for CPR management is to establish resource management regimes that are able to secure the claims of the poorest over the flows of benefits from CPRs, in the face of competitive pressures from other users. This demands a systematic understanding of policy processes and policy options.

Two important areas of policy that relate to CPR management in eastern Africa are wildlife conservation and rainwater harvesting. In Kenya, donor funding has facilitated the designation of large areas of land as areas for wildlife conservation. While such areas can attract tourism and may create job and income-generating opportunities for local people, farmers and pastoralists living alongside national parks can be negatively affected by the wildlife. For example, crops are routinely trampled or eaten and livestock can be killed by wildlife or weakened by exposure to tsetse fly. The designation of land as a conservation area can also lead to the curtailment of access to natural resources for local people. This can exacerbate poverty and cause conflict.

In semi-arid parts of Tanzania, rainwater harvesting is an established and expanding practice for improving crop and livestock production. As a result, it has been given priority by the Government of Tanzania in the Agricultural Sector Development Strategy (2001) and in the National Water Policy (2002). Run off water has become an important CPR and access and management of run off water and related common property are key research issues. To ensure that water is used equitably and productively, improvements are needed in the ways in which water is allocated between, for example, upstream and downstream users, and between agriculture and the environment. Weak governance has been identified as the core problem for improved water allocation.

This Suite of projects sought to better understand the role of CPR management in sustaining livelihoods in semi-arid areas of Tanzania: a key focus was the governance of run off water in rainwater harvesting systems. The Suite also aimed to investigate the links between wildlife conservation and livelihoods in Kenya; to explore CPR policy processes and options; and to identify ways of facilitating dialogue in conflict situations.

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<sup>1</sup> This document summarises NRSP's work in one of its Uptake Promotion Node: suites. For further details and links to project and project documents see <http://www.nrsp.org.uk/6.aspx>

<sup>2</sup> This document presents research funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

## **Research Topics**

- How can wildlife conservation be made to benefit local communities?
- How dependent are poor communities on CPRs?
- What is the national policy for managing CPRs?
- How can CPR conflict situations be better understood and dialogue be facilitated?
- How can the governance of run off water, and associated CPRs, be improved in rainwater harvesting systems?

## **Projects**

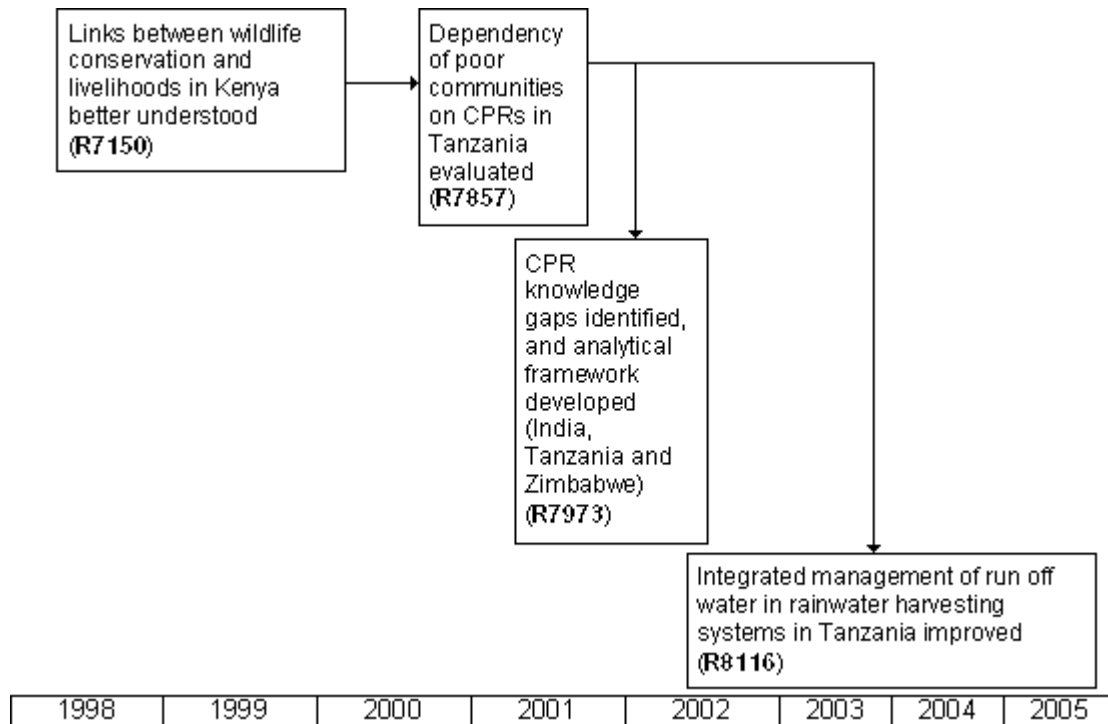
Beginning in 1998, the first project in this Suite (R7150 [see project links below]) and a follow up study examined the impact of wildlife conservation on the livelihoods of local pastoralists and farmers. The focus was on two semi-arid locations close to Amboseli and Tsavo National Parks in Kenya.

This work was followed by R7857, a short-term project designed to determine the relative dependence of rural communities on CPRs in semi-arid Tanzania and to assess their potential contribution to the livelihoods of the poor. A review of existing knowledge was undertaken and new information was obtained through fieldwork in 12 villages in six different districts. Water was identified as a key CPR deserving further research and this led to the commissioning of R8116.

R7973 sought to further improve knowledge of the contribution that CPRs make to rural livelihoods in semi-arid regions of Tanzania (and also in Zimbabwe and India; see India suite 3: improving NRM strategies and access to CPRs) and to identify the policy implications of this knowledge. The project involved a systematic analysis of the status and pressures on CPRs in each country, including changing patterns of use, and the policy, legislative and governance environment within which the CPRs functioned.

In 2002, project R8116 was added to the long-term series of rainwater harvesting projects (see Eastern Africa suite 1: rainwater harvesting and management) centred on the two semi-arid target areas of West Pare Lowlands and Maswa District in Tanzania. This project focused on analysing transaction costs in CPR management, and on developing and promoting strategies for the integrated management of run off and related CPRs (e.g. run off land areas) through the participation of various groups, including the poor, in negotiation, planning and management.

### Project links within Eastern Africa Suite 3: 1998 – 2005



### Outputs

#### Findings

R7150 revealed that wildlife conservation interventions at the two Kenyan study locations had not benefited local people, nor conserved wildlife, due to insufficient financial and other benefits reaching the communities. However, awareness of alternative approaches that could support ecotourism development and improve livelihoods was increased amongst the local communities and at regional and national levels, including the Kenya Wildlife Service. The PD assignment that followed R7150 demonstrated that introducing innovative livelihood options, which have the potential to reduce poverty whilst simultaneously conserving the environment, can provide opportunities for consensus building in socially fragmented communities adjacent to national parks.

A key finding was that if wildlife conservation projects are to have a reasonable chance of success, they must target areas where the potential for cash income generation from wildlife is high and tailor interventions to the real needs on the ground. The capacity of civil society to participate in interventions and policy coordination for pastoralist development, wildlife conservation and tourism are also important factors.

R7857 provided an overview of the current status of CPRs in Tanzania. It revealed that use of CPRs offered opportunities for livelihood diversification for poorer households in agro-pastoral villages. However, the role of CPRs in the livelihoods of poor people varied substantially. A lack of certain capital assets (e.g. livestock) could prevent poor households from deriving significant benefits from the existence of CPRs.

Local respondents, particularly pastoralists, identified lack of access to water for agriculture and domestic use and lack of effective water governance as priority CPR concerns requiring

intervention. R7857 also indicated that the poor are often under-represented on CPR management institutions, undermining their ability to influence and benefit from the use of such resources.

Findings from R7857 fed into a subsequent NRSP cross-cutting study (PD105: Livelihoods synthesis study: key determinants of poor people's livelihood strategies and natural resources-related management opportunities) that aimed to provide a characterisation of livelihood strategies and key natural resource (NR)-based factors influencing livelihoods.

Project R7973 analysed the policy, legislative and governance environment within which the CPRs function. It established that all land in Tanzania is publicly owned with the ultimate ownership vested in the State, where the real power controlling land use, including village land, still officially resides. It proposed that any changes to the management of CPRs must therefore be linked to the reform of the role of local governance in land use issues.

Opportunities were identified for developing CPR management strategies that benefit the poor through research and policy level dialogue, including promotion of the role of village level governance of NRs. A framework that could be used to help decision makers to understand the opportunities for, and implications of, possible policy options was developed, which led to a follow-up project in India (R8280; Improving NRM strategies and access to CPRs).

The study of run off water as a CPR in rainwater harvesting systems (R8116) indicated that current institutional and regulatory mechanisms limited poor people's access to CPRs. Analysis of transaction costs and benefits in CPR management showed that individuals and communities incur these costs in both fiscal and time dimensions. However, the poor and politically weak incur more transaction costs than the rich, potentially limiting their participation in the management of CPRs. Several ways in which the governance of run off water and associated CPRs could be improved were identified. These included coordination between primary courts and village governments, and harmonisation of contradictory by-laws, regulations, traditions and customs. Use of participatory law-making, development of land use plans that recognize the requirements of different users and demarcate farm and grazing land, and the establishment of village committees responsible for preparation and implementation of plans and resolution of conflicts were all found to be useful means for facilitating constructive dialogue, reducing conflict and enhancing the equity of access to CPRs.

Planners and policy makers at district level needed training in how to link their plans and programmes with national policies, strategies and legislation. At the community level, training was also needed in various areas, such as how best to ensure equitable access to run off water and how to resolve conflicts between farmers and pastoralists. Communication products were produced, including planning guides and maps on land suitability and tenure systems. Through workshops and training courses, the project was able to positively influence policy and planning at the district level.

#### *Research messages*

- If wildlife conservation projects are to improve the livelihoods of local communities as well as conserve wildlife, they must target areas where the potential for cash income generation from wildlife is high and tailor interventions to the real needs on

the ground. Benefits generated for local people (financial and otherwise) must be tangible and fairly distributed.

- When they are effectively managed, CPRs can play an important role in the livelihoods of the rural poor in Tanzania. However, the ability of poor people to derive benefits from CPRs, and thus the importance of CPRs to the livelihoods of the poor, depends on their access to particular forms of capital, such as livestock.
- The poor and politically weak incur more transaction costs than the rich in managing CPRs, potentially limiting their participation in such systems.
- A range of mechanisms exist for use in facilitating constructive dialogue and for reducing conflict over CPR management. These include participatory law-making, development of land use plans that recognize the requirements of different users and allocate land equitably, and the establishment of committees for the implementation of plans and for conflict resolution.
- In rainwater harvesting systems in Tanzania, there is a need for improved by-laws and regulations (and complementary training) to facilitate more equitable access to run off water and associated CPRs.

#### *Key research products*

Adams, W.M., Brockington, D., Dyson, J. and Vira, B. 2003. Managing tragedies: understanding conflicts over common pool resources. *Science*, 302. Pp.1915-1916.

BBC World Service. 2003. Gathering in the rain: communicating rainwater harvesting in Tanzania and beyond. Radio programme (cassettes and CDs). Soil and Water Management Research Group, Sokoine University of Agriculture, Morogoro, Tanzania.

Coupe, S., Lewis, V., Ogutu, Z. and Watson, C. 2002. Living with wildlife: sustainable livelihoods for park-adjacent communities in Kenya. ITDG Publishing, London.

Quinn, C. H., Huby, M., Kiwasila, H. and Lovett, J.C. 2003. Local perceptions of risk to livelihood in semi-arid Tanzania. *Journal of Environment Management*, 68(2), 111-119.

Shivji, I. 2002. Village governance and common pool resources in Tanzania. Project Discussion Paper (see also Common Pool Policy Paper 3), Dar es Salaam, Tanzania, Faculty of Law, University of Dar es Salaam.

Soil and Water Management Research Group. 2005. Planning guide for development of RWH projects at catchment level. Sokoine University of Agriculture, Morogoro, Tanzania.

#### **Impacts**

- Awareness was increased amongst local communities in Kenya of alternative approaches that could support ecotourism development and improve livelihoods.
- A model for ecotourism development in environmentally sensitive areas of Kenya developed from the research in the Node: suite was applied to a Ugandan biodiversity site by the UNDP.
- Changes to CPR and rainwater harvesting bye laws and more inclusive membership of village level planning committees were agreed at the district level in Tanzania: these are facilitating poverty reduction.

- CPR knowledge and management capacity was enhanced within Sokoine University of Agriculture and the Soil and Water Management Research Group, Tanzania.

**Further work**

There is a continuing need to promote dialogue on CPR management (including water governance), raise awareness of the CPR interests of the poorest households, and develop processes for improving the equity of access to CPRs, particularly in relation to rain water harvesting.