

# **Common pool resources in semi-arid India - Dynamics, management, and livelihood contributions**

Summary findings of NRSP project R7877

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## **THE CONTEXT**

In semi-arid India common pool resources (CPRs) are often significant for poor people's livelihoods. They provide sustenance and income for household survival, opportunities for risk sharing and coping with seasonal crises or unusual shocks (e.g. sickness, drought). And they are particularly important to poorer people, who typically lack the threshold requirements - resources and influence - crucial to securing private resources and other livelihood options.

CPRs such as pastures and forest are usually a mixture of open access (i.e. no effective owners or secured rights), and notional common property regimes in which shifting groups laying different claims to diverse resources (e.g. grazing, non-timber forest products, timber), vie for access, control, and use. With the breakdown of traditional management systems and exacerbated by privatisation and encroachment, most CPRs in semi-arid India have become severely degraded.

This research project aimed at influencing decision-makers by providing them with the knowledge required to understand the dependence of poor communities on CPRs, and the policy implications of this dependence in view of pressures on CPRs and constraints to their sustainable and equitable management. The underlying assumption was that policy makers lacked a thorough understanding of livelihood contributions of CPRs, which prevented them from taking pro-poor policy decisions related to CPR management.

## **METHODOLOGY**

The project analysed common pool resources (e.g. forests, water, grazing lands) in semi-arid India in terms of:

- (1) their current status and dynamics in relation to bio-physical aspects,
- (2) current management practices and their constraints,
- (3) their contributions to the livelihoods of the poor,
- (4) identification of demand for alternative management options, and
- (5) ways to promote the uptake of these findings among stakeholders.

It used an iterative, two tiered approach: An interdisciplinary research team comprised of scientists from CRIDA (Central Research Institute for Dryland Agriculture, Hyderabad), NRI (Natural Resources Institute, UK), MSU (Michigan State University) and WRMLtd (Water Resources Management) reviewed secondary data and literature. Two NGOs - CWS (Centre for World Solidarity) in Andhra Pradesh and AKRSP (Aga Khan Rural Support Programme - India) in Gujarat - carried out consultations with grassroots organisations working on CPR issues in these two states.

The project produced a comprehensive review of CPRs in India, based both on a large proportion of the available literature and on interactions with experts from the grassroots level. Through a number of workshops and meetings, a range of stakeholders and target institutions were involved in the project and their comments and suggestions were fed back into the review continuously. In particular, the project was able to identify a number of generic issues related to CPR management in India, which will form the basis for the development of pro-poor CPR management strategies. Project reports can be downloaded on the project web page <http://www.nri.org/IndianCPRs>.

## KEY FINDINGS

### Crosscutting issues

**No coherent policy framework for CPRs.** A key constraint to proper management of CPRs in both of the focus states (and probably in the rest of the country) has been the lack of a coherent public policy framework for CPRs and their use. Various public policies and programmes pursued by both the state and central governments during the post-independence period have substantially affected the status of CPRs, generally in a negative way. Government policies and programmes that have contributed for the rapid decline of CPRs include: land reforms, forest policy, wasteland development programme, irrigation policy, and introduction of Panchayati raj system.

**Relevance of CPRs.** Some people believe that there is no justification for the state to rehabilitate CPRs, arguing that:

1. their contribution to people's livelihoods has declined sharply, and people have adjusted their livelihoods and coping strategies accordingly;
2. most land-based CPRs are seriously degraded, so the costs of restoring them to their former levels of productivity would be very high;
3. there is little evidence that CPRs can be effectively managed by communities, so rehabilitation investments would be wasted.

There is some truth in each of these points, but each of these points needs to be considered on a case by case, area by area or sector by sector basis. For example, it might be true that points 2 and 3 apply to village pastureland in most of AP, but not to pastureland used by homogeneous tribal communities in south Rajasthan.

**Privatisation and the exclusion of certain groups.** Most of the above-mentioned policy interventions have encouraged the privatisation of CPRs, in a broad sense. Land reforms in AP tended to convert common lands into private land; while state governments have tended to turn a blind eye to illegal privatisation through encroachment. Some state interventions (e.g. the newly created VSSs and WUAs for forest and water management respectively) have excluded important stakeholders from the membership of the associated CBO, either in practice or officially. In the case of formal WUAs created by the government, only command area farmers are recognised as members: other groups, such as fisherfolk, washers and cattle herders are excluded by law. Women are excluded too, because membership is conditional upon having land titles.

**Poverty and CPRs.** The above point relates to a broader one concerning the relationship between CPRs, poverty and the poor. Whereas degraded CPRs are generally more important to poorer groups than to better-off ones, the benefits of rehabilitated CPRs sometimes accrue disproportionately to the better off. Development agencies need to design and implement their interventions with the poor in mind; and to monitor them carefully to see whether they are having the desired impact, taking corrective action where necessary.

**Equity.** Privatisation of CPRs has been justified on the ground of increasing productivity and efficiency of these resources. In the process the question of equity has been sidelined. How to build equity and sustainability while maintaining efficiency is a crucial question, which needs to be addressed.

**Lack of co-ordination between different government departments in charge of CPR issues.** Since there are interactions between different CPRs, and between CPRs and farmland, development of one CPR alone is not enough. The livelihoods approach (which has been promoted by DFID, Oxfam and other agencies) offers the opportunity to work in a more integrated way.

**Investments and returns by external agencies.** In order to increase the productivity of some CPRs there would need to be large investments in them: for example, in desilting and repairing tanks that

have been neglected for decades. It is important to determine whether such investments are justified economically, but the necessary information is somewhat lacking at present. Furthermore, it would be unwise for external agencies to make such investments unless they were reasonably confident that the *postulated* benefits flowing from them would materialise and be sustained. It is necessary, therefore, to take account of the prospects for *sustainability* when drawing up investment plans, and to understand what influences sustainability.



**Sustainability and the neglect of institutional capacity.** This issue is common to a range of state interventions, including watershed development and JFM. For example, a recent evaluation of the watershed development programme in AP found that in the majority of watersheds studied (17 out of 27) the users had not been organised into groups. Even where groups had been formed, their roles and responsibilities were not clear in most cases. Where management groups have been formed, experience has shown that they are liable to

become defunct within a few years unless they are soundly constituted, and carefully nurtured initially. When financial or other support ends, their involvement may end too. In addition, the returns must be sufficient to justify the time they invest in managing the resource.

**Financial aspects of sustainability: investments and returns by users.** Users would be foolish to invest time or other resources in managing a CPR if doing so was not giving, or going to give, them a good return. Where there are clear and secure returns, or where the operating and maintenance costs are low, people are prepared to make the investment. This is illustrated by fishing communities in parts of AP, who are contributing in cash and kind to the maintenance of tanks; or by villagers in Rajasthan who voluntarily protect village pasturelands and repair the boundary wall each year.

**Social aspects of sustainability.** Conflicts within CPR management groups, and between those groups and neighbouring villages and hamlets are common, and can undermine management initiatives. There is a strong case, therefore, for giving priority to villages where the prospects for avoiding conflicts or for managing them effectively are good. Relevant criteria include villages: with a homogeneous community; that are smallish or medium in size and remote; in which there are no political or factional conflicts; and where their claim to the resource is relatively undisputed by other villages or communities. This also reduces the transaction costs for development agencies regarding the time they spend assisting in conflict management.

**Flexibility.** Development agencies, particularly (but not only) state ones, tend to be rather rigid in the way they implement their programmes. For example, FDs have tended to insist on having only single revenue villages (as opposed to hamlets or multi-village arrangements) as the management unit in JFM programmes. Such uniformity of approach is inconsistent with the diverse social arrangements and relationships that exist in rural India. (In Anantapur District, for example, rural communities evolved different arrangements for effective utilisation of tanks without hurting anyone's interests).

**Formulating procedures and programmes** Scaling up effective participatory approaches to CPR management requires not only policy changes, but formulation of necessary procedures and programmes. Clear guiding principles, operational mechanisms and administrative instruments are needed to operationalise policies effectively.

The following sections summarise some of the resource-specific issues.

## Resource specific findings

### *Forests & forest products*

#### Status and trends

- General trend: Degradation of forests in most states
- Important role of forests in ecosystem

#### Livelihood contributions

- Important role of non-timber forest products for tribal communities, small and marginal farmers
- Role of forest as grazing land
- Impact of Joint Forest Management on small ruminant owners: are excluded



#### Management

- Most forest is under FD control
- JFM: successes and failures
- Community managed forests: natural regeneration and social fencing, success depends on potential benefits
- Risk of exclusion of traditional forest users, once demand and price for certain NTFPs increase

#### Recommendations

- Silvicultural management systems need to be developed and applied - shift from timber focus to multi-purpose forest
- All user groups, especially women, landless, and livestock keepers, must be represented in VSS
- Marketing network and prices for NTFPs should be reviewed to ensure that benefits go to traditional forest uses
- Extending community based forest management to protected forests should be considered.

### *Fodder and grazing land*

#### Status and trends

- Drastic de-facto reduction in common pool grazing lands in most states (encroachment, privatisation, enclosure by watershed programmes or forest dep.)
- Degradation of quality of CPR lands.

#### Livelihood contributions

- Important role of CPRs in livelihoods of landless / near-landless livestock keepers and small and marginal farmers without own grazing areas.

#### Management

- No effective management system in place, Panchayat not involved
- Very few examples of community managed common grazing lands, and very little support available for such initiatives.
- Importance of post-harvest fields and other grazing lands (roadside / tank bund land / field bunds) as a source of fodder
- Impact of increased areas under irrigation: shift to stall feeding
- Impact of restricted access to grazing lands on goat population, "the poor (wo)man's cow", and impact on poverty
- Privatisation ("patta" lands) often does not benefit the poor, because generally these lands are low quality and agricultural inputs / technical advice / loans are unavailable



#### Recommendations

- Shepherds and landless need to be included in JFM and other natural resource management committees
- Encroachment should be controlled to encourage people to manage CPRs for their common benefit

### *Water & water bodies*

#### Status and trends

- Shift from surface to groundwater exploitation has led to de-facto privatisation of water resources
- Overexploitation of GW resources
- Conflict between watershed management and traditional tank system
- Important interactions between CPRs and private property: water for irrigation.



#### Livelihood contributions

- Drinking water for people (and animals) has to receive highest priority.
- Irrigation: “Chasing the water table” leads to exclusion of the poor
- Surface water bodies have many uses (fishing, reeds, artisans, silt harvesting, duck rearing, washing, livestock)

#### Management

- Breakdown of traditional tank management systems
- Water user associations often do not include all users, only those using water for irrigation.
- Lack of regulatory mechanisms for groundwater exploitation

#### Recommendations

- Water management strategies should be demand focused to promote more efficient water use.
- All water users need to be represented in water user associations (not just those using it for irrigation)
- Regulatory mechanisms for groundwater exploitation need to be implemented.

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