Farhad Vania & Bansuri Taneja

People, Policy, Participation:

Making Watershed Management work in India

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The authors are solely responsible for any errors that may appear in this report.

Acronyms

AP	Andhra Pradesh
APRLP	Andhra Pradesh Rural Livelihoods Project
ATMA	Agricultural Technology Management Agency
CAPART	Council for Advancement of People's Action & Rural Technology
CPR	common property resource
DDP	Desert Development Programme
DDS	Deccan Development Society
DFID	Department for International Development
DFO	Divisional Forest Officer
DoA	Department of Agriculture
DoAH	Department of Animal Husbandry
DPAP	Drought Prone Areas Programme
DRDA	District Rural Development Agency
DSC	District Steering Committee
EAS	Employment Assurance Scheme
EPP	entry point programme
FD	Forest Department
FPR	farmer participatory research
GoAP	Government of Andhra Pradesh
GoI	Government of India
GVS	Gram Vikas Samastha
IGNOU	Indira Gandhi Open University
IGWDP	Indo-German Watershed Development Programme
IRDP	Integrated Rural Development Project
IWDP	Integrated Wastelands Development Programme
JFM	Joint Forest Management
MANAGE	National Institute of Agricultural Extension Management
MDT	Multi-Disciplinary Team
MoA	Ministry of Agriculture
MoEF	Ministry of Environment and Forestry
MoRD	Ministry of Rural Development
MSS	Mewat Sahyog Sanstha
NABARD	National Bank for Agriculture & Rural Development
NDDB	National Dairy Development Board
NGO	non-government organisation
NIRD	National Institute of Rural Development
NLG	National Learning Group

NRM	natural resource management
NTGCF	National Tree Growers Co-operative Federation
NWDPRA	National Watershed Development Programme for Rainfed Areas
O&M	operation and maintenance
PAWDI	People's Action for Watershed Development Initiative
PCC	Project Co-ordination Committee
PD	Project Director
PDC	Pasture Development Committee
PIA	Project Implementation Agency
PIM	Participatory Irrigation Management
PMU	Project Management Unit
PRADAN	Professional Assistance for Development Action
PRI	Panchayati Raj Institution
PROGRESS	People Research Organisation for Grassroots Environment Science
PSU	Project Support Unit
RDT	Rayalaseema Development Trust
RIDF	Rural Infrastructure Development Fund
RVP	Soil Conservation Works in the Catchments of River Valley Projects Scheme
SC	Scheduled Caste
SFC	State Finance Commission
SHG	Self-Help Group
SLG	State Learning Group
ST	Scheduled Tribe
SWC	soil and water conservation
SWCD	Soil & Water Conservation Department
TBS	Tarun Bharat Sangh
UG	User Group
VASORD	Vasavya Society for Rural Development
VIP	Villages in Partnership
WA	Watershed Association
WC	Watershed Committee
WCUSS	Weaker Communities Upliftment Services Society
WDP	Watershed Development Programme
WDSCA	Watershed Development in Shifting Cultivation Areas
WDT	Watershed Development Team
WUA	Watershed Users Association
YFA	Youth for Action
ZP	Zilla Parishad

Executive Summary

With its history of Gandhian people power and reputation for labyrinthine bureaucracy, a study of the ways in which India has tried to institutionalise participation, particularly in the context of poverty alleviation and resource management, is an important part of the IIED-IDS action research project, 'Institutionalising participation and people-centred processes in natural resource management'.

In its methodological approach, the study used an innovative mechanism of establishing a National Learning Group (NLG) and State Learning Group (SLG). Beyond the broad framework of questions to be covered provided by IIED, power was vested with the NLG, SLG and the co-ordinating organisations to execute the study, so that the findings were of immediate importance and relevance to the watershed development process in India. The emerging issues and challenges, chronicled at the end of this report, indicate the far-sightedness of the questions originally posed, the ways in which thinking about participation have been refined by and in the course of this study, and the ground (or water) that remains to be covered in transforming bureaucracies and institutionalising participation.

When this project was conceived, ideas around participation and natural resource management were at a certain stage of development, and a wide range of perceptions existed among policymakers (government and donors), researchers (academics, trainers) and practitioners (communities, NGOs, government functionaries). An interesting outcome of the study is that the original research questions are still relevant today, especially when seen in the context of the emerging challenges around each of the original questions. Despite changes in the political and economic environment both in India and the state of Andhra Pradesh (where major fieldwork was undertaken), or to some extent because of it, poor people who are largely dependent on natural resources continue to have precarious livelihoods. Thus the question of their participation in policies that determine the security of their livelihood and state of livelihood resources is as important as before. Equally important is the nature of change that is required in bureaucracies that currently control these resources and the government and donors who fund projects and programmes to manage them. If participation is essential to a more equitable use of resources then

the institutionalisation of participation is even more essential to ensure its sustainability.

India's first two country-wide experiments with participation in natural resource management are widely known: Joint Forest Management (JFM) and Participatory Irrigation Management (PIM). These processes are ongoing and continue to evolve, but this study looks at India's major effort to combine poverty reduction with natural resource management in the 1990s: watershed management. Unlike JFM and PIM, the new approaches to watershed management are a unique instance of a bureaucracy moving normatively towards a process of institutionalising participation as the move to participatory ways of functioning originated in policy statements from the centre, as different from the ways in which PIM and JFM policy came about – as generalisations following experiences of the government on the ground.

Early watershed management programmes in India were basically technical fixes to conserve soil and water on degraded lands and to increase food production. The 1994 report of the 'Dharia Committee' (the High Level Committee on Wastelands Development) marked the first rethink of that attitude, when it recognised that the continuing degradation of land, including village common lands, was in part a result of the unhelpful separation for treatment and consideration of the three biophysical resources: land, water, and forests. The Dharia Committee recommended that soil and water conservation efforts be extended to all lands, whether already degraded or not, in order to prevent further deterioration and depletion. Second, they recommended an integrated approach to biophysical resource conservation on the basis of a micro-watershed. These marked significant departures in thinking. Work would be based on a meaningful physical unit instead of an arbitrary administrative one, and include all land, and not just land with agricultural potential.

For the next 20 years, watershed management would continue to evolve, but involvement of the state in this sphere would be managed by three different central government ministries with little strategic co-ordination of approaches or objectives. (There were also many watershed management programmes funded and run by multi- and bi-lateral agencies and non-government organisations.) This report looks at how an innovative new approach to bring communities into the management of their natural resources, spearheaded and shepherded through the bureaucratic minefields by a skilful and dedicated Ministry of Rural Development (MoRD) administrator in 1995, changed the way the state manages watersheds in India. This tale, with its well-informed schemers, is an excellent example of how to succeed in changing policy by using good practice from the ground as the basis for mapping the policy process, manoeuvring the legislation through the many stages of Indian

policymaking, and knowing what you need to offer your adversaries to get their support for your programme.

Watershed management in the 1990s was no longer just a problem for the scientists, engineers and water experts. The link was made in the groundbreaking MoRD's *1995 Guidelines* between rural communities participating in planning and managing their natural resources and sustainable rural livelihoods. Watershed management was now a key plank in the government's rural poverty reduction programme. Unfortunately the Ministry of Agriculture (MoA) and Ministry of Environment & Forests (MoEF) were not ready to change, so for at least the next five years there were radical differences in the way watersheds were managed. Indeed, the full potential of the new approach has not been fully realised even within the MoRD, because of the way it has been applied by different implementing organisations. Through a case study of the watershed development programme in Andhra Pradesh, we look also at how different combinations of funding and implementing organisations (government or non-government) have produced different results. On the whole, projects funded and managed by NGOs have been more aware of the importance of genuine and sustainable participation of the whole community, have used more local and indigenous water conservation technologies, and have achieved better results in terms of benefits to all members of the community. Projects at the other end of the spectrum, those both funded and implemented by government, have tended to be more focused on large-scale land-based technology that is suggested (or dictated) by government technical specialists, and hence the benefits have tended to accrue to landowners rather than the resource-poor in the community.

An attempt in 1999 to build on the work of the MoRD and co-ordinate the approaches of the two main ministries (MoRD and MoA) through a set of *Common Principles* was not a success. The *Principles* would have been another significant improvement in practice, building on the *1995 Guidelines* and taking into account all the lessons learned at the MoRD since 1995, but were never adopted by either ministry. Fortunately the MoA, influenced no doubt by the praise received by the MoRD for their innovative work as well as the relatively more successful impact of the MoRD watersheds programmes, went ahead and used the *Principles* to radically update their own ways of working in the 1999 *WARASA Guidelines*. An improvement on both the *1995 Guidelines* and the *Common Principles*, the MoA was now the innovator. The MoRD has gone on to update their own *1995 Guidelines* several times, in the *2001 Guidelines* and 2003 *Haryali Guidelines*, but in a key lesson for anyone who is tempted to sit back and take their successes for granted, we outline how in the 2003 *Haryali Guidelines* politics has once again triumphed over the needs of the people, and there have been considerable reverses to these once inspiring policies.

Although even the *WARASA Guidelines* are a huge improvement on practice only ten years earlier, significant flaws remain. Issues around equity were not adequately addressed in the *1995 Guidelines* and this omission has not been signficantly rectified, so results are still very inconsistent across the spectrum. Gender was not so much missed as sacrificed; it was considered during the 1995 policy process that forcing the watershed management projects to give women a fair role in watershed management would have led to the rejection of the whole package, and the loss of all the innovation. Some NGO-run projects have in fact managed to achieve good, gender-balanced programmes, but this has not been the case with government-led projects. Other areas in which success has been patchy include training and capacity-building, timely, fair and effective disbursal of funds, and flexibility.

There was found to be great variation in the level of success in institutionalising participation, and this was very often related to the funding and implementing institutions. Projects funded and implemented by government routinely marginalised participation for expendiency, while at the other extreme some NGO-funded and implemented projects have been quite successful, particularly where they have had the strength to follow their own models and not had to follow strictly ministry advice, to hire staff who may not have been as well qualified technically but who were committed to the principles of participation, and to take time over the initial preparation and capacity-building work with the communities.

Many issues and challenges still remain. The creation of an enabling environment depends on legislators having the will and desire to create policy that not only encourages community participation, but makes it mandatory and ensures both that shortcuts are avoided and that money is available in the right place at the right time. The champions of participation need the space and incentives to encourage others to change their ways by proving that participation is the path to success, but this will only happen if staff and institutions are given the freedom and autonomy to do so. At the same time the value of having instructions to use a participatory framework at a high level cannot be denied. There is still far too much pressure in government to spend the money quickly and to think about watershed management purely in terms of physical change in the landscape. Monitoring is geared mainly towards physical change as it is so difficult for managers to measure participation, but including indicators that measure whether the resource-poor are happy with and have benefited from the changes could begin to institutionalise their inclusion in the whole process. Until the rights of resource-poor families are acknowledged and government policies insist that the need to improve livelihoods is just as imporant as the need to conserve soil and water, the resource-rich landed farmers will continue to gain the most benefits from watershed management.

Capacity building – not least in terms of attitudes towards participation – both at community level but perhaps more importantly within the bureaucracy, is arguably the most pressing need to improve participation. The larger policy environment has played a mixed role in institutionalising participation. One major problem is the trend in favour of investment and market-based instruments as the answer for improved natural resource management – which decisively skews the equation in support of those who already enjoy more power and do not have a direct stake in conserving natural resources.

Chapter 1: Introduction

With its history of Gandhian people power and reputation for labyrinthine bureaucracy, a study of the ways in which India has tried to institutionalise participation, particularly in the context of poverty alleviation and resource management, is an important part of the IIED-IDS action research project, 'Institutionalising Participation and People-centred Processes in Natural Resource management'.

This report aims to give the reader a detailed understanding of the process that led to the birth of the groundbreaking *1995 Guidelines* that first introduced community participation into watershed development in India, and an overview of the guidelines that succeeded them. We then look in detail at how the *1995 Guidelines* performed in terms of institutionalising participation, and highlight the issues and challenges that remain.

When this project was conceived, ideas around participation and natural resource management were at a certain stage of development, and a wide range of perceptions existed among policymakers (government and donors), researchers (academics, trainers) and practitioners (communities, NGOs, government functionaries). India's first two country-wide experiments with participation in natural resource management are widely known: Joint Forest Management (JFM) and Participatory Irrigation Management (PIM). These processes are ongoing and continue to evolve, but this study looks at India's major effort to combine poverty reduction with natural resource management in the 1990s: watershed management. Unlike JFM and PIM, watershed management proved to be a unique instance of a bureaucracy moving normatively towards a process of institutionalising participation as the movement to participatory modes of functioning originated in policy statements from the centre, as different from the ways in which PIM and JFM policy came about – as generalisations following experiences of the government on the ground.

In its methodological approach, as described in Chapter 2, the study used an innovative mechanism of establishing a National Learning Group (NLG) and State Learning Group (SLG). Beyond the broad framework of questions to be covered provided by IIED, power was vested with the NLG, SLG and the co-ordinating organisations to execute the study, so that the findings were of immediate importance and relevance to the watershed development process in India. The emerging issues

and challenges, chronicled at the end of this report, show the far-sightedness of the questions originally posed. Chapter 2 also highlights what was learned from this approach and process.

Chapter 3 gives a brief summary of the history and evolution of watershed management in India. Long an area ruled by engineers and technologists, watershed management has only recently been seen as a way to alleviate poverty and improve livelihoods.

The process that resulted in the creation of the Ministry of Rural Development's *1995 Guidelines* is described in considerable detail in Chapter 4, as it is vital to understand that although the importance of community participation was being acknowledged worldwide, it still took a good deal of wheeling and dealing by a committed administrator to turn that knowledge into policy. Chapter 5 goes on to show how the Ministry of Agriculture then took the lead and further developed the *1995 Guidelines* into the (in some ways) more progressive *WARASA Guidelines*, while the Ministry of Rural Development in fact began to slide backwards.

Chapter 6 presents an analysis of the *1995 Guidelines*, showing how different types of institutional set-ups – combinations of government departments and NGOs working at different levels – produced very different results in terms of participation. Chapter 7 takes this analysis one step further and highlights the issues and challenges that still remain, making suggestions for ways that all parties involved in watershed management in India could improve their ways of working to ensure that resource-poor families in watershed areas get the most benefit.

Chapter 2: Methodology

The India case study on Institutionalising Participation in Natural Resource Management asked the same set of research questions that was used in each of the other country case studies. The purpose of the study was to research in the local context the following parameters:

Conditions/enabling environment

- Hierarchical nature of bureaucracies and their capacity to move from an implementation to an enabling role
- Internal/external factors that inhibit/facilitate participation
- Economic, social, political and institutional conditions which assist in the scaling up of participatory approaches
- Positive/negative influence of policies and legislation
- Timeframes for institutionalisation to take place
- Funding arrangements that best support a shift towards a participatory process

Capacity building

- Types of training and capacity
- Individual and organisational capacity
- Institutional, pedagogical and resource implications for training organisations
- Role of capacity building in institutionalisation of participatory approaches

Attitudes and behaviour

- Incentives for scaling up participation
- Changes in organisational norms, operational procedures and bureaucratic cultures
- Change in attitude and behaviour of officials and professionals when involved with participatory processes

Democratisation, governance and equity

- Gender and equity issues
- Group involvement in formulation, implementation and evaluation of participatory processes
- Forms of governance (from state to village level) that can best integrate participation, gender and equity concerns

Impacts

- Measurement of change by key stakeholders
- Impact of scaling up on social dynamics, organisational dynamics, nature of development assistance, and state of natural resources

Policy and practice

- Points of leverage to scale up participation
- Policy, operational and resource implications for external support agencies
- Effect of conflicts between national policies that work for people and their resources and those that work against

Approach to India case study

The research focused on the evolution of watershed management, as a representative example of the natural resource management sector in India, with a focus on the experience in the state of Andhra Pradesh (AP). The study was structured at three distinct levels: national, state and district.

At the national level it was initially co-ordinated by ERM India and later by Development Alliance. At the state level in Andhra Pradesh it was co-ordinated by the National Institute of Agricultural Extension Management (MANAGE), and at the district level five independent researchers were chosen for their seniority, experience with the sector, and familiarity with the issues and the districts concerned.

The study was expected to be of immediate relevance and use to those who were involved with its execution. Hence, it was intended that there be close and frequent consultation between the three levels of the study to make the findings and analysis immediately available to various actors in government and NGOs. This was facilitated through the establishment of a National Learning Group and a State Learning Group.

National Learning Group

The National Learning Group (NLG) was established to oversee the study, including its approach and methodology, and to comment on the emerging analysis and findings. It comprised between eight and 10 government officers, NGO and donor agency representatives, as well as the national co-ordinating organisation. Over the course of the study there were several changes in both the people and organisations that comprised the NLG. The NLG met several times, and some NLG members also visited Andhra Pradesh to attend State Learning Group meetings (see Annexe 1).

State Learning Group

A State Learning Group (SLG) was established in Andhra Pradesh to oversee the fieldwork in the state, respond to the emerging findings and analysis, and adapt lessons to the respective spheres of work of the participants. The SLG was a significantly larger and more proactive group than the NLG, comprising 30 to 40 people representing AP state government officials, district officials, NGOs, AP-based donor agencies, academics and researchers (see Annexe 1).

The SLG met on more than 10 occasions over the course of the study, culminating in an end-of-project workshop on 29 January, 2004. The SLG acted as the interface between the district case studies and the state watershed development programme. While the study did not have any jurisdiction over the AP Watershed Development Programme, it benefited from the presence of representatives in the SLG who were also in their respective official capacities involved with project implementation and policymaking. The SLG helped to design the methodological approach for the district case studies, choose the districts, and identify appropriate people to co-ordinate the studies. The role, functions and purpose of the SLG were often debated and negotiated at its meetings. Having a body like the SLG created an important forum to share information and ideas and to debate issues, and enabled a wider ownership of the study and its findings.

National policy analysis

The study's key research questions spanned local processes through to national policy. There is a complex history behind the emergence of participation as a critical factor in national policy on natural resources, and that history shows both how participation in the policy process can affect policy, as well as (in Chapters 6 and 7) how participation in the ensuing programmes can affect success. In the course of the study it was felt that the watershed development experience from other states should also be incorporated into the national policy analysis. A short review was undertaken

of five watershed projects in Rajasthan and the Indo-German Watershed Development Programme (IGWDP) in Maharashtra. Rajasthan has diverse and innovative experiences in facilitating watershed management at the community level, while IGWDP was a process-oriented programme with considerable impact both at the community and policy level. MANAGE also had ongoing links with the IGWDP that assisted in bringing learning from the Maharashtra experience into the study. The findings from other states informed the on-going research in AP and the national picture that emerged.

Andhra Pradesh case study

Andhra Pradesh was chosen as a case study for in-depth research as it had enthusiastically adopted the government watershed development programmes, especially that of the Ministry of Rural Development (MoRD) and to a lesser extent that of the Ministry of Agriculture (MoA), as a means of alleviating rural poverty and consolidating land and water resources. MANAGE, based in Hyderabad, was chosen to co-ordinate the AP case study because of its close involvement with policymaking for watersheds at the state and national level. In addition, MANAGE was also implementing an MoRD-supported watershed programme in Ranga Reddy district.

The research questions listed at the beginning of this chapter were the starting point for developing the detailed study methodology that emerged through a consultative process with the SLG. The study was conducted in three different phases:

- five district case studies;
- re-verification of district case study data; and
- extended methodology for process monitoring.

The state of AP is divided into three agro-climatic regions: Telangana, Ryalseema and the coastal belt. Very little watershed-related work has taken place in the coastal areas, hence only selected watersheds in Telangana and Ryalseema were studied. The districts represented were:

- Telangana: Ranga Reddy, Mahbubnagar, Medak
- Ryalseema: Kurnool, Ananthapur, Chitoor

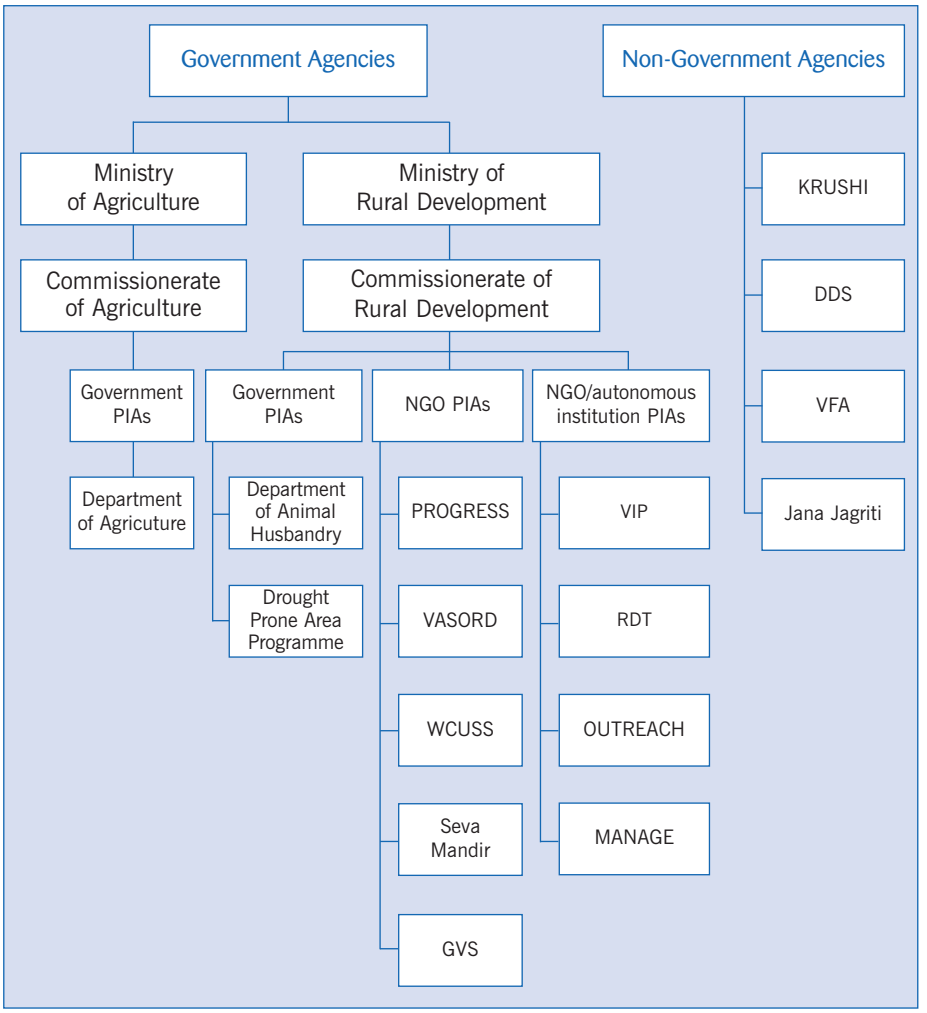
Agencies supporting the watershed programme in AP

Three types of agencies fund watershed programmes in AP: the Ministry of Agriculture, Ministry of Rural Development and independent NGOs. When this study began in 1999, each of these agencies had their own guidelines for project implementation – the MoA and MoRD had official guidelines, while the NGOs worked not so much on the basis of guidelines (unless they were implementing MoRD projects) as through periodically revised sets of flexible principles for project planning and implementation. There was some convergence in the institutional structures that the guidelines of each agency sought to establish at the community and district level to implement watershed projects.

Project implementing agencies (PIAs) were not uniform in their source of funding, staffing pattern, number of years of experience, capacity to handle watershed projects, or ability to establish contact with local communities. (PIAs were the lowest level of organisation in the hierarchy of those involved with watershed management in the particular institutional framework set up by *1995 Guidelines*. They disbursed funds and technical advice and were also eventually charged with overseeing/facilitating social processes.) The number of watersheds managed by each PIA also varied. Funding and implementing agencies worked in various combinations, as detailed in Table 2.1 and Figure 2.1. An effort was made to try and represent in the study virtually every type of funding and implementing agency operating in the state in the watershed development programme.

FIGURE 2.1

Organisational overview of watershed development projects at central, state and district levels



Choice of PIAs and watersheds

Some 6,000 watershed projects are being implemented across the state of AP, and larger PIAs manage the implementation of a number of watershed projects simultaneously. In order to cover a reasonable sample of individual watersheds, shortlisted PIAs were expected to identify at least two watersheds under their jurisdiction that demonstrated both their most positive and least successful experiences. Following initial attempts to identify the watersheds to be studied it was reported that, in fact, the least successful projects were often in areas where almost no work had been initiated, while even the most positive demonstrated considerable negative experience as well. Thus the idea of taking at least two watersheds per PIA was dropped and only one per PIA was selected for study.

The final shortlist covered a selection of watersheds in four different categories: government-funded (MoA and MoRD) and government-implemented; government-funded (MoRD) and NGO-implemented; government-funded (MoRD) and implemented by an autonomous institution (MANAGE); and NGO-funded and NGO-implemented.

Figure 2.1 provides an organisational overview of the watershed development projects at central, state and district levels. The organisations that act as PIAs and that were included in the study have also been identified.

NGOs as PIAs

AP has a vibrant NGO community that has been associated with the watershed initiative in the state for more than a decade. When it came to choosing projects to study the team was able to choose from a wide range of NGOs acting as both recepients of funds (from government and non-government sources) and implementers. The NGOs ranged from small to very large, and from new to very experienced. In the initial selection of NGOs size was not given much consideration, but it was important that they should have had some years of experience in implementing watershed projects. (One of the significant findings of the study in retrospect was that the size/age of an NGO does have a significant bearing on its capacity to deal with issues related to participation.)

Another important fact not taken into consideration at the start of the study was that some NGOs were receiving funds from both government and non-government sources and implementing projects according to the respective funders' guidelines. This actually enhanced the performance base of such NGOs, who were able to adapt their ways of working based on their experience of using different guidelines and benefiting from the lessons from both. See Table 2.1 for the final selection of NGOs.

TABLE 2.1

Watersheds studied, by type of funding and implementing agency

Study number	Source of funding	Type of PIA	Name of PIA	Name of district	Name of watershed
1.	MoA	GO	DOA	Ranga Reddy	Chintapatla
2.		GO	DOA	Mahaboobnagar	Chakalipalli
3.		GO	DOA	Kurnool	Krishnagiri
4.	MoRD	GO	DPAP	Ranga Reddy	Dontepalli
5.		GO	DPAP	Mahaboobnagar	Karkalpahad
6.		GO	DPAP	Mahaboobnagar	Metlagunta
7.		GO	DOAH	Kurnool	Allugundu
8.		GO	DOAH	Kurnool	Bommireddypalli
9.		GO	DPAP	Kurnool	Lakkasagaram
10.		GO	DPAP	Anantapur	Kotanka
11.		GO	DPAP	Chittoor	Bisantham
12.		NGO	PROGRESS	Ranga Reddy	Pomena
13.		NGO	VASORD	Mahaboobnagar	Kakunoor
14.		NGO	WCUSS	Kurnool	S. Rangapuram
15.		NGO	Seva Mandir	Anantapur	Chelivendulu
16.		NGO	GVS	Chittoor	Panjani
17.		NGO*	VIP	Mahaboobnagar	Dokur
18.		NGO*	RDT	Anantapur	Mallapuram
19.		NGO*	OUTREACH	Chittoor	Madanpalli
20.		NGO*	OUTREACH	Khammam	Khammam
21.		GA*	MANAGE	Ranga Reddy	Malagundam Vagu
22.	NGO	NGO	Krushi	Chittoor	Garigelavanka
23.		NGO	DDS	Medak	Metlagunta
24.		NGO	YFA	Mahaboobnagar	William Konda
25.		NGO	Jana Jagrati	Anantapur	Kothakunta

*NGOs/autonomous organisations who have evolved some innovative ways of working within the MoRD guidelines

Shift in methodological approach

Over the course of several meetings of the SLG, 25 watersheds in five districts were shortlisted for study. As the study progressed, however, 25 was considered too small a sample to be truly representative of the approximately 6,000 watershed projects being implemented in the state. In order to assess the wider relevance and applicability of the initial findings, the study outputs were shared with district officials in the presence of all the PIAs operating in each district studied (including some that were not involved in the study) to get their feedback about the trends that the data was suggesting. The information was presented at a district-level workshop, followed by discussion with the PIAs. While no formal proceedings of these meetings were prepared, they did report striking similarities across districts and combinations of funders–implementers in their attempts to address the issue of participation.

The district case studies and the verification of data process showed the importance of identifying processes, clarifying roles and developing mechanisms for the institutionalisation of participation in watershed development. Further, the approach developed by MANAGE in the initial stages of the study emphasised more the physical and financial performance of individual watershed projects with some broad social indicators that focused on participation. Through SLG meetings this was changed to include many more qualitative questions on participation, gender, equity and technology choice questions. However, the district case study co-ordinators preferred to adopt these detailed formats only as checklists and developed their own methods of inquiry. Only in one case (Chitoor District) was the district case study undertaken using the MANAGE data-collection formats.

Besides this study, MANAGE also had a important role in the development of the DFID-supported Andhra Pradesh Rural Livelihoods Project (APRLP). Several lessons that emerged in the course of this study were incorporated into outputs being developed for APRLP. Following discussions on the potential to further explore issues of processes, roles and mechanisms of participation, it was agreed that MANAGE would undertake a separate study (in the same districts and watersheds as this study) to understand some of these complexities and develop methods to address them. The methodology subsequently developed for APRLP added value to this study as well, enabling the identification of parameters and measuring criteria which added considerable value to the narrative approach adopted by the district co-ordinators in their component of the study. Some of the combined learnings have since been incorporated into various draft reports of this study.

Merging the strengths of this study and the APRLP project significantly enhanced the objectivity of the methodological approach and the data subsequently generated, and enabled wider 'canvassing' of the findings beyond the 25 watersheds initially proposed.

District case study methodology

Consultations with the SLG helped to shortlist key co-ordinators for the five district case studies. In the field the co-ordinators were supported by a team of field investigators. Some additional information was also gathered from the districts of Medak and Khammam, where MANAGE had contacts with organisations engaged in watershed development projects.

The co-ordinators were encouraged to develop their own methodological approaches depending on their experience and their particular inclination towards certain issues, hence the district case study reports' coverage of technical issues, community organisation aspects, participation and gender issues varied. Findings from the reports and extensive consultations with the district case study co-ordinators were instrumental in preparing the final report for this study.

Verification of district case study data

Following the primary fieldwork at the district level, MANAGE undertook a data verification exercise that consolidated the district data, reviewed available secondary information, undertook a visit to each district headquarters and, where possible, visited the watersheds studied.

On the visit to each district, the MANAGE researcher was accompanied by a representative from the local NGO/PIA who arranged contact with their local Watershed Committee (WC), Self-Help Groups (SHG) and User Groups (UG). Where possible, the Watershed Development Team (WDT) also joined the group for a visit to at least one village, often more, per watershed.

At each watershed, physical progress was verified on a random basis from written records maintained by the WC and re-checked against the PIA's records. In instances where there were significant discrepancies between the data at watershed, district and state level, the watershed-level data was used. Primary data was also collected by holding focus group discussions with UG and WC representatives at the watershed level, and taking transect walks with them.

Monitoring some of the processes that went into enabling and adopting a participatory approach at the watershed level had not been considered in the initial stages of the study. It was only after the results of the first rounds of the verification

phase that it was incorporated as part of the study methodology itself. Once the data for each district had been compiled and tabulated, it was used as a discussion document with the district case study co-ordinators and was also sent to selected members of the SLG.

AP state report

The draft 'Andhra Pradesh State Report' captures the bulk of the fieldwork findings, including those from the district case studies and the process of data re-verification. It also draws on several rounds of meetings of the SLG, the individual experience and understanding of the SLG members, and the evolving institutional experience of MANAGE. Regular consultations were also held between MANAGE and the SLG (including district case study co-ordinators), the national co-ordinators of the study, and IIED representatives. The final version of the 'AP State Report' was compiled at MANAGE between September and December 2003 and presented at an SLG meeting in January 2004 in Hyderabad.

The final study report also documents the evolution of watershed policy at the national level. In the latter stages of the study there was an emphasis on trying to collate authentic data from the field but through discussions with IIED representatives it emerged that there was a need to simultaneously understand what had happened at the national level, given the importance attached to the watershed programme by the Government of India. This was considered essential because it demonstrated the importance of participation between policymakers at the highest level. It also demonstrated that the concerns of farmers and the poor tend to be relegated the higher one goes up the policy pyramid and that other political and fiscal concerns seem to take over. This analysis was largely based on secondary sources, but focused on the emphasis given to the concept of participation at the national level (see Chapters 4 and 5).

Reflections on process

As the study drew to a close and this final report was in the process of being drafted, it was felt that some reflections on the process would benefit future researchers as well as help to put on record some of the limitations of the study itself. The India case study began over five years ago when there was an optimistic understanding of the role of participation in natural resource management. It was believed that participation was both desirable and possible because for the rural poor it gave them greater control over precious resources that were necessary for livelihood and survival. It also eased some of the pressure of management away from government and shared it with

communities, both in terms of labour and financial resources. Participation would also enable NGOs to go from being sideline advisers to centre-stage implementers.

This study was ideally placed to monitor processes at work in the Watershed Development Programme of Andhra Pradesh, from the villages through districts to state government, as well as policy imperatives at the national level. The 1999 workshop at MANAGE, Hyderabad raised several crucial questions about objectives, methodology, usefulness and ownership of results. There was near unanimity, in the gathering of senior bureaucrats, policymakers, academics and NGO representatives, that it was a study well worth undertaking. This section recounts some of the major milestones of the research process, of methodological shifts and the role of factors unknown at the start of the study that were to influence its ultimate outcome.

The 1999 Hyderabad workshop provided the thrust that was required at the time to get the research process started in India. District case study co-ordinators were appointed with the understanding that they could develop their own methodological approach while keeping the key research questions within the framework of their choice. Given their seniority and depth of experience, it was understood that they were likely to focus on questions and areas of their preference, but that was not going to take away very significantly from the study. The key word was 'flexibility'.

In retrospect, it appears that the independent district case study co-ordinators were more flexible in approach than the co-ordinating institution MANAGE, which is an autonomous training institute of the Government of India. The district case studies were built on an adaptation of methods appropriate to the prevailing situations in the watersheds where they were undertaken, however they were constrained by periodic changes in elaborate prescriptive questionnaires handed out by MANAGE.

While these were developed in good faith and were meant to assist the data collection process, in the end only one district case study was undertaken in accordance with these formats. The others provided their inputs in the form of qualitative reports, backed in some cases with available quantitative data.

A unique feature of the methodological approach mandated at the 1999 Hyderabad workshop was a film-based institutional analysis. The task was to have been undertaken by the Community Media Trust (CMT) of the Deccan Development Society (DDS) in which men and women farmers would become the researchers, with government and non-government project managers the respondents to a set of loosely structured questions on the role of various institutions and the devolution of real decision-making, etc. in the watershed development process. It was keenly anticipated that the filming process by CMT in at least one watershed in two of the five case study districts would raise participatory research in the state to

unprecedented levels. While CMT initiated the filming process in Anatapur district it was unable to move beyond the district level.

It was interesting that despite the initial enthusiasm about filming demonstrated at the 1999 workshop, and at subsequent SLG meetings, over time the same people became less convinced about the usefulness of the approach. In 2001 a journalistic sting operation (known as the 'Tehelka' case after the organisation that carried it out) into irregularities in arms deals in the GoI's Ministry of Defence grabbed the attention of the nation as well as the ire of the government. In the aftermath there was general discomfort over anything that involved government functionaries making statements on film and there were few who were willing to risk careers and reputations. In one instance it was actually cited as the reason why government officials were reluctant to participate in the film-based approach to institutional analysis for this study. But what was the risk posed by a group of farmers (mostly women) from a credible local NGO that wished to pose questions on the management of their own livelihood resources? The footage would have been publicly available and the final output would only have been an edited version of the process. This was never satisfactorily explained, but there was a general sense of lethargy about encouraging the process, especially at state-government level, despite efforts to secure appointments and even share the general thrust of questions to be asked. In that sense, it was a lost opportunity to empower both the CMT and other constituencies that would have viewed the end results to try an innovative approach in participatory research, and to record a process that would have been useful long after the study itself had ended.

The matching of final outputs with available resources in a research process is always difficult. Given more time, more ability, and more funds any research process could provide more authentic, and therefore useful, results. In this study, while there was considerable time, ability and funds available at the start of the study, they were not necessarily put to optimum use. At the national level, the study changed co-ordinators more than once and there was a turnover of people associated with the study, especially in the National Learning Group. At the state level, while the co-ordinator was constant, there was high turnover in the State Learning Group membership and a diffusion of purpose.

This raised questions about how the interest of individuals in a voluntary coalition such as the NLG or SLG can be sustained. Hindsight suggests that it is not the prospect of meetings that make them attractive but the opportunities such meetings represent. Periodic meetings at regular intervals, sharing of information and insights from the field and policy levels, clear agendas and proceedings, are

some of the things that might have helped to keep the two groups intact and committed. Unfortunately, the value of the NLG and SLG was never convincingly demonstrated within the study even though there was initial enthusiasm about its role and existence. However, at least at the SLG level, its usefulness was acknowledged right through the period of the study until the end-of-project workshop at MANAGE in January 2004.

Two other elements of the study that were proposed but not undertaken were a peer review process and an end-of-project workshop at the national level. The national co-ordinator had identified a series of people (within and outside the NLG) who would be sent drafts of the final India case study report for review and to obtain from them the most current information on some of the issues being considered at the policymaking level. The peer-reviewed report would then have been presented at a national workshop that would bring together policymakers, donors, practitioners and researchers of participatory processes in natural resource management in India. Due to delays in drafting the final report and a change in national co-ordinators, neither the peer review nor the final national workshop were undertaken. These have to be counted as lost opportunities that would have added significantly to the final India case study, especially in the light of recent political changes and the subtle shifts away from participatory approaches in natural resource management.

In a study that made 'flexibility' its cornerstone, the role of a facilitator to keep it on track was well played by IIED and needs to be acknowledged. There were times in the process when it was felt that the study was taking too long and not suggesting anything dramatically new in the understanding of participation or watershed development in India. There were changes taking place at the policy level, such as the three sets of guidelines that were issued in the course of the study that would make some of the final results redundant and only of historical interest. The volume of information generated (from the district case studies, the AP State Report, the limited CMT footage, the reviews of both the Rajasthan experience and the IGWDP in Maharashtra, as well as the vast NRM and participation-related literature in India) added significantly to the understanding of some of the individuals involved with the study. However, it was felt that the richness and depth of this understanding might remain unused in the final output of the study that, at least in early drafts, was tending to be more descriptive than analytical.

Concern was expressed about whether the findings of this study would be relevant at all by the time they were published and available for wider dissemination. Timely interventions from IIED, as well as discussions with MANAGE and SLG representatives, helped to a great extent to redefine the scope of the study and keep it focused on some

Selected statements from the plenary made at the end-of-project workshop held at MANAGE, Hyderabad, 29 January 2004

"The political angle cannot be ignored but ways of getting around it have to be found. The political stakes of local politicians need to be represented in perspective planning exercises." Director, Andhra Pradesh Rural Development Academy

"An overarching national policy may need to be considered as different sets of guidelines have led to differing perceptions. Large government hierarchies have a low commitment to participation but it needs to be incorporated." Director, Central Research Institute for Dryland Agriculture

"When it comes to practice, the government is not so keen on participation in their programmes. The attitude tends to be that people can participate once the planning is over." AP state government official

key issues around the study of participation rather than on producing general statements on several issues.

The outside interest in the study, especially by DFID India, was quite revealing. At the time the study was initiated, DFID was in the process of initiating its own Andhra Pradesh Rural Livelihoods Project (APRLP), with at least three districts being common between APRLP and the study. MANAGE played a key research and training role in APRLP as well and it has been acknowledged that some of the issues related to institution building and management that were first identified in this study were subsequently operationalised in the implementation of APRLP activities and project processes.

In the end the study raises as many questions as it set out to answer, about livelihood options for the poor, the state of natural resources in India and the concerns of those engaged, both from government and non-government quarters, in the struggle to find alternatives that work. The evolution of the *1995 Guidelines* was fascinating, but it was not possible to chronicle the subsequent sets of guidelines in similar detail. The richness of discussions throughout the study has been acknowledged by nearly everyone who was associated with it, although only a fraction of it has been captured in this report. It has been heartening to get feedback from some of these people who say that they now view participation in completely new and more sophisticated ways than they thought possible, or even essential, prior to the start of the study. That some of these new and sophisticated ways have worked themselves into the fabric of participation in watershed management in Andhra Pradesh is even more encouraging.

Chapter 3: Evolution of natural resource management in India

The evolution of the concept of watershed management and development shows that NRM trends in India have mirrored international ones. A watershed roughly refers to the land of a drainage divide, a basic and natural physical unit. What is now known as watershed management has changed over the course of about 100 years from concentrating on a single physical objective – conserving soil and water or reversing degradation – to having multiple objectives, including social and economic development, natural resource conservation and empowerment.

A very good overview of the major stages in the evolution of watershed management is provided by Chhotray (2003), which largely informs this section.

Watershed management in India, from the late 1800s by the colonial administration and until quite recently by the Government of India (GoI), was essentially a technical solution to the problem of soil and water conservation (SWC), led by a central planning authority. The earliest accounts show that in 1888 nearly 1,200 hectares of ravines in Uttar Pradesh were treated with conservation measures to protect the adjoining town of Etawah from water erosion. The 1928 Royal Commission on Agriculture had recognised soil conservation as a problem of special importance, while the Bombay Land Improvement Act of 1942 was a prominent example of a regional initiative.

After Independence in 1947, soil and water conservation became the job of the Ministry of Agriculture (MoA). The work mainly involved treating river valley catchments to reduce siltation in reservoirs. The agriculture strategy at the time concentrated on increasing food production, so irrigating the lower reaches of river basins was the focus. The catchments themselves became seriously neglected as a result, leading to premature siltation of riverbeds, tanks and reservoirs. In 1962–3, the first major government response to this was launched: the Soil Conservation Works in the Catchments of River Valley Projects Scheme (RVP).

During the Green Revolution, when increasing agricultural productivity was the priority, drylands were neglected. While many scientific institutions and projects were closely involved in research for dryland agriculture (including the Central Arid Zone Research

Institute, Centre for Research in Dryland Agriculture, Central Soil and Water Conservation Research and Training Institute, and ICRISAT), this research was not necessarily accompanied by active fieldwork or improved productivity. This relative neglect of drylands hampered the food self-sufficiency project – irrigated areas alone were not able to meet the country's food needs. The 7th 5-Year Plan in 1985 stated that decades of neglect had led to dryland areas being caught in a vicious cycle of high risk, low investment, poor technology and low production, and that issues of agricultural productivity and degradation of biophysical resources could no longer be compartmentalised.

In 1994, the GoI created a 'High Level Committee on Wastelands Development', known as the Dharia Committee, to analyse the results from the latest 'Land Use Survey'. Its findings, presented the following year, were a fundamental building block in a rethinking of the existing soil and water conservation strategy. They said that 95.5 million hectares of 'degraded lands' required urgent attention, before they became wasteland. Nearly 50 per cent of this land lay outside forested areas, so could be made fertile and productive again. Even good agricultural lands needed to be worked carefully, as after multiple cropping, irrigation, and heavy pesticide and fertiliser use they become depleted. The degradation of village common lands (which are neither privately owned nor owned by the state) posed yet another serious problem. And overall, the rigid compartmentalisation between the departments concerned with these different resources got in the way of progress.

The Dharia Committee recommended that SWC efforts should be extended to all lands, whether already degraded or not, whether very productive or not, in order to prevent further deterioration and depletion. Second, an integrated approach to biophysical resource conservation was required, based on the physical (rather than administrative) area of a micro-watershed. This marked a significant departure in thinking at the time.

Watershed development programmes had been carried out by the MoA since Independence, and in 1990 the MoA launched the National Watershed Development Programme for Rainfed Areas (NWDPRA) as the country's premier dryland farming scheme on a watershed basis, along with three other soil and water conservation schemes (RVP, FPR and the Centrally Sponsored Scheme for the Reclamation of Alkali Soils). At the same time, however, the developments in thinking reflected by the Dharia Committee in part laid the ground for a transition in the watershed development sector, from a soil and water conservation strategy to a 'rural development programme'. This was effected through the transfer of governmental mandate for watersheds from the MoA to the Ministry of Rural Development (MoRD). The Hanumantha Rao Committee in 1993 and 1994 recommended that the many

programmes with related objectives such as drought proofing, soil and water conservation, and wastelands development be combined under a few programme heads. Thus while there was no literal or explicit transfer of mandate of watershed works from MoA to MoRD – indeed there are still overlapping mandates – a significant portion of the responsibility/privilege for watershed works came to rest with MoRD. This transfer was significant in two ways: the state recognised the breadth of objectives that watershed development had come to encompass, and the shift paved the way for wide-ranging policy changes, especially with respect to incorporating a 'participatory focus' for watershed development.

In 1987 the MoRD's existing Drought Prone Areas Programme (DPAP) and the Desert Development Programme (DPP) changed their own practices and adopted the watershed approach. Their Integrated Wastelands Development Programme (IWDP) was set up in 1989 and also aimed to develop wastelands on a watershed basis.

Participation in the natural resource management sector received a major boost in the late 1980s with the National Forest Policy (1988) that saw the creation of Joint Forest Management (JFM) (see Box 3.1) 'a massive people's movement' to achieve its stated objectives. Shortly thereafter, the Ministry of Environment and Forests (MoEF) issued an order (No.6.21/89-PP of 1 June, 1990) that enabled government agencies to start establishing the involvement of village committees for the protection, regeneration and development of degraded forest lands. In 1992 the 73rd Amendment to the Constitution of India was promulgated and came into effect in April 1993, empowering Panchayati Raj Institutions to act as the medium of local self governance (see Box 3.2). People's participation in the governance and management of their livelihood resources was widely acknowledged as the key to poverty alleviation. It was this heady period of change that encouraged the initiation of the process that would culminate in the *1995 Guidelines* for watershed development and another process that resulted in laws encouraging participatory irrigation management (PIM) (see Box 3.3).

BOX 3.1

Joint forest management

There is eveidence to suggest that local communities in India had been spontaneously protecting forest areas for a long time before the Forest Department was created. Collaborative arrangements to protect and mange forests were initiated in the 1970s in West Bengal and Joint Forest Management (JFM) was institutionalised by the Ministry of Environment & Forests (MoEF) through an order dated 1 June, 1990. By 2002, 27 states and union territories had institutionalised JFM through their own enabling orders, supporting 63,618 committees and covering an area of 140,953.60 sq km. As the name suggests, it is an arrangement between the Forest Department and local communities, represented through Forest Protection Committees (FPC), to protect and manage selected areas of 'degraded' forests. The clause restricting JFM to 'degraded' forests proved a significant hindrance to the spread of the concept and in February 2000 the MoEF issued another order replacing 'degraded' with 'good' forests, suggesting that all forests (as determined by the Forest Department) could potentially be brought under JFM. In December 2002 another order encouraged the development of a Memeorandum of Understanding (MoU) between FPCs and the Forest Department, engagement with Panchayati Raj Institutions (PRI), and capacity building for management of non-timber forest produce (NTFP).

Besides local community representatives, the FPCs (variably called the Van Suraksha Samiti, Village Forest Committee, or Village Forest Protection Committee) also include the local Forester or Beat Guard as member-secretary and where possible NGO representatives. A 'micro-plan' prepared through a participatory planning process records the activities, such as plantations, choice of species, extent and periods of extraction, protection duties, etc., and is subject to the approval of the local Divisional Forest Officer (DFO).

In theory, JFM is an evolving policy-based programme which sets out to establish 'partnerships' based on mutual trust between local forest-dependent communities and the Forest Department for the sustainable management and joint benefit sharing of forest produce. . JFM seeks to shift the existing inequitable distribution of management control by directly involving local peoples and institutions in forest management. It does not involve the transfer of legal ownership over forests and forest land, but attempts instead to restructure the formal system of access, decision-making, and sharing of costs and benefits to account for the needs of local communities. While many object to this fundamental limitation, proponents see JFM as a negotiating process, where the objectives of different users are determined through a transparent and participatory process – regardless of 'ownership' or 'property rights' alone. The linking of socio-economic incentives and forest development has been singularly instrumental in eliciting community participation. The institutional involvement in various forest protection and developmental activities has made promising impacts on the biophysical and socio-economic environment of the JFM areas.

The Forest Department, from once being the most ardent critic of the programme, is now its most willing promoter. However, critics of JFM argue that there is no real change in power relations between communities and the Forest Department, legal ownership still vests with the Forest Department, and that donor interest in the programme is a bigger motivator for the government than the needs of local communities.

The next big change in watershed management came when the MoRD's *1995 Guidelines* took effect (see Chapter 4 for a full description of the birth of the guidelines). For the first time the participation of watershed users was an element of watershed management, along with the multiple objectives of social development and resource management. These guidelines applied to the MoRD's Drought Prone Areas Programme and Desert Development Programme, where farmers depended heavily on relatively small landholdings, non-agricultural biomass, and common assets. In addition past guidelines had been exclusively technical, and as the programmes each had a different focus, had not really been suitable for sharing. Historical watershed works in India prescribe, and the *1995 Guidelines* maintained, an emphasis on physical structures and targets. The cornerstone of the DPAP/DDP programmes is treating land by building soil and water conservation structures, including field bunds, check dams, gully plugs, rock-fill dams, percolation tanks and drainage lines. The *1995 Guidelines* were subsequently revised in 2001 (the *2001 Guidelines*) and again in 2003, when they became known as the *Haryali Guidelines* (meaning 'greenery' in Hindi).

Following a failed 1999 attempt to bring the MoRD and MoA watershed programmes together under some *Common Principles*, in late 1999 the MoA issued the *WARASA Guidelines* for its NWDPRA programme, which also employs a watershed approach. The MoEF, whose watershed work was mainly about wasteland development, could have used the MoRD's *1995 Guidelines*, but it was not bound to the way MoRD programmes were. While numerous other national and state policies continue to have a significant affect on watershed activities at village level, these sets of guidelines are the main policy directives guiding current watershed management and they have huge importance for the way that participation has developed in watershed development activities.

The major exception to the above is the many dryland-focused watershed activities being carried out by donor agencies in India. There is a bewildering diversity of institutional arrangements and emphases employed by these donor-driven programmes, which makes it difficult to analyse the dynamic of participation across them all, even though these also contribute to institutionalising participation in watershed management. This report confines itself to examining the state and its initiatives – plus to some extent (and for purposes of comparison) the experience of NGOs, drawing largely on the experience from Andhra Pradesh – as well as policy initiatives at the national level.

BOX 3.2

Panchayati Raj – Institutions of local self-governance

The 1992 Constitution (73rd Amendment) Act marked a new era in federal democracy and provided constitutional status to Panchayati Raj Institutions (PRIs). Most states and territories have now also enacted PRI legislation.

Traditionally, a Panchayat was a governing council of five senior members of a village. This concept was formalised, and Panchayats became local government bodies. Panchayats' main responsibilities are to plan for and implement economic development and social justice. A Panchayat will be created and elected to cover a certain specified population, which might include many neighbouring villages.

States with more than 2 million people have a three-tier system: village, intermediate and district level. Representatives are elected by the Panchayat area for five-year terms. Seats are reserved for Scheduled Castes, Scheduled Tribes (both proportional to the population) and one-third of seats are reserved for women. All states except Assam, Arunachal Pradesh and Jharkhand have held elections under this act.

Financial powers of Panchayati Raj institutions

The 73rd Amendment Act gave the Panchayati Raj institutions such powers and authority as they may need to function as institutions of self-government and it contains provisions to devolve powers and responsibilities to Panchayats at the appropriate level to enable them to fulfil their responsibilities, including:

- authorise a Panchayat to levy, collect and appropriate some taxes, duties, tolls and fees;
- assign to the Panchayat some taxes, duties and tolls levied and collected by the state government;
- provide grants from the consolidated funds of the state; and
- provide for constitution of such funds for Panchayats for crediting all money received by or on behalf of Panchayats and also the withdrawal of such money therefrom. A State Finance Commission (SFC) may review the financial position of the Panchayats and make recommendation to the governor regarding the allocation of fund to Panchayats.

The Ministry of Rural Development gives states limited financial assistance to train elected PRI members and functionaries. The development functionaries (or civil servants) working within the PRI framework are required to undergo a certificate course developed by the Indira Gandhi National Open University (IGNOU) and run by the state governments. MoRD has also been providing financial assistance through the Council for the Advancement of People's Action & Rural Technology (CAPART) to enable NGOs with proven track records to conduct training and awareness raising programmes on Panchayati Raj.

Panchayat and the environment

Although the Act does not mention the term 'environment', some of the 29 duties are relevant:

- agriculture, including agricultural extension
- land improvement, implementation of land reforms, lands consolidation and soil conservation
- minor irrigation, water management and watershed development
- social forestry and farm forestry
- minor forest produce
- small-scale industries including food-processing industries
- khadi, village and cottage industries
- rural housing
- drinking water
- fuel and fodder
- non-conventional energy sources
- education including primary and secondary schools
- health and sanitation, including hospitals, primary health centres and dispensaries
- maintenance of community assets

Source: http://pnrdassam.org/praj.htm

BOX 3.3

Participatory irrigation management

'Existing usage of water is inefficient, wasteful, inequitable with tail end deprivation being almost universal. Further, widespread deterioration of infrastructure with little or no participation of farmers has aggravated the low utilisation of water of irrigation commands' (Irrigation & CAD Department, 1997).

In the late 1990s, the area irrigated under some of the major and medium-sized projects was shrinking, despite increases in capital expenditure (corrected for inflation) and operation and maintenance (O&M) expenditure (Jairath, 1999). The financial returns were very poor due to the low rates of water tariffs and low rates of collection. That the technical, managerial and financial performance of irrigation projects in AP was very poor was well known and acknowledged in government circles.

Against this backdrop, in March 1997 the AP Farmers' Management of Irrigation Systems Act was passed by the State Legislative Assembly. The legislation aimed to provide a legal backing for implementing measures to institutionalise the participation of irrigation users in the operation and maintenance of irrigation systems.

The main objectives were to ensure equitable and reliable supplies; bridge the gap between irrigation potential created and used through preparation of suitable operation plans; enable social and water audits; and enable the department to withdraw from O&M to concentrate on reservoir management and development of new systems.

The thrust was on decentralising irrigation management – giving greater responsibility and powers to locally elected representatives of water users. Involvement and control by the users at the local level, it was believed, would be an incentive to improve operational performance. Quality and cost efficiency of irrigation management would improve, leading to increased profitability of irrigated agriculture – often despite increased irrigation costs to the user. The process was perceived to be a cost-saving venture for the government, wherein the released resources could be used to invest in irrigation elsewhere or on the main system.

Putting the proposals into practice required the creation of an institutional structure with Water User Associations (WUAs) as the basic element. In June 1997 elections for nearly 10,000 WUAs were held (each with one president and a number of technical members varying with the size of the area to be serviced). It was a huge task for the Irrigation Bureau (IB) to hold all these elections freely and fairly on one day, but most farmers were happy with the process. After the elections, extended training was provided to government officers and WUA presidents to sensitise them about the features and necessity of PIM. Further training for all the WUA presidents and members was conducted in June 1999 at a cost of Rs.25 million (DIPR, 1999).

As a result of the reforms, by 1999 22,171 works had been completed at a cost of Rs.1.07 billion (DIPR, 1999). During the first year the main activities in canal-irrigated areas were silt clearance (of channels), strengthening of embankments, small repairs of pipe outlets and drop structures, plugging of breaches, etc. The emphasis during the second year shifted to fixing the shutters at the various offtake points (the existence of shutters being a precondition to water regulation).

These WUAs have provided a forum for communities to communicate their demands, problems and concerns to the government in a systematic manner. In place of anarchy, confusion, and randomness there is relative order in getting the message across. Field surveys confirmed that most farmers prefer to deal with the WUA officials rather than the Irrigation

Bureau officials that they dealt with before. Whatever reservation the individual farmers may have had regarding the degree of effectiveness of the WUAs, they were unanimous in welcoming the establishment of these organisations. While personal patronage seemed to be the only way to get a high-level hearing before, now there was a place that any farmer could go to with his water-related difficulties. The WUA's systems will take time to establish and become really effective, particularly given the large scale of PIM reforms in AP.

According to a press release from the Irrigation Minister, as a result of better maintenance work due to the reforms, cultivation on previously uncultivated land had expanded by some 500,000 acres. Paddy production has gone up by 10 per cent between 1997 and 1999 and yield has increased from 30-35 to 40-45 bags per acre, although this cannot be proven to be directly linked to the reforms (The Hindu, 1999). Certainly there has been a significant increase in area irrigated, but field observers feel the figures are exaggerated. There has indeed been a shift to wet crops, mainly rice.

The major weakness of the programme has been the negligible impact on equitable distribution of water. Increased water availability without a reorganisation of water distribution is likely to reinforce the existing patterns (or anarchy) of accessing and using water. Those farmers with nearest or first access monopolise the water to the cost of downstream farmers. Financial returns through the payment of water tariffs are very poor, primarily due to this inequity in the use of water. Though there has been an increase in remittances recently, there are problems with the interpretation of data over the years due to changing water rates. And although WUAs have effective links with the Irrigation Bureau, the representativeness of WUAs in general remains weak due to the top-down nature of the reforms and lack of awareness at grassroots level.

Source: Jasveen Jairath, Participatory Irrigation Management in Andhra Pradesh, Contradictions of a Supply-Side Approach. Society for Participatory Development, Hyderabad, India, 2000.

Watershed development or rehabilitation in India has long been a fundamentally resource-based approach; enhancing livelihoods was a secondary purpose. The *1995 Guidelines* have been characterised as a significant step towards decentralised decision-making in support of the livelihoods of the poorer groups of society (Farrington, et al., 1999). As we will show in Chapter 4, only part of the rationale for the passing of the *1995 Guidelines* was enhancing livelihoods. It is also significant that the rationale for participation was based on engendering participation of the local community in rehabilitating the biophysical entity of the watershed. The main concern in official circles remained the loss of soil and water due to deteriorating management of the watershed, and the local institutions/community were considered a better route to improving SWC. Much of the rhetoric that enabled the *1995 Guidelines* to pass into law was related to the extent of environmental degradation. This environmental loss was not immediately related to the welfare of the people directly dependent on these resources, even though the programmes through which the SWC was to be achieved were meant to improve the welfare of the people. It is important to remember that the number of eligible sites for watershed development

was expanded based on new identification using an aridity index, following from the Hanumantha Rao Committee recommendations, though social indicators are listed as criteria in the choice of watersheds or villages within the district or block. Even the unit of intervention, the micro-watershed, continues to be a bio-physical unit rather than one more appropriate for social development or developing community welfare, such as a village unit in which most of the resources in question are owned, either privately, by government agencies or as common property resources (CPR).

The jurisdictional and/or territorial divisions within a single watershed between Forest Department (FD) land and land owned by other departments or individuals and whether it can all be brought under a comprehensive watershed development strategy has also been a sticking point. The upper reaches of watersheds are often under the jurisdiction of the Forest Department. Under the Forest Conservation Act, 1980, no excavation, removal of stones, construction or submergence may take place on this land without the consent of the FD. The history of differences between the states' FDs and Rural Development Departments means that very often permission is denied for constructing water or soil conservation structures on land that is classified as forest land. These administrative difficulties often impinge on the overall effectiveness of watershed conservation works.

Chapter 4: *The 1995 Guidelines**

The MoRD's *1995 Guidelines* were groundbreaking for their introduction of community participation into watershed development, but they did not happen in a vacuum. The contextual factors include the history of the failure of soil and water conservation programmes to deliver on poverty alleviation objectives; the economic reforms and corresponding political climate; the growing disillusionment with the lack of benefits from the Green Revolution; and the success stories established in watershed projects.

Briefly, the policy shift came about in two main stages, the first after the Hanumantha Rao Committee issued its report in 1993, and the second with the adoption of the *1995 Guidelines*. The Hanumantha Rao Committee had been created in 1992 by the MoRD to evaluate their DDP and DPAP programmes. The recommendations of this committee were then picked up and drafted into the *1995 Guidelines*, a process that involved considerable consultation and negotiation. The *Guidelines*, once formulated, then had to be passed by the legislative arms of the government in order for them to be officially adopted by state governments in their watershed programmes.

Context and policy space

The political atmosphere in India in the early 1990s was one of increasing acceptance of and experimentation with institutionalising participation. The 73rd Amendment of the Constitution of India, responsible for institutionalising the role of the Panchayat Raj institutions, was passed in 1993. The Joint Forest Management (JFM) programme had received a significant boost from the June 1990 order of the Government of India. At the same time, structural adjustment programmes were restricting government expenditure; the limited benefits of the Green Revolution for poverty reduction were being recognised, and a participatory paradigm for poverty alleviation was gaining currency worldwide. Added to this was the obvious lack of success in the country's government-backed soil and water conservation and watershed management programmes in the country, particularly compared to some of the successful programmes in the NGO sector.

For all these reasons, the policy space that opened during 1993–4 was highly favourable to reform.

*This chapter draws significantly on the work of Pratt (1988).

In 1991, the Government of India had embarked on a programme of structural adjustment. The Congress Government, under then Prime Minister Narasimha Rao, had agreed to liberalise and reform the economy and Manmohan Singh, a Harvard-trained economist serving as the minister of finance, headed the reforms. The industrial licensing regime was changed, the currency was devalued, and markets were opened to external competition (Chhibber 1995). The government vowed to attack the deficit by slowing spending, so any policy option that involved additional financial outlays was unlikely to be approved by the cabinet.

The policymaking context changed significantly between 1992 and the *1995 Guidelines*, however. First, the budgetary squeeze had been relaxed somewhat. Second, the Congress party had been trounced in several key state elections: in 1993 in Uttar Pradesh, and between December 1994 and March 1995 in Andhra Pradesh, Karnataka, Maharashtra, and Gujarat. Narasimha Rao's leadership of the party came under threat as a result of these setbacks (Agha, 1995). Analysts linked Congress's electoral woes to the unpopularity of the new economic reform measures, so the advocates of structural adjustment within the government realised that for political reasons they needed to stress the 'human face' of structural reforms. Despite their commitment to controlling the deficit, they needed to increase spending on social services as a part of the reform process if they were to survive politically (Yugandhar, 1998).

History of failure in soil and water conservation programmes

By the late 1980s, disillusionment with SWC programmes was growing, including in official circles. The government constituted a high-level committee to study the many schemes in operation. A committee formed by the MoRD reviewed the DPAP and DDP, submitting its report in 1989. The Indian Council of Agricultural Research evaluated model watersheds initiated by the MoA, and the Planning Commission made renewed efforts to include rain-fed agriculture in the 7th Five-Year Plan. The reports all found that the programmes were failing to meet their objectives. Reservoirs were silting up, drought-prone areas still needed drought-relief assistance, flooding continued, and agricultural productivity in rain-fed areas was not growing fast enough. This was despite large expenditures in these sectors over decades (Seth, 1996).

Individuals in important positions in the MoRD had begun to feel quite strongly that the time had come to concentrate on improving agriculture in rain-fed areas, rather than focusing exclusively on high-input agriculture in irrigated areas (Yugandhar, 1998). Yugandhar argued that selecting agriculture ministers from irrigated areas, like the Punjab, sidelines the interests and needs of dryland farming. Policymakers were

recognising the limits of the Green Revolution to benefit farmers in drylands, and thus to alleviate poverty (Yugandhar, 1998; Seth, pers. comm. in Pratt, 1998; Turton, 1998). Yugandhar, who became Secretary, MoRD in 1993, linked making a shift towards supporting rain-fed areas with alleviating poverty, as many of the rural poor were living in semi-arid, rain-fed agricultural areas (1998). These opinions were supported by numerous other official statements on the lack of impact of the historical SWC approach and the need to look more closely at drylands and wastelands.

Successes involving participation and non-governmental experiences with participation

The existence of some key success stories generated by NGOs were a key contextual factor in the policy shift. These success stories influenced the Hanumantha Rao Committee (the primary driving force behind the promulgation of the *1995 Guidelines* – see section later on key actors) as it travelled the country looking for examples of good practice (Ganeriwala, pers. comm. in Pratt, 1998; Yugandhar, 1998).

The Hanumantha Rao Committee visited eleven states in the course of their assessment (MoRD, 1994:72). On their visits special efforts were made by certain committee members to ensure that the committee would have a chance to hear presentations from NGOs taking a participatory approach to watershed management (Yugandhar, 1998). The success stories that the committee observed had a strong influence on their recommendations. Their report specifically cites the examples of Ralegaon Siddhi and Adgaon in Maharashtra, Jhabua in Madhya Pradesh, and Kabbalnala and Mittemari in Karnataka as providing visions of success (MoRD, 1994:15). The committee also devoted two full weeks to meeting NGO representatives towards the end of their tenure (Ganeriwala, pers. comm. in Pratt, 1998; MoRD, 1994:72). The case of Ralegaon Siddhi – a village in dryland Maharashtra in western India that had undergone a radical socio-economic transformation due in part to an extremely successful watershed management effort spearheaded by a visionary leader known as Anna Hazare – had a particularly powerful influence, even though Anna Hazare, an exceptional Gandhian leader, played such an important role there. While recognising the unique character of this case, the committee still considered it important evidence of the place of participation in successful watershed projects. One member viewed the institutional arrangements in the *Guidelines* as a second-best substitute for leaders like Anna Hazare (Ganeriwala, pers. comm. in Pratt, 1998). Aside from success stories from the NGO community, there seems to have been some influence from donor-backed projects (Sanghi, pers. comm. in Pratt, 1998). An important committee member was on the governing body of the ODA-funded project KRIBHCO, a watershed project run by a

co-operative fertiliser company with British support. The project was ongoing in Madhya Pradesh and Gujarat at the time. The Indo-German Watershed Development Project (IGWDP) in Maharashtra was also analysed by the authors of the *Guidelines*. The influence of donors on the *Guidelines* is unclear, however, since government policymakers generally downplay the influence of donors in affecting the move towards participation (Saxena, pers. comm. in Pratt, 1998; Yugandhar, 1998). Policymakers similarly downplay the role of international discourse or donor influence in the greater visibility or credibility given to participation in national or official circles. When the key MoRD individual spearheading the review of the DDP and DPAP, Mr Yugandhar, was asked directly about the influence of donor projects on the *Guidelines*, he vehemently denied their influence, stating that in his view the donors simply had not achieved any success. The one exception, he thought, was the IGWDP in Maharashtra. In his view, however, the state government was the key to the success of that project, not the influence of the donor (Yugandhar, 1998).

Key actors

In April 1993, shortly after Yugandhar became Secretary of MoRD, a committee was constituted to conduct a broad review of the existing programmes, the 'Technical Committee on the Drought Prone Areas Programme (DPAP) and the Desert Development Programme (DDP)', more commonly known as the Hanumantha Rao Committee after its chair. Its wide-ranging terms of reference empowered it to:

- review the criteria for selecting eligible areas for the programme;
- review the 'programme contents, methodology of planning, scale and pattern of funding and the administrative structure';
- reconsider the list of eligible activities;
- consider integration of the DPAP and DDP with other government programmes; and, of central interest to this story,
- recommend measures intended to promote the role of Watershed Committees, Pani Panchayats, NGOs, etc. in order to encourage widespread participation of people and ensure greater accountability of funds and sectoral departments to people's representatives (MoRD, 1994).

Although many individuals were part of the process that led to the formulation of the *1995 Guidelines*, a small core of people were major players. Mr Yugandhar was central in orchestrating who would be involved in the policy reform and at what stage. His vision of development happened through the co-operative efforts of small groups,

not only in watershed programmes but in all sectors (Yugandhar, 1998). Mr Yugandhar selected Hanumantha Rao, an old associate of his, to head the Technical Committee. Hanumantha Rao also had the ear of the prime minister, thus lending the committee, and whatever recommendations it made, crucial additional weight. The two of them strategically selected committee members with sympathetic views on watershed programmes (Yugandhar, 1998). For example, Dr Venkateswarlu had previously conducted research on indigenous SWC technologies in Rajasthan (Venkateswarlu, 1991), and was thus predisposed towards supporting a greater role for local people in technical planning. Another key figure on the committee was Anil Shah, a retired Indian Administrative Service (IAS) officer who had established an NGO in Gujarat called the Development Support Centre. His career gave him a special place in policy processes, as his days in the IAS gave him an extensive network of former colleagues within government who still had his respect, while his move into the NGO sector allowed him the space to innovate and experiment that he would not have had in the government sector (Turton, 1998).

Once the Hanumantha Rao Committee had made their recommendations, work began to draft them into what would become the *1995 Guidelines*. Mr Yugandhar contracted SK Arora, then Director of MANAGE, the National Institute for Agricultural Extension Management, to take the main responsibility for drafting the *Guidelines*. MANAGE was a quasi-governmental research, training, and consultancy institute with a reputation for innovation and Mr Arora was recognised as an innovative manager himself, who had attempted to introduce flexible organisational structures at MANAGE. He was also known as a supporter of participatory approaches in development (Sanghi, pers. comm. in Pratt, 1998). Mr Arora was helped throughout the drafting process by Dr Sanghi, who was then a researcher at MANAGE. When Mr Arora had been Commissioner of Agriculture in the Andhra Pradesh state government he had arranged for Dr Sanghi to be transferred into MANAGE. Dr Sanghi was responsible for some of the pioneering research work in documenting indigenous SWC techniques, and was committed to participatory research processes. He had developed contacts with Anil Gupta (a Professor at the Indian Institute of Management, Ahmedabad working on farmer knowledge networks) and Robert Chambers, becoming part of a network of other activists with similar views (Chambers, pers. comm. in Pratt, 1998; Sanghi, pers. comm. in Pratt, 1998). Dr Sanghi's thinking heavily influenced Mr Arora, and the emphasis on indigenous technology in the *1995 Guidelines* reflects this (ibid.).

It is worth singling out a few more of the many actors in this policy process. Mr Tucker, who was a District Collector in Anantapur District, Andhra Pradesh in the early 1990s, was also a key influence on the *1995 Guidelines*. He has since served

as the Commissioner for Rural Development in Andhra Pradesh, and feels the *1995 Guidelines* institutionalised the approach that he was taking in watershed development in his district at the time (Tucker, 1998). Mr Yugandhar identified another key voice from Andhra Pradesh, Mr VS Sampath, who was the Commissioner of Agriculture in the state government. Mr Sampath served on the Hanumantha Rao Committee, and helped Mr Yugandhar in early attempts to draft the guidelines. He pushed for a large role for local people in controlling the programme (Yugandhar, 1998). Throughout the drafting process, Ranjit Issar, who was the Joint Secretary for Wastelands Development in the central government, also played a major role. TKA Nair, the Additional Secretary of Wastelands Development, helped to write in changes to answer criticisms raised at the various consultative fora.

Discourse

The discourse that policymakers draw upon affects the way they understand problems and the policy options open to them. The 'Hanumantha Rao Committee Report' (MoRD, 1994) reflects a certain narrative (Roe, 1991; Leach and Mearns, 1996) about people's participation and environmental change, with a beginning, a middle and an end.

First, the 'steady environmental degradation' in drylands is attributed in part to '[the] breakdown of traditional institutions for managing common property resources and the failure of new institutions to fill the vacuum' (MoRD, 1994: 15). These institutions have been replaced by the 'individualised or market-driven exploitation of natural resources without any regard for adverse externalities', and also 'numerous official programmes... which are dependent almost entirely on the top-down bureaucracy' (ibid: 15). The lack of participation in government programmes was 'conspicuous by its absence', and as a result, '[the] people were found to be passive at best and sceptical and even hostile, at worst' (ibid: 15).

The Hanumantha Rao Committee report also suggests that more people's participation is part of the remedy for the failures of previous watershed programmes. The middle of the story is thus a number of policy reforms. First, '[greater] attention has to be given to peoples' own strategies and their own indigenous technologies', since people in drylands 'have developed over a period of centuries their own strategies to cope with the adverse consequences of droughts' (ibid: 17). (The report is a bit ambiguous on this point, as it states that despite the value of people's technical knowledge, they may need to call on technical assistance from government staff (ibid: 21).) Second, people should be called upon to make 'some contribution of labour or material' (ibid: 27). Third, assets created through the programme should

be turned over to the 'beneficiaries' (ibid: 25). The overall strategy is that the responsibility for planning and implementing DPAP and DDP should be transferred to the democratically constituted local self-government institutions (Panchayati Raj institutions, or PRIs) and to voluntary organisations of the people. Government functionaries at all levels should act as facilitators for implementing the people's programmes…(ibid: 23).

The report sees the transition towards this state of affairs as a protracted one. It states that in some areas, local voluntary agencies and Panchayati Raj institutions are ready for the task, and in others they are not. It also argues that because of the deep-rooted tradition of bureaucratic implementation of development programmes and the ignorance and apathy of people, it would take some time for an appropriate development-oriented work culture … to evolve and become operational (ibid: 23). The report recognised the substantial difficulties of such a reform.

The end of this story is the proposed impact of linking people's participation to watershed management. The combination of better co-ordinated government departments, NGOs, and people's participation should lead to the same kind of success observed by the committee in their visits to particular non-governmental project sites:

'The outstanding examples of success at Ralegaon Siddhi and Adgaon in Maharashtra, Kabbalnala and Mittemari in Karnataka, and Jhabua in Madhya Pradesh show that drought can be beaten, provided concerted efforts are made to develop on a watershed basis, with motivated and determined leadership from the administration, with the involvement of voluntary organisations, and together with the participation of local farmers who are willing to undergo sacrifices and share benefits. A study by the National Remote Sensing Agency, Hyderabad, reveals that as a result of DPAP check dams in Jhabua district, the area of water bodies has increased significantly from 30.09km^2 in 1987 to 38.72km^2 in 1993. Similarly, there has been an increase in green cover from 297km^2 to 485km^2 over the same period' (MoRD, 1994: 15).

The rationale for people's participation is not very clearly presented in the report, but is mainly linked to the question of sustainability. For example, the report observes that where people do not participate, they do not maintain structures. It then argues that 'where people have been motivated to participate from the inception, i.e. from the planning stage, their enthusiasm was visible and the structures were protected by them' (ibid: 56). Elsewhere, it argues that people's contribution to activities, and their ownership over new assets, is likely to lead them to protect and maintain those activities themselves, as participants do in social fencing projects in West Bengal and

Orissa (ibid: 13). The rationale is simple: in successful watershed sites people had participated (ibid: 56). The association is taken to be causal, with participation leading to success. The source of larger discourse informing this narrative is uncertain. It does reflect a greater visibility for participation in the public sphere and in poverty alleviation (as opposed to previous discourses which concentrated on government failures); however the precise sequence of causation reflected in this narrative is difficult to trace. This narrative has to be seen in conjunction with the emerging atmosphere of decentralisation and enhanced participation in other areas of NRM such as forest management and irrigation management, and the ideal of Panchayati Raj. It has been suggested that because the notion of participation was new to the government, they brought in NGOs to make the implementation smoother.

Debates, networks and the process of building support

The 'Technical Report of the Committee' (MoRD, 1994) provided a platform for policy reform. As requested, they created a new aridity index that effectively expanded the areas eligible for the DPAP and DDP. The committee also made recommendations about increasing the participation of beneficiaries in the programme. Although they would be refined later, the committee's report outlined the basic institutional arrangements that would be adopted in the *1995 Guidelines*: local committees would be formed to manage the implementation. Both government and NGOs would support them in implementing the plans. Indigenous technology should figure more largely in the construction of SWC works.

The committee produced a new expanded list of districts eligible for the DPAP and DDP according to their aridity index. They argued that spending the existing funds plus using funds available under the Employment Assurance Scheme (EAS) would limit the financial impact of expanding the programme. The other main message of the report was to 'do the same thing better', by improving co-ordination of line departments. This should lead to technically feasible plans. The report makes a number of other recommendations in the same vein: other programmes should be used as complements to watershed development activities, watersheds should be selected more systematically based on need, and activities only peripherally linked to the main objectives of the programme should be dropped. Complementary macro-economic policies should also be put in place.

A process of consultation began, in which drafts of the proposed *Guidelines* were presented to national policymakers in Delhi, and to regional audiences in various cities. Government bureaucrats from various levels were involved, as well as researchers and representatives of non-governmental organisations. Many important

positions taken in the *Guidelines* were negotiated amongst a small number of key players, although ultimately they had to receive approval from a broader audience. For example, one of the key debates in the first operational draft of the *Guidelines* was over which agencies should implement the *Guidelines* – what would become known as Project Implementation Agencies (PIAs). In the first draft, government was entirely excluded from implementing projects. Watershed projects would only be implemented by NGOs. Mr Arora had been in contact with Anna Hazare on this issue, and their view was that reforming government to adopt a participatory approach was hopeless. They did not believe that it would be possible to reform the mind-sets and procedures of line departments sufficiently to cope with a participatory approach. After the presentation of this first draft, the *Guidelines* were slowly modified. Over time, a consensus developed that government was needed to implement the programme, especially in areas where there was not yet a strong NGO movement, such as Orissa. After a series of meetings with Mr Yugandhar, Mr Arora eventually came around to this point of view (Yugandhar, 1998).

The reform had to make some concessions to make the *Guidelines* politically acceptable. The position taken on gender issues is one such example. The Hanumantha Rao Committee report recommends the establishment of village watershed committees where at least five out of ten members are women (MoRD, 1994). In contrast, the *Guidelines* vaguely suggest that there should be 'adequate representation of women' on watershed committees (MoRD, 1995: 16). Dr Sanghi reports that there was a debate over how explicit the references to gender equity should be in the final document. In the end, a conscious decision was made to include only very vague mentions of gender equity, reflected in the failure to mention gender outcomes in the 'success criteria' (Sanghi, pers. comm. in Pratt, 1998). The rationale was that the *Guidelines* were already asking for extremely radical changes in the way SWC programmes were implemented. There was a fear that adding one more 'radical' element, a strong focus on gender equity, could attract resistance from implementors who would feel the changes were too large to handle. The intentionally vague references to gender issues would allow those agencies interested in gender equity issues to pursue them within the framework of the *Guidelines*, but would not pressure those agencies who were not. Dr Sanghi's feeling was that working on gender issues requires time and a gradual approach, and that at the time of drafting little working experience was available to guide the authors of the *Guidelines* in how exactly gender equity could be incorporated into watershed projects (ibid). Thus, gender was not overlooked in the debate leading up to the *Guidelines* – it was consciously sidelined (ibid).

A similar logic led to the weak focus on equity issues in the final policy. Dr Sanghi reports that he and Mr Arora were well aware of the problem with equity for the poor and landless in a land-based development approach. However, in the same way they decided that gender issues were better left alone, the drafting group decided that fundamentally, watershed development was a natural resource management project, not a 'social' project (ibid.). Mr Yugandhar recalls that the inequitable slant of the watershed approach as proposed in an early draft of the *Guidelines* was strongly criticised at a review meeting held at the Institute for Social and Economic Change, Bangalore. Mr Yugandhar explained that this led to the incorporation of the Self-Help Group component into the *Guidelines* (1998). The SHGs are a way of bringing the landless into the watershed programme, as they would otherwise be excluded completely.

In order to build support, drafts of the *Guidelines* were presented at several stages to various groups around the country. Government representatives, NGO representatives and academics were given opportunities to comment. Government staff were consulted at various levels, including national ministry secretaries, state government secretaries, and the Department of Rural Development's District Rural Development Agency (DRDA) project directors. Drafts of the *Guidelines* were presented in Delhi on at least three occasions, as well as at the Institute for Social and Economic Change in Bangalore, and to groups in Pune and Gujarat (Yugandhar, 1998).

Thereafter, the Secretary of Rural Development, Mr Yugandhar, began to strategically steer the *Guidelines* towards approval.

Because the *Guidelines* would unconventionally institutionalise the flow of funds from the national government to the district level, bypassing the state government, the states were a potential source of opposition (Yugandhar, 1998). States were accustomed to receiving government funds for specific programmes, and then often using them to service their debts, or cover other expenses for which they were not intended. As Mr Yugandhar recalls, one state's chief minister wrote a letter to the prime minister openly saying that under this new scheme, soil conservation and irrigation officers would not have the same 'access' to funds as before. Another chief minister opposed the reform on the grounds that his bureaucracy simply did not have the capacity to implement it. A third raised several points of opposition. He disputed the size of the watersheds proposed in the *Guidelines*, since in his experience even much smaller areas were difficult to plan. He also argued that Bihar (his state) did not have enough existing NGOs or enough staff to follow the proposed organisational set-up.

This opposition from the states nearly scuttled the reform. Mr Yugandhar had arranged to make a private presentation of the draft *Guidelines* to the then prime minster, Narasimha Rao, who was also serving as the Minister for Rural Development. Gaining an audience was made easier since the secretary to the prime minister was an old friend of Mr Yugandhar. Apparently, the timing for the meeting was bad. The prime minister was under tremendous time pressure. Due to the political climate, he was also extremely wary of making any moves that would upset the states. The prime minister raised the states' objections, and left Mr Yugandhar feeling that the meeting had been a 'disaster' (Yugandhar, 1998).

Mr Yugandhar struck compromises that would answer the states' criticisms, but he took an unconventional route. Rather than approaching the chief ministers, he convened a meeting of the state-level secretaries for rural development. He felt confident approaching this group because he knew them well, and had good relations with them. He made a number of concessions, then having gained support from the secretaries, Mr Yugandhar made another approach to the prime minister. At this meeting, his key message was that he had gained the support of the states. He did not explain that he had worked through the secretaries for rural development rather than through the chief ministers. The prime minister was reassured that it was safe to consider proceeding with the reform. The prime minister granted Mr Yugandhar a third meeting to present the *Guidelines* (Yugandhar, 1998).

At the third meeting, the prime minister also invited the ministers of agriculture and finance. Knowing that the Hanumantha Rao Committee had earned itself a golden reputation, Mr Yugandhar exaggerated the degree to which the radical institutional arrangement under the new *Guidelines* reflected the recommendations of that committee. The minister of agriculture argued that this programme should be implemented by his officials, not by rural development. In response to this challenge to his 'turf', Mr Yugandhar convinced the prime minister that this was an 'irrelevant' criticism. Dr Manmohan Singh, the minister of finance (who later, in May 2004, became prime minister of India), was naturally concerned about the fiscal implications of the reform. However, he felt that the institutional approach was good, and was convinced that the reform was a valuable one. By now, the prime minister seemed to be largely convinced, and invited Mr Yugandhar to make exactly the same presentation to the cabinet (Yugandhar, 1998).

The cabinet presentation went very smoothly. Mr Yugandhar told a 'dramatic story', drawing on staggering statistics about the amount of soil washed into the ocean every year. He argued that a level of investment that was below the bare minimum and the lack of interdepartmental co-ordination were the key contributors to this crisis. He

also argued that there was a desperate need for SWC in order to stem impending environmental disaster (Yugandhar, 1998).

The discussion that followed went easily, in part due to a diversion built into the reform. The proposed reform included not only the radical institutional change for implementing the DPAP/DDA, but also a re-definition of the geographical areas eligible for the programme. Being politicians elected from geographical constituencies, the cabinet were primarily concerned with the areas that would now be eligible under the newly created 'aridity index'. As for the new participatory institutional set-up, and the new routing of funds, Mr Yugandhar consciously underplayed it in his presentation, and no-one picked up on it. Mr Yugandhar thinks they did not realise how far it would undermine conventional vertical funds flows, and the parallel political networks that go alongside those flows. One or two questions were asked and simply answered about the relationships to the Panchayati Raj institutions. There were also some indirect questions from cabinet members about what place there would be for their political clients in this scheme at the district level, and Mr Yugandhar could assure them that there was an important role for the Zilla Parishad chairmen (the elected chairs of district-level local governance institutions, who are usually members of the political parties and part of their hierarchies). Mr Yugandhar conjectures that things went smoothly in the cabinet because the prime minister supported the new participatory institutional set-up, and that the other cabinet members sensed his supportive mood. In the end, the cabinet approved the new *Guidelines*. This critical role of the prime minister's support in getting policies through cabinet has been noted elsewhere – it is said that a large part of the battle of cabinet approval is won once/if the prime minister agrees.

The MoEF was a second key player. The central question was about jurisdiction over Reserve Forests that were inside the areas to be treated under the watershed programme. The secretary MoEF was pressing for the MoRD to provide funds to treat watersheds within Reserve Forests. Mr Yugandhar gives the impression that this was quite a protracted debate. In the end the MoEF accepted financial responsibility for that work, but the jurisdictional debate has been ongoing ever since (Saxena, pers. comm. in Pratt, 1998; Jain, pers. comm. in Pratt, 1998).

The MoA was a third key potential opponent. It is particularly interesting to study the dynamics between the two ministries, as they both have watershed programmes, yet the MoA's approach did not go in the same participatory direction as the MoRD's programme until much later and after a protracted process. The MoA's National Watershed Development Programme for Rainfed Areas (NWDPRA) used a set of institutional arrangements quite different from the *Guidelines*, focusing

on the use of contact farmers and herders to disseminate good practice. The MoA approach tended more towards centralised planning than the *1995 Guidelines* (Saxena, pers. comm. in Pratt, 1998). Mr Yugandhar approached Mr Pant, the secretary for agriculture at the time, with the proposal that the two ministries could collaborate, bringing both the NWDPRA and the DPAP/DDA under the same set of guidelines. The secretary for agriculture was not enthusiastic about adopting the *1995 Guidelines*. He felt that the MoA had invested a considerable amount of time and effort in establishing the NWDPRA already, an investment that would be lost by adopting new guidelines. He had no objection to the participatory processes for planning watershed works in the new *1995 Guidelines*, but he did not approve of handing financial control over to the officials of newly created Watershed Committees. He was also not in favour of allowing NGOs to act as PIAs. These reasons were enough for him to decline to adopt the *1995 Guidelines*. The two secretaries reached an agreement to leave each other's 'turf' alone. The MoRD would not interfere in areas where the MoA had already started activities under the NWDPRA. They would both continue with their distinct approaches, and perhaps if the *Guidelines* were passed, and if they proved to be very successful, the MoA might adopt them sometime in the unspecified future. This was sufficient to ensure that the secretary for agriculture would support the new *1995 Guidelines*.

The *1995 Guidelines* came into effect on 1 April, 1995. A description of the organisation structure mandated in the *1995 Guidelines* is provided in Box 4.1.

It is important to note that concerns such as political clientelism and fund flows that were thought to have been overcome in the *1995 Guidelines* seem to raise their head again in later versions of these guidelines. Thus while the passing of the *1995 Guidelines* represented a victory of sorts over these issues, the passage of time has shown them to be not easily overcome.

BOX 4.1

1995 Guidelines: Organisational structure and provisions

At central level

The MoRD releases funds to the state governments to implement their watershed programme at state level according to MoRD guidelines.

At state level

The Watershed Programme Implementation and Review Committee is constituted under the chairmanship of state-level chief secretary of the Department of Rural Development along with the additional chief secretary, agricultural production commissioner and development commissioner. In addition the secretaries and heads of departments of related departments, vice chancellors of the state agricultural universities, directors of a few state-level training institutes like the Institute of Administration or Management Institute, and five or six representatives of important NGOs and voluntary organisations are the committee members. The Department of Rural Development represented by the DRDA is the nodal agency to service this committee.

At district level

The Zilla Parishad (ZP) and/or the District Rural Development Agency (the district-level office of the Ministry of Rural Development – the names changes depending on the state) is responsible for the administration and implementation of watershed development projects. They receive their funding directly from the central government. They select the Project Implementing Agents (PIAs) and approve the watershed plans. They hold the ultimate power of administrative and financial control over PIAs, releasing the funds to PIAs and laying down the guidelines for managing the accounts, for instance. They also establish the Watershed Development Advisory Committee at the district level. The committee advises on the selection of PIAs and members of the Watershed Development Team (WDT) and various other aspects.

At local level

Government departments, Panchayati Raj institutions, universities, voluntary organisations and research institutes are involved as Project Implementing Agencies. Local communities must form a Watershed Committee (WC) in order to secure government funding. These WCs get technical support from a four-person WDT, who in turn are employed by a PIA. The PIA may be a local government agency or an NGO (NGOs are usually preferred by the DRDA), and it has a mandate to work with a community for four years. During that time community resources are built up, through saving schemes, to pay for long-term maintenance. Each PIA is expected to handle 10-12 micro-watersheds, each covering about 500ha. The PIAs at district, Samiti/Mandal and village level can monitor and review the implementation of the programme and give suggestions and guidance for improvements in administrative arrangements and for ensuring convergence of other developmental programmes to supplement and complement the watershed programmes.

The Gram Panchayat shall be involved in community organisation, training programmes, and formation of Self-Help Groups (SHGs) and User Groups (UGs), development and sharing of common property resources and operation and maintenance of existing and created community assets. The PIA will appoint the WDT, which consists of four members, one forester, one veterinarian, an engineer and a community mobiliser for implementation. The WDT is responsible for technical matters while planning and implementing the watershed, apart from mobilising and organising people for collective action.

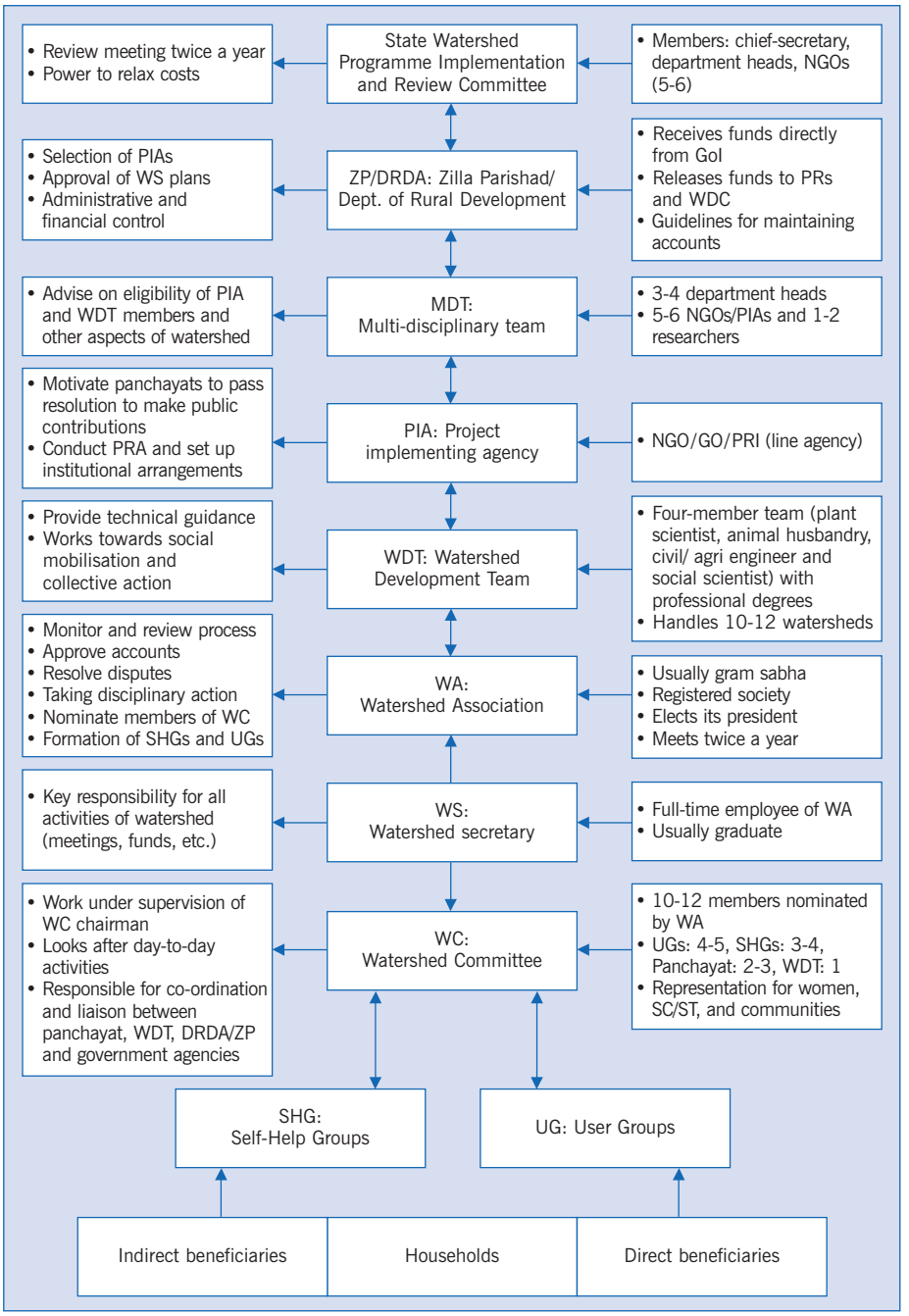
At watershed level an association of all the members of a village community who directly or indirectly depend upon the watershed area for their livelihood is formed and registered as a Watershed Association (WSA), under the Registration of Societies Act. The Association elects its own president and office bearers. There is a demand that 'consensus' must be reached rather than going through an election process. This is the responsibility of the WDT, especially the social organiser. The watershed association in its first General Body Meeting nominates three to four representatives from SHGs and four to five from UGs as members of the WC, with adequate representation of women and Schedule Castes, Schedule Tribes, and the shepherd community. The Gram Panchayat nominates two to three members and the WDT is asked to nominate one of its members for the WC. The WSA meets as frequently as necessary but not less than twice a year, to finalise and improve the projects and annual action plans. The WSAs monitor and review the implementation of watershed development plans, resolve disputes and lay down procedures for the operation and maintenance of community assets. In other words, the WSAs exercise overall supervision and control over planning, implementation and maintenance of watershed development works and activities.

The WC elects a chairman from its members who carries out the day-to-day activities as assigned by the WSA. The WC also appoints a qualified local person as secretary and three volunteers (including a woman and a member from a ST or SC) to help the committee in programme implementation and to maintain the records and accounts. The WC is also responsible for co-ordination and liason with the Gram Panchayat. The formation of SHGs and UGs is vital in the institutional dynamics of watershed management, as they provide the basis for collective action. Broadly the households in a village can be grouped under watershed (direct) beneficiaries and indirect beneficiaries. The former will be organised into UGs by the WDT members, based on common activity in the watershed. Similarly, indirect beneficiaries are grouped into groups of 10-15 members as credit and thrift societies or to initiate a livelihood activity.

Source: Adapted from Springate-Baginski et al. (2002)

FIGURE 4.1

Institutional structure of watershed management created under the 1995 Guidelines



Source: Adapted from Springate-Baginski et al. (2002)

Chapter 5: The policy trail

As noted in Chapter 4, separate watershed programmes are run by the MoA and the MoRD. The MoEF also undertakes watershed programmes in officially notified forest areas. The *1995 Guidelines* were issued by the MoRD and, as described in Chapter 4, a territorial separation was agreed between the three relevant ministries – MoRD, MoA and MoEF – at the time these guidelines were issued. This territorial separation, while an agreement on the face of it, also created problems where forest lands fall under the proposed area to be covered in the watershed programme. The Forest Department (FD) of the MoEF routinely makes it difficult to obtain permission for watershed works on such lands.

In 1999 the then national finance minister, Yashwant Sinha, highlighted in the annual budget the need to unify the multiple watershed programmes under the three ministries. The Planning Commission then advised the MoA and MoRD to work to devise a common set of guidelines. It is notable that the MoEF has consistently kept out of the watershed development approach now being shared by the other two ministries – this could be on the grounds that the lands in question are not meant to be arable lands, which speaks of a certain institutional culture and mindset that continues to inform the concept of watersheds, and a wish to render invisible the people whose lives are in fact tied closely to these watersheds administratively classified as forest land. Alternatively, this delineation also speaks of territoriality (both literally and in terms of funding, clientelism and organisational division) amongst different parts of government.

An inter-ministerial meeting was held in March 1999 under the joint chairmanship of Smt. Sathi Nair, additional secretary in the Department of Agriculture & Cooperation, MoA, and Shri SB Mohapatra, secretary in the MoRD, with representatives from the Planning Commission and other divisions from the two ministries. It was agreed at this meeting that the reclamation of problem soils (MoA) and the Integrated Ecodevelopment and Afforestation projects (MoEF) would require unique institutional components and would be left out of the harmonisation exercise. Two MoA watershed programmes (NWDPRA) and Watershed Development in Shifting Cultivation Areas (WDSCA), would now be included with MoRD's four programmes (DDP, DPAP, IWDP and EAS) under an umbrella set of guidelines.

A sub-committee was constituted to formulate a common approach with the following broad framework:

- Aim for convergence of selected programme components/activities that share a common approach.
- Rationalise unit cost norms depending on the nature of programme content, work items and institutional arrangements – i.e. review the ceiling on the amount that can be spent at the micro-watershed level.
- Determine feasibility of territorial delineation in terms of eligibility criteria, ministerial mandate, programme focus and development objectives – i.e. could or should the territorial delineation between MoA, MoEF and MoRD continue?
- Determine scope for enlarging the process capacity building involving local bodies/NGOs, community groups and extension functionaries.
- Increase the financial resources available through forging inter-institutional credit linkages.
- Propose unified approach that supports programme measures and builds a suitable institutional framework to ensure long-term sustainability.

The sub-committee comprised:

- Rita Sharma, Additional Joint Secretary, MoA
- Shri Satish Chandra, Joint Secretary, MoRD
- Shri JD Sharma, Deputy Inspector General (Forests), MoEF (on deputation with MoRD)
- AN Sarkar, Deputy Commissioner, MoA
- D Ramakrishnaiah, Deputy Commissioner, MoRD
- NK Sanghi, Director, MANAGE

Some members were handpicked for this sub-committee, though it is not clear how many. Dr Sanghi was invited because of his experience drafting and implementing the *1995 Guidelines*, and especially his work on capacity building for participation at MANAGE.

In July 1999, the recommendations of this sub-committee were tabled in the form of a report, *Common Approach/Principles for Watershed Development* (aka the *Common Principles*). Unfortunately the *Common Principles* never did lead to a common set of guidelines, as the MoRD and MoA could not agree.

Common Principles

The *Common Principles* contain many progressive provisions, clearly derived from extensive and in-depth learning from the experience of the *1995 Guidelines*. Some of the most significant include:

- PIAs will be allowed a six- to eight-month capacity-building phase for initial community-building activities to work with volunteers, who may or may not be the eventual members of the Watershed Committee.
- PIAs will be selected based on feasibility reports prepared for identified watersheds. Both PIAs and reports would then be evaluated before PIAs were chosen. This measure is clearly in response to the sudden emergence of numerous NGOs wanting to take advantage of the provision in the *1995 Guidelines* that allows NGOs to be PIAs, with significant funds at their command.
- The contribution to the development of community lands will depend on a pre-determined sharing of usufruct (the community's rights to forest produce), i.e. only those who are assured benefit will be asked to contribute. The products left over after meeting the needs of the beneficiaries will be sold, and 15 per cent of the income put into the Watershed Development Fund (WDF), with the remaining 75 per cent to be shared by the members of the WA, especially with the landless. This provision recognises the problems of distributing benefits derived from SWC activity. However the hardship borne by the landless and poor due to exclusion from common property resources (CPRs) during the regeneration period is not factored into the arrangement proposed.
- The territorial division between forest and non-forest land in watersheds remains unchanged, with little potential to bridge the gap.
- The linking of WCs with PRIs is suggested to encourage the sustainability of the institutional and physical structures that emerge as part of the watershed work.
- Linkages with credit institutions are suggested (rural banks, co-operative banks, etc.) to promote an avenue of livelihood support other than soil and water conservation. This recognises the non-productive components of livelihood and development questions, and also expands the focus from purely NRM questions, even though the motive may be to generate an incentive for the community's involvement in NRM rather than to provide livelihood support for its own sake. The 'development component' should be divided into an NRM component (read SWC works) and a production system management component. The latter

includes 'on-farm livelihood support for landed families and household livelihood support system for landless families'.

- There are new measures to promote equity for the resource-poor and women, including harvesting structures and labour inputs, but also the sharing of usufructs and the treating of problem soils and marginal lands usually owned by poorer sections of the village community.
- It is suggested that there be flexibility in the ceiling on the amount of money available for a single watershed, because of the variety of conditions found across watersheds, and stipulated that any additional amount (if above the ceiling) should come from the community itself. The use of indigenous and low-cost technologies is encouraged by explicitly stating their virtues and describing a few indigenous solutions to serve as illustrations. This has had the effect of endorsing some indigenous solutions in explicit terms in the guidelines themselves, which then opens the door for agencies on the ground to adopt indigenous solutions without fear of reprimand.
- There is a suggestion to make the composition of the WDT broader, explicitly mentioning the inclusion of at least one woman and a sociologist. The injunction to hire WDT members on a temporary basis in order to effectively engage with the WA or users in a participatory manner allows for an important institutional reform of a significant sticking point, namely the in-house capability in the PIA/WDT, especially when these were government line departments.
- Progress is made towards recognising the importance of post-project maintenance, and it is suggested that all assets developed under the project be transferred to the community, from 'fixed assets' such as drains, tanks, etc. to replenishable ones which are likely to be common property resources and are often auctioned, such as fisheries and biomass from common land.
- There is an entire section dedicated to capacity building. Though the focus is on training field-level workers, which as discussed in Chapter 6 is only part of the problem, there is also mention of the need to 'orient' officers in management committees at the state and district level. Establishing support organisations at the district level is suggested as an additional capacity building measure.
- The following allocation of funds per watershed is suggested:

Management component		Percentage of funds allotted
	Administration cost	10
	Community organisation	7.5
	Training	5
Development component		
	NRM	50
	Farm production system for land-owning families	20
	Livelihood support for landless	7.5

These elaborate instructions for funds for training and community organisation, and the high proportion of funds given over to non-works-based watershed management (or rather livelihood enhancement), is notable.

Monitoring and evaluation provisions remain weak, however. Though mid-term evaluations and agencies to carry out these evaluations are talked about, the parameters for evaluation continue to remain physical and financial progress alone.

Ministry of Agriculture's 1999/2000 Guidelines *(WARASA)*

Despite their progressive nature, the 1999 *Common Principles* were never officially issued due to disagreements about adopting them between the MoRD and MoA. Nevertheless, in late 1999 the MoA went ahead and used the *Common Principles* to create new guidelines for its NWDPRA programme, known as the *Watershed Areas Rainfed Agricultural Systems Approach (WARASA) Guidelines*. Previous MoA guidelines had been exclusively about the technical and financial aspects of watershed development, focusing on who was eligible and what kinds of machinery could be used to move earth. Physical works were carried out on a purely sectoral/departmental basis (Sanghi, pers. comm. 2003).

MoA's NWDPRA programme had long had a heavy emphasis on technology – the aim was to find low-cost solutions to the problem of inadequate soil moisture in order to increase agricultural production. Water conservation was not important in itself – only soil moisture and productivity – thus under the NWDPRA programme there was no attention paid to common lands and the contribution that they might make, and indigenous technical knowledge (ITK) was an unknown entity.

The *WARASA Guidelines* were a departure from this. Formulated by a group inside the MoA with some advice from experienced people, and following a series of workshops

with clients from various states including representatives of the Rural Development Department and funding organisations (so as to learn from their implementation experience), the *WARASA Guidelines* officially took effect on 14 November, 2000. The *WARASA Guidelines*, exclusive to MoA, were inspired by the positive feedback and appreciation received by the MoRD for its *1995 Guidelines*.

The new objectives of the NWDPRA programme as announced in the *WARASA Guidelines* are the:

- conservation, development and sustainable management of natural resources (including their use);
- enhancement of agricultural productivity and production in a sustainable manner;
- restoration of ecological balance in the degraded and fragile rainfed ecosystems by greening these areas through an appropriate mix of trees, shrubs and grasses;
- reduction in regional disparity between irrigated and rainfed areas; and
- creation of sustained employment opportunities for the rural community, including the landless.

These objectives are a far cry from the original singular aim of enhancing agricultural productivity. The institutional structure adopted for the field level is taken from the *1995 Guidelines*, with a Watershed Committee, Watershed Association and PIAs with particular roles to fill with reference to the Committee and Association. There is a progressive provision enabling numerous phases for the watershed development including a preparatory phase, capacity building, community organisation, planning, implementation, and withdrawal. There are separate sections on monitoring and evaluation and success criteria – a notable difficulty in the *1995 Guidelines*. The funding allocations are remarkable in that there is an additional set aside of 2.5 per cent of total funds for management, 20 per cent for production enhancement activity, and 7.5 per cent for livelihood support for landless farmers – following precisely the allocations suggested in the *Common Principles*. The amount allocated to structures is commensurately reduced. Such an orientation is particularly remarkable in MoA (NWDPRA) guidelines.

In general the *WARASA Guidelines* follow the *Common Principles* with some additional progressive features:

- The section on capacity building recognises that the people involved in projects at all levels of watershed management may require training. Committee officers and other managerial posts may need only short-term orientation programmes to

familiarise them with the specific requirements of NDWPRA/*WARASA*. Here attitudinal and behavioural changes for facilitating a participatory approach, and sensitisation to equity and gender concerns, are listed as part of the orientation programmes.

- Another notable point is recognition of the need for capacity building at the WDT/PIA staff level. Interestingly, attitudinal or behavioural changes and sensitisation to equity issues are not suggested for inclusion in training modules for this level of staff.
- A training plan is outlined, with national and state levels being tackled in Phase 1. (It is not clear who is responsible for preparing this plan or making sure it is implemented.)
- The capacity-building phase is to be separated from the implementation phase, and can extend up to one year. Here, however, the capacity of the PIA and the watershed community is the point. Thus the implementation phase cannot begin until the capacity building (including community organisation) has been assessed as acceptable by the District Watershed Committee.
- Entry-point activities are given an important role, in a separate section devoted to community organisation. A maximum of 3 per cent of the funds can be used for these, but interestingly these funds can only be released for entry-point activities following the submission of the action plan with its detailed design and financial estimates, which seems to be somewhat contrary to the spirit of entry-point activities. It is also stated that the WC must be formed after the organisation of SHGs, UGs, and the WA – the *1995 Guidelines* required the WC to be formed at the outset.
- Links with PRIs are encouraged – where possible PRIs should be supported to become PIAs, elsewhere PRIs should forge links with WCs. (This has subsequently been adopted as an important component of the *Haryali Guidelines*.)
- On-farm research is to be carried out in conjunction with watershed users, with the aim of developing more heterogenous technologies for rainfed farming such as currently exist for irrigated farming.
- The 7.5 per cent of funds available for livelihood support can be used to match the revolving fund for SHGs. This revolving fund would previously have been drawn only from programmes external to the watershed management programme – leaving the poorest out of the watershed work altogether. In the agriculture department, this is a significant step towards livelihood concerns.

- While a certain amount of encouragement is given to choosing indigenous technologies for water harvesting, this aspect is still left very vague and mainly to the discretion of the PIA concerned.
- There is a notable mention of the need for social regulation to avoid over-exploitation of groundwater resources. While this is another injunction that places yet more responsibility on the community, it is indicative of the kind of vision and detailed thought that went into the formulation of the *WARASA Guidelines*, although many items remain as suggestions rather than injunctions when it comes to the governmental functionaries charged with following them.
- A withdrawal phase is built into the rationale for having a strategic plan for watersheds.
- Small structures costing up to Rs.25,000 can be sanctioned by the WDT itself. Previously the need to have all plans passed by the district authority often disqualified ITK solutions, because the WDT tends to be more sympathetic to such ideas than the District Watershed Committee. Now low-cost ITK solutions are more likely to be used. The WDT/PIA can also hire external consultants to certify, assist with design, and make estimates for ITK structures, with the WC bearing the responsibility for addressing any queries that arose during the audit process. Previously many innovations stalled at the WDT level out of fear of an audit objection.
- PIAs can be deselected mid-term if performance is poor, and monies can be transferred from one watershed to another for the same reasons.
- The section on monitoring and evaluation remains faithful to the *Common Principles* – with no innovations for monitoring process other than physical and financial progress. Success criteria, however, do include various social and economic targets, e.g. a 10 per cent increase in productivity; significant reduction in erosion in cultivated fields; and diversification of farming systems by at least 20 per cent of families, especially resource-poor ones. Particularly interesting are the criteria for human capital development, which stipulate that 80 per cent of WDT members' capacity should be improved in both technical as well as participatory aspects, through exposure visits and awareness raising through folk media, for example. Some 80 per cent of small and marginal farmers' lands should have been developed, more than 50 per cent of water harvesting structures should have been built for the convenience of resource-poor families, and usufruct rights should be allotted to families dependent on these resources prior to the watershed management intervention. Criteria are also laid out

pertaining to the existence and effectiveness of SHGs and UGs, both during the project period and after its completion.

- A section on post-project activities and the withdrawal phase suffers from the clubbing together of these two separate heads. There seems to be more emphasis on 'what should happen' post project, rather than any injunctions about when a withdrawal phase should start and what should be done during such a phase. While these are very useful pointers, and provide ample scope for a PIA with a long-term vision to make the most of a watershed management intervention for improving people's lives, they fall short of the sort of directives needed for more recalcitrant agencies.

Some people believe that while the *WARASA Guidelines* provide excellent guidance, the institutional structure and character of the MoA has prevented these from being translated into a real difference on the ground. One of the major ongoing difficulties with operationalising the guidelines has been the way that funds flow. Funds must go from the central MoA to the state-level Department of Agriculture (or equivalent). From the state department the funds are transferred to the district head of department, and then to the PIA. This is a much more circuitous route than that followed in the MoRD, and more liable to bottlenecks or diversion of funds. Some state department-level staff have said that funds not being released at the central level have frustrated their efforts to initiate projects or to apply the *WARASA Guidelines*.

MoRD 2001 Guidelines

In 2001, within two years of the MoA issuing the *WARASA Guidelines*, the MoRD revised their *1995 Guidelines*. The genesis of the *2001 Guidelines* is not properly known, indeed the guidelines themselves are not widely known either. It has been surmised that the revision is the result of a desire to reduce the length of the earlier guidelines (Ravindra, pers. comm.). It is not known whether these guidelines were formulated by committee or not, although they do claim to have used lessons learned from detailed consultations with different agencies involved with implementing watershed programmes. Something seems to have been learned from the experience of implementing the *1995 Guidelines*, and from the discussion and thought that went into developing the *Common Principles* followed by the *WARASA Guidelines*.

The *2001 Guidelines* claim to be general principles for implementing watershed development projects and advise users not to use them to make implementation a complex exercise. Their basic philosophy covers the transparent use of public funds,

promotion of overall economic development, and improvement of the socio-economic conditions of resource-poor and disadvantaged people. The aim of the *2001 Guidelines* is to ensure:

- a programme-specific and focused project approach;
- greater flexibility and transparency in implementation;
- a well-defined role for state, district and village-level institutions;
- the removal of overlapping areas;
- an exit strategy;
- a greater role for women;
- an effective role for PRIs;
- that SHGs are centre stage; and
- the establishment of a credit facility from financial institutions.

The objectives applicable to watershed programmes have not changed much from the *1995 Guidelines*. Institutional structures remain the same. Criteria for watershed selection now take into account that habitation units may be a more suitable division for management purposes, and recommend that if a watershed has two or more hamlets within it, these should be chosen and treated simultaneously as sub-watersheds. Recognising the difficulties that exist on watershed and NR management between the functionaries of the MoRD at ground level and the Forest Department, a section is devoted to detailing the relationship of the watershed institutional structure with the FD. This section seems happy to maintain a separation between the two.

The Panchayat is brought in as a participant in the institutional structure with encouragement for PRIs to become PIAs, provided they have the capacity to do so. PRIs are also empowered to oversee and monitor the watershed works and to be a member of the District Watershed Development Committee where this is the body overseeing the work. At the village level, the Gram Panchayat shall be entitled to ensure co-ordination between watershed and other development activities and more generally oversee watershed management works.

Other new measures include a safeguard against fraudulent NGOs, and a dedicated phase of community organisation with an emphasis on PRA before the finalisation of an action plan. Entry-point activities are also sanctioned here, with a preference for improving both drinking water and water harvesting measures. The section on capacity building emphasises the training of SHGs and UGs (the community). It also

notes that project directors and CEOs at district level may need to be sensitised and oriented before beginning work. What this sensitisation should consist of is not mentioned, except for training in remote sensing and GIS. The need for sensitisation at any level higher than the district is not mentioned, though it is of course most relevant the district level. In order to meet training needs at the PIA and WC level a National Committee for Watershed Training is stated to have been established under the chairmanship of the director general, National Institute for Rural Development (NIRD), Hyderabad.

Some of the physical works that can be undertaken within watershed programmes include the improvement of drinking water sources, pasture development, and the introduction of and support for low-cost measures for water harvesting (a fillip to indigenous technologies). The need for a detailed action plan still gives an advantage to elite sections and favours the PIA's version of the action plan. The DRDA is charged with working towards convergence with other programmes, which is a very positive step. The funding pattern at the watershed level, though, adheres to the original 1995 allocation of funds (see Table 5.1).

TABLE 5.1

Funding allocations first issued in the *1995 Guidelines* and retained in the *2001 Guidelines*

Management component		Percentage of funds allotted
	Administration cost	10
	Community organisation	5
	Entry-point activities and training	5
Development component		
	NRM	80
	Farm production system for land-owning families	
	Livelihood support for landless	

which constrains innovation and diversification of the watershed management agenda. Compared to the allocations made in the *WARASA Guidelines*, the recommended allocation in the *2001 Guidelines* is not progressive. Here 80 per cent of funds still go to watershed treatment or development works; community organisation gets 5 per cent, as does entry-point activities and training, and the remaining 10 per cent is for administration. The positive steps are that PIAs are encouraged to build links with financial institutions (though the purposes for which these links should be made remain unspecified, mentioning only watershed development activities (e.g. SWC structures) and that it is recommended that a revolving fund be set up for SHGs).

Monitoring and evaluation remains a weak point, though there is a provision for PIAs and projects to be on probation for nine to 12 months. An exit protocol is required of all projects and is to be worked into the action plan. This protocol must include details of how the structures and the watershed development fund shall be managed, and the equity and sustainability of the benefits should be clearly spelt out.

The overall impression of the *2001 Guidelines* is that while there is some learning from the experience of implementation, the MoRD is reluctant to make as great a leap forward as it did in 1995. In its lack of detail and somewhat cursory mention of issues like post-project sustainability, equity, training and capacity building, the *2001 Guidelines* are weak and not very progressive when compared to the *WARASA Guidelines* or the *Common Principles*. Gender concerns are conspicuous by their absence here and in the *WARASA Guidelines* and *Common Principles*. Funding allocations have not moved on from the *1995 Guidelines*, despite the detailed thought evident in both WARASA and the *Common Principles*. There is no explicit provision for a flexible ceiling on expenditure for a single watershed, though it is stated that rates prescribed from time to time by the central government may be the basis for sanctions.

The MoRD 2003 Guidelines – '*Haryali*'

Within two years of the *2001 Guidelines*, the MoRD announced yet another new set of guidelines, in January of 2003. Touted as another step in continuously improving the watershed development programmes, these guidelines came as a surprise to many, even within the MoRD. These guidelines, popularly known as *Haryali*, took effect on 1 April, 2003.

Not unexpectedly, given that the *Haryali* guidelines were a surprise to many in the MoRD itself, the process underlying them is shrouded in mystery. There is a strong feeling that in the build up to state elections in Himachal Pradesh in 2003, the

national minister for rural development wished to create an institutional set up that would enable him to give and earn favours from those working under him and ensure him political support for his ambitions at the state level. The conjecture is that these guidelines came to be issued through the drafting effort of a single bureaucrat in the ministry, mainly at the behest of the minister. Unlike the formulation process of previous guidelines, no consultations were held nor were they even claimed to have been held.

Haryali is a significant departure from the institutional structure that has become fairly well established under watershed development programmes. While the bulk of the objectives remain the same as those of other MoRD guidelines since 1995 – mitigating climate change, overall economic development of rural areas, employment generation, restoring ecological balance and motivating communities – the very first objective has shifted from developing wastelands, degraded lands or drought-prone or desert areas to harvesting every drop of water for irrigation, plantations, pasture development and fisheries, etc. This must be seen in conjunction with another major change in *Haryali* – they no longer apply only to DPAP, DDP, and IWDP, but make watershed development projects generically related to 'area development programmes'. In effect, watershed development has gone from being about mitigating drought/dry conditions, or improving the conditions of lands that were 'in distress', to being about irrigation, and thus favouring the landed/elite and 'normal' conditions. As one commentator put it (Ravindra, pers. comm.), from being land centred, *Haryali* has made the programme water centred.

The second objective is to ensure economic development through Gram Panchayats and to create regular sources of income for the Panchayats from rainwater harvesting and management. This is notable in that neither the PRIs nor generating income – regardless of whether it was for any particular entity – were named or so central to the watershed management mission in earlier versions of the guidelines. It must be borne in mind that income for a PRI is different from income for a poor or marginalised household.

The fundamental differences between *Haryali* and other guidelines are the primacy given to the PRIs as the main implementers of watershed development programmes; the decrease in the provision of funds for community mobilisation and training from 10 down to 5 per cent of the total; and the imposition of user charges for use of common utilities like water for irrigation from village tanks, etc.

The most important change brought about by *Haryali* is the overhaul of institutional structures. Watershed Associations and Committees have been done away with, to be replaced by the Gram Sabha (at the village level) and the Gram Panchayat (at the

Panchayat level) respectively. This use of PRIs is outside that established by successive watershed guidelines. In the important position of PIA, Intermediate Panchayats are nominated as the first and most preferred choice. If the Intermediate Panchayat is not developed enough to be able to take on this role, it is suggested that the Zilla Parishad (ZP) itself be the PIA – an institution clearly at too high a level of administration to be able to effectively implement a project at watershed level – and only when a government agency cannot be the PIA should an NGO be appointed as PIA. These statements drastically reduce the institutional – and conceptual – space created for NGOs as PIAs in 1995.

The difficulty created with this institutional arrangement is that it is widely held that not only do PRIs not have the capacity to take on watershed management, but also they are rife with contractorship. While earlier guidelines emphasised the need to organise UGs and SHGs – groups of primary stakeholders who had more ownership and more responsible attitudes to resource conservation and management – before Watershed Committees, etc. were formed, *Haryali* mentions only that the Gram Panchyat must form UGs and SHGs. Effectively the trend to increasing decentralisation has been reversed. The extent to which the ultimate functioning of the programme rests in the hands of the UGs and SHGs is left unspecified in *Haryali*, and is an area in which great strides had been made in certain state-level interpretations/elaborations of previous guidelines. It is also a concern that the political and administrative boundary of a Panchayat and the natural boundary of watershed rarely overlap. This would mean confusion in, and a disadvantage for, areas where the watershed does not overlap with the Panchayat, as there is no provision for watershed committees or associations. Another problem is that a government-nominated secretary of Panchayat affairs is responsible for implementing programmes. This is a significant step away from the progress that had been made towards participatory and local control.

In addition, the roles of Zilla Parishad, Intermediate Panchayat and Gram Panchayat in the watershed programme need to be defined with respect to the constitution and purpose of these institutions within society. The supervisory, advisory and monitoring functions of these 'democratic' institutions should not be mixed up with the facilitation functions of NGOs and the execution functions of genuinely participatory platforms like UGs, SHGs and Watershed Committees.

The flow of funds is changed substantially as well. While earlier guidelines allowed Watershed Associations/Gram Sabhas to have a say over approving action plans and how funds were disbursed to UGs and SHGs, with *Haryali* control rests with the Gram Panchayat, an arrangement that is likely to facilitate contractorship. In addition,

where 10 per cent of funds were earmarked for community organisation and training, *Haryali* takes a retrograde step and brings the total allocation for community organisation and training down to 5 per cent. No attention is given to the issue of what these funds should be used for or at what level they should be spent – it is well known that allocation at the district level led to an underspend of the training head. The allocation for structures and watershed development works now stands at 85 per cent. Additionally, the contribution to the watershed development fund at the watershed level from project funds has been done away with, leaving only a community contribution to fund the watershed development fund, which covers ongoing maintenance. This will be counter productive as far as equity is concerned, as the resource poor who need assistance to maintain their assets will likely have no wherewithal left for maintenance. The 10 per cent (of the cost of a structure/project intervention) that the project used to contribute to the watershed development fund is now being used for implementation itself. User groups are now expected to pay for using, for example, water for irrigation, grazing lands, etc., whereas earlier the emphasis was on ensuring proper benefit-sharing arrangements. These payments are supposed to form the ongoing income for the Panchayat.

There is no longer any concept of project phasing, whereas earlier there was a recognition of the need to plan for all four phases, including capacity building/community organisation, probation, main, and post-project. The only positive step in this direction is the provision for an exit strategy to be in place.

There are various views on the benefits and drawbacks of this most recent set of guidelines. One view is that *Haryali* is a step towards transferring power and functionality to PRIs, no matter how flawed they may currently be, as they are considered to be the eventual true democratic institutions representing the interests of local people. With PRIs filling the role of WCs, etc. there is no need to form new groups under each new project, nor to seek a mechanism to transfer maintenance once the project period is over. The heightened emphasis on contribution can be seen as a positive step toward building ownership.

Another view is that *Haryali* is a step backwards, as PRIs do not have effective power everywhere, watershed management would be only one of the works PRIs undertake, and the arrangement with the administration is such that the governmental Department of Panchayati Raj has to undertake the role of the PIA rather than the Panchayat itself. The *1995 Guidelines* had created an alternative institutional structure precisely to avoid the watershed agenda becoming mired in the contractual and overtly patronage-oriented ethic of the PRIs. Ground gained since 1995 seems now to have been lost, according to this view.

One way to retain the benefits of the institutions set up for watershed management is through committees that can be set up under PRIs. There is a provision for an NRM committee which can fill the functions of the current Watershed Committee, retaining autonomy while remaining within the PRI framework. The debate on the efficacy and desirability of the *Haryali* guidelines for watershed development continues in India.

Chapter 6: Policy In Practice

This evaluation of the performance of the *1995 Guidelines* in implementing watershed works is drawn mainly from the experience in the districts of Andhra Pradesh where this study was carried out. This information is bolstered by the research team's experiences in other parts of the country. There has been additional significant research on the experience of participation – a number of observers have conducted detailed analyses of participation in watershed projects as carried out under the *1995 Guidelines* (Kolavalli and Kerr, 2002; Turton and Farrington, 1998; Farrington et al., 1999). A significant level of detail regarding processes of community organisation, financial arrangements (especially with regard to the contributory mechanism), and monitoring comes from the research done by Gareth Pratt (1998) complementary to this study. Part of this research has been used to help draw a more complete picture of the status of participation with regards to the *1995 Guidelines*.

It was found in the course of analysis that problems with lack of participation arose on several fronts and threw up issues at various levels in the institutional set up around participatory watershed management. Some issues prevailed at the level of the village community or watershed users/beneficiaries; some at the levels 'above' the community, e.g. district, PIA, state or beyond; and some at all levels. Accordingly, this chapter deals with these sets of issues in three separate sections, community-level issues, issues at other levels of project management, and issues that cut across all levels.

The issues were studied across the watersheds and districts and qualitatively graded according to a system that gave a mark on specified parameters to each example studied: green for good, yellow for acceptable, and red for poor. Each set of PIAs thus gets a certain number of green, yellow or red marks for implementing different aspects of the *1995 Guidelines*.

Community-level issues

Equity

One of the main objectives of the *1995 Guidelines* is a:

'Special emphasis to improve the economic and social condition of the resource poor and the disadvantaged sections of the watershed community such as the assetless and women through…more equitable distribution of the benefits of land and water resources development and the consequent biomass production' (MoRD, 1994).

The Self-Help Groups (SHGs) aim to promote equity, and special consideration is built-in for Scheduled Castes and Tribes (Section 25 of the *Guidelines*). Priorities for watershed rehabilitation are to be consistent with the needs of the poor (Section 72), and the allocation of new resources should also be shared equitably with the poor and weak, especially when public funds have been supplied for the creation of common assets (Section 75).

In practice, however, equity is not an outcome as often as might be hoped in watershed projects.

First and foremost, the emphasis on land-based structures automatically disadvantages the poor and landless, relegating them to beneficiaries, mainly as wage labour on the watershed programmes. Their only other benefit as part of the watershed programme would be a small amount of money coming into the SHGs. The *1995 Guidelines* do not make provisions for non-land based activities and livelihood support, aside from the note that at least 50 per cent of funds used by SHGs should be generated from amongst the members (Section 21), leaving it unsaid where the remaining half of the funds should be generated from – thus not specifying any government support for this component. The nature of the activities that can be undertaken from the funding is undefined; the *Guidelines* specify only the component that deals with structures, etc. Further, the landless are eligible to receive small loans at 24 per cent per annum interest, while the landed receive grants!

Improved water retention is one of the main planks of watershed programmes. For water conservation purposes, the ridge-to-valley approach should be applied – upper reaches first, then lower. However the lower reaches are usually where the more fertile lands of the rich are located. These landowners are better able to put forward technical proposals, and therefore the structures get built in the valley more often than not. Also the type of water harvesting implemented often involves surface water regeneration, which can in many cases inundate some lands – this can be a huge loss for a small

farmer with only one plot of land but a loss that larger farmers can absorb. At least surface water bodies that are regenerated are a common resource, to be shared fairly.

Groundwater recharge, the other benefit, is more an advantage for the landed, who can also afford the infrastructure to access that water. Groundwater is also owned on the basis of ownership of the land above it, so those whose efforts result in regeneration may gain no benefits from their labour. If over-exploited in the lower reaches, efforts in the upper reaches to aid regeneration are actually another form of exploiting the efforts of the poor. Additionally, groundwater recharge is a benefit that can extend beyond the local area, further complicating the issue. The lack of a clear policy on groundwater ownership is an important issue here that has been noted by many (e.g. Kumar et al., 1999; Batchelor et al., 2003; Soussan and Ratna Reddy, 2003; Sanghi, pers. comm. in Pratt, 1998). Field-bunding, a water harvesting measure that would help small landowners, is in general rarely undertaken on a large scale because it is not specifically mandated in the *1995 Guidelines*, while in AP a government order prohibits field bunding. (The rationale for this is that since the expenditure is far smaller and much more scattered, there is tremendous scope for, and occurrence of, misuse of funds.) Even when it is done, bunding is a measure that favours landowners (albeit small ones) as opposed to the landless.

Soil conservation measures most often comprise treeplanting on common lands, or the use of exclosures (areas fenced off to allow natural regeneration). Once the soil conservation has been achieved, the benefit of an increased soil depth automatically accrues to the landed, and those with low-lying farmland first of all.

Common property resources (CPRs) and their regeneration under watershed programmes should hold the most promise for the landless and disadvantaged. However, CPRs are usually regenerated by exclusion (that is, leaving the area to regenerate naturally by excluding people from using it for a period of time, thereby depriving the usually landless people who depend on it from even these meagre resources). Unfortunately, the lack of guidelines about how benefits from the regenerated CPR are to be distributed means that the poor actually have no guarantee whether and about how their effort/deprivation in the short term is going to pay off for them in the long term. Often the elite make greater claims to the CPR benefits as well as the benefits accruing to them as landowners.

Grazing activity, an important livelihood source for many of the poor and disadvantaged, often suffers because it is not covered by watershed programmes, even though CPRs provide areas for grazing.

The institutional structure prescribed by the *1995 Guidelines* is for the PIA to form the Watershed Committee (WC), Watershed Users' Association (WUA), etc., immediately or very soon after the project is sanctioned, so that there really is not much space to challenge the existing social and power dynamic – which further entrenches the disadvantaged position of women and the poor. It has been pointed out that the requirement for an action plan in itself privileges technical and skilled understandings that are at best likely to be hijacked by the elite within the community, and at worst to privilege project officials and their whims over the local residents of the watershed.

Mascarenhas (1999) outlines a series of biases against the poor in watershed approaches:

Investment biases

- A disproportionate amount is spent on private lands, usually in the more productive lower reaches.

Technological biases

- The over-emphasis on water harvesting structures is likely to be useful to (richer) farmers in the lower slopes.
- There is less emphasis on soil and moisture harvesting in the upper reaches.

Capital formation biases

- Opportunities for savings and credit, creation of assets and infrastructure, leadership skills, and institutional and social capital are all biased towards wealthier areas and individuals in a watershed.
- Skills such as conflict resolution, assertiveness, and leadership are rarely found in the weaker sections.

A review of the performance of the *1995 Guidelines* carried out in 1997 (Turton and Farrington, 1998) noted that 'to provide the poor and women with an equitable share of benefits required more effort and vigilance than most implementing agencies can currently provide'. The review found that inadequate time and resources were set aside for entry-point activities, and that the scope for using existing groups' links with the weaker sectors was not being fully exploited.

The intention of the watershed programme is not to create inequality, but the unfortunate fact is that sometimes it does. What is needed is a sticking agent that

will bring communities together on the watershed question – but perhaps the issue is wider than just the community; long-standing historical and wide-ranging economic and political links need to be looked into as well.

The details obtained in the course of the district-level research revealed that equity for resource-poor families is unlikely to happen naturally in the watershed programme since most of the attention is paid to families who own more land and water resources. Hence specific mechanisms and instruments have to be evolved and integrated into the watershed programme if equity for resource-poor families is to be achieved at the same time. This study assessed equity with the help of six parameters, looking at how well the *Guidelines* performed in terms of ensuring the:

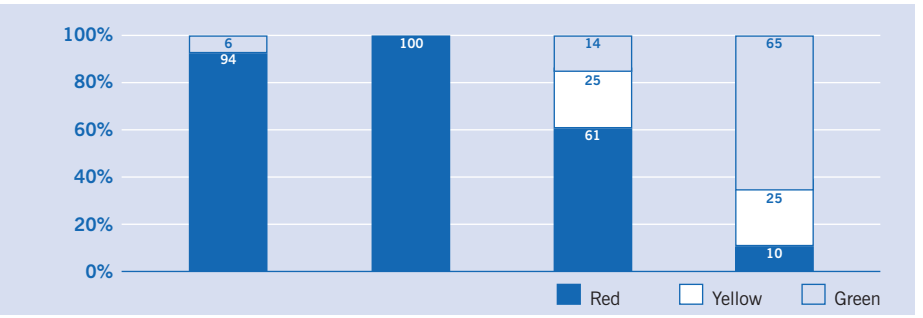
- allocation of a proportion of the fund for the equity-oriented development of natural resources;
- development of assigned patta land and other land owned by resource-poor families (RPF);
- balance of equity while developing private fallow land owned by resource-rich families (RRF);
- prioritising of recharging community wells or bore wells owned by RPF;
- preference for earthen structures rather than masonry structures; and
- preferential allocation of rights over usufruct from common land in favour of RPF.

On average a majority of equity parameters scored red in all the watersheds that are funded by government organisations (MoA and MoRD) even if they were implemented by NGOs (as is the case on MoRD-funded watersheds). Obviously very little attention has been paid to this aspect, which is essentially because of inadequate mechanisms and instruments in the existing MoRD and MoA guidelines.

Equity parameters scored green (65 percent) only in those watersheds funded as well as implemented by NGOs. In such watersheds, though specific mechanisms and instruments for equity were not provided in the guidelines, equity was considered almost mandatory in the strategy and approach document of the funding agency (see Figure 6.1).

FIGURE 6.1

Overall ranking of processes related to equity for resource-poor families in each type of watershed



Source of funds	MoA	MoRD	MoRD	NGO
Type of POA	GO	GO	NGO	NGO

Gender issues

While involving women in watershed development – and more specifically improving their position – is a major objective of the *1995 Guidelines*, Chapter 4 described how the details of how to operationalise gender equity in implementation were left intentionally weak. The performance of the *1995 Guidelines* on gender can be disaggregated into two main parts – the question of how watershed development works affect women's lives and concerns, and what is the level of their participation in watershed works. It goes without saying that the two aspects are intimately connected.

Almost all women in rural areas are involved in agriculture in some way – working on the family farm, as wage labourers or as share croppers (Seeley et al., 2000). Thus they have a direct stake in changes in agricultural management or practices. In addition poor rural women are far more tied to non-agricultural natural resources like forests, common lands and water. In the first instance, because the watershed approach is based on land and land ownership, even women who own a small plot of land – and who probably control far less even than they may own on paper – have generally been left out of the watershed development planning or even implementation. To be fair, this is not a characteristic of watershed programmes alone – the systematic exclusion of women due to the structure of land ownership and control is a long-standing characteristic of planning for natural resources. The budgetary provisions of the watershed programmes that are centred on land development reinforce this inequity.

A second component of watershed programmes is the development/conservation of CPRs. Because women are more dependent on common resources, they are likely to be more adversely affected by the closure of common lands for regeneration or plantation. Loss of access to grazing land can mean switching to a stall-feed system, which will at best increase workload, at worse mean selling off livestock or switching to smaller animals. Fodder and fuel often has to be fetched from much further away than before – a direct increase in the workload for women and children. In addition, in most cases the community contribution of 5 per cent towards water harvesting works on common lands has to be met through a labour contribution from women, as they are dependent on the areas concerned. The 'development' of wastelands/common lands can lead to changes in species composition, and a loss of some species valuable as medicine or food. Practices such as the protection of sal trees through multiple shoot-cutting (which produces good straight trunks for timber) results in the leaves growing only higher up the tree and becoming out of reach, and affects sal-leaf plate-making, which many – primarily poor – women are dependent on.

The nature of the 'participation' that takes place results from the land-based orientation of the programme. Women are not seen as necessary participants. In some instances participation is confined to the contribution of voluntary labour – which is usually women's. Men get involved when the labour is valued or paid for. On the Watershed Development Team (WDT), the one woman is usually the social development specialist who has been hired into the team from outside the government machinery – disadvantaging her position doubly as she is not only the only woman in a team of mostly men, but also from outside the government and not wielding the same authority as the remainder of the team. Women are often not recognised as members of the watershed community and are instead seen only as necessary to fill quotas. Due to a general lack of self-confidence and/or empowerment, women do not often speak out or participate in WA/WC meetings. Often men make the decisions and send the resolutions to the women for signature.

Women's involvement is relegated to the development of Self-Help Groups (SHGs), who are given micro-credit loans (see Box 6.1). The women's SHGs across the country and most notably in Andhra Pradesh are a remarkable success story, being prompt in repaying loans and contributing their bit to household food security and livelihood improvement. However the link between these SHGs and natural resource management is tenuous and uncertain, and while the *Guidelines* make a vague reference to the use of UGs and SHGs as building blocks for the watershed community and committee, their precise role remains unclear. In addition the precise role of pre-existing women's organisations such as SHGs in enhancing long-term empowerment and status remains uncertain.

BOX 6.1

A woman's perspective on watershed planning

A woman member of the watershed committee in the tribal district of Surguja in eastern Madhya Pradesh was asked how women's priorities had been incorporated into the watershed plan. She said that she knew nothing about the plan or its contents. She complained bitterly about the women in the village being debarred from waged employment on the watershed works. The agricultural officer present, the person responsible for the watershed project, explained to the visitors that women did not qualify for membership of land-based 'User Groups' because only men own land. Hence only male landowners had been considered eligible for waged work for land development. He went on to explain that two 'Self-Help Groups' of women had been formed, one for weaving mats from palm leaves and the other for making brooms. Each group had been loaned Rs.5000 to start a revolving fund with regular savings and to produce their respective products for earning income. The woman committee member fumed at the very mention of mat weaving. She told the visitors that it took 8 to 10 days to weave a single mat that could be sold for barely Rs.35–40. In contrast, the minimum daily wage for unskilled work was Rs.48.50. She went on to say that within her tribal community the tradition was that both women and men controlled their respective incomes, thereby enabling married women to enjoy a relatively more equal status with their men and also ensuring greater household food security through their independent earnings.

Source: Seeley et al., 2000

A basic reason for such low levels of involvement of women or any gender equity in the outcomes of watershed development works is that watershed planning at the micro-level does not start with an understanding or analysis of gender-differentiated dependence or use patterns.

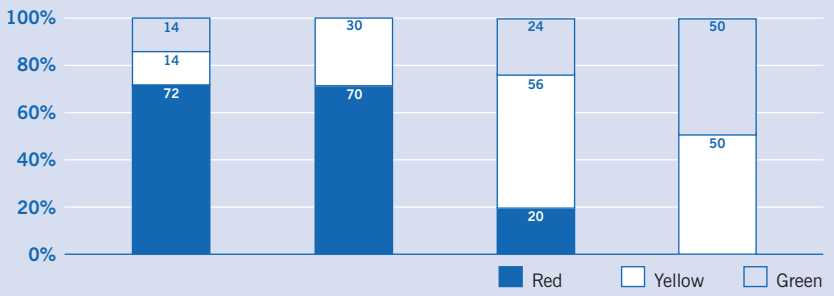
Involvement of women: As in the case of equity, the involvement of women is also likely to be low if specific mechanisms and instruments are not a mandatory part of the guidelines and reinforced later through focused exposure visits and capacity-building efforts. In the present study, the involvement of women was assessed by looking at the:

- organisation of SHGs for women members;
- organisation of focused exposure visits for women; and
- investment of project funds in a women-specific agenda.

On the whole watersheds funded and implemented by government organisations ranked red on most parameters (see Figure 6.2). There were some green marks in watersheds implemented by NGOs (even though funded by MoRD). Again, the highest ranking – of 50 per cent – occurred in watersheds funded as well as implemented by NGOs. There is a long way to go to improve gender equality, even in watersheds implemented by NGOs (but particularly those funded through government).

FIGURE 6.2

Overall ranking of processes related to involvement of women in each type of watershed



Source of funds	MoA	MoRD	MoRD	NGO
Type of POA	GO	GO	NGO	NGO

Financial arrangements

The overall funding assigned for any micro-watershed often falls short of what is needed, and works remain only partially effective. The inflexibility of the funding also overrides the right of the community to decide on the works necessary for their watershed. The research team and SLG members often say that more flexibility in funding allocations would have been very useful. (The funding per micro-watershed is calculated by working backwards from the total amount estimated for the overall watershed. Of course the watershed is not evenly divided into micro-watersheds of 500ha each, but that is how the funding is divided.)

A very notable feature of the *1995 Guidelines* was the provision for a 10 per cent contribution from the landowner to be paid into a watershed development fund that would then be used to maintain the structures. This contributory mechanism was meant as a means to ensure ownership and upkeep. In fact, these contributions have been managed in very different ways in many watersheds. In the rest of this section, Pratt (1998) explains how the financial guidelines have failed poor and landless farmers.

'In the case of structures on private land, it is up to the landowner to organise the work. In the case of small farmers, they usually do the work using their family labour. They are paid the Standard Scheduled Rate (SSR), the government official wage, for this work. The SSR is calculated in a way that includes urban wages, and does not account for the heavily depressed wage rates in the summer season when there is no demand for agricultural labour, so in rural areas in the summer season the SSR exceeds the local wage rate. When one also takes into account that the local wage paid to women is below that paid to men, there is a large discrepancy between the

SSR and the local wage, especially for women. In many of the villages visited, people reported that there was not sufficient labour to be had locally anyway, and that previously people migrated outwards in the summer season for work. In most places, small farmers make their donation to the WDF after they have been paid for completing the work on their own land. Even when they have contributed 5 or 10 per cent of the amount, they are likely to earn more than the local wage.

'The SSR is not totally binding on PIAs. One organisation, a research institute, felt that they could not pay the full SSR without inflating the local wage, making it impossible for local landowners to hire sufficient labour. After negotiations with local landowners and labourers, the PIA intentionally chose a figure above the established local wage, yet below the SSR, that has served to push up local wages in the local labour market without completely squeezing landowners out. The savings they have made by paying less than the SSR has been used to treat a larger area of land than the standard 500 hectares.

'On private land for larger landowners, the landowners themselves contract in labour to complete the works. They may or may not employ family labour alongside the hired labour. Collecting the contribution for structures on larger farmers' land is more difficult for the PIA. One research institute acting as a PIA explained that collecting contributions from these larger landowners was the key problem. They do manage to collect the contributions, but delays of months after the work is completed is common.

'One government WDT explained their alternative to collecting fees after the work was completed. The WDT made it a policy to collect money before the work was started. To make it easier for the farmers to come up with the contribution money, the work is split into phases. Perhaps the total work to be done is worth Rs.20,000. The first phase is budgeted for Rs.5,000. The farmer thus has to pay up front their contribution of this amount, which at 10 per cent is Rs.500. The farmer then earns money for completing the first phase of the work. The farmer uses the earnings from the first phase to pay the 'upfront' contribution for the second phase. The landowner continues to rollover the subsidised earnings to cover the contribution until the work is complete.

'Representatives from an NGO PIA described a common procedure in their district for collecting contributions for large structures, like check dams, that are constructed on private land. With the knowledge of the WDT, the landowner writes wages for himself into the budget for building the structure. He collects the wages for 'supervising' the work, even though he does not do any physical labour. He uses these 'earnings' to pay his contribution after the structure is completed.

'There are reports that in some cases, where works are done by labourers on large landowners' private land, 10 per cent is simply cut from the wages and paid directly into the WDF. Alternatively, the amount budgeted for is the full SSR rate, and the landowner pays the local wage rate instead. The difference is ample to cover the contribution. When asked about the payment of wages, WDT members often emphasised that workers were aware of the wages that they were owed, and that the payments were made in full, and publicly, directly to the labourers. This reflects some concern not to be accused of shortchanging labourers. Goud (1998:25) reports that:

> *"Wherever the contribution is given in the form of labour or materials, the equivalent money is supposed to be withdrawn from the project account and deposited in the WDF. However, there are reports that some clever PIAs are misusing this provision. The works are got done for rates lesser than SSR but recording will be done for one hundred percent as per the SSR rates. The differential amount is put in the WDF as a contribution of the farmers".*

'In these cases, the WDT plays a more active part in this process of charging the contribution to the labourers rather than the landowner. If the WDT does not monitor the handling of wages, landowners or WC chairmen can effectively set themselves up as contractors by exploiting this spread between the SSR and the local wage.

'Two organisations in the sample collect payments in advance of starting the work, imposing a certain amount of hardship on the farmers as intended. One is an NGO that has been working on SWC since before the *1995 Guidelines* were issued. Their director emphasises that it has taken ten years of gradually phasing in contributions to reach the level of 7 per cent of the total cost of works constructed. He argues that given the history of subsidies in India, the change asked for in the *Guidelines* is too abrupt. He thinks that PIAs should be enabled to phase in contributions over time. One of the research organisation PIAs is also collecting contributions in advance. They also collect a higher percentage for works if the landowner's plot is above a certain size, in order to improve the equity of the programme. Intense effort in community mobilisation was required, which has taken time and determination.'

Community organisation

Pratt (1998:20) is also enlightening on the issue of community organisation: 'Some WDTs, when placed under tremendous pressure to produce action plans in less than a quarter of the time suggested in the *Guidelines*, found various ways to cope. Goud (1998) reports that the action plans are often prepared by the WDT themselves or with the help of outside consultants. The components are therefore being decided by

the WDT with or without the involvement of the local people and submitted to DRDA to release the pressure.'

'Other WDTs found less drastic ways to formulate an action plan in three months by compressing and changing the sequence of the community organisation activities suggested in the *Guidelines*. The common practice is to call an initial Gram Sabha (village meeting) at which the programme is explained. At that same meeting, villagers are pressed to pass a motion committing themselves to the programme. Finally, a Watershed Committee, which will administer the watershed programme for the next four years, is formed by the people in attendance. The members are selected by appointment in the open meeting. The quotas suggested in the *Guidelines* are followed. Since User Groups have not been formed yet, their representatives cannot be chosen for the WC. The UG representatives are instead drawn from the entire pool of landowners at the meeting. Since in many cases no Self-Help Groups exist either, leaders from the landless are selected as a replacement for representatives of the SHGs. The quota for a Scheduled Caste/Scheduled Tribe representative was respected in some villages. The women represented on the committee tended to gain their legitimacy as representatives of SHGs where they already exist. Since the programme is new, many people are sceptical about the benefits and do not bother to attend this initial meeting. In some cases, their omission leads to conflict later, when they become interested in the watershed programme and discover the WC has already been decided' (Pratt, 1998).

The above chain of events can lead to, in some instances, the UGs (consisting mainly of the village elite) making decisions on the village's behalf, forwarding the contribution on behalf of the village as a whole, and then laying claims to the benefits and/or any distribution of that benefit at the end of the treatment (Kochhar, pers. comm. 2003).

The fact that the PIA staff of government PIAs do not work full time on the project also means a reduced ability to undertake time-consuming processes such as effective participation in the watershed work. Pratt reports that 'one PIA in the sample, a research institute, resisted the pressure to accelerate the community organisation phase. Although the institute enjoys privileged status as it is a training centre for the watershed programme as well as being a PIA, it found itself under heavy pressure from the district collector. The district official was refusing to disperse funds until the action plan was submitted. As the director of the research institute said, *"If we as a powerful PIA came under such pressure, imagine what it is like for other PIAs".*

The detailed data re-verification phase in this study examined processes relating to the:

- functioning of community organisations;
- planning phase; and

- implementation phase.

Processes are qualitative and hence these have been studied with the help of suitable parameters and measuring criteria. For the purpose of analysis, both qualitative (red, yellow, green) as well as quantitative (1 to 10) rankings have been made. Highlights of the analysis are given below:

Functioning of community organisations: As discussed earlier, two types of groups (Self-Help Groups and User Groups) and two types of management bodies (Watershed Association and Watershed Committee) need to be organised, particularly in the watersheds funded by MoRD and implemented by GOs and NGOs. The quality of functioning of these bodies was assessed with the help of 45 parameters and 135 measuring criteria (MANAGE, 2003). A list of the parameters used to assess the functioning of each type of community-based organisation under the watershed programme is given below:

A. Self-Help Groups (SHGs)

1. Built upon earlier initiatives that organised groups?
2. Criteria for membership
3. Federation of groups
4. Regularity of meetings
5. Proper maintenance of records and accounts
6. Rotational system of sharing the responsibility
7. Investment in human resource development:
    - for maintenance of accounts/records
    - for development of need-based skills
    - for building of shared vision
8. Self-disciplinary action for sustainability of groups
9. Peer group pressure against defaulters
10. Linkage with bank and other development departments
11. Proper management of revolving fund
12. Regularity of loan repayments

B. User Groups (UGs)

1. Building upon existing user groups
2. Adoption of sustainable method of organising new user groups
3. Proper involvement of UG in planning
4. Proper involvement of UG in implementation
5. Sustainable use of natural resource
6. Current users of natural resource
7. Clarity about ownership of community-oriented structures/measures
8. Functional mechanism for repair of community-based structures/measures
9. Representation of UG in management bodies

C. Watershed Committee (WC)

1. Nomination of membership in watershed committee
2. Constitution of sub-committees in case of more than one village falling under a single micro-watershed
3. Downward accountability of WC
4. Adoption of rotational system of membership
5. Investment in human resource development:
    - for proper maintenance of accounts/records
    - for development of need-based skills
    - for building of shared vision
6. Promotion of group-based activities
7. Proper adoption of social regulatory mechanisations for sustainable use of common property resources
8. Development of links with banks and other organisations
9. Generation of common fund through sustainable sources
10. Carrying out of timely auditing of accounts

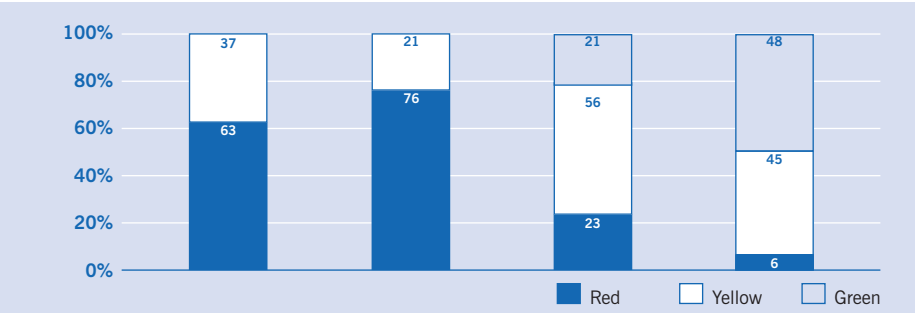
D. Watershed Association (WA)

1. Adoption of sustainable process for organising WA
2. Regularity of meetings
3. Proper maintenance of proceedings and records
4. Decision-making by WA
5. Eligibility criteria for membership in WA
6. Proper operation of revolving fund
7. Proper operation of Watershed Development Fund
8. Resolution of conflicts related to community-oriented works/activities
9. Facilitation of transparency and social auditing
10. Ownership of financial documentation by WA
11. Rotational system of office bearers
12. Harmony in relationship between WA and Panchayat
13. Perception of community about functioning of WA
14. Type of items discussed in WA meetings

An overall analysis of the SHGs and UGs has shown that groups in watersheds funded and implemented by government had more parameters scoring red (63 and 76) (see Figure 6.3). On average only three or fewer parameters scored green in these types of watersheds. Watersheds implemented by NGOs scored much better: 21 per cent of watersheds funded by MoRD and implemented by NGOs scored green, and 40 per cent in watersheds funded as well as implemented by NGOs also scored green.

FIGURE 6.3

Overall ranking of processes related to organisation of community in each type of watershed



Source of funds	MoA	MoRD	MoRD	NGO
Type of POA	GO	GO	NGO	NGO

As discussed earlier, the poor functioning of community-based organisations in government-implemented watersheds was essentially a result of the lack of both proper sensitivity and the skills to organise the community into a sustainable institutional set-up. The main purpose behind organising communities has been to implement the watershed project rather than to develop a self-reliant social unit. Because of this, in many of the above projects three out of four social units (UGs, WAs, and WCs) have become virtually non-functional once the project was over. Post-project sustainability of these groups, particularly of UGs, continues to be a concern, even in watersheds that were implemented by NGOs.

Planning phase: The quality of processes adopted during this phase was analysed with the help of these six parameters:

- Analysis of existing situation regarding natural resource use and livelihoods before preparation of annual action plan
- Need-based allocation of budget for different components and sub-components
- Adoption of demand-driven approach in planning
- Facilitation of group action and conflict resolution for community-oriented works
- Investment in a wide range of technological options
- Application of PRA tools

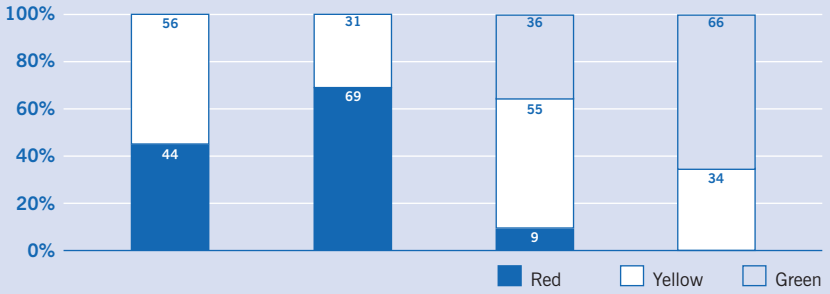
On the whole, government-funded and implemented projects had a high number of red scores (44 to 69 per cent) (see Figure 6.4). The percentage of parameters with a green

score increased significantly in watersheds implemented by NGOs. A total of 36 per cent of parameters were green in the watersheds funded by MoRD and implemented by NGOs. The percentage of green parameters increased further (66 per cent) in those watersheds that were funded as well as implemented by NGOs.

The data indicates that by and large the technical planning of watershed programmes continues to be WDT centered, particularly in watersheds that are funded and implemented by government. It has, however, become WC centred in cases where the programme is funded by government but implemented by NGOs. Interestingly, there is a tendency to adopt a group-centred approach (through SHGs/UGs) in the watersheds funded and implemented by NGOs.

FIGURE 6.4

Overall ranking of processes related to planning phase in each type of watershed



Source of funds	MoA	MoRD	MoRD	NGO
Type of POA	GO	GO	NGO	NGO

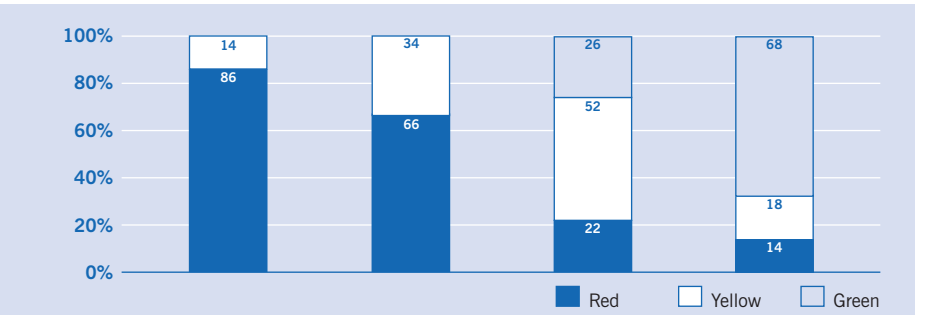
Implementation phase: The quality of processes adopted during the implementation phase were analysed with the help of seven parameters:

- Genuine contribution by actual users for development works
- Implementation of works by people themselves
- Flexibility in modification of plan during implementation phase
- Systems established for repair of community-oriented structures
- Monitoring of participatory processes besides physical and financial progress
- Social auditing and transparency
- Operation of account of development fund by people themselves

On the whole the percentage of parameters with a red score was high (86 and 66) in government-funded and implemented watersheds (see Figure 6.5). The percentage of parameters with a green score was high (26 and 68) in those watersheds implemented by NGOs.

FIGURE 6.5

Overall ranking of processes related to implementation phase in each type of watershed



Source of funds	MoA	MoRD	MoRD	NGO
Type of POA	GO	GO	NGO	NGO

Post-project issues and sustainability

Numerous issues affecting livelihoods, poverty alleviation and equity arise after the completion of the SWC works, and once the benefits become available. In general these relate to the distribution of and access to the regenerated resources, and include:

- free access and consequently over-exploitation of groundwater resource as well as of biomass on common land;
- lack of proper operational system for repair and maintenance of community-oriented structures created under the project;
- lack of system for proper use of watershed development fund and revolving fund created/provided under the project; and
- post-project sustainability of community institutions

It has been noted that the real test of the entire watershed programme or watershed management strategy happens after the project ends, and in this aspect the strategy generally fails – in terms of both maintaining structures built under the project and providing sustainable improved livelihoods. Soft issues such as skills and information for marketing increased yields have also been raised as problems with long-term/post-project sustainability of watershed programmes.

Issues at other levels

Monitoring

This section, also from Pratt (1998), describes in detail some of the problems with monitoring the process of participation effectively:

'The programme activities may be broken down by category (see Table 6.1). The first column includes the tasks that the field agents are expected to undertake. All of them are difficult for managers of the programme to observe and evaluate. The only way to get accurate information about many of these processes would be to be physically present to monitor them. This type of monitoring is clearly impossible. Due to time and resource limits, managers in the programme, whether at the level of PIA directors, project directors at the district level, or state-level government officials, could not possibly have the time to track the activities of all their field agents very closely.

TABLE 6.1

WDT tasks and outcomes

Tasks	Outcomes
Difficult to observe • Facilitating PRA exercises • Organising UGs • Organising SHGs • Facilitating negotiations between 'winners' and 'losers' • 'Tilting' benefits in favour of 'the poor and the weak' • Forming Watershed Committee • Creating consensus about action plan • Creating ownership of action plan • Including ITK in the action plan • Creating an action plan • Collecting contributions • Creating ownership of the structures • Creating capacity to maintain structures after the watershed period	**Difficult to observe** • Community feels ownership of action plan • Community feels ownership of structures • Community maintains structures after the project period • Women empowered • 'Poor' and 'weak' derive benefits • UGs continue to function after project period • SHGs continue to function after the project period • WC continues to function after the project period • Capacity created for further community initiated collective action • UGs functioning during project period **Easy to observe** • PRA outputs (maps, diagrams, etc.) • WC minutes • SHGs function during project period • UGs function during project period • WDF account balance • Action plan submitted • Structure built • Funds disbursed • Physical impacts (i.e. groundwater rise, vegetation regenerated)

'The other difficulty about gathering information about the performance of many of these tasks is that it is not clear how to observe or judge the difference between good and bad performance. Take the case of conducting a PRA exercise. Many PRA practitioners accept that good practice is highly contextual. In fact, the PRA literature argues that flexibility, innovation, and variation is a sign of good practice. This attitude is encapsulated in the PRA maxim, 'Use your own best judgement at all times' (Chambers, 1997: 158). This makes codifying what is 'good' PRA practice very difficult. One might create some general criteria. Did the facilitator 'hand over

the stick' to local people? Did they ask leading or open-ended questions? Were they attentive to the types of people who were participating and those who were not and try to correct it? How much did they speak and how much did they listen? Did they listen to all types of people, or only some? These are hardly precise measures. When one compounds the difficulty of making judgements about what is or is not good performance with the inability to directly monitor field agents' tasks, the manager faces a major problem in monitoring.

'As Table 6.1 shows, the unobservable work activities of the field agent are meant to produce two sorts of outcomes. Many of the outcomes are effectively unobservable to the manager for a variety of reasons. Some of the outcomes do not easily lend themselves to measurement. For example, how easy is it to judge the feeling of ownership in the community for an action plan? How can one judge how much ownership of structures has been generated through the process of collecting contributions? If there are gradations in feelings of ownership, how can one judge them? If one involves communities in monitoring their own perceptions from the beginning, they may be able to provide indicators of how their commitment changes over time. As subjective judgements, however, one would not easily be able to judge one field officer's performance against another's, or make fine gradations in performance.

'Many of the impacts of performing well at participatory processes will appear in the future, which also makes them hard to observe and reward. For example, there is no way of knowing whether UGs, SHGs, and the Watershed Committee will continue to function until after the project period ends. It is unlikely that the manager will be in a position to reward or penalise field agents for good performance over that time scale, as field agents in the government bureaucracy are normally transferred or promoted every two years.

'For many of these outcomes that are difficult to observe, there is also the question of how the outcomes can be attributed to the actions of the field agents. If a WC continues to function, or collapses after the project period, how possible is it to put the responsibility on the actions of the field agent? It is not clear how one would conclusively demonstrate the link. This is also true for feelings of ownership, and the sustainability of SHGs and UGs. In evaluating the performance of field agents, managers recognise that the agent may be doing everything possible, but that conflicts in the community or other factors out of the field agent's control can hamper their performance (Jain, pers. comm. in Pratt, 1998).

'The same processes that produce these difficult-to-observe outcomes also produce far more tangible results. One may not be able to watch the construction of a check dam, but one can easily go to the field to see the result. One can gauge not only

whether it was constructed or not, but also the quality of the construction. Many of the participatory processes also generate easily observable outcomes. For example, a PRA will contribute to the formulation of the action plan. Managers may not know how the PRA was conducted, but they can quite easily see whether the plan has been submitted in time or not. When collecting contributions, one may not be able to easily observe how much of a sense of ownership is being generated for the physical structures, and one will not be able to observe whether they are maintained or not, nor attribute their maintenance directly to the process of making contributions. However, the manager can easily see whether or not the account balance in the Watershed Development Fund is increasing.

'The reality of the programme is that the managers tend to direct their managerial pressure towards a few easily observable outcomes. These include building structures, disbursing money, and employing people. When it comes to processes of work, they rely on anecdotal evidence and their judgement about whether the field agent is doing good work, based on irregular field visits to project sites (ibid.).

'The cornerstone of the DPAP/DDP is treating land by building SWC structures, including field bunds, check dams, gully plugs, rock-fill dams, percolation tanks and drainage lines. The number of new structures that have been created since the inception of the new *Guidelines* is striking. In areas where there has been enough rain to observe the results, local people express their pleasure with the outcomes, often claiming that there has been a significant rise in groundwater.

'In the course of building these SWC structures, a tremendous amount of employment has been generated in the state. As of 1997, approximately Rs.7.29 billion (about US$182 million), had been spent on watershed schemes in Andhra Pradesh, approximately half of which went on employing labourers for constructing works (GoI, 1995; Dept of Rural Development, 1998). On visits to watershed projects, local people consistently express their satisfaction with the access to work that has resulted from the programme. The wages offered are usually above the local agricultural labour wage. The employment also comes in the summer season, when there is very little local employment available. The watershed works allow people to work in their own communities rather than migrating to find work.

'As one would expect, easily observable outputs become the focus of monitoring efforts by managers.'

In addition to Pratt's observations, the research team noted the difficulty that is created in that the watershed programmes released huge amounts of money to be spent over a short time. It has been noted that even the most participatory of

institutions with the best of intentions would have to concentrate on spending that money, privileging targets over processes (Kumar et al., 1999).

The *Guidelines* list a set of technical criteria on the basis of which to measure success. These include: quality of the works executed; production resulting from watershed works; physical and financial targets; employment generation, etc. One addition is that where local technical knowledge has been identified as appropriate, 80 per cent of the works should either use or be based on such local technical knowledge. Another is that 80 per cent of the completed works or CPRs should be managed by UGs or the community or Panchayat. Community organisation criteria include that 50 per cent of the community should be enrolled in SHGs, and at least 80 per cent of the SHGs and UGs should meet regularly, taking over operations and maintenance, submitting accounts, etc. On the training front, success is defined on the basis that 80 per cent of the people involved with watershed work at all levels from WC to MDTs should have been trained.

Pratt (1998) also notes that 'the WDT members are acutely aware of the pressures on them to meet targets for expenditure, which means building structures quickly. One project director identified this as a key force driving the way government WDTs approached their task. A government WDT member employed by the same project director joked that his project director had done everything short of beating him to make him reach the physical and financial targets. Another government WDT member explained that it was very clear that getting the works completed in time to meet expenditure targets was the key to getting a reasonable evaluation and keeping one's job. He argued that if there were a choice between a highly participatory process and getting the money spent, the officer would have to prioritise reaching the expenditure targets.'

Institutional reform

Another significant issue is linked to the dichotomy between forest lands and projects therein and the watershed programmes. In some places, forest protection committees have been set up for forest lands under JFM or other forest-related schemes, and benefit-sharing of tangible benefits (as opposed to certain intangibles under watershed protection) has been decided upon as part of the scheme. Here claims can sometimes be laid by WAs on these tangible benefits because of the CPR regeneration activity, which overlaps with forest protection activity. Under JFM programmes, usually only a section of the community is involved, unlike in watershed programmes where theoretically the entire community has been a part of the regeneration effort. This can give rise to conflict, owing to several village institutions managing the same common property, and under different distributional agreements.

The new institutions created and the processes of 'reform' towards increased participation that they are supposed to go through have been analysed separately at the state (Andhra Pradesh), district and PIA level. They are analysed on the basis of three different aspects:

- strengthening of existing institutions by bringing in new skills or manpower (this variable is emphasised);
- reorganisation of the institutions; and
- performance of new roles and responsibilities.

State level

Strengthening of existing institutions: This aspect has been assessed with the help of the following four parameters and measuring criteria:

- addition of new posts (through deputation from other departments or through contractual hiring from open market);
- source of funding for the above posts (through non-plan budget of the state government or out of the project fund);
- further strengthening of institutions through honorary management committee (having members from government and non-government organisations or consortium of different funding agencies); and
- further strengthening of institutions through out-sourcing (for activities like concurrent monitoring, consultancy on technical aspects; scrutiny and processing of accounts at different levels, etc.).

In order to cope with the additional workload and perform the new roles and responsibilities under the participatory approach, the government of Andhra Pradesh has created a separate Commissionerate of Rural Development (CRD) at the state level exclusively for managing the watershed programme. This has undoubtedly helped in focusing the attention of different stakeholders towards the new paradigm. The administrative expenditure for this strengthening was met by the state government out of its own non-plan fund, which reflects clearly the level of priority given by the state to natural resource development.

The Commissionerate of Agriculture (CoA) did not, however, consider it essential to further strengthen its institutional set up at state level with respect to any of the parameters indicated above. This is partly because the size of the programme was manageable by the existing staff in the department and also because the programme was implemented largely through the conventional approach, where the major role in

planning and implementation was to be played by subject-matter specialists within the department.

The Centre for World Solidarity (CWS), the nodal NGO at the state level, has taken initiatives to strengthen its state-level institution by:

- creating a small cell exclusively for the project by hiring experienced people on contracts;
- meeting the expenses of the new posts out of the funds available under the project;
- forming a steering committee of NGOs nominated by different funding agencies within the consortium; and
- outsourcing assignments related to concurrent monitoring/evaluation of the programme, etc.

The above arrangement by the NGO has created a flexible and responsive institutional set-up, and for that reason it was possible to hire resource people with proper attitudes and skills for the specific jobs required under the project.

Reorganisation of existing institutions: The following two innovative steps have been taken at the state level regarding reorganisation of departments/institutions to improve their delivery mechanism:

- Constitution of a 'water mission' in the government sector to facilitate co-ordination of the 11 departments dealing with water resources. This mission is chaired by the chief minister of Andhra Pradesh and supported by a full-time 'mission' office. Besides this there is a state-level advisory committee consisting of experienced resource people from different parts of the country.
- Constitution of a consortium of funding agencies in the NGO sector (Oxfam, ASW, BWF, Christian Aid, etc.) to share the overall cost of the watershed project and to provide a collective perspective for managing the programme according to the new paradigm. The above project was managed through a steering committee at state level (consisting of local representatives of each of the above funding agencies). The office space and management support was provided by the nodal NGO (CWS) and a separate cell was created for supporting the programme on an ongoing basis.

The initiative taken by the previous state government in creating a 'water mission' was unique. This approach was meant to result in convergence and co-ordination among different departments; it was outside the scope of this study to investigate how far this mission approach has been successful.

Likewise, the consortium approach adopted by funding agencies in the NGO sector also reflects an important realisation, that the watershed programme deals with a variety of agenda items and its success depends upon the integration of multiple perspectives including technical, managerial, social, participation, equity, gender, etc. Hence, the above initiative has provided a unique opportunity to integrate different views and experiences in a holistic manner through proper reconciliation with each other. This indeed has improved the quality of the ultimate output under the project as discussed in earlier chapters.

Performance of new roles and responsibilities: The performance of new responsibilities assigned to institutions at the state level were assessed on various parameters and the qualitative assessment of performance is compared in Table 6.2 below.

TABLE 6.2

Quality of new roles and responsibilities performed by different organisations at state level

Type of role	Quality of role performed by different organisations		
	CoA	CRD	NGO
1. Concurrent support on policy and administrative aspects	Low	Med	High
2. Proper management of financial aspects:	High	High	High
• Need-based allocation of funds for different districts	High	High	High
• Timely release of funds to the districts	Low	High	High
3. Overall review and monitoring of programme on the following aspects:			
• Physical progress	High	High	High
• Financial progress	High	High	High
• Participatory processes	Low	Low	High
4. Convergence with other development departments	Low	Low	High
5. Preparation of a perspective plan of the whole state regarding the development of natural resources	Low	High	High
6. Linking with other funding agencies to fill in the gaps in the ongoing programme	Low	Med	Med

District level

Additional strengthening of existing institutions: Due to inherent flexibility because of the autonomous nature of the organisation, the DPAP office /DRDA could strengthen the existing institution in order to meet the additional workload. For this purpose, a Multi-Disciplinary Team (MDT) consisting of subject-matter specialists in engineering, agriculture, forestry, livestock, etc. was created at the rate of one unit for every five or six PIAs to provide the desired level of technical as well as management support. The administrative expenditure for the above MDT units was met out of funds available under the management component in the watershed project. Besides this, a new committee (known as the District Watershed Advisory Committee) was constituted to democratise the decision-making process at district level. In addition to the above, some of the works, such as concurrent evaluation, case studies, internal auditing of accounts, etc. were done through the out-sourcing of services under the project.

TABLE 6.3

Performance of new roles and responsibilities by the existing organisations at district level

Type of role	Quality of role performed by different organisations	
	DoA	DPAP
1. Identification of people, PIAs, and watershed sites	High	High
2. Capacity-building of PIA	Low	Med
3. Technical sanction of high-cost structures (above Rs.25,000)	High	High
4. Timely release of funds to PIA and WC	Low	High
5. Vigilance against mismanagement of funds	Low	High
6. Periodic monitoring of progress during project period:		
• Physical progress	High	High
• Financial progress	High	High
• Participatory process	Low	Low
7. Follow-up support to PIA/WC during:		
• Project period	High	High
• Post-project period	Low	Low

As with the state-level organisations, no specific strengthening was attempted by the Department of Agriculture (DoA) (at district level) for the watersheds funded by MoA. This has obviously become a severe constraint in performance of new roles and responsibilities under the changing paradigm.

Quality of new roles and responsibilities performed by existing organisations: The new responsibilities and performance for different district-level bodies is shown in Table 6.3:

As Table 6.3 shows, both the organisations at district level are equally strong with respect to:

- identification of PIAs and watershed sites;
- technical sanction of high-cost structures;
- monitoring of physical and financial progress; and
- follow-up support during project period.

However, DPAP could perform relatively better than DoA on the following three aspects:

- capacity building of PIAs;
- timely release of funds; and
- vigilance action against financial mismanagement.

On the other hand, both the organisations were found to be weak with respect to monitoring both processes during the project period and follow-up support for activities carried out after completion of project period.

TABLE 6.4

Type of additional strengthening carried out by different institutions at PIA level

Parameters Type of strengthening used by different groups of PIAs	With DoA	With DPAP		With CWS
	GO PIA	GO PIA	NGO PIA	NGO PIA
A. New WDT posts were filled through:				
• Nomination of available subject-matter specialists from the government department	**	–	–	–
• Contractual hiring from open market	–	Y	Y	Y
B. Additional source of funding was through:				
• Non-plan budget of the state government	Y	–	–	–
• Management component fund under the project	–	Y	Y	Y
Number of PIAs	3	10	8	4

**By and large existing subject-matter specialists in the same department were used as WDT members. Also their jurisdiction was kept much larger than the expected jurisdiction under the same project.

PIA level

It was broadly observed that people's participation at watershed level was lowest with the PIAs associated with MoA-funded watersheds, and was best in those watersheds where PIAs have hired, on full-time contracts, WDT members with good attitudes towards participatory approaches.

Reorganisation of existing institutions: When identifying/hiring WDT members, the government PIAs put more emphasis on specialisation in the technical matters rather than the social science. The situation was the other way around in non-government PIAs. Likewise, there was a large variation in the location of the headquarters of WDT members. The headquarters of government PIAs were located in the offices of the PIAs themselves, whereas non-government PIAs located their WDT headquarter at the village level (see Table 6.5). Non-government WDTs had more women members than government PIAs too. It was interesting to observe that non-government PIAs provided additional support on technical matters (through outsourcing) in order to compensate for the lower technical qualification of the village-based WDTs.

TABLE 6.5

Reorganisation of existing institution at PIA level

Parameters Type of strengthening used by different groups of PIAs	With DoA	With DPAP		With CWS
	GO PIA	GO PIA	NGO PIA	NGO PIA
1. Education level of WDT members:				
• Graduate/masters degree in the subject	Y	Y	–	–
• Diploma in concerned subject	–	–	Y	Y
• Very little knowledge of subject-matter	–	–	–	–
2. Preference for subject-matter specialists of WDTs:				
• More emphasis on technical aspects	Y	Y	–	–
• Equal emphasis on technical and social aspects	–	–	Y	–
• More emphasis on social aspects	–	–	–	Y
3. Location of headquarter of WDTs				
• At the office of PIA	Y	Y	–	–
• At the block/mandal headquarters	–	–	–	–
• At the watershed level	–	–	Y	Y
4. Gender of WDTs:				
• Practically all members are men	Y	Y	–	–
• About 25 per cent of members are women	–	–	Y	–
• About 50 per cent of members are women	–	–	–	Y
6. Outsourcing for technical assistance:				
• All technical requirements were met from internal sources	Y	Y	–	–
• Higher technical requirements were met through outsourcing	–	–	Y*	Y

* The multi-disciplinary teams (MDTs) available with DPAP have provided technical support to these PIAs for designing and supervising the building of costly structures.

As expected, the technical specialisation was at a higher level in those WDTs that were previously working in the government department on a regular basis. The technical specialisation of WDTs with non-government PIAs was about middle level. The strategy of hiring WDT members with middle-level specialisation does indeed have an inherent limitation. However, it has been helpful at least in one sense in that it did not become a demotivating factor for the WDT members to stay at the village level, thereby facilitating participatory approaches better. Such an approach is likely to be useful in situations where alternate arrangements are worked out to fill the gap in technical specialisation (particularly for costly structures) through outsourcing of technical experts from qualified organisations.

Quality of roles and responsibilities performed by institutions at PIA level: Under the new paradigm, the PIAs along with their WDTs are expected to perform at least eight types of roles and responsibilities: organisation of community; capacity-building of watershed-level participants; facilitating participatory approaches during all phases of the project; technical sanction of low-cost structures; supervision of quality of structures during construction; periodic review of progress; follow-up support to the community, and adoption of withdrawal strategy from early stages itself (see Table 6.6). The overall performance of different types of PIAs varied strikingly. On the whole, performance was relatively better in the case of those non-government PIAs that were associated with watersheds funded by an NGO, and it was relatively poorer in the case of those government PIAs that were associated with watersheds funded by the MoA. The remaining PIAs (government and non-government) associated with watersheds funded by the MoRD have performed in between the above.

This differential between the performance of the MoA and MoRD, with both being government agencies, has been traced to the amount of autonomy that district-level organisations had. DRDA offices, and now DPAP ones, have been independently registered entities, handling their own bank accounts and not directly under the command of the state bureaucracy, since before the *Guidelines* were issued. This low level of vertical integration accounts for some of the success with unconventional ways of working.

The vertical hierarchy seems to be greatest in the watersheds funded by the MoA (as the concerned institutions are in the government sector, and without formal autonomy at any level) as per details given in Table 6.7. In such cases, most decisions taken even at national level become the rule at all levels. The reverse is true in case of watersheds funded by NGOs. The institutions are all autonomous (registered under society act/trust) except for the CBOs set up at the community level which could not receive funds due to unavoidable restrictions imposed by the *Guidelines*' financial rules.

TABLE 6.6

Quality of new roles performed by different organisations at PIA level

Parameters	Present status of strenghtening of different types of PAs			
	With DoA	With DPAP		With CWS
	GO PIA	GO PIA	NGO PIA	NGO PIA
1. Organisation of community at village level	Low	Low	Med	High
2. Capacity-building of watershed-level participants				
• For management of programme during project period	Low	Med	High	High
• For management of activities likely to be carried out after completion of project period	Low	Low	Low	Med
3. Facilitation of participatory approach in project management	Low	Low	Med	High
4. Technical sanction of low-cost structures	High	High	High	High
5. Supervision of quality of structures during construction	High	High	Med	Med
6. Review of periodic progress:				
• Physical aspects	Med	Med	Med	High
• Financial aspects	Med	Med	Med	High
• Process-related aspects	Low	Low	Med	High
7. Follow-up support to the community	Low	Low	Med	High
8. Timely adoption of withdrawal strategy	Low	Low	Med	High

The overall situation in watersheds funded by the MoRD is in between these two extremes. Under this setup, 10 watersheds have been implemented by government PIAs, and eight by non-government PIAs. Even in the 10 government projects the vertical hierarchy is not large, as there is an autonomous agency at district level as well as watershed level (see Table 6.7). In the remaining eight watersheds, the institution is autonomous at three out of four levels. Variation in the size of the vertical hierarchy seems to be one of the important factors behind variation in people's participation under watershed programmes. It has also been mentioned elsewehere (Venkateswarlu, pers. comm. 2003) that the MoRD's organisational culture is much more open and multi-disciplinary than the MoA's. The latter is populated by

TABLE 6.7

Type of institutional combination with each source of funding

Source of funds	Type of institutions at different level				No. of watersheds
	State level	District level	PIA level	Watershed level	
1. MoA	GO	GO	GO	CBO	3
2. MoRD	GO	GO*	GO	CBO*	10
			NGO*	CBO*	8
3. NGO*	NGO*	–	NGO*	CBO	4
Total:					**25**

*These organisations are autonomous as they are registered under the Societies Registration Act, 1860.

agronomists trained in a specific disciplinary mould, and hierarchy is pronounced. MoRD, by contrast, has a much more interdisciplinary outlook and, as described before, there is autonomy at various points in the hierarchy.

Turnover of officers/subject-matter specialists during the project period: For various reasons, the turnover of personnel was high in the programmes funded by the MoRD. Project directors were transferred frequently, at least two or three times during the project period. Similar turnover was experienced among WDT members even though they were hired for the project period. This level of turnover has caused severe discontinuity in the adoption of participatory processes, and delay in the progress of work because new members had no experience of the new mechanisms and instruments in the watershed guidelines. The higher turnover in the MoRD programme emerged as a problem because the MoA programmes were implemented by existing MoA staff without involving outside resource people, using a top-down approach, and with the aim of increasing agricultural productivity, hence overall pressure on the capacity-building aspect was also low.

There was little problem with turnover of officers and subject-matter specialists in the NGO-funded programme. This was partly because they took greater care when hiring; preference was given to people who had the desired kind of attitudes and background experience even if their basic academic qualifications were lower.

Fund flows and accounting system

This study includes only three major funding agencies – MoA, MoRD and NGOs – which covers more than 80 per cent of the watershed programmes in the state. In the public sector, the government of Andhra Pradesh receives funds for its watershed programme mainly from the GoI (through MoRD, MoA, MoEF) and NABARD (National Bank for Agriculture & Rural Development) (under the RIDF (Rural Infrastructure Development Fund) and WDF programmes). CAPART also supports watershed programmes in Andhra Pradesh through a few partner NGOs.

The fund-flow mechanism varied significantly between the different funding agencies. The MoRD released its funds directly to the autonomous organisation at the district level (DPAP/DRDA). The district-level organisation's other funds were released separately by the state government to the concerned district. Hence, for such watersheds, the district became a unit for overall management of funds, which subsequently released the funds to concerned organisations in two components: a developmental component, which was released directly to the registered CBOs; and a management component, which was released to the concerned PIAs. (A part of the management component was retained by the district to carry out its own activities.) The development funds for the CBOs were managed jointly by the representatives of the WC and the PIA.

The MoA, on the other hand, released its share to the headquarters of the state government, which in turn released it to the government treasury at district level against stipulated financial allocations given by the Commissionerate of Agriculture. The funds available for administration were deducted at the state level before releasing the development funds to the district-level treasury. At the district level, the DoA drew the funds from the treasury either against the completed works or as a contingent advance to be settled within a limited period. Since 2002, however, the fund flow has been centralised and the central government finance department releases a consolidated amount directly to the state finance department for all the MoA schemes. Subsequently the fund is released in the same manner as indicated above – i.e. to the district level against allocations stipulated by the Commissionerate of Agriculture. As is apparent, the funds must go through many more hands and numerous purely financial tests (rather than the need at the community level) before it reaches the community. The kinds of difficulties this complicated arrangement can create do not need to be spelt out.

In the case of NGO-funded watersheds, the consortium of funding agencies releases their share of funds to the nodal NGO (CWS) at the state level. They in turn release it to partner NGOs at watershed level. This fund includes a management component

as well as a development component. Funds under both the components were released to the PIAs (partner NGOs), who have in turn operated it with the help of a representative from the watershed community as a co-signatory.

By and large the existing fund-flow mechanism facilitates participatory approaches only in the case of MoRD and NGO-funded watersheds. The watersheds funded by the MoA suffer because of both the delay in the release of funds due to the centralisation of the fund management system and the practice of releasing funds against completed works (rather than against an approved action plan) which indirectly encourages contractorship during the implementation phase.

In general, some of the characteristics of the financial arrangements under the *1995 Guidelines* are:

- The management component of the funds are centralised at the state or district level.
- Funds allocated for the capacity-building and community organisation components are usually not fully used, in fact most of this money remains unspent.
- There is a mismatch between the timing of the release of funds and the needs of the project, as the release remains at the discretion of the district, or in the case of the MoA, the state-level body. Money can be released late and then activities have to be fast forwarded to fit the financial year. In other cases, money is released against expenditure already incurred rather than against a workplan, creating further difficulties.
- It is difficult to maintain proper financial records at the village level because of heavy workloads and inadequate training of the office bearers in the WC.

The argument for elaborate financial mechanisms is to prevent financial mismanagement. While this is a laudable objective, the fact remains that the conventional financial management system now lacks relevance under the new participatory paradigm.

An overall assessment of the performance of different institutions, combining institutional and financial parameters, is given in Table 6.8.

TABLE 6.8

Scoring of quality of internal management system within the organisations at different levels

Type of indicator	Overall scoring for quality of indicator for each type of organisation									
	State-level administrative agency			State-level training organisation			District-level management agency		PIA-level facilitation agency	
	GO		NGO	GO	NGO	GO	GO	GO		
	COA	CRD	CWS	APARD	WASSAN	MANAGE	DPAP	DOA	GO	NGO
1. Decentralisation in decision-making	Y	Y	G	Y	G	Y	Y	Y	Y	G
2. Autonomy in functioning	Y	R	G	R	G	G	G	R	R	G
3. Flexibility in management system	R	Y	G	Y	G	G	G	Y	R	G
4. Multiple sources of funding	Y	Y	G	Y	G	G	Y	R	R	G
5. Learning institution for self improvement	Y	Y	G	Y	G	G	G	R	Y	G
6. Availability of corpus fund	R	R	Y	R	R	G	R	R	R	R
7. Ability to influence policy	G	G	Y	G	Y	G	Y	R	R	R
8. Networking with other institutions	Y	Y	G	Y	G	G	Y	R	R	R
9. Motivation to innovate	Y	Y	G	Y	G	G	Y	R	R	Y

Y = Yellow R=Red G=Green

Cross-cutting issues at all levels

The question of indigenous technical knowledge

Returning again to Pratt's study, the *1995 Guidelines* suggest that 80 per cent of SWC solutions should be based on indigenous technical knowledge. The policy discourse that preceded the *Guidelines* links the use of indigenous technology to the later sustainability of the structures.

'WDTs must share decision-making in some way with local people, balancing the creation of local ownership for the plan with the technical quality of the plan. WDTs always say that they 'only give technical advice'. The WDT members are often vague when asked exactly what that means, but upon further questioning they describe a variety of approaches to sharing decision-making with local people. Most decisions about small structures on farmers' fields, such as bunds and drainage channels, are made in the course of a transect walk. In some cases, WDT members arrive at the field and make a proposal, and it is up to the farmer to try and negotiate changes. In other cases, farmers make suggestions, and the WDT member discusses the proposal with them and makes suggestions as to what is technically best. Sometimes farmers are asked to make these proposals in written form, by drawing them on paper, with help from literate villagers if necessary. The plan that results is negotiated, since WDTs need the agreement of the farmers to go ahead with the works, and farmers are certainly not beyond influence from WDT members. As it would be for a manager, it is difficult as a researcher who is unable to observe this process directly to report accurately on the sharing of decision-making in this negotiation. However, when WDT members describe these decisions, they commonly use the verbs 'explain' and 'convince' which may suggest something of the role they take in these interactions. One government WDT member argued that a 'problem' with the new *Guidelines* is that if he knows that a farmer 'needs' a contour bund down the middle of his field, and the farmer disagrees, there is no way for the WDT member to 'force' him to take it up. This suggests that WDTs take a very active role in pushing their ideas for treatment, but that the *Guidelines* successfully impose some restraint on government functionaries in their interactions with farmers.

'Water harvesting structures, such as percolation tanks and check dams, tend to be the focus of attention on field visits, since they are physically large and expensive and also provide the most dramatic results by contributing to groundwater recharge. The way in which decisions are made over these structures varies. One WDT leaves it to villagers to decide the location and the size of structures. They intervene only by converting the farmers' estimated sizes into formal measurements, so that an accurate budget can be calculated. Other WDTs allow the villagers to decide the location of the structure while on a transect walk. The WDT exercises a veto if they feel the site is not 'technically feasible'. The WDT engineer provides plans for its construction, such as what depth of foundation is needed, the dimensions of the dam itself, the way to use local materials in constructing it, and how to build a waste weir. Another team explained to me that they would give a list of 'technically feasible' locations for structures, and allow villagers to decide which one to use. This was in order not to waste time allowing the villagers to discuss technically undesirable sites.

'Once the villagers had selected from this menu of locations, again the WDT would provide all the plans as to the dimension and construction of the actual structure. In some cases, the decision-making process may be less inclusive. One government WDT chooses a site for the structure, and then 'convinces' the community that it would be the optimal location and size for a checkdam. In another village, the WDT member explained that a check dam site had been decided by a WDT member, a MDT member, the WA President, and the WC chairmen.

'As a way of finding out about the attitude of WDT members towards indigenous technical knowledge in SWC, they were asked about previous soil and water conservation practices in the villages where they were working. Their attitudes were mixed. For example, a lengthy discussion with one government officer serving as an MDT member revealed that he viewed the technologies used in the watershed programme as improvements on commonly known indigenous technologies. He viewed his agricultural training at university as learning the technical or English names for practices he already understood from growing up in a rural area. An agricultural engineer revealed more confusing attitudes towards indigenous technology in the course of a transect walk. While walking through a gully to the site of a new percolation tank, we crossed a row of stones spanning the gully, nearly covered in silt. He pointed it out to me as a gully plug built by an unknown villager sometime in the distant past. Later, when I pressed him on indigenous knowledge of SWC techniques, he insisted that rock fill dams (to catch silt in streams) were a completely new concept to farmers, and had to be explained carefully step by step. He did not see it as a familiar concept given a particular shape by himself as an agricultural engineer.

'When on a field visit with a former WDT member, I asked the WC chairman how they had decided where to start the works. The WDT member immediately jumped in and dismissed my question because, 'It is common knowledge', that one must start at the ridge and work to the valley. The farmer did not have a chance to reply. When a representative from a research institute PIA was asked the same question, he said that they started at the ridge because it says so in the *Guidelines*, and that it is a 'well-known fact' that the treatment must proceed in this order. The dynamic of these attitudes towards knowledge about ridge and valley treatments stands out in relief against the general occurrence of structures being constructed in valleys on privately owned lands – an iniquitous arrrangement. However, the observation that farmers prefers valleys to ridges might be applicable in instances where both fall within a given farmer's land – a rarity in the Indian context.

'The sample included a striking example of one manager whose emphasis is clearly on creating the technically best plan by outsiders' standards, not on creating ownership for the plan through participatory planning. One project director has a vision of creating a computer model to interpret satellite images of watershed sites. The computer model would be able to generate ideal treatment plans for each area. WDTs could then take these optimal plans to the villages and attempt to 'convince' the people that this would be best. He explained that local people lack some important knowledge, whereas with satellite imaging and computer analysis, the planners would know everything necessary to make an optimal plan.

'Villagers give fairly consistent reports about their previous knowledge of SWC measures. For example, in a watershed implemented by an NGO, people said that they had some idea about water harvesting techniques before the WDT entered the village, but that they had no funds to build structures. The other contribution the WDT had made was helping them to organise themselves to create a co-ordinated plan that would systematically cover the treated lands. Similarly, in another watershed implemented by a research institute, an elderly man insisted that the villagers knew about SWC for generations, but did not have the funds to invest.'

Following on from Pratt's conclusions, the research team also found that the value of indigenous technological solutions is also undermined at a level beyond the WDT. Action plans for micro-watersheds have to be approved at the district level by the DRDA or equivalent before funds are disbursed. This can constitute another bottleneck as district-level authorities can refuse to disburse the funds unless they conform to certain technical parameters, or their ideas of technical 'soundness'. ITK solutions often do not 'measure up' to these standards, and often have to be disregarded so as to get access to the funding. Additionally, ITK solutions generally entail smaller expenditure, which can result in more work for the district-level authorities, as well as difficulties in meeting expenditure targets. This is compounded by the expenditure following a different format in different places, hence monitoring of expenditure becomes more difficult, and it has to be admitted that this leaves the way open for financial mismanagement or corruption. The most telling example of this is the GO at the state level disallowing field bunding because the very small and decentralised mode of expenditure led to considerable corruption and siphoning off of funds. Field bunding is a preferred ITK solution in many instances.

It is also pertinent to note that discussions on capacity-building requirements do not often refer to the need to sensitise technical personnel on the agreement of ITK and their own learning.

Training and capacity-building

The *1995 Guidelines* are far from silent on the subject of training and capacity-building. It is stated that watershed users, the watershed secretary, and volunteers should all be trained. Users should be trained in technical aspects of *in situ* soil and moisture conservation, maintenance of the structures set up under the project, and other such livelihood improvement activities. Paid staff of the project – meaning the watershed secretary – should be trained in record-keeping, conduct of meetings, and administrative and accounting procedures in keeping with the requirements of PRIs, DRDA, etc.

For staff at the PIA level, it is stated that WDT members shall be sent on a month-long training course as soon as possible after their appointment for training in watershed treatment technologies, with an emphasis on low-cost structures and farmers' innovations, among others, as the first module. PRA and community organisation methods should be the second module; along with a third on project management tools and a fourth on the administration of various specific rural development programmes. This training is the responsibility of the state-level body, and costs shall be met from the administrative costs head.

Despite extensive guidelines about how to undertake training and what it should consist of, there had been little investment on training or exposure for staff for a considerable length of time. There remained considerable ambiguity at the level of the training institutes about what the training should consist of, even though it had been specified in the *Guidelines*. A stage of assessing current capacity was felt to be a prerequisite to being able to build capacity, and was missing. Agricultural universities and state institutes for rural development were nominated as the institutions responsible. There were two main obstacles to the training taking meaningful shape:

- Financial outlay for training remained minimal in the overall funding scheme – especially as the funds that could remain at the state level were a small proportion of the overall amount to begin with. Other funds were distributed amongst various districts, and co-ordinating efforts to organise training became a difficult task.
- Training remained within the institution, and did not become field or site-based, immediately diminishing the on-site practicability of the training. The agricultural universities/research institutions were not always familiar with empowerment issues, and the training retained a certain top-down focus. Though the option of inviting experts with experience in participatory methods to the state training institutes to impart training on some aspects to the trainers themselves was mentioned in the *Guidelines*, it is not clear if this ever materialised.

Detailed micro-level analyses reveal that training had been given to the WDT members in the PIAs. Some WDT members (even government operatives) felt that more training in techniques and methods related to participation would have been very welcome, but that this was not forthcoming. With respect to the engineering-oriented component of the training, the emphasis was on cost-effectiveness in conventional engineering works, and more emphasis on appreciating and working with ITK would have been welcomed.

TABLE 6.9

Overall status of capacity-building initiatives in the watershed programmes funded by different agencies

Type of role	Overall ranking of capacity-building related aspects in the watershed programme by different agencies		
	CoA	CRD	NGO
1. Training programmes on:			
• Technological aspects	High	High	High
• Management aspects	Low	Low	Med
• Social aspects	Low	Low	Med
2. Institutional reforms at community level	High	Low	High
3. Partnership with autonomous organisations at different levels	Med	Low	High
4. Proper designing of project guidelines/ operational manual	High	Low	High
5. Transparency in communication/information sharing	Med	Low	High
6. Concurrent policy support	Low	Low	Low

By and large courses on technological aspects have been given high priority by all three organisations. The programmes funded by the MoRD and MoA have received low priority on management as well as social aspects. These aspects have, however, received medium to high priority in the programmes funded by NGOs. This is one of the primary reasons why particpatory processes are at a low level in government-funded programmes.

Strategy and approach for organisation of training programmes: There has been a striking difference between different funding agencies with regard to the strategy and approach adopted for the organisation of training programmes. In the watershed programmes funded by the MoRD and MoA, the training courses were organised through one-time contact between trainers and trainees without significant effort to provide follow-up support. In the case of programme-funded NGOs, training courses were organised through repeated contacts between trainers and trainees. Besides this, follow-up support was also provided by experienced resource people in between the two rounds of courses. Training inputs were usually linked with project review sessions so that efforts could focus on weak areas.

In the NGO-funded programme, subject-matter specialists at the field level had only a low to medium level of specialisation (e.g. diploma rather than a bachelor's/master's degree in engineering). The less qualified subject-matter specialists were, however, willing and able to stay in villages (as their headquarters) without much difficulty. In such cases, this potential knowledge gap was more than overcome by providing additional needs-based support through external resource people.

Broadly speaking, principles of systematic planning, implementation and monitoring were not adopted for software components like community organisation, training, etc. though they were for components such as natural resource development, livelihood development, etc.

Another difficulty was created by the high turnover of staff. Additional rounds of courses for new people joining later on became necessary because of transfers, but this was not always possible. The problem of turnover was not as bad in programmes funded by the MoA.

Type of efforts made to train primary stakeholders associated with the watershed programme: With the adoption of new paradigms, the center of gravity has been shifted (from public sector offices) towards community-based organisations. As mentioned earlier in the section on community organisation and capacity-building for primary stakeholders – which may include not only office bearers of WC/WA but also a series of paratechnical workers such as convenors/co-convenors of SHGs and group members (including women and men) belonging to resource poor families – training is a major need. The roles that are assigned to these stakeholders can only be performed well if the people are trained first. However it must be noted that this is a larger social empowerment need and not one restricted to the watershed management agenda.

Among the three funding agencies, intensive efforts to build the capacity of primary stakeholders were made mainly in the watersheds funded by NGOs. The capacity-building efforts in government-funded programmes (with MoA as well as MoRD) focused more on secondary stakeholders. Hence, the lack of capacity among the bulk of primary stakeholders has become the weakest link in the whole programme.

As is evident from the range of issues covered in this chapter, a multitude of factors affect the quality of participation in watershed programmes, including those that are community-specific (equity, gender) and that those cut across levels such as institutional reforms and the role of PIAs, and training and capacity building. What this study demonstrates is that while the issues are complex they need to be engaged with and resolved to raise the effectiveness of participation in the watershed programme. The next chapter highlights some of the emerging issues and challenges around these and other questions in the attempt to understand and institutionalise participation.

Chapter 7: Emerging issues and challenges

At the start of this study several research questions were posed (see Chapter 2). The methodological approach for the India case study was formulated around these questions. The research itself included secondary literature analysis, fieldwork, interviews with community representatives, government officials, NGOs and other independent experts. Several drafts of the preliminary findings of this study were circulated among a selected group of people comprising the district case study co-ordinators and representatives from MANAGE, Development Alliance and IIED, as well as other independent experts. In addition, the research team had several rounds of discussion internally, as well as in the SLG, to arrive at what are now the emerging issues and challenges in the institutionalisation of participation in natural resource management and its role in poverty alleviation in India.

These issues and challenges are of a varied nature, and this is reflected in the text that follows. These have been drawn from the key research questions, the findings of the district case studies, the Andhra Pradesh case study synthesis report, and the process of interaction and discussion that took place among several participants during the research. While pertaining to the specifics of the role of participation in watershed management in some places, in others there are political and discursive issues of a much broader nature that arise. While some of the issues have been subdivided for clarity, it is pertinent to note that eventually most issues are interrelated.

Conditions/enabling environment

Certain issues circumscribe the finer points of the conditions in which participation can be scaled up. The ability to enable participation on the ground and then institutionalise it varies from one organisation to another, regardless of whether it is a government agency or an NGO. In a situation where participation is already at low levels, the question of institutionalisation is complex.

The trend reported by the findings of this study shows that, on average, government-funded and executed programmes are least able to institutionalise participation, government-funded and NGO-executed programmes are average, and NGO-funded and NGO-executed perform well. As NGOs get larger, however, attempts to enable

participation within them and in the projects they undertake begins to suffer. Many more government and NGO programmes need to be assessed to understand their successes and failures in participation and the structures and processes that give rise to these successes and failures. An analytical framework needs to be evolved to understand processes within the organisation that lead to good or poor rates of participation before considering its institutionalisation.

The watershed programme has seen some convergence in the ways of working of NGOs and government agencies, but are NGOs beginning to work like government or the other way around? Do donor funding restrictions tend to make NGOs behave more like government organisations? To what extent do NGOs need to comply with such conditions and to what extent are they free to innovate? Are they constrained by the circumstances of the funding arrangements, or do their attitudes regress? In general, it has also been seen that larger NGOs are less susceptible to external control, but smaller organisations are more likely to comply – a factor that is to participation's advantage if the large NGOs are 'participation friendly' to begin with.

It has also been noted by a district case study co-ordinator that in a situation where an NGO is both funder and implementer, the effort put in by the first rung of leadership pays off, but scaling up to the next level of leadership does not always work. This is possibly because of the vision that primary leadership is able to bring both to an organisation as well as a programme, while for others in the same organisation it may be just another job. In contrast, though, government provides the least incentives and rewards for innovation among its functionaries; few actions can be taken without clearance from a higher authority, preferably in writing.

Scaling up participation may be a desirable objective, but getting it right can be tricky. Considerable discussion has taken place in the course of this study on the notion of 'scaling up' and 'large scaling' as well as a 'project mode' and 'programme mode' of functioning. It was felt that NGOs operate in a project mode and are responsible for a focused set of objectives in a limited area, while the government, by default, has to operate in a programme mode responsible for the entire state. This may explain some of the differences in approach and performance between the two entities, but how could the lessons of successful projects then help to make successful programmes?

Developing the idea further, it was suggested that scaling up did not necessarily mean wider outreach across geographical area and number of villages/people covered. This would only amount to 'large scaling' with any real benefits of participation. Genuine scaling up should then include, among others things, changes in resource ownership,

access and use relations, equitable distribution of benefits, and positive changes in gender relations.

In Andhra Pradesh, for example, the development of 'process guidelines' by the state authorities that emphasised and expanded on the community organisation/ participation element of the *1995 Guidelines* (see Chapter 5) to encourage more genuine participation was appreciated as a step in the right direction. However, it remains to be seen whether this will lead to genuine scaling up or only large scaling.

Another conundrum that is repeatedly faced is whether new institutions should be created that will be free of the wrangles of previously unsuccessful ones; or should there be an attempt to reform or modify the existing institutions at the community level? Put slightly differently, should participation be supplementing ongoing ways of functioning or supplanting them? Which is the more efficient, or perhaps more importantly, sustainable, mode of operation or way of thinking about participation?

It also needs to be borne in mind that some outcomes can be achieved through participation but there may be others that require external intervention, especially on issues related to equity and gender. In other words, participation has to be understood and put in practice – and therefore institutionalised – in a very nuanced way to maintain the twin objectives of local sovereignity and equity. For example, the issue of regeneration of common property resources is not in the interest of the landed and relatively well off in most communities. In order to safeguard the interests of the poor, therefore, it may be necessary for the state or NGO to 'enable participation' by the communities on specific issues. Gender issues might also require similar interventions in the event that male-dominated institutions are unwilling to share roles and responsibilities with female colleagues. At the same time, 'participation' can lead to inequitable outcomes, such as where wages for labour were fixed at the community level through a process of consultation but happened to be below the prescribed minimum wage in the State Schedule of Rates.

Several current natural resource management programmes in India are based on participatory approaches, for example the Watershed Development Programme, Joint Forest Management (see Box 3.1) and Participatory Irrigation Management (see Box 3.3). Convergence among these programmes in approach, technical planning and project management is essential to ensure that the output of each, individually and collectively, is conserved. Convergence will ensure outputs because non-convergence often means that work gets held up while the programmes are competing with each other, over turf or who gets to make decisions.

How does the hierarchical nature of large bureaucracies influence their capacity to move from an implementing to an enabling role?

While seeking clarity on how small-scale participatory successes came to be applied on a wider scale, it was found that the bottom-up processes operated in a piece-meal way, that is certain individuals leveraged small-scale participatory successes to bring about a change in policy at a higher level. This change did not filter through the system uniformly, however, rather it leapfrogged, from one convinced individual to another. Later, it also spread from one bureaucracy to another, that is from MoRD to MoA, again not necessarily due to the impact of the approach or of ideology. Leapfrogging within one bureaucracy did have to do with convincing people, but the spread from one bureaucracy to another was a different matter; it happened more because of the prestige and kudos received by the former in its attempts to adopt a participatory approach.

It has been noted that at the macro-level, the guidelines and the revision of them is an institutional reform within the MoRD. Watershed-type programmes constitute only 20 per cent of the MoRD's expenditure. The remaining 80 per cent is spent along far more conventional lines. It is hoped that the reform would spread to other parts of the ministry, but this has not really happened so far, for lack of an institutional framework amongst other reasons.

The study has shown that the level of people's participation in NRM has been inversely proportional to the size of bureaucracy of the implementing agencies and the degree of autonomy enjoyed by various levels of the watershed development bureaucracies. Some of the ways in which the weak enabling environment that appears to go with larger bureaucracies manifests itself include:

- the perpetuation of a target-oriented approach (despite the shift in paradigm towards process-oriented approach). Because of this, there was continued emphasis on the use of outside technologies, high-cost structures and heavy equipment for earth work and low emphasis on processes;
- the low level of flexibility in the programme, which affected both the performance of existing government staff and discouraged experienced NGOs from joining (e.g. Youth For Action, MYRADA) or caused them to leave the programme mid-way through (VIP, MVF, etc.); and
- a reluctance to adopt institutional reforms (as happened particularly in the MoA-funded watersheds) due to fear that hired personnel might become a liability to the host organisation after the project. Because of this, it was not possible to bring in resource people to address aspects such as gender and community organisation.

Internal and external factors that inhibit the spread of participatory processes and approaches

Some of the inhibitory factors identified in this study include:

- Political conflicts: A problem particularly at the district and village level, where there is considerable lobbying for both the selection of particular areas to be covered by the project and the recruitment of specific people as office bearers in various institutional arrangements. Atmospheres of political patronage and interference also play a role. For instance, district-level politicians routinely interfere in the selection process of NGOs as PIAs or in the appointment of project staff. In some cases NGOs have been created overnight or affiliated with politicians to allow them to access funds in an irregular manner.
- Social conflicts: Entrenched problems of inequity, gender imbalances, and over-exploitation of natural resources are some of the contentious issues that generate conflict at the community level and therefore hinder the spread of participation.
- Use of funds and centralisation of resources: The allocation of funds, especially for the management components of the watershed programme at district level, is quite *ad hoc*. The lack of a systematic approach to how these funds earmarked for training and community organisation purposes may be used and how their allocation should be prioritised acts as an inhibitor to participation.
- Lack of flexibility: Government departments demonstrated significantly low levels of flexibility in the implementation of the watershed programme unless backed by appropriate enabling orders from higher levels of the hierarchy (for example in Andhra Pradesh a district office of the Commissionerate of Rural Development would hesitate to pass indigenous water harvesting solutions unless the head of operations at the district level (the project director) was known to back innovation).
- The simple lack of a mechanism to disseminate information widely about the watershed programme is also a problem. For instance, it was found that most women in a village had been given none or only skeletal information about the proposed watershed programme, which not only prevented them from participating in designing the programme but also prevented them from asking for what was theirs by right. At the outset the AP government made very good information available on water availability and crops through posters, but very few of the posters were used. How information is delivered is an issue.

- A comparison across watersheds also shows that too much material inequality among the various stakeholders to some extent prevents the adoption of a participatory approach.

Inhibitory factors work at a multitude of levels. On the issue of participation of women, societies that show strong gender discrimination (as in much of non-tribal rural India) and expect women to follow prescribed gender roles cannot also be expected to simultaneously promote women's participation successfully. India is currently going through a change in attitude – albeit at an excruciatingly slow rate – towards women and gender relations in public life (for example a bill reserving 33 per cent of seats in parliament for women has been introduced and endlessly debated but is yet to become law). Despite this, however, at the community level a resistance to accept women as equals prevents men from accepting them as actors who are able to work on their own behalf and articulate their own needs and solutions. At the same time bureaucrats mouth platitudes but continue to look down on women and treat them as recipients of handouts (Rao, pers. comm. 2003).

Internal and external factors that facilitate the spread of participatory processes and approaches

Some of the factors that give rise to effective participation identified in this study include:

- the preparation of process guidelines at state level in harmony with mechanisms and instruments provided in national guidelines;
- the adoption of institutional reforms to facilitate need-based strengthening of organisations (with experienced resource people) for the project period; and
- that in NGO-run programmes the communities are able to plan and implement their project and do so effectively because they are responsible for reviewing their own performance and making adjustments.

It is also felt that adoption of the project management principle (systematic planning, implementation, and monitoring) for not only development components but also the management components of the project could help to improve the institutionalisation of participation. The study found the lack of a systematic approach to training to be a huge problem, and preliminary efforts towards systematising to be useful. Similarly, adoption of the batch concept in which each PIA is given one or two micro-watersheds in the first round could help. (PIAs themselves and researchers have seen how much PIAs have learned and improved after their first attempt.) Thereafter, the allocation of additional micro-watersheds is done in batches based on the

performance of the PIA as well as participation of the community. The batch concept was part of the guidelines up until *Haryali*, and should certainly be reinstated.

Economic, social and political conditions under which participatory processes and approaches may be scaled up

The availability of funds has acted as an enabling factor in the adoption of a participatory approach at the national, state and community level. The willingness of donors to support participatory natural resource management projects has encouraged government ministries to incorporate the approach into guidelines and programmes. Aside from donor funding, it has also been noted that the situation of the state's coffers influences whether money will be put into endeavours such as participation in NRM for poverty reduction – or for that matter any other project/approach that might pay off only in the very long term. However, it is not known how long such 'paid for' participation is likely to last, after the sources of funding have been withdrawn.

At the community level, where some financial resources are already available or can be accessed (such as through a revolving fund), there appears to have been enthusiasm for developing privately owned land. It is notable that NGO watershed projects often include contributions from the community of up to 70 per cent, as opposed to the 10 per cent stipulated in government guidelines. Economic constraints need to be seen in conjunction with social and political will. It has been seen that communities that are fractured along economic, caste or religious community lines are harder to organise or persuade to come together for NRM purposes, even though there may be a clear economic advantage in doing so.

Politically, the factors that enable the spread of participation are:

- the willingness of legislators at the state/national level to both approve policy that stipulates a participatory approach and further decentralise programmes by treating WCs as facilitating bodies and mature SHGs as executive bodies; and
- a democratic and accountable political system with regular election of office bearers.

In the latest set of *Haryali Guidelines*, political support for project implementation has to a large extent been shifted to the PRIs. Given that in many instances PRIs tend to be fractured and patronage-oriented, the likelihood of support for more decentralisation and genuine participation is currently unknown. In the long run, as PRIs mature, it is to be hoped that political support for participatory approaches will also gain ground.

Organisational/institutional conditions under which participatory processes and approaches can be scaled up and institutionalised effectively

The organisational conditions under which participatory processes and approaches seem to flourish include:

- implementing the programme through autonomous institutions (independently registered, e.g. under the Indian Societies Act, 1860), particularly at the level of primary and secondary stakeholders (e.g. CBO at village level and DPAP/ATMA (Agricultural Technology Management Agency) at the district level) makes a qualitative difference in participation on the ground;
- adopting institutional reforms in the vertical chain by using autonomous organisations as PIAs and hiring subject-matter specialists on the open market (for the project period), particularly on those subjects that are presently weak in existing government organisations (e.g. equity, gender, community organisation, etc.); and
- a willingness to make investments in motivating and building the capacity of existing resource people through focused exposure visits to other successful initiatives, and intensive training through hand-holding approaches.

Policies and legislation which influence positively or negatively the spread of participation in NRM

The study has suggested that some of the policy initiatives that would positively influence the spread of participation in NRM include:

- in the watershed development sector in particular, legislative support is required to treat groundwater as a common property resource through the allocation of legal rights over it on the basis of actual land area owned by concerned families so that over-exploitation by a limited number of well owners is curtailed;
- legislative support to allocate usufruct over biomass in common land to resource-poor families (preferably to women's SHGs belonging to landless families) will lead to equitable outcomes;
- formal allocation of ownership over water harvesting structures to user groups would help to ensure that repair and maintenance could be facilitated;

- formulation of a separate scheme for developing private property resources through the use of a revolving fund, rather than the current practice of heavy external subsidy; and
- a policy for involving tenant farmers and also for vacating encroached land so that these farmers and their land could also be considered under the project would be useful.

It is worth repeating here that the spread of the participatory model in watershed management in India is mainly a result of the promulgation of the *1995 Guidelines*. Many forward-thinking government functionaries were able to use these guidelines as a platform from which to bring about participatory practice. The existence of a written and approved set of statements then encouraged other government functionaries to take the participatory agenda further in the course of project implementation.

Policy support in the form of convergence with other schemes in forestry, irrigation, and agriculture – which are currently implemented through built-in high levels of subsidy and managerial control – would be very useful to take forward the participatory ideal established in watershed works. Needless to say, participation is currently impeded – at the community level but perhaps more importantly within the government machinery – in watershed development because the idea stands in contrast to many other existing government schemes and projects that are not structured or expected to be implemented in a participatory way. The challenges for such policy change are apparent when one considers that the remaining 80 per cent of the MoRD's programmes are still not run under a participatory framework.

The final workshop for this study, held at MANAGE in January 2003, also noted that what government should and should not do with reference to participation is now well known, including what changes need to be made in administrative processes and procedures to run a lasting participatory programme. This should be made mandatory – through process instructions or an operational manual – not left to the whims and fancies of the individuals in the post who are faced with interpreting the national guidelines in their local contexts. There is a need to institutionalise mechanisms and to challenge continuously the perceptions generally held about participation, and to agree on a definition of participation. At present there is no perceivable reward system for people who adopt the participatory approach – for government functionaries it is seen more as a liability – so unless participation becomes non-negotiable it is unlikely to happen.

Appropriate time frames for institutionalising and scaling up participatory approaches in different areas of NRM

NGO experience from the study shows that it takes seven to eight years to scale up experiences to the point where they are sustainable. Thus it is suggested that the project period of the government watershed development programme could also be extended from the present five years to eight years. This will also minimise the adverse effects of the target-oriented approach as officials will not be under pressure to cover area and spend resources in a limited time frame regardless of the results.

It would be beneficial to divide the project period into four distinct phases, namely (i) community organisation, (ii) natural resource development, (iii) livelihood development and (iv) post project. The probation or batch concept is also useful to weed out the PIAs not totally committed to implementing the project in a participatory way.

It is also suggested that bankable items such as loans for agriculture or economic enterprises (for NRM or livelihood development) should be funded through credit institutions or from a revolving fund so these could become regular activities without specific targets in each year.

At a macro scale, the process of formulating the *1995 Guidelines* and pushing them through the governmental machinery at the very top took about two or three years. For the ethos to filter through to other levels has taken more time, and is necessarily an ongoing process, with refinements and adjustments being made continuously.

Funding arrangements that best support the shift towards more participatory NRM processes

Direct funding to the community for development works is the desired goal, with the community themselves being responsible for accounting for expenditure. Capacity constraints – including differential capacity within a given community – will affect the feasibility and indeed even the desirability of such a step. Special provisions will need to be made for marginalised community members, namely women, livestock owners, marginal landholding farmers, landless families, etc., and for those with land-based as well as non-land-based livelihoods. Accountability within the government machinery also needs to be significantly enhanced. It is suggested that a transparent system of determining fund requirements and disbursement at the project and district levels be evolved. The key changes that would improve accountability at this stage include that:

- funds be released to the lowest level organisation under the project (such as User Groups) through a bi-monthly financial planning system (in a rolling manner); and
- the internal auditing of accounts should take place on a monthly basis, possibly through a voucher-based MIS in which a template of the basic financial data required could be developed and filled out by a PIA representative either online or emailed back to the project director at the district headquarters. This woud avoid delays, kept the information required brief and specific and standardise reporting across projects and over time. To maintain accountability the 'vouchers' (completed templates) could only be filled in by authorised staff; and
- the management of accounts is done by a panel of independent chartered accountants.

The findings of the study indicate that the allocation for management, which is the head from which capacity building is funded, should be raised to 30 per cent from the 20 per cent recommended in the *1995* and *2001 Guidelines*. The operation of this management fund should also be decentralised at district level by releasing to PIAs and WCs their share as allocated in the *Guidelines*. It has been found that money meant for capacity building at the PIA level is pulled back to the district level if it lies unused for too long, which works against the interest of local capacity building at this level because PIAs need more time to organise properly for such programmes.

Flexibility is also necessary, for example if unseasonal rains prevent the community from building a water harvesting structure they should be allowed to do it at another time. An innovation by one programme official under an MoA project showed the significant benefit of releasing funds against planned expenditure rather than only against completed works.

At a macro-level, comparing the arrangements adopted by the MoA and the MoRD, it is clear that the latter, with immediate pass-through of funds from the national to the district level, encouraged much more genuine participation and an increased spread of the idea of the participatory model in the echelons of the MoRD itself than the more cumbersome financial disbursement procedures of MoA, where funds are still routed through state governments. In Andhra Pradesh the Commissionerate of Rural Development imposed fewer blocks to the approval and sanctioning of funds. The MoRD model might then be the preferred one to adopt to encourage the institutionalisation of participation.

Capacity building

An interesting perspective on capacity building emerged through this study. It was noted at the final workshop in January 2003 that 'capacity' is the ability to do something but cannot *per se* be achieved through training alone. Any number of training sessions and toolkits will not confer the desired or required capacity to implement a project with a participatory approach. Institutional capacity also has to be considered. For example the District Rural Development Agency (DRDA), the district-level office of the MoRD, is a registered society and therefore free to adopt its own approach to project implementation. But the office of the DPAP at the district level is not, and has to depend on DRDA for every bit of its money. What will make the difference will be DPAP also being allowed to be a registered society, i.e. an institution with the autonomy and space to exercise its capacity.

Through this study it became apparent that capacity building for enabling effective participation posed the greatest challenge. This was evident not only at the community level but also at other levels of government. The discussion in government circles did not, however, choose to address this need very much, though it has become more visible with time.

In the Andhra Pradesh context, the high turnover of subject-matter specialists hired by PIAs for the project period is also a significant problem. Likewise, the transfer of district heads under MoRD-funded watersheds is also high, so gaps in capacity are created again. Because of this, the gap between the expected impact of the NRM activities and actual impact is very high. Capacity building needs to take the problem of frequent changes in personnel into account.

A committee was created to look at the training and capacity-building aspects of implementing the watershed guidelines, but although many of their suggestions were accepted they are yet to be implemented; the committee was mandated only to advise.

One commentator has noted, however, that the larger question is 'capacity building for what?' suggesting that the capacity to engage effectively in a watershed management programme alone may not be enough. In order for a farmer to get lasting benefits one would have to go beyond water harvesting structures and consider other infrastructural needs such as technology to improve yields, access to markets and pricing. Thus their participation would need to extend to these sectors as well and therefore need the capacity to do so.

What kinds of training, capacity building, strengthening and follow-up are necessary to create the right 'skills mix' for the staff of public agencies to employ participatory approaches for NRM effectively on a large scale?

Training has been inadequate in many aspects, including methodology, content, under-use of training budget, and lack of availability of resource people/centres, etc. Major issues related to capacity building include:

- a lack of proper strategy and approach to building the capacity of different stakeholders, and lack of strategy revision based on periodic reviews of strategy and performance;
- an inadequate emphasis on management aspects and social aspects in training;
- a lack of proper synchronisation between training courses and ongoing activities, resulting in the elements of the training bearing little resemblance to the ongoing work on the ground;
- insufficient experienced resource people or training organisations to promote the new paradigm;
- the centralisation of funds at the district level for the capacity-building component means that community-level or PIA capacity building is hindered; and
- the low emphasis on sensitisation of tertiary but influential stakeholders (such as honorary members of management committees at different levels, legislatures, PRI representatives, other government department representatives, auditors, accountants, journalists, etc.).

The major challenge for the implementing agencies is to change from being an authority to being a critical support agency: understanding community needs, and helping to articulate needs, develop and choose implementation options, clarify issues when conflicts arise, and choose the right mechanism for sustainable NRM. PIAs need to be able to listen, plan processes and manage change.

Remedies for this situation could include:

- training on job-specific management aspects as well as technical aspects;
- adopting a hand-holding approach through long-term contacts between trainers and trainees;
- creating self-reliant training institutions at community level that can be used as resource centres beyond the project period;

- training women in specific technical skills to enable them to implement the programme and more importantly to function in the public domain;
- providing detailed orientation/training of honorary members of management committee at different levels (state, district, and watershed) about the key features of participatory processes, mechanisms and instruments provided in the guidelines, the project management cycle, and also the role that they need to play under the new participatory approach; and
- installing a decision-support system, particularly at district level, so that even new heads of office who transfer in can take proper decisions in line with the project strategy and approach.

What are the institutional, pedagogical and resource implications of participation for organisations responsible for training the next generation of development professionals involved in NRM (e.g. universities, technical schools and training organisations)?

Training organisations should consider getting involved in action research, by becoming a PIA, in order to generate a direct link between their training and the situation on the ground. The training institutions involved in this study, such as MANAGE, who were also undertaking an implementation project in a watershed in the state, noted this distance from the reality on the ground as a shortcoming in their initial training activities.

For courses to be designed to cover not only technical aspects but also management, social issues, participatory processes, gender, equity, etc. a major change is required in the conceptual models employed by training institutes. There is ample evidence that such changes are occurring, albeit slowly and hampered to an extent by the prevailing environment in which technological aspects are valued above others.

Attitudes and behaviour

Post-project sustainability remains a significant question and problem even after adequate participation. Sustainability pertains to the social institutions, the solid structures, and the livelihood options developed during the course of the project. The pervasive and continuing nature of this difficulty gives rise to the question of whether thought should be put in before the investment, rather than invest first. Is participation fund-driven or demand-driven, and was demand one of the criteria in choosing watersheds? This seems to be the reason why NGOs are more succesful in the long term – they invest in thought before providing funds for watershed work.

Governments, on the other hand, take spending money as the starting point – a very different point of view.

Along with this, there is the problem that working participatively is seen as a sort of 'punishment' for some of the officials involved, as it means moving towards a more demanding style of working. The absence of a reward system for officials in getting people to participate does not help, though it can be argued that ideally participation should not be dependent on reward.

Government policy is still compartmentalised into soil and water conservation, natural resource management, etc. NGOs start with the intention of working with deprived parts of communities, so in terms of equity, ownership, and genuine participation their efforts tend to achieve what seem like better results.

The thrust of NGO attitudes are illustrated in the objectives set out by a large organisation at the outset while conceptualising their watershed programme: participation, sustainability of resources, people's institutions and finances, cost sharing, equity, and gender equality.

On the other hand, NGOs have reported that when dealing with communities for the first time, even the non-negotiables such as participation of women or considering the interests or concerns of the underprivileged have to be negotiated to get them into place and to have them followed systematically.

In the course of the study it was pointed out that 'organisational cultures' prevent the change of attitudes and behaviours towards participation. There needs to be real power behind proposed values in order for them to be taken seriously. Changes in attitude at higher levels of government (central and state) will encourage functionaries at the district and lower levels to try and adopt the same changes. Similarly there was a need to question the 'organisational culture' of donor agencies: whether they themselves worked as 'participatively' as they expected recipients of their assistance to, for example, and whether they used the leverage of their funds with government to bring about desired change. An observation about organisational cultures in general was the question of whether they provided an atmosphere that encouraged taking risks in favour of a participatory approach, and did they provide the time or opportunity to reflect on experiences gained? Other suggestions included linking attitudinal and behavioural change to more focused and sustained capacity-building initiatives as well as a system of apprenticing NGO functionaries to government agencies and vice versa.

What incentives (e.g. economic, professional, social, etc.) act as a catalyst for the spread and scaling up of participatory processes in large agencies?

Some of the incentives acting as catalysts for participation include:

- adequate funds for UG, WC and WA members to make exposure visits to both successful and unsuccessful watersheds to monitor sustainability during the post-project period, and for project staff to make frequent visits to the selected watershed sites during the project period;
- freedom for experienced subject-matter specialists to both become resource people and take up consultancy assignments outside the project, so that their learning is useful after the particular project as well;
- creating awards to recognise the best PIAs, CBOs, etc.;
- encouraging academic studies on participation and sustainability, to be carried out by government staff on deputation and others associated with the project;
- the organisation of innovators' workshops to disseminate information on tools, techniques and approaches to deal with project-related issues;
- the development of user-friendly monitoring and information systems on participatory project management, decision-support systems, etc.,
- publishing successful experiences in popular magazines, newspapers, etc., and recognising the work done by project staff;
- assigning leadership roles only to people with management or social experience (rather than those with only technical backgrounds); and
- encouraging the exchange of staff between government organisations and non-government organisations to provide on-the-job exposure to the participatory paradigm.

How do the organisations' norms, operational procedures and culture of bureaucracy change when agencies adopt a participatory approach?

Study findings reported that some project directors treat NGOs and their own colleagues in a fairly shoddy manner. In this work culture it is difficult to feel motivated to work well. However, the converse has also been reported – a leader with a dynamic attitude can change the complexion of the entire unit.

The organisational culture in any given project unit (PIA, DRDA) seems to depend mainly on the person at the helm. For government functionaries, the existence of a set of guidelines has helped in that reluctant innovators are now more able to take risks and move away from the established norm of functioning because they are backed by a written policy.

Activities that would help bring about further positive change include:

- encouraging more action research;
- adopting institutional reforms by (i) hiring subject-matter specialists on the open market to meet new requirements, (ii) reorganising the existing organisational structure (in government and non-government agencies), and (iii) creating autonomous sub-units like MDTs, Project Support Units, Project Management Units, and State Agricultural Management and Extension Training Institutes, etc. to meet emerging needs;
- decentralising both the decision-making process and execution of project-related responsibilities;
- paying more attention to networking with other organisations; and
- making meetings within the organisation more transparent and open.

How do the attitudes and behaviours of officials and professionals change when they become involved in using a participatory approach, and what are the factors that encourage or bring about this change?

Some changes have been seen in officials who have had to start using participatory approaches because of the new policy. There is an enhanced appreciation of indigenous technical knowledge, and an appreciation of the need for developing social capital at village level. Some concern for equity can also be seen in isolated individuals, but officially there is little recognition of the issue, or any shift to a wider appreciation of gender issues.

The main factor that brings about the change in attitude and behaviour is the mandatory use of participatory methods. It is suggested that the adoption of the programme management mode of operation (i.e. taking a long-term view rather than one confined to the duration of a project) and the provision of incentives for field visits (as discussed earlier) would enhance such changes in attitudes and behaviour.

Democratisation, governance and equity

To what degree are gender and equity issues taken into account in the scaling up of participatory approaches in both external and local organisations?

The formulation of the *1995 Guidelines* was a hugely innovative step. Equity concerns were deliberately worked into the draft after receiving feedback on the issue from civil society. Gender concerns were consciously sidelined, however, and not worked into the policy in as effective a manner.

At the local level, the concept and relative success of SHGs marks the mainstreaming of gender and equity issues. SHGs are yet to attract the attention of the men and particularly those who belong to resource-rich families. In contrast UGs, which are considered the main actors in watershed development, consist mainly of relatively resource-rich men, particularly in UGs formed to construct water harvesting structures. Under the project guidelines there was no restriction about the location of those structures. The proportion of resource-poor families in UGs (concerned with water harvesting structures) was low, particularly in MoRD/MoA-funded watersheds. In the case of NGO-funded watersheds UGs were organised not only to create water harvesting structures but also to use biomass in common property resources. In such watersheds, even the UGs for water harvesting structures had a majority of their members from resource-poor families. Likewise, the members in UGs concerned with biomass in common land were women. In these cases the existing women's SHGs were given usufruct over the common land biomass and hence they became the UGs. In general, though, the SHGs do not have any formal standing in the watershed programmes.

A strong case is currently being made to decentralise the operational responsibility of watershed development further to SHGs, because of their financial record as well as the equity and gender dimensions. SHGs would in this case be extended to more men as well.

At higher levels, it is notable that there are very few women in the PIA/WDT teams, or any level above. Gender thus remains a concern marginal to the entire operation at all levels.

Broadly speaking, the representation of women and the SC/ST community was low among the MDT members (at district level) and also among WDT members (at PIA level) in government-funded and implemented watersheds. In addition, the sensitivity of the other subject-matter specialists towards gender and equity-related aspects was also low. However the situation was relatively better in cases where the watershed

programme was managed by a government organisation (at district level) but implemented by an NGO at PIA level.

To what extent are the groups that are involved in the formulation, implementation and evaluation of participatory processes representative of the constituency they are meant to serve (in terms of gender, social position, resource access, etc.)?

In the case of the MoA-funded watershed programme, the majority of resource people involved at the formulation stage had a technical background, and field experiences mainly with exogenous technologies. In the case of NGO-funded programmes, only a few guiding principles were considered at the time of writing the project guidelines (as discussed earlier). Mainly there was a continuous learning process during the construction works as well as local institution building. Detailed operational processes were evolved jointly by concerned stakeholders and experienced resource people with sensitivity and field experience on aspects like participation, equity, gender, etc. In the case of the MoRD-funded watershed programme, draft guidelines were prepared by a government consultancy organisation specialised in extension management aspects. The material was prepared on the basis of the latest learning about participatory approaches that had emerged through case studies of some of the best watershed programmes in the country, irrespective of the source of funding. Afterwards the draft guidelines were critically examined in a series of consultation workshops with a wide variety of participants including administrative services, development professionals, reputable NGOs, freelancers involved in participatory watershed programmes and experienced resource people dealing with gender, equity, participation, etc. in the context of natural resource management.

The people meant to be served by the watershed programme (farmers and other resource-poor communities) are then clearly under-represented in the policy formulation process and at decision-making levels. This is particularly glaring with respect to gender concerns.

With regard to project management at the district level there was a significant variation in the specialisation and background of the head of the office between MoA and MoRD-supported projects. In the case of the MoRD-funded programmes the head of the office usually had a sound administrative/management background and so was able to comprehend project management principles and people's participation more quickly than a head of office with only a technical background (as in the case of projects funded by MoA).

Regular evaluation of participatory processes has been done mainly in watersheds funded by NGOs with reports forming the basis for improving the processes in early

stages. Also the consortium of NGOs (who were sensitive about equity, gender, participation, etc.) have been assessing participatory processes continuously in their regular quarterly or six-monthly review meetings. In these watersheds, the concurrent evaluation of processes has also been done by involving external resource people (women as well as men) who were sensitive about equity, gender, participation, etc.

It was also pointed out that 'gender' issues are different from women's participation alone. At community level women's interests have to be taken into account and issues of access have to be addressed. Attitudes and behaviours that are detrimental to women's participation have to be constantly worked at and capacity building has to include such gender aspects. It was also reported that in some cases NGOs are as gender insensitive as government organisations.

What forms of governance (at board and management levels) can best integrate participation, gender and equity concerns in large, public bureaucracies?

Governance at secondary stakeholder level has varied between the three funding agencies. In the case of the MoA-funded programme, decisions were made mainly by the heads of the departments of agriculture at different levels, usually in a top-down manner (decisions taken at national level usually became the rules at the watershed level). In the case of NGO-funded watersheds there has been a high degree of democratic decentralisation in the decision-making process as a result of the presence of autonomous organisations at each level. In the case of the MoRD-funded programme, decision-making was already decentralised before the project began, particularly at district level (because of the autonomous DRDA). Later on democratisation in decision-making was widened through the constitution of autonomous management committees at both district and state levels.

Field studies have shown that the contribution of management committees in the state-run programmes at district and state levels has not been enough to achieve democratic decentralisation in the decision-making process. The management committees were found to be virtually non-functional in most cases. The following specific suggestions would improve the functioning of these management committees:

- Modify the membership of the committees to give more space to actual stakeholders (e.g. heads of PIAs, office bearers of WAs/WCs, etc.) who are directly affected by the decisions taken.
- Monitor the functioning of the committees at a higher level through a standing agenda item on monitoring on a monthly/quarterly basis.

- Scrutinise government orders and circulars sent from time to time by the above committee to ensure that users' perspectives are properly incorporated.
- Include three or four resource people (as special invitees) in the committee who are experienced on special aspects like gender, equity, participation, etc.

What might be the corresponding forms of democratic governance in village organisations and User Groups involved in participatory NRM?

Field experience has shown that SHGs can provide a sustainable foundation over which other groups and management bodies can be successfully built. This may include commodity groups (in agriculture, horticulture, livestock, etc.), commodity associations, federations of SHGs, etc.

It is suggested that it may be useful if an SHG-centred approach is adopted in place of a Watershed Committee (functional committee)-centred approach. As per the revised *Haryali Guidelines*, Gram Panchayat/Forest Committees may still receive the development fund (against an approved annual action plan) but they may then release the funds to mature SHGs (against their approved annual action plan) who in turn shall implement the approved works as per SSR without involving contractors or even adopting contractorship.

There can also sometimes be conflict between the ideals of decentralised governance and equity. For instance, in one district the committee of WC presidents decided not to pay the SSR rates as required by the guidelines. While this is a decision of the community organisations in one sense, it shows up the extreme inequities prevalent in the system and how there is a need to safeguard against this in the governance system.

Impacts

How do the key stakeholders (e.g. policymakers, field staff, local people, etc.) measure improvement (e.g. indicators, standards, methods)?

There is a striking difference in perception between primary stakeholders (local people) and secondary stakeholders (e.g. field staff and policymakers) with regard to the measurement of improvement. It is also important to mention that there is a large variation in perception even among the local people (i.e. between resource-rich and resource-poor families). Some of the differences in perception between secondary and primary stakeholders are indicated on the following page:

Parameter	Secondary stakeholders	Primary stakeholders
Importance of gains from project	More attention is given to long-term gain from NRM (conservation of soil resource, development of water resources, etc.)	Short-term gains are also considered important (i.e. development of not only natural resources but also enhancement of productivity/income from livelihood)
Post-project sustainability	Not much emphasis is given to post-project sustainability (e.g. WDF/RF are under- or unused)	Self-reliance during post-project period is considered essential, particularly with regard to repair and maintenance of community-oriented structures
Development of common property resources	More emphasis is given to planting trees of high economic value on common land	More emphasis is given to planting on common land trees that provide income on a regular basis, though there can be a difference between those directly dependent on forest products (resource poor) and those likely to sell them (resource rich)
Equity and gender	Generally little attention is paid to equity and gender aspects	More concern for equity for resource-poor families, empowerment of women – though again this is differentiated by economic situations and class factors within the community
Access to developed resources	More emphasis on development of natural resources rather than on aspects related to usufruct allocation, etc.	High concern for formal allocation of usufruct rights over perennial biomass in common land as well as equitable access to new water resource developed under the project
Project purpose	Tendency to complete the works more quickly even if it means using mechanical power/heavy duty equipment, etc.	More concern about generating employment, reducing migration, etc.
Project objectives	Mainly in the form of quantifiable indicators – increase in area under irrigation, amount of biomass available, etc.	More in terms of meeting multiple needs of the community including irrigation of crops, drinking water for people as well as for livestock, development of post-monsoon base flow, etc.
Assessment	Grading of watersheds done on the basis of a limited number of indicators worked out through a top-down approach, mainly related to physical and financial aspects, overall impact, etc.	Assessing the quality of watersheds mainly on the basis of sustainability of development, enhancement of income, etc.
Choice of technology	Tendency to have more cement structures for water harvesting	Preference for earthen structures for water harvesting

What are the impacts of the scaling up of participatory approaches over space and time on the:

(i) social dynamics, livelihood security strategies and well-being of low-income rural and urban groups and local organisations?

- On the whole, the difference between resource-rich and resource-poor is widening in proportion to the differential ownership of land area, water resources, etc. The most direct indicator of this is that while the farmers who owned land received grants to enhance the productivity of their land, the poorest received loans at an interest rate of 24 per cent per year. Kerr (2002) comments that there may be an inherent trade off between increasing production/conservation and poverty reduction through watershed management as it is currently conceived, because environmental services rendered by the poor are not adequately valued in the current set up. Inequity prevails particularly in watersheds where equity-related instruments are not provided and the organisation of resource-poor families is not adequately facilitated. However, in situations where CBOs are properly organised, there is considerable empowerment of resource-poor families as well as of women members of the community. Where collective decision-making is increasing (through organisation of sustainable SHGs/federations), livelihood security is enhanced (including through the sustainable use of the revolving fund provided under the project).
- The empowering of resource-poor families and women members leads to initial conflicts between rich and poor. A later stage of reconciliation leading to better relationships between them has also been reported, though it is not clear if this comes about with or without intervention from the PIA.
- Some suggestions for developing the natural resources mainly of resource-poor families include (i) the specific allocation of financial resources for equity-oriented development, (ii) redesigning the project in a manner that only develops those lands and water resources that are owned or used by resource-poor families, and (iii) focusing attention on natural resources which benefit resource-poor families (development of assigned patta land, development of common land with preferential allocation of usufruct for resource-poor families, etc.).
- The use of the revolving fund in mature SHGs leads to enhanced livelihood security, credit worthiness of the families, and some reduction in migration particularly where common land has been adequately developed.

On the livelihoods front, the following gaps have been reported in the government watershed programme:

- There is a low emphasis on the development of land-based and non-land-based livelihoods under the watershed programme.
- There is a lack of proper integration between livelihood development and natural resource development.
- There are operational difficulties in using the SHGs as institutional units for promoting new technologies on specific commodities, even though this is a successful organisational unit.
- The development of livelihoods for resource-poor families and women is a low priority.
- There is inadequate emphasis on the allocation of usufruct to resource-poor families over the biomass from common land.

On the whole, there seems to be improved livelihood security for a certain section of the community, but this is compromised by the absence of a similar or proportionate improvement for those who most need the livelihood support.

(ii) organisational dynamics, operational procedures and culture of large public bureaucracies?

The scaling up of participatory approaches and processes is resulting, in the best (but rare) cases, in some isolated and small changes in institutions, some of which include:

- enhanced transparency of organisational functioning;
- faster release of funds through simpler procedures for approval and disbursement;
- concern towards resource-poor families and gender sensitivity;
- flexibility in working hours for field staff;
- better response to transport needs of project field staff for visiting villages;
- accessibility of community representatives to various levels of project management;
- reduction in hierarchical relationships between staff;
- changes in attitude from controlling to enabling;
- simplification of project-related procedures; and
- more linkages between the project and NGOs/CBOs.

NGOs are now officially recognised and considered part of the machinery of livelihood support and development. However, there is still a significant power differential in

most situations, and NGOs are certainly treated as the subordinate partner when dealing with government. Some of the institutional changes mentioned above must be seen in proper perspective, in that they have been slow in coming and are far from being institutionalised. It is acknowledged that there has been a slight improvement but there is still a long way to go yet for the government machinery to move into an enabling role. Technocratic cultures still prevail, for instance the identification of watershed sites and PIAs is coloured by conflicts between scientific parameters and socio-political compulsions. There is still little or no progress towards the convergence of schemes and programmes of other development departments in the watershed project. Software components like community organisation, capacity building of different stakeholders, participatory processes, equity for resource-poor families, empowerment of women, etc. are neglected and not monitored – while expenditure and construction targets remain the point of focus in government.

The changes in the central government ministries are perhaps more apparent and wide ranging:

- There is a greater flexibility in the allocation of available funds for different sub-components at watershed level (MoRD guidelines were better than MoA, and recent MoA guidelines better than their old ones).
- A cost-sharing approach between government and communities has been developed.
- The allocation of a portion of the funding for equity-oriented development is under consideration (in APRLP).
- Project funds are being invested in indigenous technical knowledge.
- The allocation of funds for different components has been decentralised to those nodal points where action plans are prepared and decisions taken about implementation.
- The delivery mechanism has been modified so that funds are released against approved action plans rather than against completed works or even against a standard allocation.

(iii) nature of development assistance and the nature and quality of aid?

Some donor-led watershed projects in India enjoy a well-founded, solid reputation for positive outcomes, especially on the issue of equity and resource management. Both national policy and implementation have adapted several lessons from these successes. In Andhra Pradesh the DFID-supported APRLP is an example of the successful adoption

of processes that have emerged from previous experience, both within the state and elsewhere in participatory natural resource management. However there is scope for donor assistance to influence learning/training institutions more significantly, leveraging government to make the adoption of participatory processes non-negotiable and flagging key issues for attention such as equity and gender.

(iv) state of natural resource and ecological conditions?

Given the nature of the programme, changes can be expected in the state of natural resources wherever implementation has taken place. For instance, natural regeneration of biomass in common land (through social fencing) has been widely reported, which is also leading to an increase in the base flow in semi-perennial drainage courses after the rainy season. The development of water resources by using surplus runoff which was otherwise going outside the watershed area has improved, but also resulted in tanks and reservoirs downstream not filling, which has led to some social conflicts.

Some of the major issues regarding changes in natural resource availability and quality that remain include:

- Developing natural resources that are owned by resource-poor families is still a low priority, particularly under government-funded watershed programmes.
- There is a tendency to treat the entire area under the watershed with soil conservation measures even if many fields are not suffering from erosion problems.
- Not enough attention is paid to regenerating post-rainy-season flow in the drainage course.
- There is a lack of appreciation among subject-matter specialists regarding inter-catchment transfer of water resources at micro-level.

Analyses conducted towards the end of this study show that where water availability has increased, water consumption has also increased, such that there is still no safeguard for water availability during drought years (Batchelor et al., 2002). Analysts have also asserted that putting in place systems for the management of water resources, including clarifying the ownership of and access to water as differentiated from that of land (through changes in primary legislation if necessary), are a necessary next step to watershed management/development programmes (Soussan and Ratna Reddy, 2003; Batchelor et al., 2002; Sanghi, pers. comm. 2003).

Policy and practices

What are the most effective points of leverage for scaling up participatory approaches from a micro-level to macro /national level?

Some of the factors required to bring about appreciable change at the macro-level identified through this study include:

- There is still a need for 'champions' in the bureaucracy who are able to build alliances and effect change by working the system to their advantage.
- The tendency of bureaucracies to respond to appreciation given to other bureaucracies can be exploited. For instance, some of the changes that the MoA made to their programme followed the well-publicised successes of the MoRD.
- Scaling up does not necessarily happen in a linear fashion, rather, it leapfrogs – in this case going from community-level successes straight into the lexicon of the central ministry in the form of the *1995 Guidelines*. From there it seemed to work back to the district-level offices, apparently by-passing the state government. It can be seen that the involvement of the state government machinery actually hampered participation to some extent, which was also the experience with implementation of the *WARASA Guidelines*.

Some of the difficulties in the policy arena that have worked against the scaling up of participation are:

- There is a lack of consistency between government orders and the true spirit of the original guidelines. In the Indian context, government orders carry similar weight to the guidelines themselves, and in some cases this is enhanced if a senior state functionary issues them. The orders also serve to elaborate on the guidelines/policy, hence the impact when the spirit of the order is at odds with the original spirit of participation. These orders are also an arena of conflict between the district-level and the state-level implementation machinery. For instance, feedback from the field in Andhra Pradesh suggested that the ban on field bunding effected through a government order at the state level was fairly unpopular. Despite requests from several district offices the state Commisionerate for Rural Development has so far refused to turn the order around.
- The lack of specific attention towards issues related to a system of 'open access' regarding the use of biomass in common land and extraction of groundwater resources developed under watershed programmes remains an issue that affects post-project sustainability.

- There has also been a tendency at government level to avoid addressing issues relating to encroached land and tenant farmers as it may prove politically hazardous.
- The development of livelihoods in general – both agriculture as well as livestock related – has been a low priority.
- Instructions for the sustainable use of the watershed development fund created under the project are unclear and lead to misuse.
- PRIs were inadequately involved at all levels under the earlier guidelines of watershed programmes until *Haryali*.

What effects do conflicts between national policies that work for people and sustainable NRM and those that frequently work against them (e.g. structural adjustment, trade liberalisation, land tenure, etc.) have on the institutional process and the ability of government bureaucracies to operationalise and apply participatory approaches on a large scale?

In the course of the study there were several policy shifts in India towards making the country a market-oriented economy. In Andhra Pradesh 'Vision 2020' also indicated a similar direction for the development of the state. In one discussion a commentator pointed out that the study had highlighted the influence of institutional/structural factors (e.g. structural dimensions of the economy) on the development priorities of the government.

The contrary effects of concurrent schemes or policies on participatory approaches for NRM can to some extent be traced from the initiation of this study till early 2003, a period that was characterised by somewhat subtle and insidious effects. For instance there was encouragement for corporate farming and the promotion of crops meant for sale and export on private lands that were earlier used to produce staple local foods. The planting of commercial trees on common land on a contract basis in order to meet urban needs is another example. This may work against the creation of regular employment opportunities for resource-poor families which would have been there if other types of trees which provide regular produce every year had been planted. A lack of attention during this period towards the land tenure system means concealed tenancy, unauthorised encroachment, and a lack of proper demarcation of private landholdings, particularly for those families who had received land allocations under the land ceiling.

The slow trend towards structural-adjustment-type policies and their implementation embodied extreme centralisation and a decline in control over production systems for

the marginalised. Measures like encouraging corporate farming, commercial plantations and the handing over of natural resources to the private sector for improved management were a late inclusion to these policies. Promoting participation would appear to be an antithesis to this trend. This situation has the potential to create severe forms of conflict over natural resources. For example, in AP the community organisation and promotion of participatory methodologies has resulted in a demand to allow access to common property resources to be managed by deprived women. On the other hand, the structural adjustment ideology is promoting the use of common lands and private farmland to grow export crops and produce needed by multinational companies which will in the end deprive local communities. Unlike in the years preceding the *1995 Guidelines*, now there appears to be less inclination among senior officials to learn from innovative experiences on the ground, or even to accept that there have been gains for poverty reduction by practising a devolutionary/ participatory approach concentrated on NRM. Instead the rhetoric has all shifted to how investment was necessary for poverty reduction, the emphasis being on large corporate investment and a corresponding model of development.

Chapter 8: Conclusion

This study on 'Institutionalising participation and people-centred processes in natural resource management' provides us with several lessons on the nature of participation, and its interpretation and implementation in both policy and practice. The study has also helped to expand how participation is understood and explain its role in addressing the key issues of poverty and management of natural resources in India.

A significant lesson of the methodological process was the usefulness of the learning groups. At the national level, the NLG was less active and therefore did not make as significant a contribution to the process compared to the SLG in Andhra Pradesh. In fact, the SLG acted as a project support unit – a concept now popular especially in externally aided projects – and helped to guide the research process as well as reflect on its findings.

The development and shifts in the natural resource management sector have been well documented in India, including the role of participatory process. This study makes an important contribution by focusing on some of the dynamics of the umbrella term 'participation' and by indicating the levels at which participation has to be institutionalised. It has highlighted the fact that 'participation' can no longer be expected only from local communities. It is also required from within – as a way of working and thinking – and between government departments, NGOs and donors. It has been learned that scaling up is a very different issue from large-scaling. While both of these are critical aspects of the institutionalisation of participation, scaling up remains the more thorny issue at present.

The fascinating account of policymaking around participation in the watershed sector suggests both just how difficult it still is to take an agenda forward politically and the variety of factors that need to be in place for policy change to take place. The role of allies in the system is highlighted once again, as was seen in the 1990s with the JFM initiative. However, gaps between processes on the ground and policymaking still remain and the learning/scaling up process is not straightforward. The motivations of the Ministries of Rural Development and Agriculture in promulgating and amending their common and respective guidelines on participation in watersheds projects indicate that financial, territorial and political compulsions can be greater

determinants than poverty, the deteriorating state of the water, forest and land resources, or the appalling impact of natural calamities such as drought.

This study adds to the emerging literature on the watershed experience in Andhra Pradesh and reveals a number of issues especially related to equity and gender equity outcomes and institutional arrangements. It also highlights the importance of transparency and accountability in dealing with state funds as well as with contributions from local communities. Given the periodic changes in guidelines and with the *Haryali Guidelines* now being the norm (at least for MoRD), the fate of thousands of institutional structures (UG, WC, WA, etc.) created under previous regimes remains to be seen. It also raises the question of what the nature and composition of institutional structures ought to be in order to withstand political and policy change. From that point of view, *Haryali's* intention to give PRIs responsibility for project implementation may not be so detrimental. The issue of post-project sustainability of an initiative is an important lesson for donor-supported projects. The questions of what constitutes institutional reform and what factors in organisational cultures encourage or work against establishing participation continue to be relevant. Independently registered organisations/implementing bodies seem to have much more success with participatory process than those that are part of a larger hierarchy.

The role of indigenous knowledge in providing technical solutions is better appreciated by policymakers and it is hoped that it will find more support at the policy level. Attention needs to be paid to the strategies and legal and policy frameworks that will regulate water use after the intervention, particularly once the amount of water is increased. The study also captures the significance of capacity building and training in participatory processes. The importance of guiding capacity building with a plan and specific objectives emerged through district case studies and in a number of meetings and discussions. It was also established that capacity building needs to be adaptable and proactive. People who have had training need to participate in regular sessions as their understanding of their participatory roles and functions develops. Capacities need to be built in a number of different areas, not just at the watershed or district level, but at the state and national levels as well. As one goes up the ladder away from the community level the important issues become those of sensitisation and changing attitudes.

The original research questions of this study have now evolved into a set of emerging issues and challenges, while still being relevant themselves. On the issue of providing conditions that are conducive to the uptake of participatory and democratic processes, the rhetoric appears to have remained the same but practice continues to fall short – even when viewed across the different governments that were in power

during the course of this study. Despite the government's stated commitment to 'the human face' of development, sometimes there is little evidence of it in practice. The sheer size of government bureaucracies in India and the scale at which they are expected to function perhaps makes it difficult for them to change radically and move from controlling to enabling roles. Nonetheless, the successes, such as the *1995 Guidelines* and *WARASA*, must be taken into account. There is some evidence to suggest that the government is actually moving towards greater control in many spheres, in effect neutralising another trend towards devolution. For instance, the guidelines for engagement between NGOs and bilateral donors put in place under the NDA government have not been reversed or questioned by the UPA government.

Participation is a slow process, and the benefits do not appear immediately. It has taken a decade and a half to begin to see some changes as a result of adopting this approach. However, the interest of the private sector in natural resource management and the willingness of the government to consider public–private partnerships (which invariably tilt away from benefitting the poor or marginalised) is an indication of some impatience with participatory processes. It can be argued that this may actually undermine the gains made in preceding years in bringing about changes in attitudes and behaviours.

The question of funding has also been touched upon in this study and its importance in facilitating participatory processes has been established. At the community level there is a greater need to commit funds to activities that benefit the landless rather than those who already have some access to resources. There is a need to invest far more in capacity building and training, information gathering, and dissemination. Management systems need to be streamlined into what is called a programme approach rather than a project approach (the key difference being long-term vision), so that funds are not unused.

The study has shown up the weaknesses in how impacts are assessed and performance monitored, the differences in community and government perceptions, and the government's continued preoccupation with targets (physical and financial). The study has also shown the willingness of NGOs to concentrate more on processes. In both cases a need has been expressed for appropriate methodologies that allow communities themselves to assess the impacts of programmes meant for their benefit. Gender-balanced outcomes are shown to be lacking, and likely to remain so until gender equity is mainstreamed into the rest of the social structure and organisational setups.

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The full versions of the various guidelines mentioned in this report are available online from the following websites:

http://dolr.nic.in/fguidelines.htm
MoRD's *1995 Guidelines*, *2001 Guidelines*, and *Haryali*

http://lead-watershed.virtualcentre.org/watershed/program.asp
Links to all guidelines and other watershed related documents including the *Common Principles* and the MoA's 2000/01 *WARASA Guidelines*

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Annexe

National Learning Group

Organisation	Designation of representative	Status	Website
The Planning Commission, Government of India	Member-Secretary	Government	http://planningcommission.nic.in/
Department for International Development (DFID) India, New Delhi	First Secretary	Bi-lateral donor	www.dfidindia.org/
SIDA, Embassy of Sweden, New Delhi	Project Officer	Bi-lateral donor	www.sida.se/
The Royal Netherlands Embassy, New Delhi	Senior Programme Officer	Bi-lateral donor	www.hollandinindia.org/
Indo-Canadian Environment Facility (ICEF), New Delhi	Project Co-ordinator	International NGO donor	www.icefindia.org/
Indian Institute of Public Administration (IIPA), New Delhi	Lecturer	Autonomous academic and training organisation	
Indian Social Institute (ISI), New Delhi	Research Fellow	National NGO	www.isidelhi.org/
Society for Promotion of Wastelands Development (SPWD), New Delhi	Executive Director	National NGO	
The Energy Research Institute (TERI), New Delhi	Faculty	National NGO	www.teriin.org/
MANAGE, Hyderabad	Deputy Director	Autonomous academic and training organisation / State Project Co-ordinator	www.manage.gov.in/
ERM India Pvt Ltd	Director	Private sector company / National Project Co-ordinator	www.erm.com/
Development Alliance Pvt Ltd, New Delhi	Director	Private sector company / National Project Co-ordinator	

State Learning Group

Organisation	Designation of representative	Status	Website
Central Research Institute for Dryland Agriculture (CRIDA)	Director	Government research and training institute	http://dryland.ap.nic.in/
National Institute of Rural Development (NIRD)	Head of Department	Government research and training institute	www.nird.org/
International Crops Research Institute for Semi-Arid Tropics (ICRISAT)	Principal Scientist (Watershed)	Government research & training institute	www.icrisat.org/
Action for Food Production (AFPRO) Field Unit	Unit Manager	National NGO	www.afpro.org/
Andhra Pradesh Academy of Rural Development (APARD)	Special Commissioner	Government research & training institute	
Department of Economics, Hyderabad University	Reader	University	www.uohyd.ernet.in/
Andhra Pradesh Rural Livelihood Projects (APRLP)	Chief Coordinator, Project Support Unit	DFID-GoAP project	www.aplivelihoods.org/
Commissionerate of Agriculture	Addl. Director Agriculture (NWDPRA)	State government department	http://agri.ap.nic.in/
Centre for World Solidarity (CWS)	Convenor & several other members	NGO	www.cwsy.org/
Watershed Support Services and Activities Net Work (WASSAN)	Managing Trustee & several other members	NGO	www.wassan.org/
Youth For Action (YFA)	Executive Director	NGO	www.youthforaction.org/
BASIX	Managing Director	NGO	www.basixindia.com/
Society for Participatory Development	Director	NGO	

State Learning Group(cont.)

Organisation	Designation of representative	Status	Website
Deccan Development Society (DDS)	Director	NGO	www.ddsindia.com/
Inter-Cooperation	Programme Co-ordinator	International NGO	www.intercooperation.ch/
Commissionerate of Rural Development	Commissioner and Special Commissioner (APRLP)	State government department	www.crdap.org/
Society for Elimination of Rural Poverty (SERP)	State Project Coordinator	World Bank–GoAP project implementing agency	www.velugu.org/
Rural Development Trust (RDT)	Director	NGO	
Drought Prone Area Programme (DPAP)	Project Director, Ananthapur, Mahaboobnagar, Chittoor and Kusnool Districts	MoRD programme	http://dolr.nic.in/
MANAGE	Deputy Director and several other members	Autonomous academic and training organisation/ Project Co-ordinator	www.manage.gov.in/
ERM India Pvt Ltd	Director	Private Sector Company/National Project Co-ordinator	www.erm.com/
Development Alliance Pvt Ltd	Director	Private Sector Company/National Project Co-ordinator	

[1] Names of actual NLG/SLG members have not been mentioned, as many of them are no longer associated with organisations they represented when the Learning Groups were established in 1999. However, the designations provide an indication of the level at which some of these organisations were represented in the Learning Groups. Several independent researchers and retired government officers were also part of the SLG but are not listed here individually. Where available, website links to the NLG/SLG organisations have been provided.