

**Project Memorandum**

**ANDHRA PRADESH RURAL LIVELIHOODS PROJECT**

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**Ministry of Rural Development  
Government of India**

**Department of Rural Development  
Government of Andhra Pradesh**

**Department for International Development, India  
Government of UK**

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## CONTENTS

### List of Abbreviations

1. Summary and Recommendation	1
2. Logical Framework	2
3. Project Rationale	
3.1 Background	11
3.2 Policies	11
3.3 Project Approach	13
3.4 Appraisal Issues	15
3.5 Evaluation	19
4. Implementation	
4.1 Management Arrangements	19
4.2 Timing	20
4.3 Inputs	20
4.4 Contracting and Procurement	21
4.5 Accounting and Auditing	21
4.6 Monitoring	22
5. Risks and Undertakings	22

### Annexes

1 - Project Approach	
Addendum 1 Comparison of Watershed Guidelines and Recommendations for Change	
Addendum 2 Government Criteria for Watershed Selection	
2 - Project Arrangements	
3 - Technical/Environmental Appraisal	
Addendum 1 Environmental Screening Note	
Addendum 2 Key Statistics of Project Area	
4 - Social Appraisal	
Addendum 1 Stakeholder Analysis	
5 - Institutional Appraisal	
Addendum 1 Capacity Building Strategy	
6 - Economic and Financial Appraisal	
7 - Budget	
8 - Monitoring and Impact Assessment System	
9 - Risk Assessment	
10 - Project Phasing/Time Chart	
11 - Claims for Reimbursement of Local Costs	
11a - Annual Audit Statement Format	

## LIST OF ABBREVIATIONS AND ACRONYMS

APARD	Andhra Pradesh Academy for Rural Development
APD	Assistant Project Director
APRLP	Andhra Pradesh Rural Livelihoods Project
CAG	Comptroiler and Auditor General
CB	Capacity building
CBO	Community based organisation
CBS	Capacity building strategy
CIG	Common interest group
CPR	Common pool resources
DANIDA	Danish International Development Agency
DCBC	District Capacity Building Centre
DFID (II)	Department for International Development (India)
DOA	Department of Agriculture
DLR	Department of Land Resources,
DPAP	Drought Prone Areas Programme
DRD	Department of Rural Development
DRDA	District Rural Development Agency
DSC&W	Department of Soil Conservation and Watersheds
DTI	District training institute
DWAC	District Watershed Advisory Committee
EAS	Employment Assurance Scheme
EIRFP	East India Rainfed Farming Project
EOP	End of project
EOY	End of year
GIS	Geographical Information System
GO	Government organisation
GoAP	Government of Andhra Pradesh
GOI	Govt of India
HYV	High yielding variety
IA	Impact assessment
ICAR	Indian Council for Agricultural Research
IFAD	International Food and Agriculture Division
IGWDP	Indo-German Watershed Development Project
IMAGE	Institute for Management of Agricultural Extension
IRDP	Integrated Rural Development Programme
JFM	Joint forest management
JRY	Jawahar Rozgar Yojana
KAWAD	Karnataka Watershed Development Project
KRIBHCO	Krishak Bharati Cooperative
M&E	Monitoring and evaluation
Mandal	An administrative unit smaller than a Block
MDCP	MRD-DFID Cooperation Project
MDT	Multi-Disciplinary Team
MRD	Ministry of Rural Development
MTR	Mid term review
MWS	Micro watershed
MWS?	Million Wells Scheme
NGO	Non government organisation
NIRD	National Institute for Rural Development
NLBA	Non land based activity
NR	Natural resources
NRMP	Natural Resource Management Perspective
NSDP	Net State Domestic Product
NTFP	Non timber forest product
NWDPRA	National Watershed development Programme for Rural Areas

O&M	Operation and maintenance
OBC	Other backward castes
PD-WS	Project Director Watersheds
PIA	Project Implementing Agency
PMIAS	Project monitoring and impact assessment strategy
POL	Petrol, oil, lubricants
PRA	Participatory rural appraisal
PRI	Panchayati Raj Institutions
PSU	Project Support Unit
PTD	Participatory technology development
PY	Project year
RITE	Regional Institute for Training and Extension
RNR	Renewable Natural Resources
RNRRS	Renewable Natural Resource Research Strategy
RS	Remote Sensing
SC/ST	Scheduled caste, scheduled tribe
SHG	Self help group
SIRD	State Institute of Rural Development
SRL	Sustainable rural livelihood
SRLS	Sustainable rural livelihood strategy
SWC	Soil and water conservation
SWPIRC	State Watershed Planning, Implementation and Review Committee
TC	Technical co-operation
TDCC	Tribal Development Co-operative Corporation
TEWA	Training and Extension for Women in Agriculture
TOR	Terms of reference
UG	User group
VFC	Village Forest Committee
VSS	Van Samrakshyana Samiti
WA	Watershed Association
WC	Watershed Committee
WDC	Watershed Development Committee
WDT	Watershed Development Team
WIRFP	West India Rainfed Farming Project
WM	Watershed Mission
WORLP	West Orissa Rural Livelihood Project
WS (+)	Watershed (plus)
WSA	Watershed association

## 1. SUMMARY AND RECOMMENDATION

1.1 DFID will provide the Andhra Pradesh Rural Livelihoods Project (APRLP) with:

- £40.176 million financial aid (F/A) over seven years;
- £ 5.367 million of TC funds to support capacity-building and knowledge generation.

1.2 The project will be in five semi-arid and drought prone districts: Kurnool Anantapur, Prakasam, Mahaboobnagar and Nalgonda, all among the poorest in the State. It will fully finance 500 watersheds and support the Government of Andhra Pradesh (GoAP) in another 2,000 with extra finance for capacity building, livelihood support and convergence of other schemes and services, collectively called "watershed plus". The scale of the programme will be kept under review. If GoAP's watershed programme goes slower than envisaged, it may be necessary to reduce the allocation for supplementary finance in the 2,000 watersheds. If GoAP's programme goes well, a third year review can consider expansion within the five project districts and beyond, perhaps in collaboration with other donors.

1.3 The project has four components with overlap and synergy.

- watershed and watershed plus initiatives;
- capacity building for primary and secondary stakeholders;
- innovation to enhance the impact of watershed work;
- lesson learning and policy influence.

1.4 The project will work within the State Government adopting a participatory "Sustainable Rural Livelihoods" approach. It will follow the national Watershed Guidelines and pilot new approaches in rural data collection and planning, and in convergence. It will help GOAP identify policy changes to increase impact on rural poverty.

1.5 The approach is to help reduce poverty and vulnerability to drought, through land rehabilitation, intensified farming, social mobilisation, employment and non-land based income generation. Initiatives will be sequenced to match progress in capacity building. Each activity will be examined for ways to maximise access or involvement by the poor.

1.6 At the outset the project will analyse constraints and opportunities facing vulnerable groups and encourage grassroots organisations and participatory plans which reflect their livelihood needs. It will finance, or seek finance for activities prioritised in these plans to improve the productivity of land and water, improve minor irrigation, drinking water and sanitation. It will promote income generation from farm and non-farm activities and seek micro-financial, agricultural input and health and education services.

1.7 It will strengthen the capacity of government organisations, local

government, NGOs and village communities to work together in alleviating poverty, and help communities to gain self sufficiency post project.

1.8 The project will directly impact on 300,000 poor and vulnerable people in the 500 watersheds, particularly the women, landless and marginal farmers, and indirectly on another 1.2 m in the other 2,000 watersheds. Effective community organisations should have enabled project exit and the promotion of convergence improved the access to government and private services. By project end, the five districts will have skilled government and NGO staff and village professionals, training institutes with enhanced capacity and new watershed implementing agencies to help GoAP deliver its development objectives.

1.9 The logframe is appended to this main section; in summary:

<b>Supergoal</b>	Reduction of poverty in rainfed areas of India.
<b>Goal</b>	Effective and sustainable approaches to eliminate poverty adopted in drought prone areas of Andhra Pradesh.
<b>Purpose</b>	Government of Andhra Pradesh able to implement pro-poor, watershed-based, sustainable rural livelihoods approaches in five districts.
<b>Output 1</b>	Equitably shared returns from more productive land and water in 500 watersheds
2	Higher income and employment options being pursued by the poorest in 500 watersheds.
3	Enhanced capacities of GOs/NGOs/PRIs to support SRL initiatives for poor women and men in 2,500 watersheds
4	Community capacity for poverty focused and gender equitable approaches to manage resources enhanced in 2,500 watersheds in five districts
5	Innovative approaches devised which enhance impact, equitable sharing of benefits, and sustainability
6	Project approaches replicated widely
7	The Andhra Pradesh rural policy environment has greater impact for women and the poorest and more working partnerships between Government and NGOs.

1.10 The Department of Rural Development, GoAP will be the nodal agency, but the project will be largely managed by district authorities. NGOs and Community Based Organisations (CBOs) will have a substantial role.

## 2. LOGICAL FRAMEWORK

See Following pages

Narrative Summary	OVIs	MOVs	Risks and Assumptions
<p><b>Goal</b> Effective, sustainable approaches to eliminate poverty adopted in drought-prone areas of Andhra Pradesh</p>	<p>Population below the official poverty line falls by 30% by EOP in project districts</p> <p>New government guidelines and schemes which improve the delivery of services through participation, equity and convergence adopted by GoAP by PY6</p> <p>Donors prepared to move from project to sector support in rural development in AP during the second half of the project</p>	<p>GoAP Below Poverty Line Surveys</p> <p>Policy documents and scheme guidelines ; stakeholder workshops and other lesson learning events</p> <p>Donor sector strategies and project documents</p>	
<p><b>Purpose</b> Government of Andhra Pradesh able to comprehensively implement pro-poor watershed-based sustainable rural livelihoods approaches in five districts of Andhra Pradesh</p>	<p>X% of below poverty line households can specify at least y% increase in incomes as a result of project interventions by EOP</p> <p>70% of marginal farmers report significantly improved drought proofing.</p> <p>GoAP develops and implements a Capacity Building strategy on watershed based SRL agenda for the whole state by EOP</p> <p>Watershed micro-plans identify watershed-plus initiatives and mechanisms for responding to them for SCs/STs and women by the end of second year of project entry into villages</p> <p>Communities, particularly SC/ST groups, have greater capacity to take up, participate in and</p>	<p>Stakeholder workshops at PY2 and annual reviews in PY 4, 5, and 7.</p> <p>Project monitoring and impact assessment system developed in PY1. Participatory approaches to PMIAS developed using PRA case studies, small scale sample surveys using special focus groups identified by stakeholder analysis against which to report distributional issues.</p> <p>Documents charting progress of 10 Year Perspective Plan developed by GoAP show evidence of adopting project approaches.</p>	<p>External project environment remaining conducive to delivering effective poverty-focused rural livelihoods in Andhra Pradesh</p> <p>Growth rates of AP's Net State Domestic Product (NSDP) does not fall below recent trends</p> <p>Budgetary allocations for rural development at least maintained in real terms</p>

	<p>influence Government services</p> <p>Approaches developed by project adopted in the 10 Year Perspective Plan for Participatory Watershed Development across AP.</p>		
<b>Component 1: Watershed-plus based sustainable rural livelihood initiatives</b>			
<p>1. Productivity of land and water sustainably and equitably increased in 500 watersheds</p>	<p>Overall value of output from rainfed and irrigated land increases by x% and y% respectively by end of PY6</p> <p>Yields per acre for at least three staple rainfed crops increased substantially (by 40%) by EOP</p> <p>Irrigation coverage in project areas increases from x to y% of which at least half is higher land held by marginal farmers, with sustained water table, by EOP</p> <p>50% of landless/marginal and small farm households in the project areas report increased returns from common pool resources (NTFPs, water bodies, fisheries, pasture lands, groundwater) by EOP</p>	<p>Project monitoring and impact assessment system developed in PY1. Participatory approaches to PMIAS developed, starting from the participatory poverty assessment to be carried out at the beginning of the project period, using PRA case studies, small scale sample surveys using special focus groups identified by stakeholder analysis against which to report distributional issues.</p> <p>Regular project monitoring data collection on quarterly and six monthly basis</p> <p>Reviews of micro-plans by MDTs, DPAP and DCBC, PIAs and village based workshops with village professionals, SHGs, user groups and other WDA members.</p>	<p>Major drought does not occur during project life</p> <p>Participatory technology development and varietal selection identifies local opportunities on a scale similar to achievements in the DFID supported Western India Rainfed Farming Project</p>
<p>2. Higher return income and employment options (both land-based and non-land-based) identified and pursued through increased access to Government and other initiatives/schemes by the poorest in 500 watersheds.</p>	<p>Livelihood options of the poorest common interest groups have been adequately represented in microplans</p> <p>Expenditure on food, health care, education and shelter by landless and marginal farmers increased and sustained by EOP</p>	<p>As for output 1.</p>	<p>Detrimental class and caste conflict minimised</p> <p>Better off gain sufficiently from project (win-win situations identified) to reduce probability of conflict.</p> <p>Market constraints can be overcome and</p>



	<p>Increased and successful access to a range of GoAP poverty alleviation schemes by Below Poverty Line households, particularly SC/ST and female headed households, (at least X%) by PY2</p> <p>At least 50% of special focus group households report increased income from IGAs, and reduction in months of employment by EOP.</p> <p>Accessible information (for literates and non-literates) on poverty alleviation schemes and other initiatives for community members available and regularly updated by PY2</p>		<p>sufficient technical interventions can be identified, to enable NLBAs to be taken up sustainably.</p>
<b>Component 2: Capacity building for primary and secondary stakeholders</b>			
<p>3. Capacities of GOs/NGOs/PRIs to support watershed based Sustainable Rural Livelihoods initiatives for poor women and men in 2,500 watersheds in the five project districts realised and enhanced.</p>	<p>Required number of WDTs/ PIAs/ MDTs in place and functioning according to GoAP Perspective Plan.</p> <p>Performance indicators for, redefined roles, responsibilities and relations between GOs/NGOs/PRIs realised according to an agreed plan.</p> <p>Capacity building strategy in place by PY? which details increased training management and capacity to deliver quality training by the available training institutions.</p>	<p>Project's progress reports, participatory poverty assessment data and subsequent PRA exercises and stakeholder workshop reports.</p> <p>Results of PMIAS.</p> <p>Reports of training courses and exposure trips</p> <p>Project joint review reports.</p> <p>GoAP orders/circulars and documents charting progress of Watershed Development Programme</p> <p>CB Action Plans and Strategy</p> <p>PSU/DCBC annual reports</p> <p>Reports from different</p>	<p>Environment for collaborative work between GOs and NGOs maintained</p>

		project supported studies	
4. Community based capacity (including CBOs) for poverty focused and gender equitable approaches to the management of resources enhanced in 2500 watersheds in the five project districts	<p>By EOP, all micro plans prepared by WDA have x% of activities (in terms of budget) that addresses needs of women and poorest.</p> <p>In x% of the WCs, representatives from the poorest and marginalised households show increased confidence and are successful in negotiation to include their interests in micro plans by PY3.</p> <p>x% of WDAs confirms exit strategy developed by the project and have plans in place to work independently including managing its WDF by PY ...</p> <p>x% of the WDA have identified and nominated village women and men by a consultative process for professional training from PY2. Half of them are from the marginalised households.</p> <p>80% of SHGs reach full independence (regular and well-attended meetings, transparent accounts and decision-making etc.) a year after their establishment</p> <p>x% of the SHGs are only women SHGs and show evidence of independent functioning by EOP.</p> <p>All SHGs report increased access to information and government services</p>	As for Output 3	<p>Inclusive nature of participatory process is not compromised by pressure to disburse funds on physical works</p> <p>Sustainable approaches adopted while strengthening community institutions and exit strategies found effective</p> <p>Local politics do not lead to 'capture' of successful community groups</p>

	by EOP.		
<i>Component 3: Exploration of innovative approaches to enhance overall impact of the watershed programme</i>			
5. Testing of innovative approaches to enhance the overall impact, equitable sharing of benefits, and sustainability of the watershed plus approach	<p>Recommendations for improving Gol Watershed Common Guidelines, particularly on aspects of watershed-plus, produced by PY2.</p> <p>Documentation of pilot experiences available by PY2.</p> <p>Evidence of effective primary and secondary stakeholder participation in pilots</p>	<p>DPAP annual reports and documents charting progress of Watershed Development Plan</p> <p>PSU/DCBC annual reports</p> <p>Findings of focused studies/PRA exercises assessing impact of innovative approaches</p> <p>Stakeholder workshops and feedback from information sharing and dissemination</p>	<p>Project environment conducive to experimentation and learning</p> <p>Replicability of pilots not compromised during implementation</p>
<i>Component 4: Lesson Learning and policy influence</i>			
6. Approaches developed in the project, particularly on non-land-based initiatives and other aspects of watershed plus, replicated widely.	<p>Participatory monitoring, evaluation and impact assessment and planning approaches developed and informing development of project approaches by PY2</p> <p>Key lessons and approaches from the project adopted by GoAP in the entire State.</p> <p>Project experience documented and disseminated to all stakeholders using appropriate media</p>	<p>DPAP/PSU annual reports, policy specific studies and documentation, stakeholder workshops, feedback through communications strategy development and dissemination events.</p>	
7. The sectoral policy environment in AP strengthened to ensure greater (and sustainable) impact for women and the poorest and more effective working partnerships between Government and non-governmental organisations	<p>GoAP makes policy changes through appropriate instruments in relation to issues which impact on the poor</p> <p>Mechanisms for identifying such issues, and taking policy decisions in relation to them established.</p>	<p>GoAP orders/ circulars and documents charting progress of Watershed Development Programme</p> <p>Stakeholder workshops, participatory monitoring and evaluation system</p>	

		feedback	
Activities	Inputs		
<b>Activities for promoting watershed-plus based sustainable rural livelihoods initiatives</b>			
<p>1. Implementation of watershed plus activities in 500 watersheds drawing on the following activities:</p> <ul style="list-style-type: none"> <li>• soil and water conservation</li> <li>• livestock</li> <li>• forestry</li> <li>• water harvesting and irrigation</li> <li>• water supply</li> <li>• farming systems support</li> <li>• participatory technology development and varietal selection</li> </ul>			
<p>2. Approaches developed by EOY2 to promote convergence with Government poverty alleviation schemes and other initiatives to address the needs of the poorest in 500 watershed, drawing on the following activities:</p> <ul style="list-style-type: none"> <li>• legal literacy</li> <li>• development of a communications strategy for information sharing</li> <li>• savings and credit</li> <li>• common pool resource enterprises (fishing, forestry [including NTFP collection], small livestock)</li> <li>• literacy and numeracy</li> <li>• non-land-based skills development</li> <li>• backyard production activities (horticulture, agricultural processing, small livestock and</li> </ul>			

poultry)			
<b>Activities for capacity building for primary and secondary stakeholders</b>			
3. Assistance, facilitation and training for GOs/NGOs and PRIs to support the development of the watershed programme in 2500 watersheds in: <ul style="list-style-type: none"> <li>• convergence</li> <li>• training</li> <li>•</li> </ul>			
4. Assistance, facilitation and training for primary stakeholders through PIAs, village professionals, WDTs, MDTs...			
<b>Activities for exploration of innovative approaches to enhance overall impact of the watershed programme</b>			
5. Piloting, and replication where appropriate, in 50 watersheds of approaches to: <ul style="list-style-type: none"> <li>• cost recovery</li> <li>• participatory technology development</li> <li>• approaches to agricultural credit</li> <li>• post-completion support for watersheds</li> <li>• institutional arrangements</li> <li>• macro-watershed treatment</li> <li>• agricultural production packages</li> <li>• mandal-district level planning</li> </ul>			
<b>Activities for encouraging lesson learning and policy influence</b>			
6. DPAP, DCBC, MDT, PIA managed studies, action research, pilot initiatives and workshops on <ul style="list-style-type: none"> <li>• developing the Gol watershed common guidelines</li> <li>• promoting convergence of poverty alleviation schemes at village, mandal, and</li> </ul>			

<p>district level</p> <ul style="list-style-type: none"> <li>• developing information sharing and approaches to better communication at all levels</li> <li>• resourcing livelihood options identified as a result of participatory planning</li> <li>• testing approaches to participatory monitoring and evaluation</li> </ul>			
<p>7. An enabling policy environment promoted in Andhra Pradesh through:</p> <ul style="list-style-type: none"> <li>• sharing lessons learned from project related activities</li> </ul>			

### **3. PROJECT RATIONALE**

#### **3.1 Background**

3.1.1 DFID's 1998 India Country Strategy identifies Andhra Pradesh as a "Partner State" in which DFID already invests in power, health, water, urban poverty and micro-finance. This will be DFID's first substantial rural initiative in the State and responds to a 1998 request by GoAP for rural support in the five districts. No undertaking is required, nor work prior to implementation.

#### **3.2 Policies**

##### **The fit with Andhra Pradesh' policies and plans**

3.2.1 GoAP's "Vision 2020" sets an ambitious agenda for rapid, overall State development including a five-pronged approach to improving the rural living standards: agricultural development and reform; creating economic opportunities in rural industry and services; providing infra-structure; human resource development and capacity building; decentralising government; and promoting Self Help Groups (SHGs). This broad approach incorporates the principles of Sustainable Rural Livelihoods (SRL).

3.2.2 Watershed work is a key plank of this agenda and GoAP has a 10 Year Action Plan which aims to 'saturate' the "treatable" area starting with drought prone districts. Nearly two million hectares (m ha) have been treated, with Rs 5,500 m already spent. The Action Plan aims to treat 10 m ha over the next ten years with Rs 37,180 m budgeted.

3.2.3 GoAP clearly sees APRLP as part of this long term programme, not as an insulated project and is interested in: testing innovative approaches that will inform policy change and reduce poverty; more effective programme management and delivery; and co-ordination with other rural schemes.

3.2.4 GoAP's pro-poor policies and schemes, the committed bureaucracy and a supportive central ministry provide a positive project environment, likely to continue. GoAP is gradually devolving powers and resources to panchayats. It is committed to help secure the livelihoods of disadvantaged groups like the Scheduled Tribes (STs) and Castes (SCs), and recognises the need for government reform, for community empowerment, and protecting child rights.

##### **The fit with DFID's policies and plans**

3.2.5 DFID's evolving rural development programme in India started with the two Rainfed Farming Projects. These promoted participatory village planning and improved farming systems, and devised effective approaches to group formation and support and participatory technology development. Two of the districts of the innovative Karnataka watershed project adjoin APRLP districts.

3.2.6 APRLP is part of a wider DFID effort to help the Ministry of Rural Development (MRD) improve the effectiveness of watershed work nationally. A MRD-DFID Cooperation Project (MDCP) is being planned to strengthen systems for monitoring, evaluation and capacity-building of staff.

3.2.7 APRLP helps to advance DFID's rural sector strategy by fully mainstreaming effort within government and promoting the SRL agenda through convergence. Within the strategy, links to state and central policy are becoming firmer and programme funding is being considered. Research and services to support the large portfolio will be planned later this year.

3.2.8 Key differences between this project and that recently approved for Orissa are:

- mobilisation of the poor done not by special Livelihood Support Teams but by sanctioned posts within district offices, taking advantage of a stronger NGO, SHG and village professional environment;
- more focus on capacity building to meet the State's request for it;
- less "watershed plus" money because of the effort in convergence;
- clear prospects for scaling up, possibly leading to programme aid;

3.2.9. DFID intends for all its initiatives in partner states to cohere into an overall strategy for addressing poverty. The project contributes to the overall DFID partnership with GoAP, especially in its clear poverty focus. It will continue to explore synergy between DFID's work in water, education, health and micro credit including the creation of common baseline data.

#### **Other donors' policies and plans**

3.2.10 The World Bank is planning a District Poverty Initiatives Project for six districts in the State, two of them the same as APRLP. This proposes a village fund to respond to micro-plans and has capacity building intentions. UNICEF is promoting convergence of government schemes in the poorest *mandals* of eight other districts. GoAP is approaching JICA for support to problem soil areas and has invited KFW to extend its successful watershed work with NABARD in Maharashtra to three or four districts in AP.

3.2.11 Networks of NGOs and registered CBOs are promoting participatory micro-planning, minor irrigation for the landless, land rights for poor farmers who have "encroached" onto state wastelands, grain and seed banks, the elimination of child labour and other livelihood support. Some, e.g. MYRADA, have training and resource centres which the project can use or build upon.

3.2.12 The project, encouraged by GoAP will look for lessons and synergy from these initiatives.



### **3.3 Project Approach (Annex 1)**

#### **What problems does the project address?**

3.3.1 One quarter of the population of AP, including over half of the STs and SCs lives below the poverty line. Low income is aggravated by poor education, literacy, health and high indebtedness. Women are particularly disempowered and disadvantaged and mostly by-passed in watershed programmes. Ten percent of households are female headed; de-facto many more so due to migration. Rural life expectancy is five years less than in towns. Andhra Pradesh has the highest incidence of Child Labour in India.

3.3.2 Project districts have over 15 m people, about 45% of them live below the official poverty line. About half of the poor live on less than half of the poverty line income. The workforce falls equally into three occupational categories: cultivators, landless labourers, and non-agricultural workforce.

3.3.3 The degraded natural resource base contributes to the area's poverty: poor soils, low and erratic rainfall, limited infrastructure and irrigation, declining and contaminated ground water and little support for agricultural enterprise. There is inequality in land distribution. Most cultivators are either small or marginal farmers and since a holding of at least two hectares is required for a household to derive subsistence - most of them are at risk.

3.3.4 The dearth of good quality implementing agencies to help GoAP achieve its ambitious scaling-up plans is seen as a serious constraint. Institutional constraints also limit the effectiveness of various schemes: limited convergence among different instruments of rural development; inappropriate skills and attitudes of staff in different agencies; poor administration and corruption; and lack of co-ordinated information and planning and implementation constraints within government agencies and NGOs.

3.3.5 The project seeks to address these key problems to assist GoAP's rapid watershed expansion plans. Field work will be within identified watersheds, the institutional and capacity building work will go beyond these.

3.3.6 The project also aims to assist MRD improve the national watershed programme. The Watershed Guidelines' participatory methods are often weakly implemented with a focus on physical works at the expense of community planning. Even full implementation of the Guidelines would not adequately address the interests of the poorest. MRD is thus enthusiastic about APRLP's broader livelihood approach.

#### **What would happen without the project?**

3.3.7 GoAP aims over time to cover 8,000 watersheds in the five districts. Of these 2,000 are underway. The 500 project watersheds will help towards this target. Without the project, GoAP may have money for another 4,000 but

would lack PIAs. Quality would also suffer due to weaknesses in government, NGO and community capacity. Policies and the Watershed Guidelines would probably change but without benefiting from project lessons.

### **Why are we doing the project this way?**

3.3.8 Project design questioned if the watershed programme provides an appropriate framework for a rural livelihoods project, given that its benefits do not typically go to the poorest. But it is a well-established programme, already covering one sixth of the potential area in the five districts, and with strong implementation approaches which include village micro-planning, and support from multidisciplinary teams and NGOs. GoAP and MRD are keen to reform the programme to achieve greater poverty impact. DFID has lessons to apply. Contributing to this effort is likely to have greater overall impact and sustainability than working outside government. (Pages 1 to 3: Annex 1 and page 4: Annex 3 give background.)

### **What are the expected benefits?**

3.3.9 A key issue for design has been the scale of DFID support. We believe that substantial DFID investment is justified because:

- full coverage of watershed programmes is a key strategy towards poverty elimination in the five districts;
- GoAP has the basic institutional capacity to implement the programme; specific capacity shortfalls are addressed by the project;
- without an investment of this magnitude it will be difficult to mainstream within the GoAP programme the new approaches being promoted.

3.3.10 Expected project benefits include:

- communities empowered to take decisions;
- landless, marginal farmers and women with enhanced capacity to work in groups and more equitable access to livelihood opportunities;
- improved agricultural incomes for small farmers, and more wage-labour opportunities for the landless;
- technology applied to reduce drudgery, especially for women;
- more effective use of water, including for drinking, and reduced vulnerability to drought;
- reduced environmental degradation;
- greater food security for poor families;
- more access by communities to government schemes;
- improved capacity of institutions to implement rural development projects and to converge different schemes;
- policy changes affecting livelihoods of poor groups;
- project approaches which help improve impact of GoI and GoAP schemes.

## **How will the benefits be sustained?**

3.3.11 Working in GoAP 's programme increases chances of sustainability. The "Watershed plus" investments are aimed at increasing sustainability. Primary stakeholders are likely to sustain beyond project life benefits like improved quality of soil and water, new income generation skills and new avenues of credit due to their livelihood impact. We know from the Rainfed Projects that the cadre of village volunteers (jankars) will enable continued social mobilisation, self help, planning, operation and maintenance of village activities. The project aims to increase the number of vibrant groups of primary stakeholders who know their entitlements and can demand them. If capacity building successfully inducts pro-poor attitudes and management skills in government staff, and if convergence works, the rural poor should have sustained access to services. Lessons about sustainability learnt in post-completion villages will be applied to all project villages. GoAP and MRD are keen to learn from this project to improve existing policies.

### **Participation of Stakeholders (Annex 4 Addendum 2)**

3.3.12 The primary stakeholders are the village communities. Watershed Committees were consulted during project preparation.

3.3.13 The main secondary stakeholders are MRD/DLR, the AP Department of Rural Development, the Panchayat bodies, and local NGOs. Their representatives participated in project design workshops.

### **Options for review and change during implementation**

3.3.14 Project activities are not pre-determined in detail, but will respond to local priorities and plans. Apart from joint annual monitoring, a review after a two-year start-up will determine the scale of future support. A review in year five, will examine impact, informed by independent evaluators. Project institutional arrangements will respond if GoAP decentralises anti-poverty schemes to elected local government. Component 4 is aimed at lesson learning for replication and policy support. Annex 8 sets out the principles against which monitoring and review will be conducted. Annex 10.6 suggests performance indicators for the first review.

## **3.4 Appraisal Issues (Annexes 3, 4, 5, and 6)**

### **Is the project contributing enough to poverty elimination in the area?**

3.4.1 The population in the project area is socially and economically diverse and mostly poor. Annex 4 describes how low income is compounded by low literacy, poor health and lack of employment, and economic disadvantage is

reinforced by caste, tribe and gender. Two thirds of the workforce depends on agriculture. The project will pay particular attention to the vulnerable amongst those that live below the poverty line: landless labourers, marginalised groups, and women.

3.4.2 "Watershed-plus" will support land and non-land based activities which increase livelihood opportunities for the poor and involve them in the watershed programme. Promoting convergence will make government schemes and other initiatives more accessible and more focused on the most needy.

3.4.3 Much of the technology to be used will be adapted from known practices to meet the needs of the poor. The lower rainfall areas will pose the greatest difficulties, but here there will be opportunity to share knowledge with the Karnataka project. The cost effectiveness of irrigating upland areas will need careful analysis. The potential for NLBAs to contribute to livelihoods is not yet clear. Water contamination with fluoride poses difficulties.

3.4.4 Crucial approaches are: to examine each intervention for impact on poverty; to improve access by the poor to sustained services, especially continuous professional loan finance; and to converge government schemes through better planning.

3.4.5 More and better managed water for domestic use and for minor irrigation is an important key to improved livelihoods. Annex 3 points to the limited application of existing legislation where ground water is already exploited by the better-off and to difficulties in gaining community ownership of domestic water infrastructure. The project will need to break new ground in gaining access for the poor to land and ground water for vegetable and fruit allotments; to existing and new water bodies for fishing rights, and to Panchayat land above 10 ha for silvi-pastoral use.

#### **How will the project address social exclusion of landless marginal farmers and Gender inequality?**

3.4.6 The "building block" approach to micro-planning will form SHGs amongst the poor and see that these are represented in Watershed Committees and Associations, and annually revisit the micro-plan. (Micro-planning is described in Annex 4 page 10). Thus those who are normally excluded may articulate their changing needs and have them incorporated in project activities. This is important for marginal farmers and the landless who have interests in common pool resources, non-land based activities and wage labour to enhance their livelihoods. Participatory monitoring and evaluation will examine how capacity building impacts on the landless and poor groups and assess their ability to participate and negotiate improved entitlements. Gender inequality will be addressed by: building upon the experience of Government and NGOs to empower women through micro-credit and micro-enterprise groups; gender sensitive capacity building; an approach to information and communications which is sensitive to the needs of literates and non-literates, and village participatory planning which includes the needs

of women, particularly from marginalised communities. Micro irrigation, vegetable allotments, aquaculture, small livestock and dairy are some of the agricultural initiatives appropriate to women. Domestic water and improved tools will ease their work load. Gender balance in staffing and gender appraisal and gender awareness training will be widely promoted

### **Is there Government and NGO capacity to deliver the project?**

3.4.7 The watershed programme in AP is managed by Project Implementation Agencies (PIAs) supervised by Multi-disciplinary Teams (MDTs), both drawn from line departments and NGOs. Annex 5 shows how despite strong commitment and several years of experience in managing increasingly successful watershed programmes, government staff, generally strong on technical know-how, lack adequate skills, sensitivities and attitudes to deal with communities, particularly the rural poor. Top down ways of working, inadequate accountability and transparency, and lack of co-ordination of programmes further limit their impact. Strong NGOs with complementary skills exist in most though not all project districts. Panchayats are weak and have little role in watershed work.

3.4.8 Most of these problems will be addressed with a systematic capacity building programme which will be devised in consultation with primary and secondary stakeholders early in the project. (Annex 5 pages 6 and 7). Stakeholders will be familiarised with new approaches and encouraged to identify their individual and institutional capacity building needs. A Project Support Unit (PSU) led by professionals along with the Andhra Pradesh Academy for Rural Development (APARD) and District Capacity Building Centres (DCBCs) will plan and manage the Capacity Building Strategy which will use a variety of methods to achieve its ends.

3.4.9 Using the experience of other agencies, the project will pilot convergence, i.e. bring together government agencies and schemes at the *mandal* level to respond to community micro-plans. (Annex 3 pages 12 to 14 and Annex 5 page 8 consider this). Starting with a limited supervisory role, panchayat bodies will receive training and orientation to assume more responsibilities entrusted to them by law. GoAP and MRD are willing to replicate in AP and other states successful models of convergence and of empowerment of panchayats.

### **Is the project going to be effective in building community capacity?**

3.4.10 The project emphasises capacity building of SHGs and common interest groups, to participate, identify needs and opportunities, demand better services and negotiate improved entitlements, and in some cases, function as PIAs. It supports GoAP's keenness to establish many skilled village professionals, able to resource a wide range of rural activities. It will create district resource centres for capacity building, add social mobilisers to watershed management and seek a time bound transfer of skills to the community. A communication strategy, participatory technology development and participatory monitoring will all increase community confidence.

**Is the project providing sufficient benefits? Are the assumptions made realistic? How are the benefits distributed?**

3.4.11 Assumptions used for the economic analysis were about mid-way in the range of benefits from the following projects: World Bank evaluation of watershed programmes; GoAP evaluation of its watershed programmes, and benefits from Phase 1 of the Western India Rainfed Farming Project.

3.4.12 Incremental production benefits from agriculture are assumed to be about Rs 2,200/ ha for paddy, and about Rs 1,000/ha for pulses. Yield increases are assumed to range between 25% and 60% for different crops. These assumptions, and only including the most direct benefits, delivers a project with a financial IRR of 17%.

3.4.13 In economic prices the project delivers a rate of return (ERR) of 19%. Sensitivity analysis indicates viability till the benefits fall by 25% from anticipated levels. The project also has intangible benefits like inclusion, improved self-esteem and confidence among the marginalised and more control over their migration. At another level similar benefits will accrue from more effective government programmes.

3.4.14 While some of the benefit streams accrue directly to the poorest, others are more difficult but could still benefit the poor with provisos like their getting assured benefits from Common Property. Small and marginal farmers, many below the poverty line, will benefit from increased agricultural production and drought proofing.

**Is the project financially sustainable.**

3.4.15 The project's 20% enhancement of the unit cost norms of MRD schemes is in line with recommendations of various bodies for their reform which are likely to be incorporated in the next revision of the Watershed Guidelines. The project will inform GoAP and MRD about the balance between the livelihood and capacity building aspects of this increase. MRD allocations for rural development have been rising rapidly, from Rs 2.5 billion to Rs 10 billion between 1992-98. GoAP allocations have been rising rapidly too - nearly doubling in the last two years. AP continues to get a proportionately higher share of MRD funds.

3.4.16 At current levels, the project will only add about 7% to GoAP allocations for 'programmes for rural development'. There are no recurrent cost implications except for some few new posts which, if effective, GoAP may retain.

**Is the larger institutional system willing to learn lessons to strengthen pro-poor policies?**

3.4.17 GoAp is committed to learn project lessons. The project funds staff for a Steering Unit with a "think tank" role which will pick up lessons and suggest

how they might be converted into policy. GoAP is willing to have a wider dialogue with donors about lessons. There are clear opportunities for synergy with DFID's wider sector work in AP. With the MDCP, the project will develop capacities and institutional mechanisms to ensure that good practice is used widely and linked to pro-poor policy change in the State and to revision of the Watershed Guidelines. Policy research and advocacy will support this.

### **3.5 Evaluation**

3.5.1 Project design uses the evaluation of previous experience, especially:

- Impact assessments of the Western India Rainfed Farming Project, and the detailed design studies for the Karnataka Watershed Development Project. Lessons from the Poverty and Environmental Synthesis studies being done by DFID's Evaluation Department have also been taken into account.
- MRD experience with implementing projects. An evaluation of the impact of the 1994 Watershed Guidelines was conducted by ODI in late 1997, and a National Workshop on Watershed Approaches took this forward in 1998.

3.5.2 The SRL projects being financed by DFID will probably be DFID's largest SRL investment world-wide and should be considered for review by DFID's Evaluation Department in about 2005.

## **4. IMPLEMENTATION**

### **4.1 Management Arrangements (Annex 2)**

4.1.1 The management structure divides into the development and capacity building programmes described in Annex 2. The largely resource-based watershed programme follows government procedures and norms through the MRD Common Guidelines. The project will be overseen by GoAP's Department of Rural Development and implemented by the office of the Project Director, Drought Prone Areas Programme (PD-DPAP) who works within the District Rural Development Agency (DRDA). This will engage government bodies or NGOs as PIAs to work with up to ten watersheds each. Multi-disciplinary Teams supervise PIAs, and are responsible for some 50 watersheds.

4.1.2 PIAs will work with Watershed Committees and village communities to plan expenditure of much of the development budget, ensuring that investments meet the needs of the poor.

4.1.3 The project has provided for its "plus" agenda by creating 1) a new Assistant Project Director Post and support positions in the DPAP offices (these will be reallocated existing GoAP posts); (2) a new Social Scientist position in the MDTs and (3) a DCBC, located within the DPAP Office in each district with professional skills in training, social mobilisation, group formation,

conflict resolution, micro-planning, and M&E. APARD, the State's main rural training institute, will play a key role.

1.4 The DFIDI Rural Development Group will manage DFID's inputs through the PSU which will help GoAP administer the project, support district teams and pursue the project's policy agenda. This wholly DFID-funded unit will also disburse TC funds for the RDG. The RDG will have Water and Sanitation Group support.

#### 4.2 Timing (Bar chart at Annex 10)

4.2.1 A one year start-up, will see recruitment, capacity building, infrastructure work, and village group work. Forty watersheds will start in each district in PY2, and sixty in PY3.

#### 4.3 Inputs (Budget at Annex 7)

4.3.1 DFID will provide up to £40.176 million (cash prices) as untied F/A grant. This will be disbursed as 100% grant through a new sub-scheme within the Integrated Wasteland Development Programme - a "centrally sponsored scheme" managed by DLR. DLR will advance funds direct to the districts in two annual instalments, the second subject to receipt of utilisation certificates for the first. The districts will in turn advance funds to the PIAs/WCs. A part of the F/A support for capacity building will flow through APARD. DFID, however, will reimburse Gol retrospectively against expenditure claims.

4.3.2 The grant will support (1) the full range of watershed work and some additional innovative activities in the 500 designated project watersheds (100 in each of five project districts); and (2) top-up support only, towards capacity building and related "watershed plus" activities in 2,000 of GoAP's own watersheds in the same districts. The top-up is pegged at 20% of Gol cost norms and roughly splits into -10% *capacity building*; 5% *income-generation/social mobilisation*; and 5% *convergence work*. The grant will also pay for the setting up, staffing and running of DCBCs.

4.3.3 The 20% support, treated as one budget item for flexibility, will be partly spent on state and district activities and partly provided to MDT or PIAs for spending on approved plans from specific watersheds. Capacity building spending decisions will be taken under the authority of the DCBC and decisions for livelihood activities under authority from the APD-Livelihoods and district committees. A mechanism will have to be devised for devolving operational decisions to a lower level. DFIDI recognises it may be impossible to cover as many as 2,000 watersheds - either because GoAP's programme turns out less extensive than envisaged, or because watersheds come up with insufficient credible plans, or because of administrative difficulties in disbursing to so many watersheds. If so, the budget will be scaled down at the second year review. Further, if the landless are found not to be benefiting then slower disbursement will be instituted.



4.3.4 GoAP will contribute to the establishment costs of the additional Assistant PD positions and support staff required to implement the "plus" agenda in each district.

4.3.5 The F/A budget has been calculated according to Gol cost norms which provide up to Rs 4,000 over four years per hectare within a watershed. **The project budget and DFID's grant will need to be revised should Gol amend its cost guidelines.**

4.3.6 In addition, DFID will allocate up to £5.367 m as TC funds to pay for the PSU, consultancy and all other expenditure incurred under the capacity building component which cannot be funded through Gol channels. TC funds will be managed directly by DFID's Rural Development Group (RDG) in Delhi, partly through the PSU in Hyderabad.

#### **4.4 Contracting and Procurement**

4.4.1 Most F/A funds will be used for activities in the village. All work will be undertaken by communities, except where larger scale works (e.g. drinking water, irrigation) require outside expertise when work will be contracted by competitive tender, according to GoAP regulations and under the supervision of the PD-DPAP.

4.4.2 Procurement of goods and services with T/C funds will follow normal DFID procedures, guided by DFID's Contract Unit.

4.4.3 Technical advice will be restricted to key areas agreed at every stage with project partners to enhance ownership of the outputs. Two features of DFID's technical assistance will be an intensive use of the Indian consultant resource and a limited and more focused use of strategic long-term international inputs engaged by the RDG through DFID's Contracts Branch.

#### **4.5 Accounting & Auditing**

4.5.1 Concerns about corruption in the administration of watershed programmes make accounting and physical monitoring essential.

4.5.2 MRD guidelines require DRDA and DPAP accounts to be audited by independent empanelled auditors within six months of the end of the financial year as a condition for further disbursements. DLR will provide certified copies of these Annual Audit Statements (AASs) to DFID-I within a month of their receipt from the DRDA/DPAP. In addition, the Comptroller and Auditor General of India will audit all project funds disbursed through DLR and submit duplicate copies of AASs for each financial year within one year of the close of the financial year. The AASs will show drawings made from the financial aid grant and the actual expenditure incurred during each financial year and will certify that the expenditure was incurred in accordance with the terms and conditions of the aid agreement.

4.5.3 GoAP conducts its own internal auditing and the DPAP's do the same for funds released to PIAs. NGO PIAs are also separately required by law to audit their books. Some practice "social auditing" for accountability and transparency. This will be encouraged through the project. DFID may request these be further strengthened by sample audits at PIA and WC.

#### 4.6 Monitoring (Annex 8)

4.6.1 An internal Project Monitoring and Impact Assessment System will be created. This will integrate financial and impact monitoring, and build capacity in the project area for carrying out participatory and conventional monitoring and evaluation. It will serve as one of the pilot exercises for MRD's broader work in improving monitoring systems, to be supported by the MDCP.

4.6.2 In addition to regular internal reports, GoAP and DFID will appoint independent consultants to sample monitor physical works. DFID, DLR and GoAP will conduct annual project reviews.

4.6.3 A high powered committee under the Chairmanship of Secretary, MRD will be constituted to conduct quarterly/half yearly reviews of the project.

### 5. RISKS AND UNDERTAKINGS (Annex 9)

5.1 Six main types of risk are foreseen

**Risk A:** anticipated production and income gains for target groups not achieved, thus compromising the cost-effectiveness of the investment.

**Risk B:** project not providing real benefits to the poor, thus compromising the equity and distributional aspects.

**Risk C:** broader livelihood objectives to be met through convergence are not realised, thus project brings less than expected benefits to the poor.

**Risk D:** capacity building objectives for secondary stakeholders not significantly achieved, thus undermining project investment.

**Risk E:** institutional arrangement do not perform to required levels, thus undermining effective project delivery.

**Risk F:** project having less than desired impact on the larger rural programme in the State, thus hampering donor and other efforts to consider moving from project to sector assistance.

5.2 Project design has sought to minimise all of the risks and to include review options to mitigate those risks which become manifest. The project is adjudged medium risk overall, with higher risks for B, C and D.

5.3 Apart from ensuring that the district offices are fully staffed, no undertakings have been sought from the Government of Andhra Pradesh.

## ANNEX 1 : PROJECT APPROACH

1. This annex covers key elements of the project's approach:

- the objective of "sustainable rural livelihoods";
- the Andhra Pradesh context;
- the specific problems to be addressed by the project;
- the main project components.

### Evolution of Watershed Based Approach

2. Watershed, or Catchment Conservation started in India in the 1950's as an attempt to provide a secure framework of conserved soil and water for sustained agricultural production. The approach was essentially based on a set of technical interventions, all within the confines of a natural drainage basin of a size chosen for administrative convenience. The design of the conservation layout tended not to be discussed with rural communities and neither did they contribute to the construction cost and so naturally felt no ownership of the investment. The programme was to provide a focal point for different line departments to work in interdisciplinary fashion, but this has not been successful.

3. Only over the last decade have the rapidly evolving theories of rural development been matched with the watershed approach as watershed programmes have been evaluated, implementation guidelines revised and new theory has been applied to project design. The need to consider the social, financial and institutional aspects of rural development within the framework of a conserved environment is now well recognised but there are as yet only isolated examples of this being effectively applied in practice.

4. The new approaches are being implemented by different government agencies and NGOs, including in a DFID supported watershed project in Karnataka. These initiatives promote a range of new thoughts: a process and needs based approach rather than blueprint; assessing cost effectiveness of different types of interventions; local contributions to costs; participation approaches which seek impact on the poor and on the practical and strategic needs of women; pursuit of a range of technical and commercial production opportunities from land and water and from non-farm and off-farm resources and enterprises; sustainability of individual livelihoods and community organisations; sustainability in RNR use and in operating and maintaining the private and communal assets created; evolution of working relationships with local bodies (Panchayati Raj Institutions); and, integrated functioning of line departments.

5. In 1994 the Ministry of Rural Areas and Employment (MRD) of GoI came up with a new set of guidelines for implementing its watershed programmes. This is a progressive piece of official policy and includes many of the good practices developed in NGO and government projects. Experience with implementing these guidelines have led to recommendations to government

which, *inter alia*, favour: common schemes, harmonised guidelines, a single disbursement window and nodal agency; longer schemes to permit up front capacity building and participatory planning; post scheme support; devising approaches to ensure participation of poor and women and attention to their needs; and training and capacity building of primary and secondary stakeholders. Specific approaches for implementing these recommendations need further consideration by government and other stakeholders.

### **Sustainable Rural Livelihoods**

6. Recent thinking on rural livelihoods complements some of the new ideas in the watershed programme. An approach based purely on agricultural production while being necessary is not sufficient for rural development, in particular for meeting the full livelihood needs of rural poor. Rural assets often generate only a portion of rural livelihoods, i.e. from farm production, rural wages and common property. Other varied forms of income generation are derived through migration, part time trade and petty enterprise, and brought into play as circumstances dictate. The health, education, skill training, non-land based employment and information needs of the rural poor are not included in typical farming systems improvement programmes. How to address all these aspects of livelihoods in a cohesive and manageable way is the concern of sustainable livelihood approaches.

7. DFID's Sustainable Rural Livelihoods (SRL) Strategy is based on an analysis of the capital assets from which rural poor make up their livelihoods (physical, social, human, natural and financial). Interventions can aim to strengthen this capital in different ways depending on need. Pursuing this approach will lead to interventions which address non-agricultural livelihood needs articulated by poor people - including food security, drinking water supply, savings and credit, transport, communications, non-land based income generation, and access to health and education services. This approach ties in closely with thinking in MRD about how to improve the effectiveness of government poverty reduction schemes - including through promoting convergence between the different instruments whereby government addresses rural livelihoods.

8. Donor involvement with Integrated Rural Development Programmes was halted in the 1980's due to poor impact. Now it is thought possible to engage with a broad range of livelihood activities because: effective participation empowers communities to articulate the agenda; governments are more willing to engage with participatory approaches; a lot more is now known about groups and their ability to implement and sustain initiatives; more is known about equity, self help, appropriate technology and about starting with a few key priorities and only broadening action after initial success with these.

9. Key features of APRLP which reflect the SRL strategy include:

- Substantial flexibility for local communities to prioritise project interventions, and include viable non-land based activities. Activities starting from an assessment of the livelihood needs of poorest groups.

Piloting of post completion support so that as yet unmet livelihood needs can be identified and fulfilled.

- Strengthening the women's self-help movement in the state, and harnessing their energies for broader livelihood interventions. Identifying and training village professionals and involving NGOs as Project Implementing Agencies (PIAs).
- Emphasising capacity building of primary and secondary stakeholders - not just in DFID funded watersheds, but more widely in the project districts. Providing "topping up" funds over and above Gol norms to additionally resource capacity building.
- Piloting initiatives such as village / *mandal* / block planning to ensure convergence between various government schemes through which a broader livelihood agenda can be meaningfully addressed. Relatively speaking, AP has considerable financial resources for rural development and the need is to bring about closer synergy between various schemes.
- Advocacy of pro-poor policy changes;
- Scope for links with other DFID-funded sectoral activities to cover a broader livelihoods agenda.

10. The approach to this project builds upon existing knowledge of important changes that must take place in a village for successful impact, including:

- a five to seven year involvement with a community;
- encouragement of structures and processes within a village which develop the community's skills, build their confidence, and enable them to articulate their needs and demand improved services;
- encouragement of structures and processes (e.g. common interest groups) which enable the poor and marginalised to be effectively involved, and develop respect between men and women;
- activities which rapidly impact on incomes, employment and food security, relieve the burden of debt, and encourage savings;
- improved management of common property and equitable distribution of its benefits;
- participatory technology development to respond to specific needs, including the particular needs of women;
- capacity-building of service providers - government or non-government.

### **The Andhra Pradesh Context**

11. One quarter of the population of Andhra Pradesh lives below the poverty line and over half of the Scheduled Tribes and Castes. Low income is aggravated by poor education, literacy and health and high indebtedness. Women are particularly disempowered and disadvantaged and mostly by-

passed in watershed programmes. Ten percent of households are female headed, de facto many more so due to migration. Life expectancy in rural areas is five years lower than in the towns. Andhra Pradesh has the highest incidence of Child labour in India.

12. GoAP's recently released "Vision 2020" sets an ambitious agenda for rapid and overall development of the state, and incorporates many of the principles of Sustainable Rural Livelihoods set out in the paragraphs above. It describes a five pronged approach to improve living standards of rural communities: agricultural development and reform; creating economic opportunities in rural industry and services; providing rural infrastructure; human resource development and capacity building; and decentralised governance and promotion of self-help groups. This is a more broad based approach towards rural development than has been adopted by many successive governments in the past, and recognises the need for reform in government and need for community empowerment. The fulfilment of "Vision 2020" objectives would depend a lot on continued political and bureaucratic commitment, greater institutional capacity, and the state's ability to leverage additional finance.

13. Andhra Pradesh is considered at the forefront of undertaking state economic and public sector reform. A pro-poor approach is evident in the reduction of un-targeted subsidies, making administration more responsive to people, e.g. through the *Janmabhoomi* programme of mass contact, and in encouraging grass-roots organisations in various sectors. Government is trying to harness an increasingly wide-spread women's self-help movement, based initially on anti-alcoholism, and now broadened to thrift and credit and other activities. This shows a commitment to address key constraints in poverty reduction, but government realises that a lot more needs to be done before widespread and tangible benefits can accrue to the state's poor.

14. The state gets a considerable proportion of central resources for rural development, perhaps a reflection of the greater capacity that exists in this state. This contribution has been rising, with a near doubling of the state's overall budget for rural development during the last two years. AP has already done considerable watershed work. Since the new watershed guidelines came into force in 1995-96, 1 million ha have been treated in the State with a financial outlay of Rs 4,200m. A ten year Action Plan envisages 10 million ha to be treated during 1997-2007 but projected government budgets would not alone suffice. Institutional capacity to rapidly scale-up the programme is also constraining. During scaling up particular attention will be required to improve the quality of programme delivery and its overall impact.

15. Compared to other states, AP implements various centrally sponsored watershed schemes in a progressive manner; planning systems are relatively strong, use of technical (including remote sensing) and social data more detailed, and fund utilisation through district agencies is high. NGOs are encouraged to be project implementation agencies (PIAs) for various schemes. Progressive administration, and the mobilisation of poor women

through self-help groups, will permit more effective and wider scale livelihood initiatives, using watershed-based programmes as the key framework.

16. This encouraging environment in the state is already reflected in considerable donor interest in working with GoAP in helping meet the state's development objectives. On its part, the state government appears keen to attract donors and co-ordinate their work in various sectors, including rural development, with a view to promoting synergy and minimising duplication.

### **Problems to be Addressed by the Project**

17. The project will work in five districts of the state: Anantapur, Kurnool, Mahaboobnagar, Nalgonda and Prakasam. The project is seeking to address four key problems of the area: chronic poverty, degraded natural resource base, limited impact on the poor of many past schemes, and limited institutional capacity to cope with rapid expansion plans for watershed programmes in AP. In many ways these issues are interconnected, and the objective during project design has been to plan interventions in such a manner as to have maximum impact on all of them.

18. The population of the five districts is over 15 million. About 45% live below the official poverty line and half of these households earn less than half the poverty line income. Between 60 to 75% of the workforce is dependent on agriculture: about a third of the workforce falls into each of the following employment categories: cultivators, landless agricultural labourers, and non-agricultural workforce. There is considerable variation in the distribution of small and marginal farmers in the five districts, as also the proportion of land owned by them. Between 55 to 75% of the cultivators are in the small and marginal farmer category. They own perhaps 20% of the cultivable land.

19. The poor and degraded natural resource base contributes to the area's poverty: poor soils, low and erratic rainfall, limited infrastructure and irrigation, declining and contaminated ground water, and little support for agricultural enterprise. A holding of 2ha is needed for a household to subsist. Release from poverty requires increased productivity, employment and new enterprise.

20. GoAP's Ten Year Perspective Plan to scale up development of degraded dryland requires many more good project implementing agencies to deliver successful programmes than currently exist. Imperfect application of the principles set out in paragraphs 3 to 10 above constrains the overall effectiveness of current schemes. There are found too: limited convergence among different instruments for rural development; wrong skills and attitudes of staff in different agencies; poor administration and corruption; and planning and implementation constraints within government agencies and NGOs. This does not contradict an appraisal conclusion that great capacity exists within AP, but recognises the need for attention in certain areas.

### **Fit of the Project**

21. APRLP will be DFID's first initiative in rural development in AP but will

complement DFID work underway in the State in health, education, urban poverty, energy micro-finance and child labour. Working across these sectors provides an opportunity for the two partners to carry out a wide-ranging dialogue on appropriate policies and strategies for poverty reduction.

22. DFID India's evolving rural development programme includes the two Rainfed Farming projects, Karnataka Watersheds and the recently approved Western Orissa Rural Livelihoods Project. APRLP helps advance DFID's rural sector strategy by fully mainstreaming effort within government. The key differences between this project and that in Orissa are:

- Poverty is more stark in Orissa, where "entitlement failure" is a key contributor to it, whereas in APRLP districts, poverty is due to a mix of natural resource, social and institutional constraints.
- APRLP has no Livelihood Support Teams as there are more and stronger NGOs and Self Help Groups; the Watershed Development and Multi-Disciplinary Teams already include social mobilisers or have sanctioned posts for them; and village professionals have already been piloted in the project area.
- APRLP has greater emphasis on capacity building due to the greater eagerness of the State to address this issue and better chances of it having an impact;
- APRLP has much less "watershed plus" money as broader livelihood objectives are expected to be met through convergence with other government schemes.
- APRLP is closer to being programme support by providing topping-up funds for some under-resourced aspects of government watershed programme across five districts, and is not just working in identified "enclaves". WORLP hopes to graduate to programme support.
- More rapid scaling up is proposed for APRLP.
- APRLP depends less on parallel management and support structures as the GoAP is better organised and the project can seek to work fully within existing systems.

23. The Orissa and AP projects form part of a wider co-operation between DFID and MRD. DFID is currently appraising a MRD-DFID Co-operation Project (MDCP), which would work with MRD on:

- use of monitoring as a programme management tool, and creating a facility to support and promote policy research;
- capacity building in the rural development HRD system;
- a venture capital fund to support innovative ideas and experiments; and,
- facilitating organisational adaptation.

24. GoAP clearly sees APRLP not as an insulated project, but as part of its long-term programme. It recognises that fulfilling the long-term action plan objectives requires new approaches and ways of working, strengthened capacity among primary and secondary stakeholders, and additional financial resources. GoAP is anticipating that work in the first two years of APRLP will



help generate interest among other donors in its rural sector and watershed plus programme, especially progress with: more clearly articulated pro-poor policies; stronger institutional capacity for programme management and delivery; a conducive larger political environment; and, further evidence of high quality impact of its programmes.

### **Project Description**

25. Against this background, project purpose is that GoAP is better able to address the SRL agenda through a watershed-based development approach in five districts of AP. This purpose should contribute to a broader goal: more effective and sustainable approaches to eliminate poverty are adopted by government agencies and other stakeholders in drought-prone areas of AP.

26. There will be four components to fulfil project purpose. These were designed through stakeholder workshops. They are by no means water tight, but have overlap and synergy. The logframe outputs are geared to them.

#### Component 1: Watershed and Watershed-Plus SRL Initiatives

27. This component will support implementation in 500 micro watersheds, each of 500 hectares. It will operate broadly within MRD common guidelines, but will incorporate lessons learnt from watersheds projects in AP and outside (see appended table). A budget of Rs 2 million (Rs 4,000 per hectare for 500 hectares) is provided for this - and is expected to finance soil and water conservation and other works prioritised through community microplans. One of the responsibilities of the PSU, in collaboration with DRD, GoAP, will be to develop a watershed selection policy which is equitable and transparent, and includes natural resource and socio-economic criteria. The policy should be derived by the State; should be clear and ready to use by the PD-DPAPs who are responsible for watershed selection in the districts, and should help to reduce any pressures on selection decisions.

28. PIAs will be selected by the PD-DPAP in consultation with the District Capacity Building Centres (DCBC) and the Multi Disciplinary Teams (MDTs). Options for PIAs include government agencies and established NGOs with adequate capacity. The project will encourage the PIAs to use the medium term perspective plans proposed to be prepared at block and district levels. This will help ensure that project interventions optimise overall natural resource management and are environmentally sustainable. Micro-planning will be made more participatory and iterative and will use objective appraisal. The watershed treatment plan will be supplemented by an improved agricultural production plan which facilitates access to other government schemes. Money for watershed work will be passed to the Watershed Committee in phases following approval of a microplan.

29. A Watershed Committee commitment to cost recovery and responsibility for operation and maintenance will be a prerequisite for expenditure on physical works. Where irrigation benefits individuals, they will be required to

contribute on a sliding scale up to 50% of project costs to the Watershed Development Fund.

30. The project emphasises in many ways the importance DFID attaches to addressing the livelihood needs of the poor. Capacity building, social mobilisation, a building block approach to community participation and poverty and poor women oriented initiatives within the watershed programme are all described in the annexes. The project may experiment with pro-poor incentives in micro-planning - e.g. by making acceptance of fully developed micro-plans conditional on the initial microplan focusing on the needs of the poorest.

31. Of the 20% "topping up" funds, additional to the watershed guidelines, 10% are to address broader livelihood needs. These "watershed plus" activities will include higher return income and employment options, land and non-land based, and other needs of the poorest identified through micro-planning. Fund flow will be similar to the watershed programme. This component also seeks to promote the broader livelihood needs of the poorest by empowering communities to demand and improve their access to other government schemes, and by promoting convergence among the different schemes. This part overlaps with the other three project components.

#### Component 2: Capacity-Building for Primary and Secondary Stakeholders

32. GoAP is currently constrained by limited institutional capacity within and outside government to rapidly upscale the watershed programme in the State. This component seeks to build capacity in communities, in government and in NGOs. It will operate across 2,500 watersheds in the five districts. An overall Capacity Building Strategy will be prepared early on, and will identify the demand for training for each group of primary and secondary stakeholders and plan sequenced training in response. Trainees will progress to more training only after they have begun to apply their first learned skills. This component has 10% addition money set aside for it.

33. District Capacity Building Centres will be primarily responsible for the Strategy and Action Plans with APARD in overall charge. The PSU will help procure local and international consultancy. DCBCs will use available training infrastructure and resource persons. The district Project Directors' offices (DPAP) and the MDTs, PIAs and WDTs will help to devise and implement the Action Plans.

34. Apart from helping to create PIAs/WDTs to meet the requirements of 2,500 watershed in the project districts the CBS will aim at qualitative improvements in the skills and attitudes of a range of primary and secondary stakeholders. Secondary stakeholders will be equipped with a new clutch of skills to complement their existing disciplines, e.g. planning, monitoring and feed back, participation, influencing, and inter-disciplinary working; and will become more sensitive to cost effectiveness, equity and gender.

35. Watershed Committees and Associations, elected members of some Panchayat Raj Institutions, leaders of Self Help Groups and Village Professionals will all be trained in various skills to enable communities to take care of their needs by self help and by accessing government and NGO services.

### Component 3: Innovation to Enhance the Impact of Watershed Work

36. This component responds to the keen interest of MRD and GoAP in experimenting with issues which might inform revisions to the Watershed Guidelines. It will pilot innovative approaches in fifty watersheds in the five districts which enhance overall impact, ensure more equitable sharing of benefits, and improve sustainability. Areas to be explored include: cost recovery; participatory technology development; innovative approaches to agricultural credit; post completion support for watersheds; different institutional arrangements, including involving panchayats; macro-watershed treatment; developing agricultural production packages; and promoting convergence among government schemes through *mandal* / district planning.

37. The allocation of Rs 4 m per watershed will provide for activities which are not included in existing government schemes. This component will be managed by DRD, GoAP, and facilitated by the PSU. The institutional and fund flow arrangements would need to be agreed case by case depending on the type of innovation proposed. In Year 1, a detailed implementation plan will be agreed by DRD and PSU. There will be close monitoring to achieve the lesson learning objective. In Year 3, initial lessons will be examined to allow for their wider replication in APRLP watersheds and beyond.

### Component 4: Lesson-Learning and Policy Influence

38. Strengthening the sectoral policy environment in AP for more effective rural development programmes was identified as a priority during project appraisal. The PSU will be a think tank for DRD to analyse key policy areas which impact on the poorest; an initial list will be drawn up during Year 1. DRD will lead in ensuring that effective partnerships are maintained between government, NGOs and donors. Policy work should make the rural sector more attractive for additional donor support; success will be reflected by the extent of additional donor interest.

39. Another opportunity for policy changes will be provided by suggestions for revisions to the Watershed Guidelines that emerge from the project.

### Annex 1 ADDENDUM 1: A Comparison of the Common Watershed Guidelines with the Guidelines as Implemented in Andhra Pradesh and Recommendations for Change

Item	MRD guidelines	Changes to 1994 guidelines by subsequent Government Orders	Variations on Guidelines already in operation in Andhra Pradesh	Recommendations for Guideline Revision
1. Objectives	Economic development through RNR in drought prone areas			A broader 'livelihoods perspective' to be adopted, taking particular account of livelihood options for women and the poorest groups
2. Approach to watershed treatment	Integrated treatment of both non arable and arable lands on watershed basis			Need recognised for integrated water management, also focus on animal husbandry, horticulture.
3. Selection of watersheds	On the basis of drought conditions in the area and a number of indicators which signify backwardness		Villages selected based on certain parameters and weightages given to each parameter, see attached appendix.	Need to identify and prioritise willing cooperators, and clusters/contiguity
4. Size of the watersheds	Only MWSs of 500 ha each are selected. In case of more than one MWs in a block, these need not be contiguous.		Contiguity with existing watersheds is favoured (and is one of the criteria used for watershed selection, see appendix, below)	Need to encourage and prioritise clusters/contiguity
5. Time period	Four years	May be extended up to five years if required (no additional funds)		An initial year for capacity building, giving a project life of 5 years
6. Selection of villages	Where peoples participation and voluntary contributions are forthcoming. The area should have acute shortage of drinking water, preponderance of SC/ST population and wastelands		Villages selected based on certain parameters and weightages given to each parameter (see Appendix)	
7. Role of NGOs	Can be one of the implementing			Need for more NGO PIAs by

Annex 1: Project Approach

	agencies for a group of 10 or 12 MWS			capacity building
8. Institutional arrangement a) State level	A Watershed Development Programme Implementation and Review Committee under the Chairmanship of the Chief Secretary.			SWPIRC to be strengthened. SIRDs to be strengthened according to the recommendations of the Eshwaran High Level Committee.
b) District level	Usually either the DRDA or ZP is responsible for implementing programmes at District level. A District Watershed Advisory Committee which offer guidance on issues of implementation, including PIA selection.		In AP a PD-DPAP has been sanctioned in DPAP districts and this person has responsibility for all watershed works. The PD-DPAP is the Chairperson of the DWAC, which also has PIA representation.	Recruit young professionals to support PIAs Strengthen capacity building with special support units Support role of PRIs Categorise PIAs Develop criteria for selection and deselection of PIAs
c) Watershed level	One of the following can be selected as the project implementing agency at the watershed level. 1. The voluntary agencies (NGOs) 2. Agricultural Universities 3. Agricultural Research Institutions 4. Training Institutions 5. Corporations 6. Co-operatives 7. Banks 8. Public & Commercial organisations 9. Panchayat Raj Institutions 10. Government departments. A multidisciplinary watershed development team to assist the PIA.		A Multidisciplinary team to cover 50 watersheds (roughly division level) comprised of three senior and three assistant line department functionaries (forestry, engineering, agriculture). Each PIA to field one multidisciplinary Watershed Development Team which covers up to 10 watersheds.	

d) MWS level	A micro watershed association which shall be a registered body. This will be supported by a micro watershed committee with representatives from self help groups (SHG), user groups (UG), women etc.			
9. Agency for planning and execution of MWS plans.	Watershed Committee through the SHG and UG. The Gram Panchayat links critical.			
10. Approval of MWS plans	PD-DRDA and PIA			
11. Flow of funds	Govt, MRD to DRDA		GOI to PD-DRDA to PD-DPAP to PIA / WC.	
12. Cost norms/ha a) RNR cost/ha b) HRD c) NLBAs d) NGO	Rs.3000-3500 5% No provision Significant	Revised cost norms based on slope		Need for additional funding for livelihood issues Need to revisit cost norms esp. for WS+ Need to revise overheads for NGO PIAs
13. Concept of cost and benefit sharing a) Cost sharing b) Benefit sharing	Compulsory. 5% in respect of CPR and 10% in respect of private lands.  Not well defined			Need to maximise cost recovery, particularly from key and landowning beneficiaries
14. Maintenance of assets during post project period	Concerned WDT to take care with the help of the micro watershed committee. To support this activity, a micro watershed			Need to define effective exit strategy

Annex 1: Project Approach

	development fund is proposed to be created and cost contributions will go to this fund.			
15. HRD	A provision of 5% of the total funds is made.			Massive HRD programme required at all levels Attitude change of senior govt officials Develop core groups of village professionals
16. Gender	This question is addressed in the guide lines but strategy has not been spelt out clearly.		Experimentation with involvement of women-only SHGs representatives in WC beginning	Affirmative action for women and SCs/STs and special emphasis on livelihood options for women Revise membership quotas
17. Equity	This question has been addressed but the strategy is not well defined.			Affirmative action for SCs/STs Benefits of CPRs to reach poorest
18. NLBAs	No provision			Needs of the assetless to be focussed, eg NLBAs, NTFPs, credit
19. M&E	Financial spending targets			monitor on wide range of qualitative and quantitative criteria Set up M&E cells at district level Address equity concerns

**Annex 1 ADDENDUM 2:***Andhra Pradesh Government Criteria for Selection of Watersheds*

Keeping in view the revised guidelines issues by the Government of India, the villages are selected based on certain parameters and weightage given to each of the parameters. The parameters adopted are as follows:

1. Priority ranking given by the APSRAC, taking into account rainfall, evapo-transpiration and sedimentation rate.
2. SC/ST population
3. Percentage of literates
4. Percentage of agricultural labourers to total workers
5. Drinking water scarcity
6. Quality of drinking water
7. Availability of active DWCRA/ Self Help Groups
8. Status of Ground water
9. Availability of active NGOs/CBOs
10. Contiguity with existing watersheds
11. Livestock population

Weightage allotted to each parameter is as follows:

No	Parameter	Range	Marks	Total Weight age
1	SC/ST population	< 100	1	
		101-200	2	
		201-300	3	
		301-400	4	
		401-500	5	
		501-600	6	
		601-700	7	
		701-800	8	
		801-900	9	
		901-1000	10	
		1001-1100	11	
		1101-1200	12	
		1201-1300	13	
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		1401-1500	15	
		1501-1600	16	
		1601-1700	17	
		1701-1800	18	
		1801-1900	19	
			1901-2000	20
	2001 <		5	
2.	Percentage of literate	< 20%	5	5
3.	Agricultural Labour	< 50%	2	5
		51-70	3	
		71 <	5	
4.	Drinking water scarcity	No source	5	5
5.	Fluoride affected water (quality)	Fluoride	5	5
6.	Active NGO/CBO	Yes	5	5



Annex 1: Project Approach

7.	Active DWCRAs/SHGs	Yes	5	5
8.	Status of groundwater	D/S	10	5
9.	Contiguity	Yes	5	5
10.	Priority - APSRAC on parameters of evapo-transpiration, sedimentation rate and rainfall etc.	Very low	6	30
		Low	12	
		Medium	18	
		High	24	
		Very High	30	
11.	Livestock	< 1000	2	5
		1000-2000	3	
		2000 <	5	
				100

## ANNEX 2. PROJECT ARRANGEMENTS

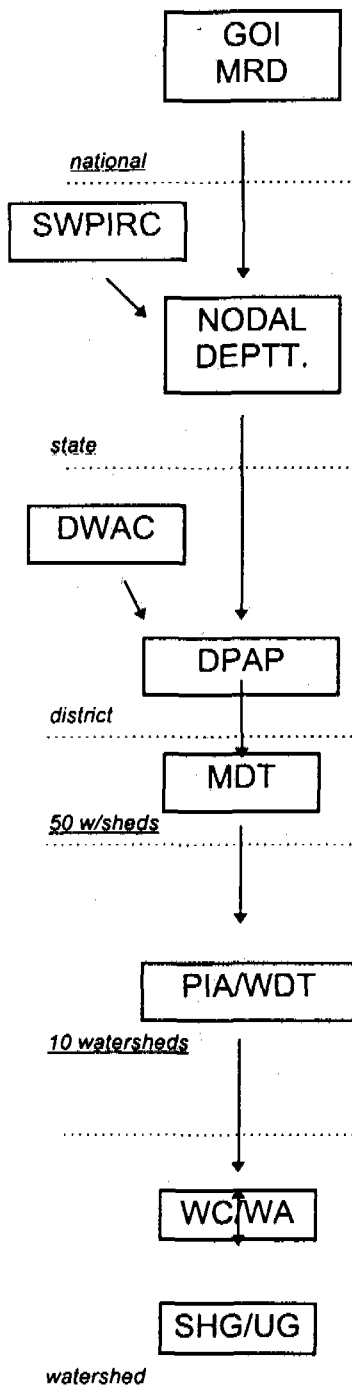
### *Background*

1. The project' management structure divides between the resource-based watershed programme, this follows government procedures and norms through the MRD Common Guidelines (see Diagram 1 overleaf), and capacity building (Diagram 2).
2. The watershed programme in APRLP will be largely conventional, following MRD guidelines and cost norms, but attempting to apply many of the recommended 'improvements' to the Common Guidelines where this is feasible. These improvements are summarised in the table in Annex 1.
3. The capacity building structure will work closely with, and respond to, the government machinery, and provide the training and capacity building needed. Parts will be independently financed, autonomous in developing their programmes, and having achieved their purpose, become redundant within the life of the project.

### *Funding*

4. The Department of Land Resources (DLR) which is responsible for MRD's watershed programmes, will administer APRLP watershed funds, routing them direct to district PD-DPAPs, and thence to the PIAs and WCs. Once funds reach the WC, they will be available for all activities prioritised by the approved village microplans, land- and non-land based.
5. In addition to funds for watershed development, four other funds will be available to PD-DPAPs through the IWDP route: funds additional to existing cost norms which are earmarked for wider district level capacity building; funds to develop and maintain District Capacity Building Centres (DCBCs); funds for innovation in a few watersheds; and funds for district remote sensing studies.
6. The Joint Secretary IWDP will also channel HRD funds direct to APARD, e.g. for consultancy, resource persons and training materials and for the post of HRD Specialist within APARD. All funds for the DCBCs will be also be routed through this channel.
7. Technical Co-operation funds will be routed direct from DFID (I) for PSU costs, some district costs, and for national and international consultancy.

**DIAGRAM 1. GOVERNMENT WATERSHED PROGRAMME THROUGH MRD SCHEMES**



There are 4 centrally sponsored schemes operated through MRD: these are IWDP, EAS, DPAP and DDP. All of these schemes channel funds direct from the centre to the districts. Different districts are designated appropriate for particular schemes, depending on a number of natural and social criteria. For example districts with uncertain rainfall are eligible for DPAP funds. MRD monitors progress of these projects from the centre.

Individual states may have different nodal departments for implementing watershed programmes, although MRD prefer this to be the Department of Rural Development which responds directly to it; this is the case in AP. The SWPIRC has responsibilities for guiding and coordinating the watershed programme, and is comprised of senior functionaries from a range of concerned departments and agencies, with the Ch Secretary/Dev. Comm as its Chairman.

Usually either DRDA or ZP is responsible for implementing programmes at district level. In AP however, a new post of PD-DPAP has been sanctioned in DPAP districts and this person has responsibility for all watershed works. In AP the PD-DPAP is the Chairperson of the DWAC, which also has PIA representation and offers guidance on issues of implementation, including PIA selection. In AP, MDTs operate at division level (one MDT per 50 MWS), and are comprised of senior department functionaries offering technical support and advice to the programme.

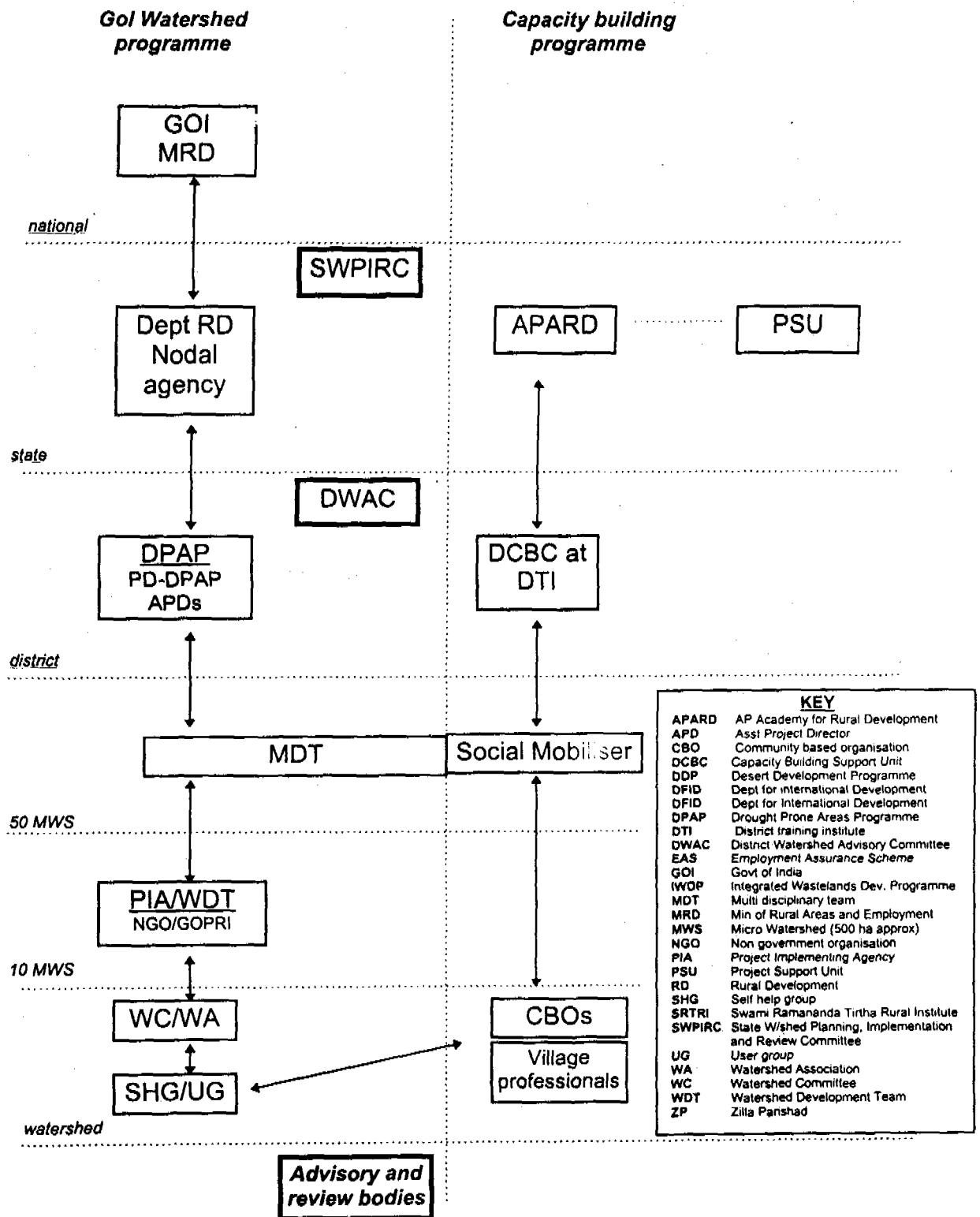
In AP, multidisciplinary teams operate roughly at division level (one MDT per 50 MWS), and are comprised of senior line dept. functionaries, offering technical support to programme.

Government agencies/staff or NGOs may be PIAs, or elected bodies, whoever has the capacity to function. In general, one PIA is expected to handle around 10 MWS, although this figure is often less. The PIA has to field one multidisciplinary WDT, which handles the same number of MWS. Overhead costs are channelled direct to the PIA, with amounts prescribed in the Common Guidelines.

The WA (general body) and WC (elected representatives from SHG/UGs, and some paid officials) are responsible for supervision of day-to-day activities. Gram panchayat links are critical. Fund flow for MWS activities should be direct from PD-DPAP to the WC.

KEY	
DDP	Desert Development Programme
DFID	Dept for International Development
DPAP	Drought Prone Areas Programme
DWAC	District WS Advisory Committee
EAS	Employment Assurance Scheme
GOI	Govt of India
IWDP	Integrated Wastelands Dev. Prog
MDT	Multi disciplinary team
MRD	Min of Rural Areas and Employment
MWS	Micro Watershed (500 ha approx)
NGO	Non government organisation
PIA	Project Implementing Agency
SHG	Self help group
SWPIRC	State WS Planning, Implementation and Review Committee
UG	User group
WA	Watershed Association
WC	Watershed Committee
WDT	Watershed Development Team
ZP	Zilla Parishad

DIAGRAM 2. STRUCTURE OF APRLP



## **State Institutions**

### ***Department of Rural Development (DRD)***

8. The DRD is the nodal agency for watershed works within AP, and for this project. The Commissioner RD will be the Project Director of APRLP.

### ***Project Support Unit (PSU)***

9. A Project Support Unit will be located in Hyderabad and staffed with a Co-ordinator (Rural Development Specialist), a Monitoring and Evaluation Specialist, an administrative officer, two accounts officers and a data processor. These staff will be recruited direct by DFID, and will respond to the RDG Programme Officer in Delhi.

10. The main functions of the PSU will be to:

- Act as a coordination unit for the Project where appropriate;
- Address macro-policy issues identified during project design and implementation, and pursue DFID's policy agenda;
- Form and maintain links with Gol, and identify issues of common concern between APRLP and other related DFID projects;
- Develop and maintain a Project Monitoring and Impact Assessment Strategy (PMIAS);
- Provide logistical and administrative support to APARD and other selected institutions, and to the DCBC and Assistant PDs at district level;
- Channel funds to DCBC for some capacity building activities;
- Engage national and international consultants.

### ***Andhra Pradesh Academy of Rural Development (APARD)***

11. APARD will provide umbrella support for all capacity building within APRLP, and will be the key training resource centre. One HRD Specialist placed within APARD will supervise training. The post may be filled by a government officer on deputation, identified and recruited by APARD. This officer will supervise the Assistant PD (Training) in the five district DPAP offices.

12. APARD will also provide resource persons for the District Training Institutes (DTIs), and will identify and develop these institutes.

### ***Other State Institutions***

13. The following state institutions may be engaged by APARD to assist with capacity building for the project: National Institute of Agricultural Extension Management (MANAGE), Andhra Pradesh State Remote Sensing Applications Centre (APSRAC), Andhra Pradesh Agricultural University (APAU), Swami Ramananda Tirtha Rural Institute (SRTRI).

***The State Watershed Programme Implementation and Review Committee (SWPIRC)***

14. SWPIRC is empowered to monitor, review and evaluate the progress of watershed programmes in the State. It will also overview DFID funded watersheds. The Co-ordinator of the PSU and all DCBC Co-ordinators will be members of SWPIRC, which should meet at least twice a year, once in a district so that field visits may be arranged. SWPIRC has governance functions at state level. (The governing body of the PD-DPAP, and a new committee to be constituted will have governance functions in the districts and mandals respectively). SWPIRC will approve the Capacity Building Strategy and Annual Action Plans of the project.

**District Institutions**

15. APRLP will fund 500 watersheds, 100 in each of five districts. Two additional MDTs will be needed per district, and 10 more PIAs and WDTs. The project will also provide an additional 25% of existing cost norms (Rs5 lakh per watershed) for capacity building in all other watersheds currently being implemented. i.e. about 400 per district, 2,000 across the five districts.

***The Office of the Project Director Drought Prone Area Programme (PD-DPAP)***

16. The post of PD-DPAP is already sanctioned in the State. PDs will be responsible for all activities in APRLP watersheds in addition to all other MRD funded watershed projects. They will get additional support from the DCBC, and from additional Assistant Project directors (APDs).

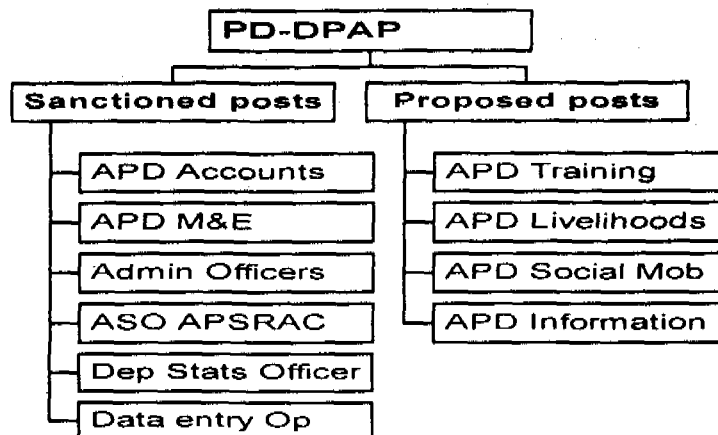
17. APDs (Training) will be identified and recruited by APARD and will support the PD-DPAP in all training activities relating to watersheds. They may be government officers on deputation or from the open market. At least half of these positions should be filled by women. They will: be a key link between DCBC and WDTs/PIAs; participate in Watershed Committee meetings; maintain a close link with the APARD HRD specialist, and spend one week in every month at APARD.

18. A post of APD (Social Mobiliser) will be created within the PDs' offices. This person will have gender and equity expertise and will support the Social Mobiliser based in every MDT. The Social Mobilisation team will be comprised of the APD (SM), mobilisers in the MDTs and their assistants, and social skills persons within WDTs. The Social Mobilisation team will:

- initiate participatory analysis of livelihoods and social/gender relations, starting with most vulnerable groups;
- form small groups based on common interests such as savings and credit, marketing, trading, processing, literacy, migration, PDS management, NTFPs, water use, CPRs, mining, farming systems, livestock;

- facilitate capacity building within these groups, starting with the poorest; training animators, village professionals and group leaders; organising exposure visits, skill development, legal literacy and access to government services;
- facilitate PRAs with groups to gain understanding of natural resource management issues and identify priorities for intervention;
- facilitate groups in prioritising their needs, in microplanning, in defining how proposed interventions will be managed, and in identifying mechanisms for cost recovery;
- liaise closely with WDTs throughout, and share responsibility with them when watershed plans are in place;
- assist WDTs in ensuring effective representation of interest groups in Watershed Committees.

19. Other APD positions will be created within the PD-DPAP's office to support watershed activities. GoAP will sanction whichever of these posts is found to be useful, and will fund their establishment. The following structure is proposed:



**District Rural Development Agency (DRDA)**

20. The PD-DRDA is responsible for all other centrally sponsored rural schemes in the district. Both PDs share equal status, and respond to the District Collector. Funds will come from Gol to the PD-DRDA account, whence it will be disbursed to the PD-DPAP, as happens at present.

**Governing bodies**

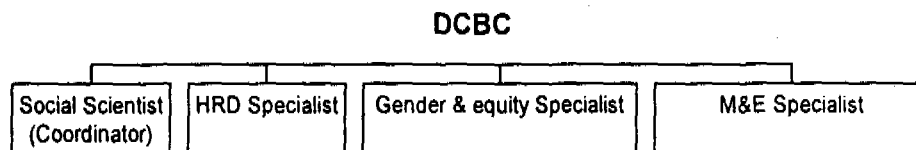
21. In Andhra Pradesh the DRDA and DPAP offices have separate governing bodies both chaired by the District Collector, but with slightly different representation from line departments and elected bodies.

**District Capacity Building Centre (DCBC)**

22. A District Capacity Building Centre will be developed in every district and will be APARD's responsibility. They will be located wherever possible near to the PD-DPAP's office and assist the PD-DPAP to:

- identify potential NGOs and CBOs; develop a programme that builds their capacity and enables them to become PIAs;
- develop a core group of village professionals in the districts especially those with appropriate characteristics to become trainers;
- support the APD (Training) programme;
- support the APD (SM) and the MDTs' Social Mobilisers;
- build the capacity of communities to access government and other services more effectively;
- provide training in social mobilisation, group formation, conflict resolution, and microplanning skills;
- identify micro-enterprise/micro-credit opportunities, and offer guidance to groups who wish to develop saving/credit agendas;
- develop and implement a Project Monitoring and Impact Assessment Strategy (PMIAS).

23. The DCBC staff will be recruited direct by the PSU and APARD. They will be funded by DFID through the PSU. They will report to the PD-DPAP. The proposed structure is:



24. The Co-ordinator of the DCBC will be a social scientist with wider skills, including microplanning, conflict management, social mobilisation, group formation, etc. Other members of the DCBC will need to have substantial prior experience in community work. They will need skills in social organisation, training, conflict resolution, gender in development, equity, monitoring and evaluation, skill identification and development, negotiation and facilitation. These skills will be strengthened by training as an early project priority. At least half of the DCBC positions will be filled by women.

25. The DCBC should complete its main work in the districts within the 7 year life of the project. Such positions as have been sanctioned will be absorbed into government, and the remainder of these units will be disbanded.

***District Watershed Advisory Committee (DWAC)***

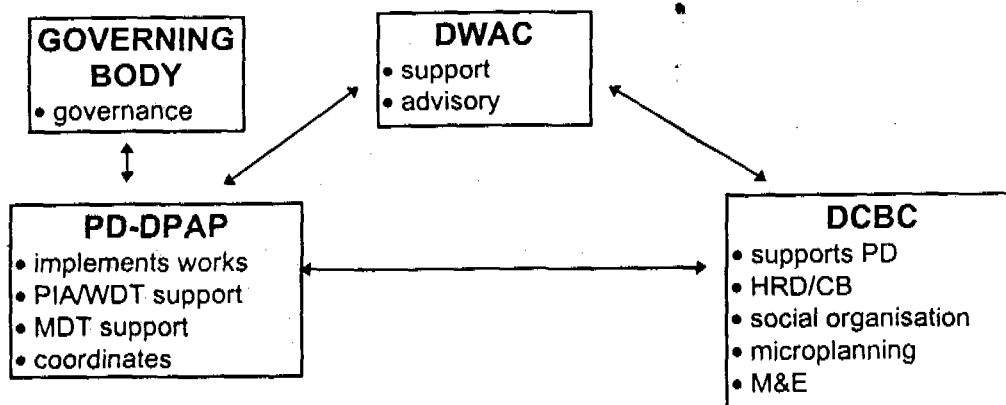
26. DWAC advises and guides the PD-DPAP in implementing and managing watershed projects and will also fulfil this function for DFID-funded projects. The Committee includes the senior functionary of each of the development line agencies. The Chairperson is PD-DPAP.



27. DWAC proceedings would benefit from NGO PIA representation, the DCBC and the DTI should be represented. DWAC should meet monthly and make at least two field visits in a year.

28. The primary functions of the various organisations involved in APRLP in the district are:

**District links and key roles**



**Sub-District Institutions**

**Multi-Disciplinary Teams (MDTs)**

29. Multi-Disciplinary Teams are mentioned in the Common Guidelines, but their composition and function is not detailed. GoAP has decided to give MDTs a major role in implementing watershed projects. One MDT will be created for every 50 operative micro-watersheds, and thus will usually have five PIAs responding to it. Positions for six full-time MDT members have been sanctioned: a senior government forester, engineer and agriculturalist, each with an assistant. There has been no sanctioned social scientist post to date but GoAP are committed to replace one of the three senior technical positions with a Social Mobiliser. This post will be supervised by the APD (SM), and the DCBC will also have a major role in supporting their activities.

**Project Implementation Agencies (PIAs)**

30. In Andhra Pradesh as elsewhere, and following the recommendations of the Common Guidelines, there are around ten micro-watersheds per Project Implementing Agency. Generally there is a significant shortage of PIAs and Government PIAs usually predominate, depending on the level of confidence placed in NGOs by the PD. GoAP are willing to develop a broader base of NGO PIAs through capacity building. APRLP provides the PD-DPAP with substantial resources to do so in an increased body of APDs and the DCBC.

31. One qualification to the Common Guidelines may be necessary in PIA selection. It is hoped that group development processes will lead to 'self-selection' of communities who meet specific criteria, and which are seen as being ready to undertake watershed implementation activities. When this

occurs, these groups may be given PIA status by the PD, and given the mandate to implement just one microwatershed to begin with.

### ***Watershed Development Teams (WDTs)***

32. Every PIA must field one Watershed Development Team for every ten watersheds. The WDT comprises four staff: an engineer, a forester, a horticulturalist/agriculturalist, and a social scientist. Where the PIA is government, staff undertake their WDT duties part-time and take the full time social scientist from the open market. In NGO PIAs, all staff are full-time.

### ***Watershed Institutions***

33. Watershed Associations (general body) and Watershed Committees (elected representatives and officials) will implement project activities. Their composition and working procedures will be by and large as prescribed in the Common Guidelines. Funds will be made available to the WC from the PD via the PIA for planned activities. Mechanisms for payment will vary according to the activity and the agency undertaking it, which will be for the WC to decide.

34. Self help groups/ user groups Watershed associations will include members of self-help and user groups from different sections of the population in line with the Watershed Guidelines. These groups will engage in micro-finance and micro-enterprises and will be a vital resource in pursuing the watershed-plus and convergence agenda. In line with the guidelines, the groups will provide 7-9 representatives for the Watershed Committee.

35. Village Professionals. Village professionals will be selected from local communities at WDA and SHG meetings. They will be supported by the WDT, particularly the social mobiliser, by GoAP line agencies and by NGOs helping with their work on health, savings, credit, and animal husbandry.

### **Review**

36. DFIDI and GoAP will jointly and annually monitor APRLP progress at output to purpose level. Quarterly internal monitoring reviews will be organised by the Commissioner Rural Development.

## ANNEX 3: TECHNICAL/ENVIRONMENTAL APPRAISAL

### Background

1. The five project districts form a contiguous belt covering 86,000 square kilometres stretching from Anantapur in the south to Nalgonda in the north. They adjoin two districts of the Karnataka Watershed Project to the south west. Most of the area is classed "drought prone" by Gol and so qualifies for special assistance. The population is approximately 17 million, about a quarter of the State' total. The districts have similar populations and areas; population is most dense in Nalgonda at 220 per sq Km.
2. A range of project district statistics are at Addendum 2 to this Annex. The districts vary significantly in rainfall characteristics, groundwater, topography, forest cover and soil types. Many natural resources are degraded and under severe pressure. Many local production niches are evident.
3. The topography rolls with some flat or gently undulating tracts. A striking feature are two broken hill ranges with the rock outcrops so typical of the Deccan. Rocks are mainly granite, gneiss and schist (crystalline basement). Red loamy or gravelly soils (alfisols) predominate. Problems with these soils include low nitrogen and phosphorous, poor physical structure, low water holding capacity, tendencies to crust and to erode on slopes. Pockets of black soils (vertisols) are scattered throughout, particularly in Kurnool.
4. The climate is semi-arid with an erratic, unimodal monsoon. Mean rainfall ranges from 555mm in Anantapur to 862mm in Prakasam. Variations around this mean and within districts are common, causing floods and droughts. Monthly rainfall is below potential evaporation in all months but September. Even in good years, mid season drought can lead to large yield reductions.
5. This extreme rainfall variability will need to be taken into account by project monitoring and evaluation, as many indicators will be more sensitive to rainfall than to project interventions.
6. There are few natural open water bodies, but many tanks, some of them several hundred years old and often in disrepair, with broken bunds and silted beds which are cropped. These, along with natural marshes and lakes, are rich biodiversity sources, containing a wide range of bird, amphibian and invertebrate species. They also provide different products, such as fish and aquatic plants, and services, such as bathing and drinking water for cattle.
7. About half of Anantapur and Kurnool is cultivated; and 30-40% in Prakasam (which has more forest), and in Mahaboobnagar and Nalgonda (where much 'waste' and fallow land are found). Private agricultural land is *de facto* common grazing after the kharif harvest. Common grazing has low feed value, poor palatability and declining productivity and is an enormous under-utilised resource.

8. Roughly 1.3m ha in the five districts is forest under Forest Dept jurisdiction. There are many other smaller patches of woodland. Dryland deciduous combinations dominate. Nalgonda has only 6% of its area under forest, Prakasam 26%. Forests in Anantapur, Mahaboobnagar and Nalgonda are degraded; those in Kurnool and Prakasam are marginally better. Tribals depend on the forest for their livelihoods especially in Nalgonda and Mahaboobnagar. Andhra Pradesh has been implementing JFM since 1993, in part with World Bank support. Over 450 forest protection committees have been formed in the five districts. These have usufruct rights within a management plan agreed with the Forest Department.

9. The Forest Department has an MOU with the Ministry of Rural Development about forest land falling within watershed projects and is also committed to improving tree resources outside mandated forest through social forestry. Fuel and fodder trees on farmland increase where there is pressure on CPRs.

10. Differences in the availability of water and markets account for wide variability in farming systems and crop choice can change dramatically from year to year depending on market opportunities. Nevertheless certain common features can be identified. Agriculture is predominantly rainfed; a single grain crop commonly inter-cropped with pigeon pea, horsegram and greengram. Sorghum is the most important rainfed cereal. Pearl millet, especially, and foxtail and finger millets are widely grown. Yields are low, 0.9t/ha for sorghum and 0.7t/ha for pearl millet. There are few drought resistant varieties. More cash crops have appeared in recent years with cotton and castor replacing the cereals. Groundnut is important, especially in Anantapur.

11. A single Kharif rice crop, mostly of new varieties and irrigated from tanks or bore wells is found in most villages. Yields are a moderate 2.4 to 3 t/ha.

12. Land ownership is highly skewed. Typically, one fifth of the households are landless. Some landless families have homestead gardens and most keep some livestock. Access to water is as important as access to land, even a patch of irrigated land reduces livelihood risks.

13. Farmers reduce cultivation risks with: bunds of soil, stone or vegetation, and extensive water harvesting with inter-connected tanks. Many of these tanks have been converted into percolation tanks at the initiation of farmers.

14. Livestock are important. Large flocks of sheep and goats are managed extensively. State policy discourages goats, but numbers continue to increase. Migrant shepherds are numerous, especially in Mahaboobnagar and Anantapur. Cows are the dominant large ruminant except in Prakasam, where buffaloes are more important. Accessible villages have stall-fed buffaloes, often acquired through loans to women's groups.

15. Although totally un-represented in statistics, indigenous aquaculture commonly provides important income for resource poor households with

access to small, even seasonal, water bodies. Aquaculture, unlike fisheries, is not limited to certain castes. Women traditionally dominate the fish drying, processing and vending.

16. Women and hired labourers play a central role in agriculture with most of the responsibility for livestock and for fuelwood collection. Children are often engaged in livestock watching and in cotton cultivation.

17. All villages have various non-agricultural activities, including traditional, caste based occupations, trading, government employment and labouring. Income from leaf plate making, basket making, pottery, and bamboo weaving contributes to livelihoods, particularly in the dry season.

18. Agricultural support systems are weak, with many vacant field posts. The Department of Agriculture extends new technology and inputs via the T&V system with a bias towards irrigated crops (paddy) and large ruminants. Farmers complain of seed shortages and of adulterated fertilisers and pesticides. A Dutch supported initiative started in 1994 to train small and marginal women farmers in dairying, poultry and hybrid rice seed production. It operates in four of the districts but not Mahoobnagar.

19. Credit options for small farmers are limited; they rely predominantly on private sources. But women's thrift and credit groups thrive and may offer a viable alternative for small loans for agriculture and consumption. Marketing remains largely in the hands of middlemen.

20. Private irrigation is typically from individually-owned open wells using electric pumps and subsidised electricity, where connections are available. Most irrigate only a few hectares and there do not seem to be local water sharing arrangements or water markets. This perhaps reflects the scarcity of groundwater in many of these wells. Good returns are possible from irrigation and access to irrigable lands is an important determinant of the level and security of livelihoods.

21. Statistics show groundwater in Prakasan and Kurnool, to be only 15 to 20% exploited. In the other districts it is 30 to 40% utilised, mostly for irrigation. Areas where groundwater is not seriously depleted in the five districts tend to be those with groundwater quality problems.

22. A gradual decline in groundwater levels across the project area in recent years varies from place to place. Decline has been more pronounced in drought-prone areas; particularly during years of low rainfall. Shallow aquifers in hardrock areas are so severely depleted that many shallow wide-diameter wells are no longer serviceable. In areas of particularly severe groundwater depletion, bore wells are going dry during the pre-monsoon period. Legislation to control surface and groundwater abstraction exists but is not always implemented in the village.

23. Groundwater quality is also a major issue. Fluoride problems are widespread, associated with pink granite aquifers, exacerbated by falling

groundwater levels and difficult of solution, especially in areas with widespread and high F concentrations. Pumping out and artificial recharge is being piloted by the AP State Groundwater Board. Nitrate concentrations are high in the more intensive agricultural areas and salinity is a problem in some coastal and black cotton soil areas. High iron concentrations are also reported in some areas. Permissible limits in domestic water supply are exceeded, especially with fluoride in Nalgonda, and the health of many rural people is affected.

24. Surface runoff is site specific. Local run-off may be 30% of annual rainfall, but run-off at the micro-watershed scale is nearer to 5%.

25. Medium and major irrigation and water supply projects are planned in the five districts and these will inevitably have a big impact on any watersheds that fall within the scheme command. Thus the final geographical location of the project will only be made with a good overview of these, in particular trans-basin diversion schemes.

### **Experience with watershed development in Andhra Pradesh**

26. Watershed work integrates natural resources conservation and management, broadly following a ridge to valley approach with five technical elements:

- protecting degraded common forest and pasture, supplemented by planting fodder grasses and legumes and fuel and fodder trees;
- water conservation and harvesting on common land with check dams, percolation tanks, and trenches;
- soil and water conservation on private land with earthen/vegetative bunds and percolation tanks;
- annual and perennial fruit trees and woody species, crop development on private land, sometimes including minor irrigation from open wells, tanks and boreholes;
- introducing cross bred cows and replacing goats with sheep.

27. Andhra Pradesh is in the van of watershed work in India, in the numbers of watersheds addressed and with its policies and approaches. Returns are rapid with impressive improvements evident in vegetation cover, reduced erosion, increased groundwater levels and fuel and fodder offtake.

28. Annex 1 tells of the shortcomings of early experience with watersheds and traces the evolution of the approach to embrace principles of: site specificity; cost-benefit; cost and benefit sharing; sustainable management, synergy with indigenous technology; broader livelihood issues and macro watershed and basin management. These principles will be part and parcel of the approach of this project which will operate as though the watershed guidelines have been optimally revised.

### The Project's Interventions

29. The project will fully fund 500 micro-watersheds over the five districts, each of about 500 ha. From an extra 20% provided above the normal watershed costs the project will provide, for these 500 watersheds and for 2,000 more under implementation by GoAP, some money for "watershed plus" activities, i.e. for additional irrigation, domestic water, sanitation, income generation, equity issues, and community self sufficiency post project. It will explore how other money for "watershed plus" might come by converging other government rural schemes on the watersheds, and from micro-financial services. There are other project resources for innovation and macro watershed initiatives in 50 watersheds, and for participatory research, data base management, and rural planning and monitoring. Annex 5 describes capacity building to support these initiatives.

#### *Technical approach*

30. The project will work in clusters of watersheds to facilitate: better water planning; inter-village management of forests; PIA operating efficiency; cross learning, and a division of workload in PTD. It will optimise the use of natural resources, build on successful approaches, generate new technology, incorporate emerging lessons and look at a fairer distribution of benefits: from existing assets, from new assets, and from ventures between rich and poor households, between landowners and the landless, and between upland and lowland. The project will strengthen the capacities of communities in planning, funding, managing, conflict resolution and technology generation and use.

31. The project will work with all the facets of the farming system and look for synergy between its components. Project efforts with the farming system and water resource management will aim to "drought proof" the poor as far as possible, seeking to minimise the impact of drought, permit speedy recovery from one, and make the most productive use of water in good years.

32. Participatory technology development (PTD), already proven in the RFPs, will identify options to intensify and diversify the farming system and reduce vulnerability to drought. Women's groups may be one entry point for PTD.

33. Micro plans, will be site and niche specific and reflect physical, biological and economic possibilities and social needs. They will strike a balance in the use of investment funds between land and water based and other income generating activities. e.g. where many households are landless it may not make sense to allocate 80% of funds to soil and water conservation.

#### *Crops and Irrigation*

34. The project will seek to improve dryland farming practices and devise a more diversified and less risky range of them than is current. ICRISAT and CRIDA for example have many new technologies for rainwater management on red and black soils which can be tried out. Vegetables and horticulture are increasingly popular. The project will support these against market analysis.

35. A major focus of the project will be the productive, equitable and sustainable development of surface and groundwater resources building on technical experience gained in AP and by the RFPs, and the experience of other projects in village and micro-watershed water regulatory systems and collective water management. Where ground water is already fully exploited and under the control of the better-off, as in half of the villages in Anantapur and many in Mahaboobnagar, enforcing legislation may be the only way to allow the poor access to it.

36. The project will impound surface water with gabions, check dams and other structures, and improve groundwater recharge. It will pilot: roof water harvesting, collector wells, groundwater extraction in or adjacent to perennial and ephemeral water courses, reusing waste water for agricultural production and multipurpose water use. The aim will be to increase the range of options that can be used and to develop best practice in selecting options for any particular physical and social setting.

37. Rehabilitated traditional water harvesting structures and irrigation schemes give a rapid, high return on investment, but will be supported only as part of a micro-watershed plan which shows clear benefits for target social groupings and a capability to maintain the structures. This may involve the entitlements of target social groupings being improved as a pre-condition.

38. Extraction from shallow aquifers will be favoured since: development and pumping costs are low, the technology is accessible to small and marginal farmers, recharge is direct and perceptible, and water quality is generally good. New tubewells are potentially inequitable and can jeopardise the yields of existing shallow wells, and so will be restricted, as in the IGWDP.

39. The project will emphasise the conjunctive use of surface and groundwater for irrigation. Given the low rainfall, lift irrigation from water courses will probably rarely be an option. Lift irrigation from impoundments, or from canals having spare capacity, will be promoted if this makes more productive and equitable use of water than other options such as aquaculture.

40. The project will develop a 'basket' of simple, low-cost, low-risk technologies, which use water productively and efficiently. It will seek to understand the common practice when irrigation is newly introduced, of a shift to paddy rather than high value crops needing less water. It will build on low-cost drip irrigation piloted by WIRFP and recommendations from ICAR and CGIAR research institutes (CRIDA and ICRISAT in particular). Crops with a high water consumption will be discouraged.

41. Rarely are water use savings achieved without incentives for the farmer to change from his current practices: e.g. water and electricity charges, increased return to labour and inputs. Changing a cropping system or irrigation technique involves transition costs and risks which are a disincentive to change. The project will examine incentives and disincentives to farmer



decision making, current legislation on water and land rights, reasons for lack of enforcement and differences between legislation and customary law.

42. Some irrigation options for poor, marginal farmers and landless have been successfully promoted by the UNDP Social Mobilisation Project in southern AP. These include: kitchen gardens, fruit trees and fodder irrigated from village tanks or from large-diameter and collector wells located in peri-urban areas, villages or hamlets; or from waste, drainage and roof water.

43. The project will examine if institutional, social, economic and legal constraints can be resolved to enable poor groups to lift irrigate "wasteland", and acquire land near to settlements for community gardens or allotments.

44. Options for existing farmers/landowners include:

- gravity irrigation of field and tree crops from check dams and village tanks;
- gravity irrigation of paddy and other crops using Irrigation Dept water;
- lift irrigation of paddy, field and tree crops and vegetables from large-diameter wells, bore wells and collector wells;
- lift irrigation of field and tree crops from check dams; tanks, ephemeral streams and irrigation canals with additional capacity.

45. Whether to integrate large and medium irrigation schemes into the project needs to be determined. There are concerns over the equity impacts of large irrigation schemes, but many landowners in these schemes are very poor. Action to prevent salinisation will be important.

#### *Soil and water conservation*

46. Experience in AP and with the DFID Rainfed Farming Projects indicate excellent returns from investments in Soil and Water Conservation (SWC). These are: increased cultivated area, improved soil fertility and water-holding status, the start of savings schemes and SHGs; sustained employment providing immediate relief from impoverishment and the need to migrate, and gradual release from indebtedness.

47. SWC will be an important part of integrated micro-watershed plans. To improve on current practice, the project will:

- strengthen the capacity of implementing agencies and villagers to adopt a more site specific approach incorporating the best elements of indigenous and external practices especially simple, low-cost options that are technically and environmentally sound;
- strike a balance between funds spent on structures to recharge ground water for irrigation with water harvesting strategies to improve soil moisture capture and management on rainfed lands;
- aim to extend the range of options;
- ensure local arrangements for routine repair and maintenance of structures and assets;

- allocate fishing and water trading rights to the poor;
- negotiate with banks about providing loans for SWC.

### *Trees*

48. The project will work with the Forest Department and with village and watershed groups to address the wide spectrum of opportunities to improve participation by the poor and benefits to them from JFM schemes in natural forest and plantations; from woodlots and farm forests on private land and individual trees on common property, farms and around the homestead and in niches like bunds and boundaries.

49. The project will examine the need for interventions concerning access by the poor to NTFPs through policy change, user group federations and processing. Rehabilitating degraded forest and common wasteland will be important and often best done by natural regeneration through protection and the removal of grazing pressure, supplemented, once a more favourable micro environment has been established, by selective planting of useful species. PTD will refine the species most popular with farmers and which meet priority livelihood needs, including those species most important for NTFPs and for use in drought. Smokeless chulas will be promoted.

### *Livestock and Aquaculture*

50. The starting point for livestock will be to support the livelihood strategies of the landless, resource poor and migrant shepherds and strengthen their access to fodder resources. Many own patches of land which might be used for intensive fodder. Introducing legumes like *Stylosanthes hamata* into pasture is often successful and will be promoted.

51. As common grazing is brought under or cut-and-carry or rotational regimes, more intensive systems will be tried. Demand for milk, eggs, chicken and mutton, being income-elastic, should rise and strengthen local markets for these products, allowing herds/flocks expansion and diversification and shifts from small ruminants to milch cattle where access to markets and veterinary services permit. There is considerable scope for dairying through women's and self help groups and for backyard poultry.

52. Aquaculture is an option where the poor have access to small (even seasonal) water bodies. The project will promote improvements to indigenous systems and promote fishing rights for the poor in new impoundments. Watershed projects have little experience of aquaculture so there will be significant HRD and research implications.

### *Renewable Energy*

53. Project efforts to meet the energy needs for the poor are likely to be restricted to: forest, plantation and tree management to improve fuel supplies and access to them; promotion of government subsidised solar lighting and

solar pumps; promoting the lightweight efficient kerosene irrigation pumps proven on the RFPs.

#### *NLBAs*

54. Women's groups in particular are involved in a diverse range of non-land-based activities. Traditional activities include papad making, hand looms, mat weaving, stone cutting, retail trading (vegetables for example), fish, fruit and flower, vending, leaf plate making, and bamboo products. Women have been encouraged through TRYSEM and other Government and non-Government schemes to develop skills in areas such as the production of ready made garments, machine stitched leaf-plates, candle manufacture, agarbathies making, vermicilli manufacturing, camphor balls manufacture, jute products, decorative manufacture (for festivals and celebrations), and leather and cloth bag manufacture.

55. Women's groups and individuals in all project districts are already engaged in the above activities. The project will seek to support this diversity and add value to the products and strengthen market links. The project will support convergence where possible between the watershed programme and schemes such as TRYSEM which promote skill development, to make the most of the resources available and spread the benefits more widely, particularly to the poorest groups and individuals who are often left out of such schemes.

#### *Domestic Water Supply and Sanitation*

56. The project will help with more equitable and sustainable access to safe drinking water and environmental sanitation for better health, reduced drudgery for women and freeing time and energy for pursuing livelihood options. It will be undertaken in response to priorities set by communities with PIA's acting as intermediaries or brokers with a role to improve the capacity, ability and confidence of the village in accessing water, sanitation and related health services, provided in the main by line departments. Funds will be from the watershed and watershed plus budgets and from convergence.

57. Typically, domestic water requirements are only 5% of total water demand, yet draw-down of the water table through pumping for irrigation often threatens even this small fraction. Competing demands on water will be addressed via the integrated micro-watershed plans and medium-term Natural Resources Management Plan for the macro-watershed. The project will also raise awareness about industrial pollution and seek to strengthen and promote enforcement of measures where appropriate.

58. The Panchayat Raj Engineering Department's Rural Water Supply Service (RWS) are responsible for constructing and maintaining domestic water supplies, including handpumps, borewells, individual piped water supplies and comprehensive piped water supplies. The Zilla Parishads also provide small scale supplies and usually work through contractors. There is

little co-ordination with the Rural Development Department in the distribution or location of supplies. Standards of contract workmanship are often poor.

59. Most RWS funding comes from the Accelerated Rural Water Supply Programme of the Rajiv Gandhi National Drinking Water Mission. This is matched by the State. Zilla Parishads also have water supply in their budgets. Funds to operate and maintain handpumps and RWS comprehensive piped schemes are fixed at 10% of the new construction budget. Gram Panchayats are empowered to levy up to 10% of house tax for operating individual piped schemes under their control. This is seldom done, though nominal charges which go to a central fund and are inadequate to cover costs are levied for household connections.

60. PRED recognises it has neither the capacity nor the funding to maintain village water supplies across the State and wants to hand the responsibility over to the Panchayati Raj Institutions. Efforts to increase commitment on the part of communities to maintain their own supplies have not been successful.

61. Rural sanitation schemes, often implemented through NGO contractors, are the responsibility of the Panchayati Raj Engineering Department, (Roads, Buildings, Sanitation, Drainage and Minor Irrigation Division). Funds come from the following programmes: Central Rural Sanitation; State Rural Sanitation; Minimum Needs, and Development of Women and Children in Rural Areas. Construction is confined to latrines of the twin pit offset design, though often only a single pit is built. The cost of Rs2,500 to Rs3,000 is defrayed by a Rs2,000 subsidy for families below the poverty line. Only a few people benefit and as there is no accompanying hygiene promotion, many people are unaware of the risks of poor sanitation and of simple measures which could be taken to minimise these risks.

62. Overall the water supply and environmental sanitation situation is not encouraging. There is complete lack of ownership of all water supply systems with villages having no knowledge of what a scheme will comprise neither being consulted even over stand pipe positions, and a total dependence on the government to operate and maintain. This is even the case where water has been used as a watershed entry point activity and so presumably prioritised by the villagers themselves. Consequently, many schemes are in disrepair. Instead of encouraging villages to renovate and maintain their existing supplies, subsequent government interventions focus on new schemes and these too quickly fall into disrepair.

63. Where water supply and environmental sanitation are prioritised by communities, the project will aim to improve village ownership and sustainability of these services by:

- Evaluation of current supplies and the potential for renovation or improvement.
- Joint design with villagers of a number of options, ensuring that they fully understand the implication of each option in terms of level of service, costs and skill requirements for operation and maintenance.

- Choice of implementation method, addressing issues of ownership and ensuring a high quality of construction.
- Setting up of operation and maintenance systems, including agreed systems for payment and collection of water charges.
- a hygiene promotion component to help people obtain maximum potential health benefits from improved water and sanitation.

64. RWS are willing to respond to requests for water supplies under the project in the role of a contractor, but it will be difficult to achieve sustainability thereby. The scale of water supply to villages in the watershed project areas is unlikely to be sufficient to enable the project to leverage significant changes in the established procedures and design. Genuine evaluation of existing sources will require a considerable change of approach, and adoption of source options other than borewells will not fit in with government norms.

65. Project water supplies and sanitation will be best channelled through the Zilla Parishads. How best to build capacity to fulfil this role needs to be examined further, but is likely to include training of the engineers in the multi-disciplinary teams in working with communities, and in water supply and sanitation design. It may involve support to monitor quality in design and construction, and to evolve options appropriate for village management. The project will learn from WaterAid who have devised a community based approach to water supply and sanitation supported by NGOs. Operation and maintenance will be based on village management, with full costs borne by the beneficiaries. Lessons from operation and maintenance structures piloted by UNICEF will be used in project design. Implementing through the Zilla Parishads will reinforce their role under the 73rd and 74th constitutional amendments, and may improve their response outside the project area.

66. The project will identify and promote people's own initiatives to improve access to water supply and sanitation. It will limit its response to village infrastructure, probably open wells, boreholes, individual piped water supplies, low cost latrines, simple drainage for sanitation and innovations such as roof water harvesting, horizontal drilling, capping and installation of handpumps in open wells, drilling in river beds, and the productive disposal of water waters, e.g. to irrigate fruit trees.

67. More complex solutions outside the local context may not be sustainable under the Watershed Plus approach. It may be possible to look at domestic defluoridation in villages where this is a severe problem, if evaluation of current pilot studies undertaken by UNICEF and other agencies shows this to be a viable option. In Nalgonda District, where the fluoride problem is more pronounced, there is a stronger case for a separate Water and Sanitation Project to pilot solutions.

68. Project provision of these services must be in the village with a single planning process and consistent cost recovery and management. The DFID(I) Water and Environmental Sanitation Group will provide support.

*Co-ordinating Information: Data Bases, Remote Sensing, GIS*

69. The project will assist in co-ordinating and making best use of information currently collected by different government agencies but not effectively used. Participatory methods will help in augmenting this field data which will be entered into a database located at the DRDA or the Mandal.

70. GOAP is committed to integrating Remote Sensing (RS) data with this information in a Geographical Information System (GIS) to assist watershed planning and monitoring. The project will support this intention, by helping to develop a district user capability that is available to the PIAs for the planning and monitoring of their micro-watersheds. The project will also help to use the system in the convergence of other government schemes on watersheds.

71. Present use of RS/GIS is limited in scope and has structural problems. Overall, the process has been led by data availability and scientific refinement, not need or user-friendliness. The results are: inappropriate scales used for local planning; an emphasis on physical interventions sited without consultation; central 'action plans', based on RS data used deterministically by PIAs who see the 'options' as a set of targets; and exaggerated claims of efficacy and application.

72. However, GIS/RS technology has excellent potential to provide an interface between the top-down and the bottom-up. Realising this potential will require a more decentralised approach, where the GIS (and not the RS) leads, district capabilities established, a more comprehensive range of data integrated, more appropriate scales used (1:13,000 RS data is now available, albeit expensive) and effective feedback from the field. Pilots of participatory GIS development in the watershed will be an early project activity which explores inter alia the scope to integrate and monitor the effects of changes that the watershed programme brings.

73. Six staff from the State Remote Sensing Applications Centre (APSRAC) are already seconded to the DRD HQ.

**Box 1 - Geographical Information and Remote Sensing**

The project will help to define strategy, based on needs and capabilities, using people literate in, but not dominated by, RS and GIS techniques. The approach will be integrated and flexible. It will develop appropriate data structures, analytical models and presentation forms for different levels and users:

- generic overviews for the State and district that provide strategic analysis, compare different localities and PIAs, and permit inter-watershed dynamics to be assessed.
- programme planning at district and PIA level, where key information and indicators of problems, opportunities and impacts is available; help in monitoring PIA performance and in providing transparency in watershed planning and management.
- planning and management of individual watersheds at the level of detail needed to ensure correct design and siting of individual structures; the internal hydrological and wider resource dynamics of the locality; the levels of management needed for and off-take from different land areas.

*Medium term and Medium scale Planning and Promotion of Convergence and Complimentarity with other Government Schemes and Departments.*

74. Project progress will be reviewed against a Medium-term Natural Resources Management Perspective (NRMP) prepared using the data bases described above. (See box overleaf). The approach to developing and operating this will be evolved at district and mandal levels but it will move planning from a bureaucratic structure to a system which interacts with communities and which seeks opportunities for the convergence of other government programmes onto the watershed.

75. Working in watershed clusters will allow the project to optimise water development against physical opportunities, cost effectiveness and social needs. Micro-watershed communities will be linked to each other to facilitate this. Some issues, such as larger tanks and irrigation systems, need to be developed and managed at a macro-watershed or basin level. Some regulation and management is needed if wider objectives of equitable access to water resources is to be achieved. Local government may need to act on occasion as an arbitrator. The NRMP will be helpful in this. The impact of water harvesting structures on downstream water users will be examined by the project' planning and monitoring system.

**Box 2 - Medium-term Natural Resources Management Perspective (NRMP)**

The project will be process and demand driven. Planning will take place in the village and micro-watershed, mandal and district. So that these plans are consistent with wider policy imperatives, a medium-term NRMP will be developed to form a strategic reference framework. The NRMP will be based on socio-economic and GIS information. It will, for example, give early warning of potential NR problems resulting from increased abstraction of ground and surface water and of quantitative or qualitative shifts in land cover and land management, and thereby guide the focus and type of local interventions. It will help minimise duplication of effort with other GO and NGO projects and help with the convergence agenda. Regular updates will record the positive changes in the watersheds and allow accessible presentations of project progress and an assessment of the "demonstration" effects to neighbouring villages.

75. Key areas in which convergence might be pursued are: agricultural and Joint Forest Management schemes; domestic water and sanitation; micro-finance; small enterprise and industries; health; education. (Annex 5.32 - 34 refers). The project will also link with other projects (UNDP, APFP, Sathya Sai Drinking Water Projects). PIAs have a critical brokerage role in this.

*Micro-Finance and Agricultural Inputs*

76. Social mobilisation should help to build strong Watershed Committees which represent many interest groups and self help groups within the communities. As project works progress and confidence and understanding grows, the project will stimulate a demand for financial services to reduce vulnerability to debt and mortgage and to enable economic growth through more secure and higher value opportunities being seized. Clearly the project needs to gear itself to meet these demands.

77. This will require loan finance and savings services being available continuously to groups in addition to one-off "seed capital". This may be achieved by building clusters or Federations from Savings and Credit groups which then play a financial inter-mediation role. This complex work needs to be sustained and may be more successfully managed by an organisation or team which can dedicate itself exclusively to the task. The project will examine the possibilities to contract out such services to specialised micro-finance institutions operating in the region. The contract holder would provide services directly or through an NGO partner or co-operative, should be fully able to manage a loan portfolio, undertake financial planning and analysis and enforce repayment.

78. There will be increased demand too for information and farm inputs. Experience with the RFPs shows that demand for seeds is the first to arise



and there are various proven ways of getting farmer groups to produce certified seed to meet the demand and create a thriving enterprise thereby.

79. There are standard outlets for fertilisers and chemicals through the Fertiliser Co-operatives who will be quick to establish new outlets where new demand is created. The prospects for federations arising and arranging input supplies and services are also good.

80. Project interventions will be monitored as to what has worked well and why, and for the value of their benefits and their distribution across the community, Annex 8 refers.

**APRLP Annex 3 ADDENDUM 1  
ENVIRONMENTAL SCREENING SUMMARY NOTE**

1. Project title: Andhra Pradesh Rural Livelihoods Project
2. Project cost: circa £50m
3. Duration: 7 years
4. Country: India
5. Department: DFID India
6. Lead project office: DFID India HQ
7. Adviser responsible for environmental screening: M J Wilson
8. Environmental Screening Summary

(i) Brief project description

Helping poor rural communities in 2,500 micro-watersheds in five districts in the West of Andhra Pradesh to have sustainable livelihoods and reduced vulnerability to drought. Achieving this by working through the State Government's Watershed Programme and adding components to generate income and to address the particular livelihood concerns of the landless and marginalised.

(ii) Environmental issues apparent at screening

A drought-prone semi-arid area. A habitat providing important resources for tribal and vulnerable groups.  
Policy changes in the State's approaches to rural development.  
Changes in water capture, storage, extraction and use.  
Changes in farming practice.  
Introduction of fertiliser/pesticides.

(iii) Significance of environmental impacts, risks and/or benefits and likely mitigation measures required

Positive impacts on the socio-economy; on land degradation caused by deforestation, soil erosion, over-grazing and biodiversity loss; and on ground-water recharge. Possible negative impact on hydrological cycle through extraction from rivers and over-exploitation of ground water.

Significant positive impact on severely degraded land likely by getting farmers to construct and maintain soil conservation measures on cultivated land; to undertake or plan for reforestation; improve the management of common property, and establish trees on parcels of private land.

In each village the project should see soil erosion controlled on at least 50 ha of cropped land; at least 25 ha of common property should be brought under management and another 25ha of Forest Department land brought under Joint Forest Management. Overall, 40,000 ha of land might reasonably be expected to be improved, possibly twice this.

These benefits should be sustained since communities will obtain higher returns from better land use and they will have helped to design the structures and determined the management responsibility and resources needed for their maintenance. Such benefits are consistent with the DFID Sustainable Agriculture Strategy and the International Desertification convention. Negative impacts could arise from:

*Misuse of water:* On average, 5 to 10% of the cropped area in each village may be irrigated with water lifted from rivers and wide diameter wells and from surface impoundments. That may be some 4,000 ha over the scheme. Project strategy is to optimise water impoundment, extraction and use along the river basins; not to use tube wells for irrigation; to balance ground water re-charge and abstraction; to promote the communal management of water, and the use of drip and trickle systems. The area is not one of saline soils or saline ground water and the likelihood of salinisation or of water-logging is negligible.

*Increased use of fertilisers and pesticides:* Farm chemicals are hardly used at present. Inevitably this will change with more intensive cropping and more prosperity. Project strategy is to minimise the use of biocides through integrated pest management, and of fertilisers through integrated nutrient management.

*Loss of landraces:* Initially crop biodiversity is likely to increase with the introduction of new material and the natural outcrossing of this with local landraces. Ultimately, if the introduced varieties are sustainable better performers, then landraces may gradually disappear.

(iv) Environmental investigations proposed and/or any special information required.

A study of the prospects for and the likely environmental impacts of lift extraction from rivers will be undertaken for project preparation. The impact of the project on ground water will be monitored by recording levels in wells. Ground water will be monitored for any accumulation of nitrates.

(v) Other issues: None

(vi) Actions to be taken

M J Wilson to ensure project design includes strategies and environmental monitoring activities mentioned above and that Indian Bureau of Plant Genetic Resources has collection of landraces from project area.

Adviser's Signature  
Date

Lead Project Officer  
Date

## ANNEX 4: SOCIAL APPRAISAL

### Overview

1. This project will work in five drought prone districts of Andhra Pradesh to improve the livelihoods of the rural population, particularly those living at subsistence level and below the poverty line. To this end, the project will help build the capacity of Government and civil society to enable them to address the livelihood needs of the poor better. The project will seek to influence policy and programmes to ensure that benefits are equitably distributed, and support affirmative action for women and marginalised groups.

2. Old people in the project area recall days when thick forest thrived, wildlife was plentiful and agriculture gave their families rich returns. Most of the forest has gone, the population has grown and the dry rocky soil in many areas cannot sustain people's livelihoods (Annex 3). A comparison of the incidence of poverty across social classes in the State shows that poverty is highest among the Scheduled Tribes (57%), followed by Scheduled Castes (50%), Backward Castes (46%), and Other Castes (33%). The income deprivation of socially disadvantaged sections is aggravated by deprivations in terms of literacy, educational attainment and health provision. Poverty also has occupational and gender dimensions.

3. This annex outlines the society and the livelihoods in the project area, highlighting the situation of the poor and marginalised groups. The information is drawn from secondary data and from workshops and discussions with stakeholders in Hyderabad and in the five Districts. There was some primary data collection on specific issues such as land tenure, where the secondary sources are limited. A participatory poverty assessment, following a similar approach to that used during the design of the Western Orissa Rural livelihoods Project, will be carried out during project start-up as a part of watershed and village selection. This is viewed as an essential to building capacity and ownership of the project among communities and putting in place a system for participatory monitoring and evaluation of project progress.

### Project context

4. About 17 million people, one quarter of the population of Andhra Pradesh, are estimated to live below the poverty line. Within the State there are regional disparities. The head count index shows the South and North have higher incidences of poverty than the coast, but within each area levels of poverty vary widely. The rural areas are the home of 73% of the people and their life expectancy is nearly five years lower than urban dwellers. A rural literacy rate of 36% contrasts with 66% in urban locations. Social and economic exclusion is higher for certain groups of people. The SCs and STs, which constitute 22% of the population of AP, tend to be the most vulnerable people. Some 51% of SC children and 55% of ST children under four years of age are undernourished. Women remain severely disempowered and

disadvantaged. Their average literacy rate is 33% whereas for men it is 55%. In rural areas both figures are lower.

5. The Project districts, Anantapur, Kurnool, Nalgonda, Mahaboobnagar and Prakasam, are largely low rainfall and drought-prone, yet 86% of the fifteen million people who live in the area depend on agriculture and allied activities for livelihood security. Half of the population is made up of non-workers (census definition). Among the workers, Mahaboobnagar has the highest percentage of cultivators (19%), Prakasam the highest percentage of agricultural labourers (23%) and Nalgonda the highest percentage in the non-agricultural sector.

Table of Occupational distribution in the five districts:

District	Cultivators		Agricultural labourers		Non-agricultural labourers		Non-workers	
	No.	%	No.	%	No.	%	No.	%
Anantapur	490,385	15	533,512	17	447,059	14	1,712,858	54
Kurnool	416,879	15	555,594	19	405,387	14	1,474,232	52
Mahaboob-nagar	586,403	19	627,454	20	330,928	11	1,532,265	50
Prakasam	337,328	12	648,254	23	356,481	13	1,417,103	51
Nalgonda	331,821	11	664,349	22	386,667	13	1,590,187	53
<b>TOTAL</b>	<b>2,162,816</b>	<b>14.4</b>	<b>3,029,163</b>	<b>20.2</b>	<b>1,926,522</b>	<b>13</b>	<b>7,726,645</b>	<b>52</b>

Source: Andhra Pradesh Statistical Abstract (1994), 1997: 20-21

6. As far as the occupational distribution of the agricultural categories is concerned, there are very few owner-cultivators among the SCs and the STs, and the majority of them are landless agricultural labourers. The predominant SCs in the five districts are the Malas, Madigas and Adi Andhras, and the STs are the Lambadis, Yerukalas, Yanadis and Chenchus. In the five districts, roughly 64% of the cultivators are small and marginal farmers with only 25% of the operational land holding (this varies between the Districts with small and marginal farmers in Anantapur and Kurnool having only 20% of the operational landholding, while those in Prakasam have 36%).

Table of Scheduled Tribe and Scheduled Caste distribution in the five districts:

District	SCs		STs		General		Total
	Population	Percentage	Population	Percentage	Population	Percentage	Population
Anantapur	451,810	14	111,207	3	2,620,799	82	3,183,814
Kurnool	518,108	17	56,455	2	2,398,461	81	2,973,024
Mahaboob-nagar	542,380	18	227,405	7	2,307,265	75	3,077,050
Prakasam	552,640	20	98,854	4	2,107,672	76	2,759,166
Nalgonda	504,206	18	275,638	10	2,072,248	73	2,852,092
<b>TOTAL</b>	<b>2,569,144</b>	<b>17</b>	<b>769,559</b>	<b>5</b>	<b>11,506,445</b>	<b>77</b>	<b>14,845,146</b>
<b>State</b>	<b>10,594,725</b>	<b>16</b>	<b>4,196,655</b>	<b>6</b>	<b>51,716,628</b>	<b>78</b>	<b>66,508,008</b>

Source: Andhra Pradesh Statistical Abstract (1994), 1997.

7. The figures in the table above may imply SCs and STs (and other castes) are homogeneous groups. This is not so. For example, there is a history of rivalry and conflict between Malas and Madigas (and within the castes). "Backward classes and scheduled castes are unable to stand united because of factionalism, regionalism and intra-caste rivalries' (Kumar 1994: 1162). During the 1980s and 90s the Madigas have been a key constituent of the so-

called Naxalite activity in Andhra Pradesh, mainly centred on the Telegana region, although the movement has tended to be led by high-caste figures. The Naxalites have been able over several years to influence mainstream opinion among SCs and STs and other landless people (Mendelsohn and Vicziany 1998: 204).

8. The 1991 GoAP survey examined poverty, female-headed households and indebtedness in rural areas and identified the families living below the poverty line. The survey showed Prakasam, Mahaboobnagar, and Anantapur among the ten most backward districts, although there is enormous variation within all Districts. In the State, the proportion of female headed households is considerable at 10% of total households. For the APRLP Districts the percentages are as follows:

Table showing percentage of Female Headed Households

District	Percentage
Kurnool	9.8
Prakasam	9.8
Anantapur	11.3
Mahaboobnagar	9.5
Nalgonda	9.5

Source: Commissioner of Panchayati Raj, GoAP, 1994

The number of 'de facto' female-headed households is likely to be much higher because of labour-migration and the invisibility of households with male heads which are fully supported by women.

9. Many small and marginal farmers are tenants in the APRLP districts. In Nalgonda, for example, two types of tenancy exist 'formal/protected' tenancy and the other informal/oral tenancy. In formal tenancy, the tenants participate in the auction conducted by the Endowment Department and bid for annual cultivation rights, whereas in oral tenancy there is an informal agreement between the landlord and the tenant, so the tenant is not protected by law and if the tenant wishes to continue to cultivate the same land, he (usually a 'he') is obliged to pay whatever rate is fixed by the landlord.

10. There is an unequal distribution of land in the districts. Various land reform acts have been passed (The Andhra Pradesh Land Reforms [Ceilings on Agricultural Holdings] Act in 1961 and Andhra Pradesh Land Reforms [Ceilings of Agricultural Holdings] Act 1973, and an Act in 1977 prohibiting the alienation of land of poor families, being among the most recent). As noted above, there continues to be a concentration of holdings in a few hands although there has been an increase in equality following legislation. Andhra Pradesh is the only State in the country in which the Gini coefficient, the measure of land inequality, has shown a downward trend over time. But in general, the landless have not benefited enough from the Government's policy of land acquisition and land redistribution.

11. Only one to two percent of women own land in the five districts. Women land owners often give out land to share crop when they have lost their male

partner. Women rarely lease-in land as individuals. Some families without sons adopt sons-in-law to undertake agricultural work but such men may opt to migrate since agricultural work in these semi-arid areas is hard and often unrewarding.

12. Indebtedness is widespread, and as is the case throughout India, informal services remain the principal source of credit and recipient of deposits for the poor even when strong groups exist and banks are close by. Among land-based and field-labouring communities credit from traders and landowners remains an important source (with interest rates reaching 72% p.a. with collateral and in more developed areas). Anantapur was identified in the 1991 GoAP survey as among the seven districts in the State having high rates of indebtedness with 45% of rural families in debt as against the State average of 18%. Besides drought, indebtedness in Anantapur could be due to large-scale implementation of anti-poverty schemes like IRDP, DWCRA etc, and special projects like the UNDP anti-poverty project which provide loans to poor rural poor families for asset generation.

13. In more developed areas of AP, chit funds or ROSCAs (Rotating Savings and Credit Associations) are popular (CASHE document, annex 1, p.2.). These groups enable members to exchange their small savings for a lump sum for each group member. The beneficiary of each round is decided by a system of fixed rotation, lottery or auction. Southern India has been rich in auction ROSCAs for many generations.

14. One in two people in Andhra Pradesh is non-literate. There are considerable disparities between literacy levels of specific groups such as rural women, SCs and STs. Moreover, literacy levels vary greatly by district, the literacy rate in Hyderabad district is over 72%, in Mahaboobnagar it is only 30% with a female literacy rate of 19%, the lowest in the State.

Table of Literacy rates

District	SCs		STs		General		TOTAL
	Female	Male	Female	Male	Female	Male	
Anantapur	11	30	11	32	25	50	42
Kurnool	11	32	10	30	23	46	40
Mahaboob-nagar	4	19	3	13	18	38	30
Prakasam	15	36	10	24	25	48	40
Nalgonda	10	30	3	19	25	48	38
TOTAL	10.2	29.4	7.4	23.6	23.2	46	38

Source: Andhra Pradesh Statistical Abstract (1994), 1997: 25-30

15. Andhra Pradesh has one of the highest incidences of child labour among States in India. It is difficult to estimate the magnitude of child labour because of definitional problems, but a 1991 UNICEF study found 1,951,000 child labourers in Andhra Pradesh, three-quarters of them engaged in the agricultural sector. Child labour is important to many poor families because it can significantly contribute to family income and can take that income over the poverty line. Attitudes are changing and various GoAP Departments are involved in the elimination of child labour. Within the project area, a National

Child Labour Project in Markapur (which DFID-supports), operates through an NGO called ASSIST and works with children employed in slate mines.

16. The health of the population reflects its poverty. A UNDP pilot study in Kurnool found half of a village's 473 people suffering from body ache, general weakness, anaemia and cough. Most of the illnesses amongst the SC population stemmed from malnutrition and chronic anaemia. Diseases associated with poverty are on the increase, e.g. tuberculosis. There are 350,000 existing and 170,000 new TB cases and 28,000 deaths in the State annually (Project Memorandum 'Revised National Tuberculosis Control Programme, Andhra Pradesh' DFID India, January 1998). People in greater poverty are not only more susceptible to disease, but face additional barriers in accessing and completing treatment.

17. Lack of proper sanitation and contaminated water leading to gastro-intestinal and other diseases adversely affect people and livestock. A high fluoride content in the drinking water of parts of all the project districts, has led to a high incidence of dental and, in some places, skeletal fluorosis. Poor diet and the consumption of foods contaminated with fluorine add to the problem of drinking water with a fluoride content exceeding the 1.5 ppm limit.

#### **The position of women in Andhra Pradesh**

18. The Andhra Pradesh State Government declared 1997 as the Year of Gender Equality with Social Justice. The GoAP had previously taken some initiatives to ensure gender equality including, reserving 33% jobs for women in Government and implementing a Special Girl Child Protection Scheme. A Women's Sub-plan was also prepared aiming to allocate at least one third of the budget outlay of each Department for programmes and projects for women. A focused sub-plan is to ensure that physical and financial benefits flow to women within a definite plan and timeframe. The term 'Sub-Plan' was chosen to indicate that it is not a plan consisting of programmes only for women, but aims to support gender equality in all sectors and influence all financial and physical planning and targets.

19. As a part of this Plan, the State Government is committed to including all poor women in self-help groups and DWCRA (Development of Women and Children in Rural Areas programme) in the next few years (GoAP 1998). There are now over 140,000 women's self-help groups in the State, including those mobilised by DWCRA and NGOs. Many of these groups have grown out of a women's movement with its roots in the Total Literacy Campaign in Nellore and anti-arrack agitation which began in that District. This was followed by the setting up of the State Government's savings movement 'Podupu Lakshmi' in the early 1990s which led, in its first five years, to 200,000 women joining groups saving a total of Rs 140m.

20. While the quality of the women's self-help groups is variable, the concept, of mobilising communities through women's thrift and credit groups, has penetrated to the remotest areas. Government has played a dominant role in



the process, but almost half of the groups active have been promoted by NGOs and micro-finance institutions with about 5% of those linked to banks through a NABARD scheme. Data on the DWCRA programme (December 1998) and research done by CARE for the CASHE project (May 1998) show that the DWCRA programme has reached 79,000 groups in the State and, in the APRLP districts 45 of the smaller NGOs operating there have reached a further 3,350 groups. The breakdown of groups by District is:

Table of DWCRA groups and SHGs formed in the project districts up to 31/3/98

District	Number of DWCRA groups	Small NGOs groups
Anantapur	7772	86
Kurnool	2873	900
Mahaboobnagar	4665	336
Nalgonda	3185	920
Prakasam	3637	1100
Andhra Pradesh total	77340	

Source: DRD, Government of Andhra Pradesh and CARE

21. But, women's self-help groups have remained fairly autonomous savings initiatives. Efforts are being made to capitalise on the strength of women's groups so that they can become instrumental in improved implementation of watershed and various other Government programmes thereby increasing women's participation in them.

22. The quality of these groups is likely to be very mixed, depending on (i) the quality of support from the promoter; (ii) how much group-formation is driven by grant incentives and (iii) the degree of homogeneity and focus in the group. How far available groups have focused on savings and credit and how far on a wider range of roles is also in question.

23. While SHGs can clearly be critical building blocks in watershed work, the quality of existing groups and how far they represent shared interests related to natural resource needs to be carefully assessed. Few efforts have been made by GoAP or NGOs to develop interest group structures focusing on a particular natural resource, livelihood or market link. The exclusive and self-selective nature of such groups also needs to be recognised. Regular savings contributions and shared "equity" often make for a high cost of entry to existing groups. There may also be more appropriate ways of reaching men, less disposed to group activity.

24. Finally, there are also risks in providing the wrong incentives for the groups to form and continue to meet. If groups join and continue to co-operate with the project because of the promise of future returns, this is not likely to be a sustainable solution.

25. Despite so much emphasis being directed to women and children, there is still a long way to go and this is reflected in poor childcare, high morbidity and mortality rates, low literacy rates and lack of access to credit. There are many State Government schemes for poverty alleviation, employment

generation and provision of social services, but the access of the poor and marginalised to these schemes is often limited. 'Despite significant improvements over the last decade, women have received a far lower share of the benefits of the poverty alleviation programs, in comparison to their proportion in the population below the poverty line' (Thakur n.d.: 47).

### **The Watershed Programme: participatory planning under the existing guidelines**

26. The Watershed Development Guidelines of October 1994 responded to concerns that the full benefits of watershed work were not being achieved because of *different approaches and because of inadequate adaptation of technical and organisational approaches to local circumstances*. The Guidelines mention that special attention should be paid to the assetless, resource poor and women to improve their social and economic conditions

27. The GoAP uses the following physical and social criteria to select watersheds and to target interventions: priority ranking (by APSRAC) against rainfall, evapo-transpiration and sedimentation rate; SC/ST population; percentage of literates; percentage of agricultural labourers to total workers; drinking water scarcity; quality of drinking water; availability of active DWCRA/ Self Help Groups; status of ground water; availability of active NGOs/CBOs; contiguity with existing watersheds; and the livestock population.

28. Under the Guidelines, watershed projects start with general awareness raising, followed by the establishment of user groups and self-help groups which include women or are exclusively for women. Representatives of these, together with other villagers, should then go forward to form the committee, thus ensuring adequate representation in the watershed committee of different sections of the community ("The Watershed Committee may consist of 10-12 members who will be nominated by the Watershed Association from amongst the user groups [4-5], self-help groups, Gram Panchayat [2-3] and a member of the watershed development team"; *Watershed Guidelines* p. 16). Thus, a participatory approach through different common interest groups, including self-help groups, should be adopted as a tool for implementation. This is the ideal, with the watershed plan prepared according to the needs and preferences of local people who are members of the Watershed Association that elects a watershed committee. The genuine representation of marginal farmers, the landless and women in the committee should generate a process that is as concerned with water and common pool resources as with private land management.

29. The beneficiaries of the watershed development projects in AP, have belonged mostly to Backward Castes (40%), followed by SCs (19%) and STs (11%). Other caste groups account for 30%. By land categories, small farmers were the largest participants (35%), followed by the landless (29%) and large farmers (12%). The involvement of the landless has mainly been in the form of wage labour (from, *Status Report of 10 year Perspective Plan of Watershed Programme, GoAP, 1998*).

30. Different interpretations of 'participation' mean that the poor, women, scheduled castes and tribes and other marginalised groups are often overlooked in group formation, project design and implementation. Appraisals have shown a need for livelihood options for women and the poorer groups and for affirmative action in favour of women and SC/STs. Tensions exist among those involved in the programme: some from GoAP Departments continue to view watershed development as exclusively a private land-based programme leading to productivity enhancement and conservation and ignore the development of local organisations envisaged in the Guidelines.

### **The watershed programme and the participation of women**

31. Despite the rhetoric about women's participation, women's involvement in the planning and implementation of soil and water conservation and in managing newly created resources in the watershed is limited. In Andhra Pradesh and elsewhere in India, land-based watershed projects are often perceived by the agencies involved as 'men's' projects and consequently not women's concern. Men, who have title to 95% of the land, are perceived to be the natural target-group because watershed-work is often viewed as a private land-based programme. One study of the watershed programme in Anantapur and Mahaboobnagar, found many government and non-government agencies involved in the watershed programme continuing to believe that women should concentrate on domestic activities, like education, health, thrift and credit, and non-land-based income generation activities, and not considering the equity impacts of such interventions (Adolph and Turton 1998: 14).

32. Watershed Development Team members, when questioned by the Appraisal Mission on the participation of women, said that women did not have time to participate. However, the time that women devote to other activities, such as literacy classes and self-help groups, would indicate that women will give time to activities that have a desirable outcome for them in terms of their own capacity building and that of their family.

33. Census data from the five districts show women are predominantly engaged in agricultural labour (57% compared to men 43%) or as marginal workers (95% compared to men 6%). Women are recorded in the census as a minority as far as participation in occupational sectors such as livestock, forestry, fishing, orchards and allied concerns (13%). In the cultivator class women are the minority forming only 28% compared to men (72%). In general women are involved in activities that are less remunerative or escape remuneration because it is unpaid work within the household economy or for subsistence. Despite recent efforts to increase the visibility of women's productive work in census data, it is widely accepted that it remains grossly under-reported.

34. That women in India contribute significantly in a variety of agricultural and farm forestry activities, but are rarely looked upon as 'farmers', is well documented (Brydon, 1989: 69-93, provides a useful summary). Typical

gender-roles typically tie poor rural women far more than men to direct and regular use and dependence on natural resources, particularly common lands, forests and water. Women are often not recognised as members of the watershed community in their own right as farmers and resource decision-makers, but are seen as 'quota women' (there to fill the quota: 'While making nominations, it may be ensured that the Watershed Committee has adequate representation of women, members of Scheduled Castes/Scheduled Tribes/Shepherd community' *Watershed Guidelines* p. 16). Women on watershed committees, and involved in other village institutions are often not given a chance to voice their opinions. A number commentators have expressed the view that the token participation of two or three individual women in a watershed committee is not working. During appraisal, PIA members and others mentioned instances where male members on committees take all decisions (often at meetings which women can not attend because of the inconvenient time) and send the final resolution to the women members for their signature. Such women are not in a position to question the decision, or worse, if non-literate, they place their thumb-print on the document without knowing what they have agreed to:

35. The role of user and self-help groups as 'building blocks' in the process of developing broad-based participation in decision-making in the watershed programme is not always understood. The Watershed Guidelines do not specify any mechanism or institutional arrangement to sustain the involvement of the poor and women in the programme. "In the beginning of the project itself, women and resource poor people are formed into self-help groups in order to meet the target and distribute the revolving fund of Rs 50,000 among them. Thereafter, they are totally forgotten" (comment during a workshop).

36. The watershed programme alters access to Common Pool Resources (CPRs) such as grasses, fuelwood and water tanks. The development of common lands leads to the loss of access to grazing areas (which particularly affects the landless), forcing villagers to sell livestock or change to a stall fed system, which has implications for the work loads of women and children. This problem is acute where there are limited areas of CPRs and where the community is highly stratified. Without planning processes giving focused attention to the resource use patterns of the poor and women, the CPR development may curtail rather than increase their access.

37. Where effort is put into facilitating women-only fora for confidence building and overcoming cultural inhibitions, and men are motivated to support creating such spaces for women, the women often begin to share decision-making and even asset ownership. Benefits delivered through women are reflected in better health, education and the overall standard of living of the family.

### Project special focus groups and objectives

38. There are two main special focus groups for this project: firstly, the local people in each watershed, particularly the women, landless, marginal farmers, and other disadvantaged groups, who will be strengthened and supported in their efforts to improve their lives. The project will seek to ensure that these poorest benefit in a manner which can be sustained. Secondly, those who will benefit from the project's capacity building. These will include: local community groups (SHGs, WAs, VSSs etc.); project implementing agencies (NGOs, Government PIAs); Watershed Development Teams and Multidisciplinary teams; training institutes, NGO networks, Government line departments; and ultimately the overall poverty alleviation programme of the GoAP Department of Rural Development and of the Ministry of Rural Areas and Employment, Gol.

### Project implementation – Focusing on Poverty

39. The project will try to ensure that the poorest benefit. Firstly with a participatory poverty assessment in the project districts, one of the first steps in participatory monitoring and evaluation. Other poverty assessments have been done for Andhra Pradesh, but this work will focus on potential project areas. Detailed poverty profiling was not undertaken during the project design, unlike the Western Orissa Rural Livelihoods Project, largely because of the availability of secondary data, the scale of the project area and the danger of raising expectations where the project would not work directly.

40. To overcome the tendency to focus on the needs of the larger landholders and men, the project will emphasise the 'building-block' approach to community participation advocated in the Watershed guidelines. In this approach, watershed development associations and committees are formed only after smaller groups of women and men from poorer groups have been formed and mobilised. Small, relatively homogenous 'common interest groups', based on existing but potentially changeable resource use and dependence patterns, will be emphasised. Sensitising WDT and MDT members to this approach, and augmenting these teams with gender-sensitised and trained social mobilisers, is essential for this to succeed.

41. The project will resource such capacity building, train people to provide continual support, and use indicators to monitor group sustainability and progress devised in other parts of South Asia. Participatory monitoring and evaluation will inform initiatives to establish such systems in MRD.

42. To allow time for participatory group formation, in new watersheds the project will have nine to twelve months of social mobilisation before major technical inputs begin. Where effective self-help groups exist, activities may begin sooner. The experience of these groups will inform the criteria for sustainable groups.

43. Conflicts arising as groups mature, and/or 'capture' by the rich and powerful may lead to the poor and marginalised losing influence. Also, the aim of the group, which was based on a shared interest of the original members, may change to suit the interests of more powerful members and thus the group may take on a completely different function (e.g. moving from providing a savings and credit service accessible to poorer members to managing a pump-set irrigating the few land-owning members' fields). Capacity building for the poor can help them resist such challenges. The project will evolve approaches that sustain the balance of effective participation by all stakeholders even as the group dynamics evolve.

44. The participatory poverty assessment will include an analysis of the situation of children in the project area and act as the basis for developing initiatives for promoting their protection from child labour in natural resources programmes. Innovative ways for encouraging the participation of children and young people in decision-making on project-related activities will be explored and, where possible, partnerships developed with other donors and NGOs. Responsibility for carrying this forward will rest with the 'Gender and Equity specialists' in the DCBCs and the APDs 'Livelihoods' in the District PD-DPAP offices.

45. Although the commitment to participatory development is increasing among government officials, there is a need to build up their capacity, and that of other agencies, at all levels and particularly in: participatory development skills, the understanding of the social context, equity and gender issues, the local economy and market relations. Capacity building will sensitise and equip service providers with the skills and competencies required to work more coherently with others providing services. In addition, through the self-help group and user group capacity building programme, the micro-planning exercises and as a part of the 'communication strategy', the project will work with stakeholders (particularly women and the poorest) to develop an environment conducive to demanding and receiving better services from secondary stakeholders (Annex 5).

46. The project will address the livelihood problems of small and marginal land-holders and tenants and the landless. Poverty oriented work will focus on meeting the needs of the poorest through land-based activities such as agro-forestry, soil and water conservation, small scale irrigation, cheaper agricultural credit, and better access to more productive common pool resources (e.g. through JFM, group leases to revenue lands and water tanks for fisheries) and non-land based activities like retail trading, small scale processing, marketing and providing services.

47. Cheaper agricultural credit may be possible as the core funds of the self-help groups increase. This may be possible using their own savings and seed capital from savings and credit schemes. Credit through SHGs is likely to be cheaper than from informal sources. This is one avenue through which rural indebtedness may be addressed.

48. An immediate benefit of the watershed programme is the employment generated in the village which allows some of the landless and marginal farmers to work closer to home without needing to migrate elsewhere. There is scope for such labourers to demand minimum wages and, if they are organised into interest groups, have sufficient bargaining power against exploitative wage systems established over the years by village landlords. However, this is probably a long term objective, since in many places there is a surfeit of available labour, and if one group demands higher wages landlords can turn to other labourers willing to work for less. So, while wage labour will continue to be an essential source of livelihood for many, alternative livelihood options for the poorest will be explored and supported as part of the convergence and watershed-plus activities. The project will ensure payment of minimum wages for project-funded activities to increase the bargaining power of wage workers (an approach already being followed by the UNDP-funded project).

49. Watershed "plus" activities and those to support convergence of government schemes for poverty alleviation, employment generation and providing social services, will focus on the livelihood needs of women and the poor and improve the access by the poor and marginalised to these schemes.

50. Some examples of promoting convergence with poverty alleviation schemes and other government programmes already exist. In Prakasam District for example, with the support of staff of DRDA, 100 DWCRA group women have been given medical training to provide medical aid in villages where facilities are poor. They are all daughters-in-law in the village (and therefore relatively young, but unlikely to move) who have studied to class eight. These women link their villages to the government health services. A similar approach, of 'village professionals' being trained to serve as extension workers of various Government departments, has been developed in the UNDP-supported project in Kurnool, Mahaboobnagar and Anantapur, and by an NGO, the Rural Development Trust, in Anantapur.

51. UNICEF is working with the Governments of Andhra Pradesh and Karnataka to develop an approach called "convergent community action", this is exploring experience in 'accelerating convergence and the responsiveness of social services in meeting the rights of the poorest women and girls'. This is done through team-work, community-Government partnerships and improved communications skills of grassroots functionaries and communities themselves'. This initiative is being piloted in Andhra Pradesh in a few mandals identified as the most backward (mainly tribal) in Nellore, Vishwapatam, Adilabad, Chittoor and Guntur Districts. The APRLP will learn from this and adopt successful approaches (capacity building of Government functionaries and, as far as possible, encouraging the filling of vacant posts).

52. The project will build upon experiences from the UNICEF/UNDP and other initiatives on how communities could be assisted in improving access to government schemes. The PSU and/or DCBC will be charged with ensuring this is facilitated and adequately resourced. As a part of the 'exploration of innovative approaches' the project will pilot village and mandal level planning

as a possible means towards departmental co-ordination. The village will be the unit of selection, rather than the 'watershed' in order to stress the need to put people at the centre of development (and among them, the poorest).

53. Since Andhra Pradesh is a state in which DFID is seeking partnership, the APRLP will be able to work with other DFID funded projects and promote convergence among these. Methods of working together, and for project partners to work together, will be explored across projects, particularly: the CASHE project implemented by CARE; the National Child Labour Project in Markapur, (in which efforts to remove children from hazardous industry in the Markapur region have promoted a return to agriculture and a demand for more profitable methods of cultivation); the District Primary Education Programme; the Revised National TB Control Programme (this aims to improve the quality, effectiveness and accessibility of TB services in Andhra Pradesh and should contribute to the increased health and well-being of many poorer households). The Urban Services Project, working in class one towns, will be developing methods of participatory assessment capacity and working with civil society, which will provide useful read across to and from the APRLP experience. There are expected to be opportunities to collaborate with the Water and Environmental Sanitation Group of DFID in project design and the support of implementation.

#### **Project implementation – gender equality**

54. Many project strategies and activities to support the poorest, will be of benefit to disadvantaged women as well as men. Yet, social inequalities in the project districts require interventions that focus on the needs of women. An effective gender sensitive programme must shift from the current stress on numbers of women in the groups or amounts saved or separate schemes for women, towards identifying and addressing gender interests (workloads, economic interests, strategic issues) in core project activities.

55. The watershed guidelines seek to involve people from planning through monitoring of the programme and sustain livelihood opportunities by specially focusing on gender and equity issues. The project will promote the capacity building of existing SHGs so that their members represent the wider group on watershed committees and other village institutions. This will build upon an initiative already being promoted in Andhra Pradesh: in March 1999, 1,200 women's SHGs in Mahaboobnagar will be linked formally to the watershed programme. Rather than joining DWCRA, these groups will receive support from the watershed programme and be 'building blocks' in that programme. This is a conscious effort on the part of GoAP to address the criticism of the watershed programme as being a men's programme and to actively pursue one of the often under-resourced aspects of the watershed guidelines.

56. In this approach, women representatives in the watershed committee will be representatives of the larger SHGs (and will be drawn from SHGs from different social and income groups) and will have the support and ideas of those women behind them. However, in order for women, particularly women from poorer households, to want to give time to the watershed



programme they will need to see some benefit from their involvement.

57. The emphasis on livelihoods in the project's 'watershed plus' and convergence agenda (which may be of more interest to women than the watershed programme in its present form) should encourage the involvement of women in the watershed programme. Micro-planning is likely to see women articulate their livelihood strategies and allow the project to explore with them how these can be strengthened and to promote new income generating activities. Women from marginal groups must be encouraged to take part because their views on choice of crops and trees (also grasses and shrubs), on land and non-land based activities and the use of CPRs are likely to be different from women from other groups. Separate micro-planning exercises for women and marginalised groups, which are then fed into a larger group process, are likely to ensure that their views are articulated and included, but this must be facilitated by field functionaries (WDT social mobilisers/village professionals for example). There is a need, of course, to ensure that women do not become over burdened by schemes and programmes focused at them and are not persuaded to participate simply for short-term incentives, but are able to make informed choices about what is best for them and their families.

#### **Project implementation: Development of a communications strategy**

58. This project will develop an effective communications strategy that ensures primary stakeholders, principally women and the poorest (particularly those usually left out of watershed programmes, including children) are able to access information on the project and understand the project's aim and concepts and become partners in the process.

What can a communications strategy contribute to this project?

A communications strategy contributes to:

- A positive project culture that is an enabling environment created by the quality of relationships and working style of those working with the project;
- An efficient system of planning activities, implementing them and monitoring and reviewing their impact;
- A positive perception of the project from the outside world

Secondary stakeholders need clarity on the aim of the project, their own role and the roles of other secondary stakeholders and their individual responsibilities.

Primary Stakeholders need to have analysed their situation enough to have understood their legal rights, and identified inputs that would enable them to overcome their root problems. From the perspective of primary stakeholders, they need to know what the project can offer them.

Both sets of stakeholders need clear information with which they may choose to participate in the project. All benefit from the opportunity to discuss the information, analyse it and understand what it means for them. This is part of the communication process.

59. The communications strategy will encompass the sharing of information on the convergence agenda, be it information on other Government schemes or other projects and poverty alleviation initiatives. Effective and sustainable methods to share and generate information will be of benefit to other programmes, such as health, education and sanitation, which may impact upon the livelihoods of the poorest in the longer term.

60. Information may be shared in different ways, and successful approaches from other projects will be experimented with as will the use of different media so that literate and non-literate people (including children) may benefit.

**Project implementation: capacity building for supporting the special focus on gender and poverty (see Annex 5)**

61. The DCBC will be responsible for ensuring that gender awareness training is undertaken by all project staff, particularly those in DPAP, MDT, PIA/WDT and the village professionals. Gender appraisal tools, to assess the implications of different interventions in local contexts, will also be required as part of the participatory analysis and micro-planning processes in each watershed. NGO providers of such training exist in India and a growing number of parallel programmes in the region have developed useful gender resource networks, including the District Primary Education Programme.

62. Currently, multi-disciplinary teams comprise officers from agriculture, forest and engineering departments. An officer with a background in capacity building and a sound knowledge of gender and equity issues will be added.

63. The WDTs comprise specialists from agriculture, forestry, minor irrigation and social science. The project will improve their equity and gender skills and their understanding of the inter-relationship between social and gender relations and how these impinge on access to and control over natural resources. Teams will include at least one woman. The DCBC will need to support the project, and the wider watershed programme, with supportive arrangements for women staff, such as priority allocation of transport, and the adoption of anti-sexual harassment procedures. The monitoring of this will be defined in the terms of reference for the post of 'Gender and Equity Specialist' in the DCBCs.

64. The qualifications of those in 'social science' posts are quite varied (graduates in management, social work, sociology) and additional training is required to ensure that they, and other members of the team, have a clear understanding of the social issues, including the importance of the convergence agenda and the 'plus' component to ensure that the equity objectives of the project are met.

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### Annex 4 ADDENDUM: Summary stakeholder analysis

1. The 52 categories of stakeholder outlined in the table below have been derived from design workshops, field visits, feedback from stakeholders on draft versions of the analysis and secondary materials.
2. Seven categories of primary stakeholders are special focus groups with somewhat differing interests and needs, within the population below the official poverty line. How far the project and the broader watershed-plus programme can reach these groups of people and improve their livelihoods is a crucial indication of the success of the project approach. This will be monitored.
3. Another set of four primary stakeholders are the established and emerging local self-help and user groups, important building blocks in the watershed programme.
4. There is potential for conflict among these groups and between them and powerful local groups or individuals. The project will need to manage such conflicts and ensure that the interests of special focus groups do not suffer.
5. Some of these groups may have ambiguous interests in the project. Village leaders, community based organisations, local level Government staff may see opportunities to increase their own areas of influence which may run counter to the intention of the project to support the participation of the poorest and women. New women's groups, literate, aware of their rights and owners of assets may threaten the status quo. The capacity building of Government staff, non-Government PIAs and village professionals, so that they understand and support the project's participatory approach, will be essential to create an environment in which the interests of poorer groups and women are protected and furthered.
6. The approach to watershed-plus and convergence may be threatening to Government functionaries in other sections used to working in a single line department. They perceive convergence as a take over of their influence, control and autonomy. The project will seek to allay such fears and build support for the approach by sharing information on successful approaches to convergence and inform all stakeholders of the benefits of such an approach for the uplifting of people's livelihoods as well as in supporting the greater efficiency and coverage of poverty alleviation schemes.
7. Secondary stakeholders more distant from the village may have an interest in the project as a supplier of services (training, advice), as a place for research, and for political gain. Some will have conflicting interests (training institutes offering similar services, politicians competing for the same constituency) which may challenge the objectives of the project and will need careful management.
8. Secondary stakeholders, such as Government departments and other donor's projects may be interested in learning from the successes and

failures of the project. They may wish to share their own experience. A communications strategy which ensures that information is gathered, packaged and shared effectively (including drawing feedback) will be an important mechanism for deriving benefit from this interest.

9. DFID India, working in many different sectors and with some projects in the same area as APRLP, has the opportunity to work across sectors and promote convergence among project partners and other stakeholders.

Stakeholder group	Interest	How the project affects particular interest
Primary Stakeholders: individuals in special focus groups of the project (some overlap)		
1. Women from poorer households mainly involved in agricultural labour, marginal farming and small scale income generation activities	<ul style="list-style-type: none"> <li>• Improved access and control over resources such as water and biomass from common property resources</li> <li>• Improved access to income generating expenditure saving activities and food security</li> <li>• Reduced drudgery (e.g. time taken on fuel, fodder and water collection)</li> <li>• Increased visibility of women's priorities and needs</li> <li>• Active involvement in decision making and planning processes beyond the household (including in watershed related activities)</li> <li>• Improved access to information on rights and entitlements, including information on Government schemes and programmes</li> <li>• Improved access to savings and credit services</li> <li>• Improved access to health and education</li> <li>• Improved access to public life</li> <li>• Avoidance of time consuming participation in public activities</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>?</li> </ul>
2. Men from poorer households involved in agricultural labour, marginal farming and small scale income generation activities	<ul style="list-style-type: none"> <li>• Improved access and control over resources such as water and bio-mass from common property resources</li> <li>• Improved food security, off-farm activities and reduction of seasonal vulnerability</li> <li>• Improved short and long-term wage labour opportunities</li> <li>• Improved access to public life</li> <li>• More economic security and access to services</li> <li>• Retain control over household resources</li> <li>• Maintain hierarchy in own household position as household head.</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>-</li> <li>-</li> </ul>
3. Scheduled castes, mainly landless and marginal farmers	<ul style="list-style-type: none"> <li>• Improved short and long term wage labouring</li> <li>• Improved access to savings and credit facilities</li> <li>• Improved food security, off-farm activities and reduction in seasonal vulnerability</li> <li>• More access to public arenas such as watershed association and committee meetings</li> <li>• Training and skills up-gradation opportunities</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> </ul>

	<p>(linked to village-professional positions)</p> <ul style="list-style-type: none"> <li>Improved access to Government schemes through better information</li> <li>Appropriate support for marginal farming operations on high or sloped land, access to new technology and resources</li> <li>Improved dignity and reduction of oppression and the elimination of discrimination</li> <li>Improved health status, particularly for those involved in hazardous occupations (slate quarries)</li> </ul>	<p>+</p> <p>+</p> <p>?/+</p> <p>?/+</p>
4. Scheduled tribes	<p>As for SC groups above</p> <ul style="list-style-type: none"> <li>Improved access to special schemes for STs</li> <li>Increased opportunities to strengthen social identity and bargaining power with non-ST groups</li> <li>Strengthen cultural identity</li> </ul>	<p>+</p> <p>+</p> <p>?</p>
5. Other occupational groups not included in SC/ST groupings (fisherfolk etc.)	<ul style="list-style-type: none"> <li>Improved short and long term wage labouring</li> <li>Improved access to savings and credit facilities</li> <li>Improved food security, off-farm activities and reduction in seasonal vulnerability</li> <li>More access to public arenas</li> <li>Training and skills up-gradation opportunities (linked to village-professional positions)</li> <li>Improved access to Government schemes through better information and support</li> <li>Improved health status, particularly for those involved in hazardous occupations (slate quarries)</li> </ul>	<p>+</p> <p>+</p> <p>+</p> <p>+</p> <p>+</p> <p>+</p> <p>?</p>
6. Vulnerable groups such as widows, female heads of household and migrant households	<ul style="list-style-type: none"> <li>Better access to services and resources</li> <li>Better ability to withstand disasters (sickness and death in the family, vulnerability to drought, flood, cyclones etc.)</li> <li>Improved food security</li> <li>Creation of productive assets</li> <li>Improved access to Government schemes</li> <li>Acceptance and inclusion in groups and wider community activities</li> </ul>	<p>+</p> <p>?/+</p> <p>+</p> <p>+</p> <p>+</p> <p>?/+</p>
7. People (particularly the very young and the old) living in areas where their health is or may be affected by water quality (fluorosis) and other environmental hazards	<ul style="list-style-type: none"> <li>Improved access to social welfare schemes and other benefits available through Government</li> <li>Improved water quality through SWC activities and water treatment programmes</li> <li>Access to employment</li> <li>Access to information on environmental hazards and preventive measures and support in the implementation of preventive measures</li> </ul>	<p>?/+</p> <p>+</p> <p>?</p> <p>?/+</p>
Primary Stakeholders: established and emerging groups at the local level		
8. Women's self-help groups	<ul style="list-style-type: none"> <li>Effective support and sustenance for the groups ensuring sustainability beyond the life of the particular programme</li> <li>Included as interest groups in watershed and other development planning processes, women from the groups are able to participate in all decisions related to the watershed and other programmes</li> <li>Opportunities for training and exposure visits</li> <li>Recognised as strong, local groups with capacities and capabilities beyond savings and credit</li> <li>Members recognised for their individual contribution to community activities</li> </ul>	<p>+</p> <p>+</p> <p>+</p> <p>+</p> <p>+</p>
9. User groups	<ul style="list-style-type: none"> <li>Cohesive groups based on a common interest or</li> </ul>	<p>+</p>

	<ul style="list-style-type: none"> <li>objective</li> <li>Retain control over resources under existing arrangements</li> <li>Increased local control over water resources and facilities</li> <li>Perpetuate social norms relating to caste and gender practices</li> </ul>	- ?/- -
10. Men's self-help groups	<ul style="list-style-type: none"> <li>Cohesive groups based on a common objective</li> <li>Retain control over resources under existing arrangements</li> <li>Increased local control over water resources and facilities</li> <li>Perpetuate social norms relating to caste and gender practices</li> </ul>	+ - ?/- -
Other stakeholders at the local level		
11. VSS (Village Forest Committees)	<ul style="list-style-type: none"> <li>VSSs (Village forest committees) contain men and women able to contribute to the programme and represent all users of the resource</li> <li>Included as interest groups in watershed and other development planning processes</li> <li>VSS members recognised for their experience as individuals in JFM to contribute to watershed and other programme activities</li> </ul>	+ + +
12. WCs in established watersheds	<ul style="list-style-type: none"> <li>Recognised as representative of the watershed association including members from self help groups, user groups, the <i>Gram Panchayat</i> and the PIA</li> <li>Able to work effectively and provide support to new WCs/WAs in the area</li> <li>Increased local control over water resources and facilities</li> <li>Enhanced capacity to implement project activities through the group</li> </ul>	+ + ?/- +
13. Community based organisations	<ul style="list-style-type: none"> <li>Included as interest groups in watershed and other development planning processes</li> <li>To retain control over resources, under existing arrangements</li> <li>Increased local control over water resources and facilities and, where a CBO is involved with water supply issues, increased capacity to maintain existing facilities</li> <li>Perpetuate social norms relating to caste and gender practices</li> </ul>	+ - ?/- -
14. NGOs working as PIAs in watershed programmes	<ul style="list-style-type: none"> <li>Access to benefits from the project is achieved</li> <li>More effective outreach and scaling up (offered additional watersheds as PIAs)</li> <li>Access to additional funding</li> <li>Secure employment for staff</li> <li>Increased salaries and improved working conditions</li> <li>Opportunities to learn and acquire additional exposure</li> <li>Influence in area of operation grows or is maintained</li> <li>Monitoring and external scrutiny does not lead to pressures for undesired change</li> </ul>	+ + + ? ? + +/- -
15. Government departments and	<ul style="list-style-type: none"> <li>Improved Government control over watershed development resources</li> </ul>	+/-

individuals working as PIAs in watershed programmes	<ul style="list-style-type: none"> <li>• Access to benefits from the project is achieved</li> <li>• More effective outreach and scaling up (offered additional watersheds as PIAs)</li> <li>• Access to additional funding</li> <li>• Opportunities to learn and acquire additional exposure</li> <li>• Influence in area of operation grows or is maintained</li> <li>• Monitoring and external scrutiny does not lead to pressures for undesired change</li> </ul>	<ul style="list-style-type: none"> <li>+/-</li> <li>+</li> <li>+/-</li> <li>+</li> <li>+/-</li> <li>-</li> </ul>
16. Watershed Development Teams	<ul style="list-style-type: none"> <li>• Access to benefits from the project is achieved</li> <li>• Access to additional funding</li> <li>• Secure employment for staff</li> <li>• Increased salaries and improved working conditions</li> <li>• Opportunities to learn and acquire additional exposure</li> <li>• Influence in area of operation grows or is maintained</li> <li>• Monitoring and external scrutiny does not lead to pressures for undesired change</li> </ul>	<ul style="list-style-type: none"> <li>+/-</li> <li>+/-</li> <li>+/-</li> <li>?</li> <li>+</li> <li>-</li> <li>-</li> </ul>
17. Village volunteers/ professionals	<ul style="list-style-type: none"> <li>• Secure employment</li> <li>• Recognition for work and support in carrying out existing roles</li> <li>• Avoidance of additional demands</li> <li>• Opportunities to learn and acquire additional exposure</li> </ul>	<ul style="list-style-type: none"> <li>?</li> <li>+</li> <li>-</li> <li>+</li> </ul>
18. Village leaders	<ul style="list-style-type: none"> <li>• Maintain position of influence in the village</li> <li>• Obtain as much benefit from the project as possible</li> <li>• Attain positions in WA and WC with a view to political gains in the future</li> </ul>	<ul style="list-style-type: none"> <li>+/-</li> <li>-</li> <li>-</li> </ul>
19. Large farmers (often with private bore-holes or water sources)	<ul style="list-style-type: none"> <li>• Increased crop production as a result of SWC works</li> <li>• Maintain their position of dominance and control in community</li> <li>• Empowerment of other community members negated</li> <li>• To get a larger share of the project resources in terms of investment, infrastructural development and access to water resources</li> <li>• Wage labour costs do not increase as a result of the project</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>-</li> <li>-</li> <li>-</li> <li>-</li> </ul>
20. Government staff working at village level in other related sectors (Anganwadis, DWCRA workers, literacy workers, local PRED representatives etc.)	<ul style="list-style-type: none"> <li>• Retain and develop position</li> <li>• Maintain existing facilities</li> <li>• Recognised for their service and encouraged to function effectively</li> <li>• Actively involved in watershed programme through convergence agenda and their activities strengthened as a result</li> </ul>	<ul style="list-style-type: none"> <li>+/-</li> <li>+/-</li> <li>+</li> <li>+</li> </ul>
21. Village level council (Gram Panchayat)	<ul style="list-style-type: none"> <li>• Retain their power and control over village activities and assets</li> <li>• Included as an important group in development planning processes</li> <li>• Role in monitoring and external scrutiny of all developmental initiatives</li> </ul>	<ul style="list-style-type: none"> <li>+/-</li> <li>+/-</li> <li>-</li> </ul>



Secondary stakeholders at District level		
22. District collectorate	<ul style="list-style-type: none"> <li>Improved ability to address severe poverty problems of district</li> <li>Effective management of tensions between local administration wings (including DRDA) and political representatives (e.g. in the Zilla Parishad)</li> <li>Law and order maintenance, including avoidance of caste conflicts</li> <li>Good land administration</li> <li>Management of political and economic aspects of local policy implementation, e.g. NTFP etc</li> <li>Avoidance of intensive monitoring and reporting burdens</li> <li>Better local management of water resources</li> </ul>	<p>+</p> <p>+ / -</p> <p>+ / -</p> <p>+ ?</p> <p>+ / -</p> <p>-</p> <p>+</p>
23. District Rural Development Agency	<ul style="list-style-type: none"> <li>Increased spending resources</li> <li>Access to training opportunities and capacity building support</li> <li>Avoidance of competition for resources with DPAP/DPP staff</li> <li>Access to take up more diverse activities</li> <li>More interaction and collaboration with other line departments</li> </ul>	<p>+</p> <p>+</p> <p>+/-</p> <p>+</p> <p>+</p>
24. DPAP/DPP	<ul style="list-style-type: none"> <li>Increased spending resources</li> <li>Increased staffing and support</li> <li>Access to training opportunities and capacity building support (including exposure visits)</li> <li>Improved performance in utilising and targeting schemes, both watershed and non-watershed.</li> <li>Avoidance of political tensions with elected representatives</li> <li>Avoidance of intensive monitoring and reporting burdens which may threaten existing informal practices, including opportunities for corruption by some staff</li> <li>Enhanced reputation for staff and recognition for project related work.</li> </ul>	<p>+</p> <p>+</p> <p>+</p> <p>+</p> <p>+/-</p> <p>-</p> <p>+</p>
25. Line department staff at District level working in areas directly and indirectly related to watershed programme	<ul style="list-style-type: none"> <li>Access to additional resources and support</li> <li>Avoidance of increased monitoring and accountability burdens</li> <li>Enhanced ability to address non-watershed demands from local people</li> <li>Better access, through project initiated groups, to target populations in villages (better outreach / delivery mechanisms for government programmes generally)</li> </ul>	<p>+</p> <p>+ / - ?</p> <p>-</p> <p>+</p> <p>+</p>
26. Multi-Disciplinary Teams	<ul style="list-style-type: none"> <li>Role within project acknowledged</li> <li>Team adequately resourced (vehicles, support staff, offices)</li> <li>Secure employment for staff</li> <li>Increased salaries and improved working conditions</li> <li>Opportunities to learn and acquire additional exposure</li> <li>Influence in area of operation grows or is maintained</li> <li>Monitoring and external scrutiny does not lead to pressures for undesired change</li> </ul>	<p>+</p> <p>+/-</p> <p>?</p> <p>+/-</p> <p>+</p> <p>+/-</p> <p>-</p>

27. District Capacity Building Centre	<ul style="list-style-type: none"> <li>• Role within project acknowledged</li> <li>• Unit adequately resourced (vehicles, support staff, office)</li> <li>• To ensure implementation of the project-related capacity building components</li> <li>• Influence in area of operation established and maintained</li> </ul>	<p>+</p> <p>+</p> <p>+</p> <p>+/-</p>
28. Panchayati Raj Councils at District and Mandal levels	<ul style="list-style-type: none"> <li>• Increasing influence and control over government resources and developmental programmes</li> <li>• Influence over operations of government field staff and allocation processes, including opportunities for resource transfer</li> <li>• Opportunities for enhancing political capital and relations through leveraging resources towards clients and supporters</li> <li>• Enhanced legitimacy in development planning, including roles in relation to NGOs and other CBOs (including watershed committees, user groups etc)</li> <li>• Avoidance of monitoring of activities in such ways as may damage reputation or political effectiveness</li> </ul>	<p>+ / -</p> <p>+ / -</p> <p>+ / -</p> <p>+ / -</p> <p>-</p>
29. Non-Governmental Organisations working in related areas	<ul style="list-style-type: none"> <li>• Access to additional funding</li> <li>• Avoidance of increased monitoring and accountability burdens</li> <li>• Improved capacity to manage and expand initiatives</li> <li>• Improved ability to address broad livelihood needs of members and constituents</li> <li>• Access to service and training contracts under the project</li> <li>• Better access to government officials and decision making at district level</li> </ul>	<p>+</p> <p>-</p> <p>+</p> <p>+</p> <p>+/-</p> <p>+</p>
30. District training institutes	<ul style="list-style-type: none"> <li>• Involvement in developing courses supported by project</li> <li>• Access to additional funds</li> <li>• Increased recognition for the institute</li> <li>• Increased 'market share'</li> </ul>	<p>+</p> <p>+/-</p> <p>+</p> <p>+/-</p>
31. People's representatives (MLAs)	<ul style="list-style-type: none"> <li>• Influencing project in terms of budget and fund flows</li> <li>• Influencing choice of PIAs and watersheds</li> <li>• Influencing project staff appointments</li> <li>• Interested in gaining visibility, status and political mileage out of project work</li> </ul>	<p>-</p> <p>-</p> <p>-</p> <p>-/?</p>
32. District level media	<ul style="list-style-type: none"> <li>• Increasing awareness and readership through reporting on programme activities</li> </ul>	<p>+/-</p>
33. District level NGO networks	<ul style="list-style-type: none"> <li>• Increased influence in watershed programme and other GoAP schemes</li> <li>• More access to resources</li> </ul>	<p>+/-</p> <p>+/-</p>
34. Panchayati Raj Engineering Department	<ul style="list-style-type: none"> <li>• Increased ability to respond to local demands</li> <li>• Decreased burden of operations and maintenance</li> <li>• Less influence over the development of new water and sanitation facilities</li> <li>• Additional funding to engineering structures and sharing of work</li> <li>• Coverage of a larger service area</li> </ul>	<p>+</p> <p>+/-</p> <p>?</p> <p>?</p> <p>?</p>
Secondary stakeholders at higher levels		

35. Government of Andhra Pradesh	<ul style="list-style-type: none"> <li>• Effective utilisation of human and natural resources for prosperity of the State</li> <li>• Government image enhanced</li> <li>• Project funds spent on time</li> <li>• Addressing conditions in poorest areas of Andhra Pradesh</li> <li>• Mobilising additional resources for the watershed programme</li> </ul>	<p>+</p> <p>+/-</p> <p>-</p> <p>+</p> <p>+</p>
36. Department of Rural Development, Government of Andhra Pradesh	<ul style="list-style-type: none"> <li>• Continued management, as nodal agency, of key watershed programmes in State</li> <li>• Access to additional resources to increase coverage of watersheds significantly</li> <li>• Project does not put additional burdens on staff time</li> <li>• Improved coverage of villages with sustainable water supply</li> </ul>	<p>+/-</p> <p>+/-</p> <p>+/-</p> <p>+/-</p>
37. Project Support Unit	<ul style="list-style-type: none"> <li>• Key design elements such as community participation, gender, equity, cost sharing, effective NGO involvement ensured</li> <li>• Role within project acknowledged (and rewarded?)</li> </ul>	<p>+</p> <p>+/-</p>
38. Department of Forest, Government of Andhra Pradesh	<ul style="list-style-type: none"> <li>• To expand joint forest management, and access new resources for newly recognised village forest committees</li> <li>• To play a role in the watershed programme where possible</li> <li>• Management of demands by local people on timber and non-timber produce</li> <li>• Improved management of forest resources</li> <li>• Access to new resources for plantation and other core work implied by working plan requirements</li> </ul>	<p>+/-</p> <p>+/-</p> <p>+/-</p> <p>+</p> <p>+/-</p>
39. Department of Health, Government of Andhra Pradesh	<ul style="list-style-type: none"> <li>• To expand influence in sanitation and preventive health care services</li> <li>• To ensure health programmes are adequately resourced</li> </ul>	<p>+/-</p> <p>+/-</p>
40. Department of Finance and Planning, Government of Andhra Pradesh	<ul style="list-style-type: none"> <li>• Spending targets of project met.</li> </ul>	<p>-</p>
41. National Institute of Rural Development	<ul style="list-style-type: none"> <li>• Given a role as a research and training institute in the project</li> <li>• Consultancy opportunities for staff within the project</li> <li>• Enhanced reputation as a centre of excellence</li> <li>• Access to additional resources</li> </ul>	<p>+/-</p> <p>+/-</p> <p>+/-</p> <p>+/-</p>
42. Andhra Pradesh Academy for Rural Development (APARD)	<ul style="list-style-type: none"> <li>• Given a role as a training institute for the project</li> <li>• Access to funding from the project</li> </ul>	<p>+/-</p> <p>+/-</p>
43. MANAGE	<ul style="list-style-type: none"> <li>• Given a role as a training institute in the project</li> <li>• Consultancy opportunities for staff within the project</li> <li>• Access to funding from the project</li> </ul>	<p>+/-</p> <p>+/-</p> <p>+/-</p>
44. Panchayati Raj Engineering Department at State Level	<ul style="list-style-type: none"> <li>• To retain influence in water supply and sanitation activities</li> <li>• To expand remit into watershed programmes</li> <li>• Achievement of coverage targets for water supply and sanitation</li> </ul>	<p>+/-</p> <p>+/-</p> <p>+/-</p>

45. WASSAN and other apex NGOs	<ul style="list-style-type: none"> <li>• Increased influence over watershed programme and other GoAP schemes</li> <li>• Increased engagement with external donor agencies</li> <li>• More access to resources for training contracts</li> <li>• Increased influence over local NGO networks</li> </ul>	<p style="text-align: center;">+/-</p> <p style="text-align: center;">+/-</p> <p style="text-align: center;">+/-</p> <p style="text-align: center;">+/-</p>
46. Government of Andhra Pradesh State ground water directorate/ Irrigation and command level development/ Central Groundwater Board based in Hyderabad	<ul style="list-style-type: none"> <li>• Involvement in providing technical support for the programme increases profile and demand for services</li> <li>• Improved management of water resources</li> <li>• Reduction in groundwater crisis in areas of the State</li> </ul>	<p style="text-align: center;">+/-</p> <p style="text-align: center;">+</p> <p style="text-align: center;">+</p>
47. Andhra Pradesh Mahila Mutually Aided Co-operative Society (AP Women's Fund)	<ul style="list-style-type: none"> <li>• Competition for women members does not create conflict or overlapping programmes</li> <li>• Project does not take up time of staff engaged in AP women's fund</li> </ul>	<p style="text-align: center;">?</p> <p style="text-align: center;">?</p>
48. Ministry of Rural Areas and Employment GoI	<ul style="list-style-type: none"> <li>• Rationalising centrally sponsored schemes</li> <li>• Learning from impact of watershed approaches, and how to improve guidelines and implementation procedures</li> <li>• Finding solid grounds for co-operation with DFID at a more strategic level, based on proven DFID commitment and comparative advantage in the sector</li> </ul>	<p style="text-align: center;">+</p> <p style="text-align: center;">+</p> <p style="text-align: center;">+</p>
49. NABARD	<ul style="list-style-type: none"> <li>• Targets for creating groups and disbursing funds are met</li> </ul>	<p style="text-align: center;">?</p>
50. National and international NGO donors and implementers CARE (CASHE project?), MYRADA, OXFAM, WOTR	<ul style="list-style-type: none"> <li>• Project does not compete for watersheds, NGOs, other staff etc.</li> <li>• Existing staff are not drawn away by the new project</li> <li>• Recognised as a resource of knowledge and expertise by the project</li> </ul>	<p style="text-align: center;">?</p> <p style="text-align: center;">-</p> <p style="text-align: center;">+</p>
51. DFID India	<ul style="list-style-type: none"> <li>• Responding to request from GoAP for assistance with watershed programme</li> <li>• Convergence on issues between projects in partnership states (for example education, micro-finance and water and sanitation)</li> <li>• Addressing newly emerging agenda for sustainable rural livelihoods and influencing its development</li> <li>• Expanding rural development pipeline and portfolio</li> <li>• Improving credibility in watershed development and associated programmes</li> <li>• Ensuring transparent and accountable use of resources and avoiding leakage</li> <li>• Maintaining acceptable trade-off between quality of interventions and scale of operation</li> </ul>	<p style="text-align: center;">+</p> <p style="text-align: center;">+</p> <p style="text-align: center;">+</p> <p style="text-align: center;">+/-</p> <p style="text-align: center;">+</p> <p style="text-align: center;">?</p> <p style="text-align: center;">+/-</p>
52. Other bilateral and multilateral donors (World Bank/ KfW/ GTZ)	<ul style="list-style-type: none"> <li>• Area of influence maintained</li> <li>• No conflict or competition with other donors</li> </ul>	<p style="text-align: center;">+/-</p> <p style="text-align: center;">+/-</p>

## Annex 5 : Institutional Appraisal

### I. Working with Government

1. The Project is one of DFID India's second generation rural development projects, characterised by an emphasis on mainstreaming the useful lessons on poverty-focused, participatory rural development learnt in first generation projects outside government. These first generation projects, the Western and Eastern India Rainfed Farming Projects, were set mostly outside government due to the low understanding and appreciation of participatory approaches in government organisations and DFID's desire to learn about such approaches in India. Experimentation and refinement continues, but DFID is now able to demonstrate and seek to mainstream the new approaches within government.

2. During the last few years ideas about participation, empowerment of primary stakeholders, government collaboration with NGOs, and focus on the poor and women, have all become more acceptable in government. The Ministry of Rural Development (MRD), which provides large sums for a variety of rural schemes, has issued progressive guidelines for watershed implementation which reflect these new ideas. These guidelines see people's participation in government's programmes as the starting point and recognise the reverse as an achievable objective: that government and NGOs participate in people's programmes. Working with a government programme with the watershed guidelines as the framework, therefore, appears to be amply justified.

3. Widespread acceptance of the new ideas is not uniform across the states neither across all departments. But the GoAP, widely acknowledged as a leading example in this regard, has not only accepted the new ideas and approaches but is keen to experiment to refine the central guidelines and the state level policies, and to replicate any lessons learnt across the state. MRD shares this enthusiasm. It has liberally provided funds for rural development to AP and is keen to develop mechanisms for wider lesson learning and dissemination of such lessons as a part of this project as well as the MRD - DFID Co-operation Project (MDCP) currently under design. Acute poverty in the project area, coupled with a pro-poor and progressive State Government and a supportive central Ministry provide an appropriate environment to pursue DFID's partnership agenda to eliminate poverty.

### II The Government Organisations

#### IIa) Areas of Strength

4. Rural programmes in AP are managed by a well staffed State Rural Development Department managed by members of the Indian Administrative Service (IAS) and the Indian Forest Service (IFS). They are supported by specialists in Agriculture, Horticulture, and Fisheries, Remote Sensing and Information Technology. Watershed work in the districts is managed by especially appointed Project Directors who work as a part of the District Rural

Development Agencies (DRDAs). Watershed Development Teams (WDTs), headed by individuals locally known as PIAs (Project Implementation Agencies) supervise the field operations. Multi-Disciplinary Teams (MDTs) of specialists supervise the work of the WDTs. Members of MDTs and WDTs and the PIAs are drawn from many line departments and NGOs.

5. In this project DFIDI will be dealing with government organisations which have considerable experience of watershed work and other related aspects of rural development. Most senior State HQ staff have many years of field experience. This has led to the introduction of many local innovations in the watershed programme, such as the MDTs, separate PDs to look after watershed programmes, and involvement of IFS officers both as PDs in the districts and as State policy makers. Adding to their strengths is their consciousness of shortcomings in their existing programmes. They know what they want and are willing to experiment and learn.

6. Such knowledgeable and experienced senior government staff permitted the conduct of project design through a series of large workshops and small focused discussions between various stakeholders, with much less dependence on consultancy than in similar DFID projects in other states.

7. Staff at several levels in the Department of Rural Development and the Project Directors in the districts seem committed to pro-poor participatory, watershed development. They are popular in the field. One hears of villages naming public places after a senior civil servant, and of another having taken a long leave from government in the past to work for to strengthen rural development NGOs. Young IFS officers working as PDs seem to enjoy their new experience outside the conventional forestry programmes, and have emerged as new champions for participatory watershed development. On returning to their Department they will be assets to Joint Forest Management.

8. The GoAP is seen as pro-poor and a supporter of participatory rural development. It has launched several popular schemes such as Janmbhoomi which aim to improve the socio-economic condition of the rural poor through people's involvement and attempt to take administration to the doorsteps of the citizens. Some of these initiatives are based on policies developed by the parties which ruled the State in the past and are therefore seen as part of an evolving political consensus. Most rural schemes are funded by MRD which has shown strong interest in AP in general and in this project in particular. MRD support adds to the likelihood of sustainability of the APRLP initiatives and approaches.

9. All these points above, put together, provide reasonable assurance that the overall positive environment of the project is not likely to change significantly in the medium term irrespective of the outcome of the State Assembly elections due towards the end of 1999.

#### 11b Areas of Concern

10. Along with these areas of strength, the watershed programme and the government organisations implementing it suffer from limitations and

weaknesses which will be addressed in this project. On the whole, most of the strengths described above seem to be concentrated in the top echelons of state and district government. Several weaknesses and problem areas were mentioned in the district capacity assessments carried out during design of the World Bank funded "District Poverty Initiative Project". These were mostly confirmed during APRLP appraisal and are described below.

*i) Lack of Accountability*

11. Watershed funds are provided by central government (MRD), but implementing staff in the WDTs mostly belong to the state government line departments. They are not under the control of the central government neither under the control of the PD who looks after watershed development in the district. Performance in the WDT is not taken into account in their performance appraisal. Their line duties are seen as their main responsibility and watershed work as an additional burden.

*ii) Limited Staff*

12. In spite of the government's flexible placement policy which permits WDT and MDT staff to be contracted from the open market, there is insufficient overall availability of staff to implement the State's "Perspective Plan for Watershed Development". At present most districts have a shortage of ten to twenty WDTs and two to five MDTs. Women are not adequately represented in the line departments, particularly at field level.

*iii) Limited Monitoring Capacity and Scope for Lesson Learning/Policy Development*

13. DLR monitors fund utilisation and physical activities and works only. Watershed guidelines have given only limited roles to state governments, which do not include monitoring. Capacity to monitor qualitative aspects of the programme is weak both at state level and at the centre. Inadequacies in monitoring constrain lesson learning and policy evolution.

*iv) Top-Down Ways of Working*

14. Government departments are hierarchically organised and generally follow top-down target driven approaches. These habits and attitudes persist when staff from line departments work as members of MDTs and WDTs. MDTs were primarily created to support the work of WDTs, but for all practical purposes they are performing only a supervisory/audit function.

*v) Lack of Convergence*

15. Lack of convergence is evident at many levels. Many line departments and the DRDAs deal with potentially complementary areas, e.g. credit, rural marketing, rural technology, agriculture and horticulture, et lack of co-ordination between departments prevents the rural people from taking full

advantage of government programmes. Planning and budgeting by line departments are not linked with each other neither are they demand driven.

*vi) Inadequate Training Capacity and Infrastructure*

16. PDs are conscious of many training requirements of their staff but do not have enough time or training management skills. There is only limited training infrastructure available in the districts. None of the project districts has a dedicated rural training institution, they are mostly dependant on the State training institution: the Andhra Pradesh Academy of Rural Development (APARD). APARD has limited professional staff and many of its sanctioned posts lie vacant. It has a spacious building and accommodation for trainees, but in an inadequate library. Staff are mostly on secondment (deputation) from various government departments and leave the Academy after a fixed tenure. The training programmes do include a sprinkling of the new ideas like participation, equity and gender focus and sustainable rural livelihoods, these ideas do not appear to be well digested among the training staff.

17. Despite these limitations, APARD has great potential. It has grown from three to thirteen professional staff in recent years. There is a proposal to make it autonomous which will allow it to freely recruit staff on contract or permanently. The National Institute of Rural Development (NIRD), located near APARD, is better equipped with staff, professional capacities and infrastructure. NIRD and APARD freely make use of each other's staff and libraries. Both have dedicated staff for watershed work. Training for watershed development constitutes roughly 50% of all APARD training. APARD has good relations with the Department of Rural Development. Annex 2.13 lists other training institutions which can collaborate with APARD.

*vii) Inadequate Skills and Attitudes to Pursue SRL Approaches*

18. Though strong in technical skills, the MDTs and WDTs have inadequate community mobilisation, participatory and gender skills, and do not fully understand SRL approaches. Since most rural schemes are formulated by central government, state and district staff have limited planning capacities. Service-providers like line departments and banks are not seen as sufficiently receptive to the needs and demands of the poor and the disadvantaged and see their role almost always as doers and not as facilitators. The project has to try to get watershed staff to shift focus from doing implementation in the villages themselves to transferring skills to villagers for implementation and project maintenance. All these limitations point to the need for a comprehensive capacity building programme. Government staff don't have the experience of managing such a programme.

**III Non Governmental Organisations**

19. Compared to other states, Andhra Pradesh has many NGO PIAs/WDTs. Most of the project districts have strong NGOs with considerable experience of watershed development. Some of the NGOs possess training capacities and infrastructure which can be used by the project. Most of the NGOs have



run savings and credit programmes for women's groups. Go-NGO relations are good at State level, and reasonably good in most project districts.

20. However, all project districts are not uniformly lucky in this respect. Some few do not have strong NGOs or have GO-NGO relations not completely free from mutual suspicions and doubts. Many NGOs have limited staff, limited WD experience, low technical expertise and high staff turnover. There are some non-serious NGOs, others which survive on political support, and those which are not trusted by the elite due to their real or suspected political affiliations with rival political parties. The State has not yet developed a reliable system of accreditation and performance monitoring of the NGO PIAs/WDTs.

21. The existing staff strength of the GO and NGO MDTs and PIAs/WDTs is insufficient to cater to GoAP's Perspective Plan for Watershed Development.

#### **IV Panchayati Raj Institutions**

22. The 73<sup>rd</sup> Constitutional Amendment Act greatly strengthened the position and role of the Panchayati Raj Institutions (the rural local bodies) as institutions of self governance responsible to plan and manage nearly all aspects of rural development. Andhra Pradesh, traditionally seen as a leading state in terms of its support for PRIs, lost this distinction during the post amendment (the 73<sup>rd</sup> CAA) period. Although AP passed a conformity legislation to acknowledge acceptance of the principles laid down in the Amendment Act, and also conducted elections for the PRIs according to the Act, it has made slow progress with devolving powers and functions to PRIs. Most of the rural development activities continue to be managed by the district line departments and the DRDAs. Panchayats are not involved in implementing watershed programmes. PRIs with little training and orientation, no experience of managing watershed programmes and with allegations of widespread corruption are seen by many government officials and NGOs as unfit for playing a major watershed role at this stage.

#### **V Implementation of Watershed Programmes in the Field**

23. As indicated earlier, the Department of Rural Development in AP has well established mechanisms and considerable experience in watershed work. Annually it receives sanctions to implement between 800 and 1,000 watersheds of which around 450 go to the five project districts. This is being done as part of the Department's Perspective Plan for Watershed Development (1997 - 2000) which plans for 20,000 watersheds over 10 years. Approximately half of these will be implemented in the project area.

24. The AP watershed programme is recognised as a front runner, yet, there are many qualitative weaknesses. The Department has reported that it has been unable to adequately address equity and multi-dimensional poverty. "The participatory process, which is at the heart of the programme, remains largely unrealised." Further, "the community has not been effectively motivated or organised in preparing action plans". The PIAs and WDTs

generally see their role as implementers, as indeed the name Project Implementing Agency suggests, and the transfer of management and technical capacities to communities and Watershed Committees is neglected. This raises questions about sustainability after the PIAs/WDTs withdraw.

## VI Project Interventions to Address Institutional Issues

25. The institutional analysis carried out in sections II.b, III, IV and V has thrown up several areas of concern and issues. Most will be addressed by specific project interventions, described below, which are a product of group discussion and represent broad stakeholder consensus. Much work remains to be done during PY1, particularly in capacity building: data collection, analysis, and participatory identification of priority options and the specific systems, methods and tools to be employed.

### a) Capacity Building for Primary and Secondary Stakeholders (Component 2)

26. Andhra Pradesh has a well organised, experienced and committed government machinery which knows what it wants in watershed development. So the project is mainly focused on building capacities to address deficiencies of quantity and quality so that government may pursue a comprehensive and collaborative SRL agenda. The project purpose reflects this emphasis. Capacity building will engage with 2,500 villages/micro watersheds, a much wider coverage than other project components. Depending upon success, to be evaluated by the MTR, DFID may decide to support the preparation and implementation of capacity building strategies for the entire State.

27. In the first half of PY1, a capacity building strategy (CBS) will be formulated by a participatory process supported by suitable consultants. This section will describe the key objectives of the CBS and the approaches to be followed in its formulation and implementation as seen at this stage. Other important aspects of the CBS such as the areas of deficiency, priorities for coverage, the key components, and the delivery arrangements are covered in the Addendum attached to this Annex.

### i) *Objectives of the Capacity Building Strategy (CBS)*

28. The CBS will address nearly all the major problem areas mentioned in sections II.b, III, IV and V. Some aspects of convergence, monitoring capacity and lesson learning/policy development and Panchayati Raj will need more focused treatment under other interventions.

29. The ultimate objective of the CBS is to ensure community-mediated sustainable rural livelihoods, particularly for the poor. The ground realities dictate that the community empowerment, at least in the initial stages, critically depends upon government. Hence the immediate objectives are for government staff to:

- understand and appreciate the SRL approaches and priorities;
- understand and accept a new facilitation role in relation to the communities, particularly the poor;
- identify their individual competencies, technical, social and behavioural, and their institutional strengths and weaknesses, in relation to their new roles;
- acquire the required competencies, and effect the necessary structural and systemic changes; and
- agree performance indicators for new roles and objectives and meet them.

30. Two specific objective are to meet the staff requirements of the GoAP perspective plan for watershed development, and to build professional capacities to plan and manage capacity building programmes in permanent government organisations dealing with rural development.

#### ii) *Principles and Approaches*

31. CBS formulation and implementation will be based on the following main principles and approaches:

- recognition that the primary and secondary stakeholders, whose capacities have to be built in some respects, possess many relevant strengths and capacities which must be taken into account and opportunities provided to realise them;
- involving concerned stakeholders to the maximum extent possible, to take advantage of their existing knowledge and experience, and to develop ownership of the changes they need to undergo;
- consultants and non permanent institutions (such as the PSU) engaged in planning and management of CBS will transfer these professional capacities to government according an agreed time table;
- CBS success indicators will be developed as part of the strategy, and the organisations and individuals undergoing capacity building will be selected for different training stages as part of a demand driven process, and only on satisfactorily meeting the objectives of a previous stage;
- CBS success indicators will take into account the need for the secondary stakeholders to transfer the necessary skills to the community according to agreed time table;
- mainstreaming equity and gender issues in all training programmes.

#### b) Pilot Projects to Test Convergence (Project Component 3)

32. Initial discussions on convergence between the DFIDI team and GoAP senior staff revealed an interesting difference on what was meant by this term. DFID saw convergence primarily as integration of rural development schemes and co-ordination between implementing agencies at various levels. In particular, DFID sought support for the DPAP recommendation to consolidate micro-plans prepared by Mandal communities (the Mandal is an administrative unit looking after a group of villages), and to integrate government agencies at the Mandal level under the supervision of the Mandal

Panchayat which would approve the plans and support their implementation. The idea is to ensure enhanced benefits to villagers by comprehensively meeting all the inter-connected development needs of the community.

33. The GoAP representatives however, saw convergence essentially as mobilisation and empowerment enabling the community to itself take care of most of its needs through self help, collective bargaining and pressure on the service providers. Based on their field experience they believed that community mobilisation and empowerment minimises official corruption and the possibility of the better-off villagers capturing programme benefits.

34. Several rounds of discussion on the subject led to shared recognition of both the aspects of convergence. Community empowerment is at the core of the approaches being introduced in the project villages under project component 1. GoAP agreed to develop and test pilot projects on the theme of convergence of community micro-plans and the government funding and implementation support at the Mandal level. There will be a workshop in the second quarter of PY1 on this subject. The participants will include UNICEF which has considerable experience of pursuing a convergence agenda. The workshop will identify the areas of experimentation, the process of designing, piloting and monitoring progress on experimental projects in project districts.

c) Project Links with the PRIs (Project Components 1, 2 & 3)

35. As mentioned earlier in this Annex the devolution of powers and resources to Panchayats to plan and manage rural development has been very slow in AP, and Panchayats have had negligible involvement in watershed activities. Although the GoAP staff recognise the need to involve Panchayats they feel discouraged by the lack of Panchayat capacities and experience of such work, and see many as corrupt. The project will build the capacities of the elected members of Panchayats, develop improved systems to ensure accountability and transparency, and involve them in watershed programmes under APRLP. The main objective of this component is to test the viability of the Panchayat involvement in watershed development. This will increase government confidence in the devolution of powers to Panchayats, and show the way to do it. The key activities in relation to Panchayats to be undertaken under the project are briefly described below :

i) *Capacity Building*

36. This will aim to increase Panchayat members' familiarity with their powers and responsibilities in relation to rural development as envisaged under the Panchayat laws, the planning and management of watershed and other related activities, and methods of monitoring. The capacity building programme for panchayats will also include developmental orientations, sensitivity to equity and gender issues.

ii) *Accountability and Transparency*

37. The CBS will encourage new systems to ensure transparency and accountability of implementing agencies. These, and empowerment of the community will guard against Panchayat corruption in their involvement with watershed programmes. Some states and several organisations in different parts of India have already devised strategies for Panchayat capacity building and systems to increase accountability and transparency. Representatives from such states and organisations will be invited to a workshop devoted to strengthening the role of Panchayats in watershed development.

iii) *Involvement of Panchayats in Watershed Development*

38. In Component 1 villages, elected members of Panchayats at the district and Mandal level will play a governance role, and not have any direct role in implementation, sanctioning of project expenditure, and selection of PIAs. GoAP has recently constituted Governing Bodies for the Project Directors looking after the watershed programmes. These bodies include the elected head of the Zila Parishad. The government may consider including some of the elected heads of Mandal level Panchayats, preferably those who are involved in similar activities in Mandal committees. These governing bodies will monitor, supervise and support watershed work in their districts including that under this project.

39. A similar role will be played by new committees to be constituted at the Mandal level under the elected head of Mandal level Panchayats. These committees will have representation of government and non-government PIAs, elected heads of village level Panchayats from the project villages and heads of WAs. Besides monitoring and supervising project activities and reporting to the district Governing Bodies referred to above, these committees will consider and resolve inter-village issues such as cattle movement, management of watersheds and CPRs spread over more than one village.

40. The Panchayat Workshop will be held in the second quarter of PY1 and facilitated by experts. It will work out the details of the functioning of these two supervisory bodies and will prepare a strategy for the medium term involvement of Panchayats in rural development. It will identify issues emerging from this strategy which need experimentation and testing in some of the Component 3 villages. The workshop will also determine the scale of these activities and any others which may be proposed. The MTR will examine progress with the Panchayat Strategy and identify areas needing testing or improvement and those which are ready for wide replication.

d) *Lesson Learning, Replication and Policy Support (Project Component 4)*

41. As mentioned earlier, the State Department of Rural Development and the central Ministry of Rural Areas and Employment are keen to develop mechanisms in this project through which the lessons learnt about SRL approaches could feed into State policy and the GoI watershed guidelines.

The Department of Rural Development will take charge of this work, with professional support from the PSU.

42. The PSU will supervise the development and establishment of monitoring systems and monitoring infrastructure from the field to the state level. This monitoring system will help in identifying the key lessons emerging from the activities in Component 1 and Component 3 villages.

43. The PSU will liaise with the MDCP in developing or supporting mechanisms for lesson learning from other similar projects and non-project experiences outside the project districts.

44. It will also identify areas of policy with significant bearing on the life of rural poor which need research, preferably action research. It will commission such demand led research, draw up lessons in consultation with government, convert lessons into actionable policy and forward draft instruments to the Commissioner RD for obtaining approval of the State government.

45. Arrangements to implement this component of the project will be initiated and completed during the second half of PY 1.

## Annex 5 ADDENDUM Capacity Building Strategy

### Key Steps

1. The Capacity Building Strategy, following the objectives and principles outlined in Annex 5, will:

- incorporate lessons from other projects (including the UNDP project and the design of the DPIIP) and the experience of GoAP in the watershed programme and other schemes;
- undertake a detailed, participatory, capacity assessment of different stakeholders;
- identify methods and tools, as required for each stakeholder group, to be employed in meeting the capacity building needs;
- develop the Capacity Building Action Plan which will detail the range and kinds of inputs required for state, district, mandal and communities, the phasing, allocation of resources and responsibilities, tasks and indicators of progress monitoring.

### Important Issues

2. Appraisal discussions with GoAP, NGOs and communities raised the following indicative list of issues which the CBS should cover:

- Beneficiaries of the capacity building programmes will be from both primary and secondary stakeholders at different levels such as the self-help groups/user groups, village professionals, WDAs, WCs, PIAs, NGOs, CBOs, relevant PRIs, MDTs, APDs in the DPAP and State Government officials. Field functionaries from other line departments may also be involved. Members of the DCBCs and PSU will also need initial and 'on - the-job' training. The CBS will prioritise the beneficiaries and define the CB programme for each category of beneficiary in the light of the institutional change objectives. CB programmes will include:
  - \* workshops, exposure visits and training courses to develop and upgrade technical and social skills, and equity and gender related sensitivities among secondary stakeholders;
  - \* community and Mandal training programmes which focus on income generation, business skills, micro planning and a range of management and organisational skills;
  - \* community mobilization and awareness building, and technical, managerial and leadership skills for SHGs, UGs and other CBOs;
  - \* support to training resources in and outside government to effectively contribute to CBS objectives.
- The development of quality PIAs to implement more watersheds in each districts. PIAs, drawn from NGOs, CBOs and Government. These PIAs

will be identified against set criteria and once qualified, the project will provide them with range of support and training programmes.

- The development of village professionals, trained local people, who may provide support to village groups and individuals in key sectors such as agriculture, animal husbandry, primary health, and micro-enterprise development. Some of these VPs may act as social mobilisers, supporting group formation.
- Developing and implementing a communication strategy to include sharing of learning and good practices, better communication methods and quality documentation to capture the processes in the field using project briefs in a range of media, accessible to literate and non-literate and developing village information centres.

3. Other parts of the capacity building programme, namely *developing a grassroot participatory monitoring system and action research and studies* have been dealt in separate annexes.

### Who Will Deliver and How

#### At State Level

4. APARD will give umbrella support to APRLP capacity building and will work closely with the PSU and DCBC/APD (Training) in the districts. APARD will provide most of the capacity building support envisaged in the project and, with PSU help, will contract other state, national and international resources to help develop and implement the CBS.

5. APARD will set up a committee of key stakeholders to supervise development and implementation of the CBS. Representation will include the DRD, the PSU, APDs (Training), DCBC, Co-ordinators and other government and non-government institutions with significant involvement in the capacity building programme. This committee will recommend the process and arrangements to develop the CBS and the action plans for the project districts. The committee will consider the CBS and district action plans and recommend them to SWPIRC for approval. APARD will appoint a HRD Specialist who will take a lead in all the State activities to develop and implement the CBS and the district action plans.

#### In the District

6. The management committees of the District Capacity Building Centres (DCBCs), will be responsible to develop and supervise the implementation of the CBS and the district action plan. This committee will have representation of the key stakeholders including APARD, PD DPAP, the APD (Training), government and non-government institutions with significant involvement in the capacity building programme, relevant district level line departments, and the Zila Parishad.

7. Details of the composition and functions of this committee and its relations with other key stakeholders will be worked out in workshops in the first



quarter of PY1. The workshops will also discuss DCBC's organisational structure, role and infrastructural needs. DCBCs will work under the overall supervision of the APARD, and like APARD will take the help of the available training resources in the district in meeting their capacity building objectives.

8. The managing committee of the DCBC will recommend processes and arrangements to develop and implement the CBS and the district capacity building action plans. PD DPAP and the APD (Training) will have key roles in the implementation of the CBS and the action plans.

9. DCBC will work closely with PD-DPAP to identify CBOs and other potential groups who can be developed as PIAs. In association with PD-DPAP and DWAC, it will develop a plan to support these groups. It will also bring in experienced NGOs to help implement such plans.

#### At the Watershed

10. The role of the MDTs and the PIAs/WDTs in project capacity building was not fully discussed in the design workshops. However, clearly, their strong local knowledge will be used in assessing the capacities of the village and Mandal institutions, in identifying local resources and in implementing the action plans in their areas of operation.

11. Capacity building will focus on peoples' institutions. DCBC will work closely with social mobilisers and help PIAs to form strong SHGs and seek to federate them at cluster/mandal/district level. WDTs will be trained in group formation and federations and will network with other projects using similar approaches

## ANNEX 6: ECONOMIC AND FINANCIAL APPRAISAL

### *Introduction*

1. This annex considers the following issues:

- case for livelihood improvement
- scope of project activities
- analysis of expected project benefits
- distributional aspects of project benefits
- financial appraisal

### *Case for Livelihood Improvement*

2. Andhra Pradesh's per-capita income of Rs 7,200 is below the national average. It has a Human Development Index (HDI) of 0.400, slightly lower than the national figure of 0.423. For most social indicators, the State ranks about midway among India's 16 major states. AP's economy grew at about 4.6% a year over the past fifteen years - somewhat lower than the national average of 5.2%, and considerably lower than of India's six fastest growing states (5.7%). In large measure the state's lower growth rate can be attributed to the low growth rate in agriculture at only 1.8 % per annum during 1989-94. The share of industry in GSDP is about one-fifth. This has not changed significantly in the past fifteen years.

3. Within the State, the five project districts have a population of 15 million, are among the poorest, and have a higher percentage of below poverty line families than the state average. The project districts contain about 35% of the entire State's below poverty line families (although they have only 25% of the total state population). Among the districts, Prakasam has the lowest incidence of poverty at 36% of population below poverty line, while Mahbubnagar has the highest incidence at 66%. About half the households below poverty line (i.e. Rs 11,000 per household per annum at 1991-92 prices) earn incomes less than 50% below this figure.

4. Between 60 to 75% of the workforce is dependent on agriculture in the five districts. The proportion of cultivators ranges between 22 and 38 percent, while agricultural labourers (landless) constitute between 32 and 44 percent of the workforce. Thus, on average about a third of the workforce falls into each of the following categories: cultivators, landless agricultural labourers, and non-agricultural workforce. Further socio-economic information on project districts is provided in Annex 4.

5. These districts also have: the lowest proportion of area under irrigation in the State (parts of Nalgonda have canal irrigation, but this will not be in the project area); a low proportion of double cropped area; low agricultural yields; and the highest proportion of degraded wastelands in the State.

6. Based on analysis and consultations carried out during design, causes of poverty in the area could be a mix of the following: poor agricultural growth rate; predominantly rainfed nature of agriculture; high indebtedness among the poor; limited non-agricultural employment opportunities; and, less than optimal impact of past government interventions, either due to poor quality implementation, or due to lack of convergence with other schemes. The relative importance of these factors is difficult to rank and quantify. On the positive side, appraisal showed some opportunities for achieving more rapid poverty reduction and faster economic growth. These include: high political commitment to undertake some of the more difficult reforms; a clearly articulated Action Plan by GoAP for the development of the rainfed regions; and an institutional system which shows greater potential (in comparison to many other states) for responding to emerging challenges.

### ***Scope of Project Activities***

7. Situation analysis gave rise to the following issues which have had a bearing on the scope of activities being undertaken by the project:

- agriculture is largely subsistence and of low yield; so double cropping, "drought proofing", and crop diversification and improvement are important;
- readily available opportunities for non-land employment are limited, but pursuing them more vigorously is important for meeting the broader livelihood needs of the poor;
- as the State goes about rapidly scaling-up its watershed programme, it needs to ensure that quality aspects are maintained, and the poor get ever greater benefits;
- given the large government outlays for rural development in AP there are opportunities for closer convergence with other government programmes, and these need to be tapped for maximum livelihood benefits for the poor.

8. Among project alternatives considered and rejected during design process was the option of concentrating DFID resources in an identified number of watersheds in the five districts. Whilst this approach may have helped meet the livelihood objectives in these watersheds, it was not considered a good option for the following reasons: GoAP has requested DFID assistance in strengthening its own programme; the State has a comparatively strong watershed programme and it is the quality aspects that need to be guaranteed during the scaling-up; and, the effort could be to increase impact of government's own programme by providing limited topping-up funds from DFID for capacity building. Thus the approach adopted by the project, makes it closer to programme support, than other project's in DFID's rural development portfolio.

9. The project will directly reach a population of 2.5 million in five districts, which is about 17% of their combined population (Annex 10 details project phasing). The project's main target group will be the landless, small and marginal farmer households, who comprise about 60-70 percent of the population. The project would directly cover 2500 watersheds comprising an area of 1.25 million ha (each watershed assumed to be of 500 ha). Of these watersheds, 500 will get the full complement of DFID support, while the remaining 2,000 will get topping-up support over and above MRD/GoAP allocations.

10. The seven year project has a total budget of £ 40 million in constant prices, which amounts to £ 49 million in cash prices. The broad break-up of the budget is provided in Table 6.1, and a detailed budget is at Annex 7. About 35% of the budget would be spent in 500 watersheds on activities determined by communities through the micro-planning process. Another 17.5% of the budget has been earmarked for broader livelihood support (including for income generation activities, self help group funds or other priorities which cannot be met through convergence) in 2,500 watersheds. The money would be spent partly on state and district activities and partly devolved to MDT or PIA level for spending on specific from specific watersheds. Further details are provided in the main document.

Table 6.1: Break-up of Project Budget (in constant prices)

Item	Rs (million)	£ (million)	% of Total
1. Watershed support in 500 watershed (as per GI norms)		14	35%
2. Livelihood support in 2500 watersheds (10% additional support to Gol norms)		7	17.5%
3. Capacity building support in 2500 watersheds (10% additional support to Gol norms)		7	17.5%
4. Support for innovative work		6	15%
5. Consultancies, M&E, salary, overheads and others		6	15%
6. TOTAL		40	

11. About 17.5% of project funds will be spent on capacity building of primary and secondary stakeholders. This level of spend on capacity building is to provide topping-up funds over DLR/GoAP allocations in 2,500 watersheds. This will address the perceived shortage in current norms for various capacity building interventions. The type of activities to be taken up under this component will be developed in Year 1 as part of preparing the Capacity

Building Strategy of the project (See Annex 5). The Strategy will be developed keeping in view the following principles: all activities will be demand driven; subsequent training will be provided only after positive results of the previous training is visible; necessary changes in the larger system and its structures and procedures are beginning to take place so that trained personnel can effectively add value; and unit costs of training and other activities will be affordable to government.

12. Another 15% of the project budget has been set aside for carrying out innovative work, so that future revisions to policies and guidelines will benefit from action research. The type of innovations which are expected to be undertaken in the project include: macro watershed treatment; different institutional arrangements at grassroots level for implementing interventions; development of agricultural production packages; and promoting convergence among government schemes through village / *mandal* / district planning. In Year 1 a detailed implementation plan for this will be agreed by DRD and PSU. About 15% of the project budget will be spent on M&E, consultancies, salaries, overheads and other costs. This figure is significantly lower than the allocations made in many other donor projects, and is a reflection of GOAP and DFID commitment to work within existing institutions.

13. A criticism of "enclave projects", i.e. those working outside government systems, structures and cost norms has been their doubtful replicability. The unit cost norms in this project, although somewhat higher than current Gov norms, are very much in tune with recommendations of various bodies for their upward revision. There is a distinct likelihood of these being revised upwards very soon. The project's watershed costs are very much in line with current unit cost norms of Rs 4,000/ha. The project is adding an additional 20% to support activities which are traditionally not seen as part of watershed activities, such as for capacity building and livelihood support.

### ***Analysis of Project Benefits***

14. Direct benefits from the project are expected to be five-fold:

- production impact - main effects on production of treating land under watershed programmes is to increase field soil moisture. This in turn allows for: higher yields, shift in cropping from subsistence to cash crops; and winter crops being grown in a wider area. There would also be benefits from increased production in village common lands, and from income generation activities supported by the project. This should help increase the total output and its value from land and non-land assets.
- employment impact: short-term employment would be available from various physical activities in project watersheds. Long-term employment benefits would be available due to increased agricultural activities in project villages because of watershed interventions; and also from income generation programmes being supported by the project.

- poverty alleviation impact: this should be the cumulative impact of project interventions through the following interventions: increased earnings from land and non-land based activities for the poor; reduced levels of debt as a result of improved incomes and from savings and credit programmes; improved livelihood and food security; and, accent laid on ensuring more equitable distribution of benefits for the poorest.
- capacity building impact: arising from improved effectiveness and poverty focus of government schemes. This could arise from the following factors: better skilled personnel; better skill mix in institutions; enhanced organisational capacity; and increased ability among primary stakeholders to articulate their needs and access various development programmes.
- policy and system impact: this should arise from the project's efforts to work in a 'programme mode', and from the proposed work on improving planning systems (micro planning and block planning), and policy formulation.

15. Since the activities to be undertaken in the project will be demand-driven, estimates of production impact considered here are notional. But while planning for detailed interventions, emphasis will be placed on ensuring their cost-effectiveness and adhering to value for money principles. During project appraisal a directed search of available literature was carried out to access findings of watershed evaluation programmes (spanning government, NGO and donor funded efforts). Robust comparison has proved difficult as different evaluations do not follow a standard format. Some data is also available from recent GoAP evaluation of its watershed programmes.

16. Assumptions used in this analysis are based on findings of watershed evaluation carried out by the World Bank; GoAP; and Phase 1 of Western India Rainfed Farming Project. The assumptions are mid way in the range of benefits seen from these evaluation studies, indicating their conservative nature. Incremental production benefits from agriculture have been assumed to be about Rs 2,200 / ha for paddy, and about Rs 1,000 / ha for pulses. Yield increases are assumed to range between 25 per cent and 60 per cent for different crops. It is assumed that each watershed of 500 ha has about 250 ha of gross cropped area.

17. On the basis of the above assumptions, and including only the most direct benefits delivers a project with a financial IRR of 17 percent. Table 6.2 shows the detailed analysis. In addition, available documents on income generation programmes in the region show IRR of between 20 and 35 percent. The type of activities included in these analysis are fisheries in tanks

**Table 6.2: Financial Analysis of Watershed Programme For One Typical Watershed**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	
Benefits (net incremental returns)																					
Rice			66000	110000	176000	220000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000
Pulses			30000	50000	80000	100000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
CPR			40,000	50,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
<b>Total Benefits</b>	0	0	136000	210000	316000	380000	380000	380000	380000	380000	380000	380000	380000	380000	380000	380000	380000	380000	380000	380000	380000
Costs (Rs)																					
<b>Total Costs</b>	100,000	600,000	800,000	500,000																	
Net Financial Benefits	-100,000	-600,000	-664,000	-290,000	316,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000
Discount Rate (12%)	1.25	1.40	1.57	1.76	1.97	2.21	2.48	2.77	3.11	3.48	3.90	4.36	4.89	5.47	6.13	6.87	7.69	8.61	9.65	10.80	
PV of Net Benefits	-79719	-427068	-421984	-164554	160095	171893	153476	137032	122350	109241	97537	87086	77756	69425	61986	55345	49415	44121	39393	35173	
NPV	377997																				

IRR 17%

and ponds, livestock and NTFP processing.

18. Conversion of financial prices to economic values was achieved in most cases by applying a Standard Conversion Factor (SCF) of 0.90 to non-tradables. This is typical of the figure used for multilateral projects in India. For tradables like purchased agricultural inputs and several crop outputs, the prices set out in Table 6.3 were used (these are based on a recent World Bank project appraisal in Andhra Pradesh).

**Table 6.3: Summary of Financial and Economic Prices Used in Project Analysis**

	Financial Prices Used	World Bank Economic Prices	Prices Used in Economic Analysis	
<b>Outputs Rs/Kg</b>				
Paddy	4.00	6.74	6.07	1
Maize	4.00	6.54	6.54	
Chick Pea	12.00	8.42	8.42	
Wheat	4.00	--	6.00	2
Paddy By Product	0.50	0.27	0.27	
Maize By Product	0.50	0.07	0.07	
Chick Pea By Product	3.00	--	0.07	3
Wheat By Product	2.00	--	3.00	4
<b>Inputs (Rs/Kg)</b>				
Paddy	5.00	11.50	11.50	
Maize	4.00	16.50-33.00	16.50	
Fertiliser - Urea	5.00	7.90	7.90	
FYM	0.50	0.13	0.13	
Labour	21.00	18.00-22.05	18.90	5
Bullock; Hired or Owned	23	20.7	20.7	6

**Notes:**

1. Paddy prices used is 0.9 of economic price to reflect reduced regional quality.
2. Wheat assumed to be 50% higher than financial price in accordance with differences in rice and maize.
3. No differential assumed.
4. 50% of financial price in keeping with Note 1.
5. Labour taken as 90% of financial rate.
6. Non tradable outputs, inputs, labour and draft power have been adjusted by SCF of 0.90.

19. Results of economic analysis over a 20 year period indicates a rate of return (ERR) of 19 per cent for the entire project. This represents reasonably good returns for a situation where capacity building is a primary focus.

20. In addition to the quantified benefits described above, the project will have other benefits which are less amenable to quantification. At one level they would accrue from direct ground-level interventions, in the form of improved self-esteem and confidence levels among the marginalised and their having



more control over their migration patterns. At another level such benefits would accrue from improved effectiveness of programmes in project districts as a consequence of the capacity building work of the project. Such benefits should be sustained in the longer term and in turn provide better value for money from public investments in rural development programmes in AP. Benefits from work on policy and the enabling environment should accrue to the state in the long term. These should be in the form of more poverty focused policies and programme designs, which would improve the prospects of increased donor and other funds flowing into the rural development sector in AP (and help meet a goal level of OVI of donors moving from project to programme aid).

21. Sensitivity analysis of project benefits involved calculation of switching values of the project. The analysis indicates that the benefits would need to be reduced by about 25 per cent for the ERR to fall below the acceptable 12 per cent.

22. The above analysis is built on certain sets of assumptions, which in turn have been derived from findings of some evaluation studies. Clearly the continued validity of these assumptions will need to be monitored during project implementation, and a Project Monitoring and Impact Assessment System (PMIAS) will be available for this purpose (please see Annex 8 for details). Any shortfall in achievement will need to be considered from the cost-effectiveness perspective, and changes effected to ensure continued fulfilment of this objective.

### ***Distribution of Benefits***

23. Experience from watershed programmes has shown that ensuring equitable distribution of benefits is particularly difficult. In the project area the landless (both men and women) are particularly at risk of getting lower benefits. They will get short-term employment benefits from construction of physical works, and in the longer-term with increased agricultural activities there might be more opportunities for local employment. Evaluation of watershed programmes have shown that in a typical watershed about 10,000 person days of wage employment (from physical works) would be generated every year for about 3 years. This is sufficient to derive significant wage employment for 50 people through the year. For the landless this should help with immediate relief in clearing some of their debts; and in the longer-term new local employment opportunities can help them look at options for migration. Among the other risk mitigation strategies proposed are availability of the livelihood fund, which should provide opportunities for non-land based employment for the landless.

24. An examination of benefit stream in the attached benefit-cost analysis indicates that while some of the benefit streams directly accrue to the poorest, some others are more difficult. The more difficult ones could still benefit the poor with some added provisos like: assured benefits from common pool resources (provided the entitlements agreed by the community benefit the poor); and, from drinking water (provide caste and class issues do not prove

insurmountable). Additionally, a share of benefits from increased agricultural production should accrue to small and marginal farmers.

25. The equity aspect of the project impact would need to be monitored against social and economic criteria. Some of these include: while taking up watershed interventions, is priority given to employing the landless in the village; are the landless and marginal farmers given increased access to biomass from common lands; do the vulnerable have access to credit for consumption and production needs; has adequate provision been made for upgrading the skills of the poorest to help them diversify and extend their production base; and are the vulnerable groups gaining importance in watershed and other village institutions.

### ***Financial Appraisal***

26. Public investment in rural development in India has increased rapidly in the last decade. One impetus for this has been the political imperative to give a "human face" to the economic liberalisation programme. The bulk of public spending on Plan support to rural development is made by the central ministry - MRD. Other central ministries involved with rural development include the Ministry of Agriculture. Since this project is designed around MRD guidelines it will be important to examine trends in MRD's budgetary allocations. These have increased from Rs 25,000 million to about Rs 94,000 million in a matter of six years (1992-98). This money is allocated to state and districts on the basis of a set of criteria, which include some poverty indicators. State governments are required to make a limited contribution to some of these schemes (some are 100 percent centrally funded).

27. In 1998-99 GoAP has allocated Rs 19,466 million (Plan and Non Plan) for the Department of Panchayati Raj and Rural Development. Of this about 50 percent is for Plan expenditure and the balance for Non Plan expenditure. Of the Plan funds about 15% is allocated for the water supply and sanitation programme, and the balance 85% for different programmes for rural development. The watershed programmes undertaken by GoAP are part of the activities being undertaken under the Budget head of 'programmes for rural development'. For the watershed programmes, AP gets a proportionally higher share of central support. This project thus places considerable emphasis on seeking convergence with other government programmes as a means of achieving improved livelihood benefits to the rural poor.

28. Current allocations signify a rising trend in AP's allocations to the sector, with a doubling during the last two years. Whilst it is difficult to expect this trend to continue into the future, given competing claims from other states, there are good chances that this level of allocation would be maintained in the next few years. On average this project will add another Rs 500 million every year to GoAP's budget. At current levels, this represents an additionality of about 6 percent to state's Plan allocations for 'programmes for rural development'.

29. At the district level, there is some variation in current GoAP allocations for the five districts - the range being from Rs 150 million to about Rs 200 million

(for 1998-99). Ananthapur district is about the middle rung, with current allocations for watershed programmes of about Rs 180 million. This project in each year will add about Rs 100 million to Ananthapur's budget - signifying an additionality of about 55 percent. Thus, at the district level the project is contributing significantly to the state's scaling-up targets.

30. Contributions from the community will be in the form of voluntary labour, which is a requirement in the MRD Guidelines. Some pilot initiatives have been proposed on issues such as cost recovery of certain interventions like irrigation. Initial experience from these pilots would need to be considered before cost-recovery strategies for the project, and indeed for policy aspects, can be developed. While the effort would be to target project subsidies for the poor, in reality ensuring this would not be without problems. Thus formulation of effective cost recovery strategies assume considerable importance.

1999 Constant prices in '000s of Indian Rupees

1 Pound = Rs. 70

**A: FINANCIAL AID: IWDP to PD-DPAP ROUTE****A1: PROJECT FUNDED WATERSHED ACTIVITIES**

A1: Project funded watershed activities	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Phase I (200 watersheds)	0	100,000	100,000	100,000	100,000	0	0	400,000
Phase II (300 watersheds)	0	0	150,000	150,000	150,000	150,000	0	600,000
Total (Rs. '000)	0	100,000	250,000	250,000	250,000	150,000	0	1,000,000
Total (£ '000)	0	1,429	3,571	3,571	3,571	2,143	0	14,286

Watershed activities will be determined through village micro-planning. Being demand-driven it is difficult to anticipate precise activities.

Generally it has included land and non-land based activities.

Project phasing assumed to be 100 watersheds in each district, for 4 years, with 40 starting in PY2 and continuing till PY5; and 60 from PY3 to PY6. PY1 is a start-up year.

Funding is as per DLR norm: upto Rs 4,000/ha for a 500 hectare watershed, i.e., Rs 2.0 million per watersheds.

**A2: DISTRICT SUPPORT FUNDS**

A2a: District Support Funds	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Capacity building	150,000	150,000	66,667	66,667	66,667	0	0	500,000
Livelihood support	83,333	83,333	83,333	83,333	83,333	83,333	0	500,000
Total (Rs.'000)	233,333	233,333	150,000	150,000	150,000	83,333	0	1,000,000
Total (£'000)	3,333	3,333	2,143	2,143	2,143	1,190	0	14,286

Assumed to be an extra 20% of the MRD norm of Rs. 4,000 per hectare, for the 2000 GoAP watersheds and 500 APRLP watersheds, indicatively divided between capacity building (10%) and livelihood support (10%). Capacity building includes, but is not confined to, training, exposure visits and stakeholder workshops, for officials and staff of government and non-governmental organisations (the CB strategy in Year 1 will develop other interventions).

Livelihood support includes support for income generation activities and for social mobilisation and convergence, which includes forming and supporting self-help groups, providing information on available government schemes and enabling access to these facilities. However, as activities under the 2 heads are closely related, allocations are to be kept flexible, and the entire amount (Rs. 100 crores) pooled and spent. These funds will be spent partly on state and district level activities and partly devolved to MDT or PIA level for spending on plans from specific watersheds. Funds will not be automatically available to watersheds, but only on the basis of acceptable spending plans.

Decisions on spending will be taken under the authority of DCBC and APD - Livelihoods and district committees.

A3: PROJECT SUPPORTED INNOVATIVE WORK

A3a: 50 Innovative Watersheds	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Total (Rs '000)	0	50,000	50,000	50,000	50,000	0	0	200,000
Total (£ '000)	0	714	714	714	714	0	0	2,857

Assumed to be in 50 villages, selected from the new lot of watersheds.

Activities to include technical and non-technical experimentation (institutional arrangements, convergence, private provision of social infrastructure, etc.)

to be decided jointly with villagers in PY1 by a district-level committee of GOs, NGOs and PSU representatives. The exact principles for using this support will be developed in PY1 and then appraised by GoAP and DFID.

Funding at a unit rate of upto Rs. 4000 per hectare for a 500 hectare watershed, to be released by the PD-DPAP on the recommendation of the district committee's evaluation of the village micro-plan.

A3b: Macro Watershed Treatment	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Total (Rs '000)	0	40,000	40,000	40,000	40,000	40,000	0	200,000
Total (£ '000)	0	571	571	571	571	571	0	2,857

Macro watershed treatment refers to the construction and renovation of large scale irrigation structures like tanks and sub-surface dykes, not possible under standard watershed development cost norms. The strategy for this work will be prepared in PY1 by the DRD, GoAP and the PSU. Following appraisal of this strategy by GoAP and DFID, funds for this component will be released. The appraisal would look at pro-poor benefits, financial and technical appraisal and managerial arrangements.

A3c: Post completion support	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Total (Rs.'000)	19,550	0	0	0	0	10,000	15,000	44,550
Total (£'000)	279	0	0	0	0	143	214	636

Assumed to cover PIA administration costs (10% of the norm of Rs. 4000 per hectare over 4 years, or Rs. 100 per year) for 1 year only.

Post completion support to be offered to: 391 GoAP watersheds due to complete during PY1; 200 APRLP watersheds in PY6; and 300 APRLP watersheds in PY7.

Purpose lesson learning, both from ongoing watersheds where 1 year is added on after 4 years of standard watershed activity,

and APRLP watersheds, which can take this into account while planning watershed activity right from the start. The modalities will be developed in PY1.

A4: DISTRICT CAPACITY BUILDING CENTRE COSTS

A4a: District Capacity Building Centre Staff Costs	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Salary Costs	7,920	7,920	7,920	7,920	7,920	7,920	7,920	55,440
Total (Rs. '000)	7,920	7,920	7,920	7,920	7,920	7,920	7,920	55,440
Total (£'000)	113	113	113	113	113	113	113	792

Each district will have one DCBC - Each DCBC would have 4 Specialists, 1 Accountant and 1 Data Entry Operator.

A4b: District Capacity Building Centre Office Costs	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Fixed costs								
Computers (2 nos.)	1,000							1,000
Laser printer (1 no.)	200							200
UPS (1 no.)	200							200
Slide projector, camera and screen (1 no. each)	350							350
sub-total (Rs. '000)	1,750							1,750
Recurrent costs								
Rental for a Tata Sumo	720	720	720	720	720	720	720	5,040
Printing and stationery	60	60	60	60	60	60	60	420
sub-total (Rs. '000)	780	780	780	780	780	780	780	5,460
Total (Rs. '000)	2,530	780	780	780	780	780	780	7,210
Total (£'000)	36	11	11	11	11	11	11	103

Estimates are for 5 DCBC offices.

A5: DISTRICT-LEVEL REMOTE SENSING ACTIVITY BUDGET

A5a: Remote Sensing Activity Budget	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
IMSD study in Prakasam district	2,788							2,788
IMSD study in Nalgonda district	2,271							2,271
Total (Rs.'000)	5,060							5,060
Total (£'000)	72							72

**B: FINANCIAL AID: IWDP to APARD ROUTE**

B1: APARD costs	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
HRD Specialist salary	300	300	300	300	300	300	300	2,100
Training needs analysis	600	900	0	0	0	0	0	1,500
Training material development	467	467	467	0	0	0	0	1,400
Communication and information dissemination	714	714	714	714	714	714	714	5,000
National exposure visits	22	22	22	22	22	0	0	110
Stakeholder workshops	375	375	375	375	375	375	375	2,625
DCBC and APARD infrastructure costs	40,000	0	0	0	0	0	0	40,000
Total (Rs. '000)	42,478	2,778	1,878	1,411	1,411	1,389	1,389	52,735
Total (£'000)	607	40	27	20	20	20	20	753

Training material development covers preparation of improved training material for watershed management and livelihood support, for district and state-level training.

Communication and information dissemination refers to preparation of printed leaflets, booklets and videographic material by contracting professionals.

National exposure visits for 11 DRD and APARD officials, once during project life.

APARD and DCBC infrastructure costs are to add two rooms to district-level Technology Training Development Centres (TTDCs) and to furnish these and additional rooms in APARD.

C: TECHNICAL CO-OPERATION FUNDS: NATIONAL COSTS (IN INDIAN RS '000)

C1: PSU COSTS

C1a: PSU STAFF COSTS	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Staff Salary Costs	2,796	2,796	2,796	2,796	2,796	2,796	2,796	19,572
Travel Allowance	234	234	234	234	234	234	234	1,638
Total PSU Staff Costs (Rs. '000)	3,030	3,030	3,030	3,030	3,030	3,030	3,030	21,210
Total (£ '000)	43	43	43	43	43	43	43	303

PSU staffing: Coordinator & RD Specialist (1No.); Policy Analyst (1 No.); M&E Specialist (1No.); Administrative Officer (1 No.); Accounts Officer (2 Nos.);

Data Processor (1 No.); Driver (1 No.); Peon (1 No.).

C1b: PSU OFFICE COSTS	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
<b>Fixed Costs</b>								
Tata Sumo (X1)	500							500
Computers & Software (X7)	700							700
Laser Printer & UPS (X3)	120							120
Scanner (X1)	50							50
Fax machine (X1)	25							25
Office Furniture	300							300
Air conditioner (X3)	150							150
Slide & OHP projectors (X1)	35							35
Photocopier (X1)	100							100
Sub-total	1,980							1,980
<b>Recurrent Costs</b>								
Rent	120	120	120	120	120	120	120	840
Electricity & Water	45	45	45	45	45	45	45	315
POL	40	40	40	40	40	40	40	280
Printing & Stationery	60	60	60	60	60	60	60	420
Telephones, postage & faxes	60	60	60	60	60	60	60	420
Report preparation	15	15	15	15	15	15	15	105
Library, books & periodicals	50	50	50	50	50	50	50	350
Vehicle hire	350	350	350	350	350	350	350	2,450
General office maintenance expenses	60	60	60	60	60	60	60	420
Other office expenses	50	50	50	50	50	50	50	350
Sub-total	850	850	850	850	850	850	850	5,950
<b>TOTAL PSU OFFICE COSTS (Rs. 000)</b>	<b>2,830</b>	<b>850</b>	<b>850</b>	<b>850</b>	<b>850</b>	<b>850</b>	<b>850</b>	<b>7,930</b>
Total (£ '000)	40	12	12	12	12	12	12	113



C1c: PSU Activity Costs	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Participatory technology development	0	7,500	7,500	7,500	7,500	0	0	30,000
Research Studies	4,000	4,000	2,000	2,000	2,000	0	0	14,000
Training Support (to DCBCs)	500	500	500	500	500	0	0	2,500
Exposure visits	2,800	2,800	2,800	2,800	2,800	0	0	14,000
M&E	3,000	3,000	3,000	3,000	3,000	3,000	3,000	21,000
Dissemination budget	1,000	1,000	1,000	1,000	1,000	1,000	1,000	7,000
Total PSU Activity Costs (Rs. '000)	11,300	18,800	16,800	16,800	16,800	4,000	4,000	88,500
Total (£ '000)	161	269	240	240	240	57	57	1,264

Research studies at upto Rs. 1,000,000 per study; calculation assumes 4 studies in PY1 and PY2 and 2 each in PY3 - PY5. Participatory technology development budget assumes approximately Rs. 60,000 spent per watershed for 500 watersheds, over 4 years. Training support to DCBCs to be used to support additional capacity building based on identified needs. Dissemination budget for reproduction and circulation of papers and proceedings from research studies, stakeholder workshops and other project activities.

#### C2: REMOTE SENSING SUPPORT COSTS

C2: Remote Sensing Support Costs	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
Computers	600							
Software	1,460							
Colour Plotter	400							
CD writer	30							
DAT drive	100							
Scanner cum printer	800							
UPS	250							
Total (Rs. '000)	3,640							3,640
Total (£ '000)	52	0	0	0	0	0	0	52

All costs are in PY1, being costs to set up a Remote Sensing Cell at the Commissionerate, Department for Rural Development, GoAP. Equipment to be purchased by the PSU, according to DFID proceed District-level remote sensing support activity to be sent as F/A directly to the PD-DPAP offices (see Table A6).

Hardware costs are for 4 Pentium2 machines (333 Mhz, 127 MB RAM, SVGA) at a unit rate of approx Rs. 150,000 per machine.

Software costs are for Image Analysis Software. For Instance:(2 Nos. of ERDAS Imagine at a unit cost of approx Rs. 300,000), GIS software (1 No. of Arc/INFO WINDOWS NT at a unit rate of approx Rs. 600,000, and 2 Nos of Arc View at a unit rate of approx Rs. 80,000), and raster to vector conversion software (1 No. at a unit rate of approx Rs. 100,000).

**D. SUMMARY OF TOTAL PROJECT COSTS**

D1: ANDHRA PRADESH RURAL LIVELIHOODS PROJECT, FINANCIAL COMMITMENTS IN CONSTANT PRICES, UK £ '000

	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
A. FINANCIAL AID: PD-DPAP ROUTE	3,834	5,600	6,553	6,553	6,553	3,600	339	35,889
B. FINANCIAL AID: APARD ROUTE	607	40	27	20	20	20	20	753
C. TC INTERNATIONAL COSTS	596	596	478	478	340	239	119	2,846
D. TC NATIONAL COSTS	297	324	295	295	295	113	113	1,733
<b>TOTAL COSTS UK £'000</b>	<b>5,334</b>	<b>6,560</b>	<b>7,353</b>	<b>7,346</b>	<b>7,209</b>	<b>3,972</b>	<b>590</b>	<b>41,221</b>

D2: ANDHRA PRADESH RURAL LIVELIHOODS PROJECT, DFID FINANCIAL COMMITMENTS IN CASH PRICES, UK £ '000

	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	TOTAL
A. FINANCIAL AID: PD-DPAP ROUTE	4,099	6,233	7,555	7,916	8,296	4,778	471	39,348
B. FINANCIAL AID: APARD ROUTE	649	44	31	24	26	26	28	828
C. TC INTERNATIONAL COSTS	622	652	549	575	430	317	166	3,311
D. TC NATIONAL COSTS	318	361	341	357	374	149	157	2,056
<b>TOTAL COSTS UK £'000</b>	<b>5,687</b>	<b>7,290</b>	<b>8,476</b>	<b>8,872</b>	<b>9,125</b>	<b>5,271</b>	<b>821</b>	<b>45,542</b>

CASH INFLATORS:

Rupee Expenditure	1.069	1.113	1.153	1.208	1.266	1.327	1.391
Sterling Expenditure	1.045	1.095	1.148	1.204	1.263	1.325	1.39

## **ANNEX 8: MONITORING AND IMPACT ASSESSMENT SYSTEM**

### **Current Monitoring Systems for MRD Schemes**

1. All DLR schemes require implementing agencies to report on progress quarterly, half-yearly and annually. DLR also commissions evaluations of selected programmes through a panel of independent consultants. The Watershed Common Guidelines require Implementing Agencies to submit quarterly progress reports to the Project Director, DRDA. There are monthly district meetings and quarterly state-level reviews.
2. Overall, national watershed monitoring is 'DLR - focused', with all districts in the country sending their monitoring reports up to the centre. Within MRD the M&E Unit is clearly under-resourced with just 4-5 people. State governments need a greater and more clearly M&E defined role. One possibility would be for the states to lead on implementation specifics, while DLR concentrated on the strategic and policy issues arising. Addressing national systems falls outside the remit of this project, but the proposed M&E system for APRLP needs to take into account MRD's procedures and potential changes, and the desire of GoAP to learn more about the effectiveness of rural anti-poverty initiatives as part of public sector reform (also part assisted by DFID). MRD and DFID India are currently designing a collaboration which would seek to improve the effectiveness of national rural development schemes, including any improvements in M&E systems.
3. GoAP plays a greater role in monitoring than other state governments, and is starting to commission an independent evaluation of its watershed programme. However even in AP, physical and financial monitoring are emphasised rather than lesson learning. Thus, current ability to monitor quality (e.g. performance, equity and probity) is limited, and feedback is rarely detailed or timely enough to enable mid-scheme or project course corrections.

### **Objectives of M&E in APRLP**

4. Three broad M&E objectives will be taken forward during the project. First, to establish an effective Project Monitoring and Impact Assessment System (PMIAS) to meet project needs. Second, to build district and state capacities to conduct more effective monitoring and evaluation generally. Third, to provide a pilot site for the proposed MRD-DFID Co-operation Project (MDCP) (subject to its appraisal).
5. Financial and impact monitoring in APRLP will be integrated via a comprehensive PMIAS, established in the first two years of the project, so that the cost effectiveness, efficiency and impact of different interventions can be assessed over time. This PMIAS will ensure that:
  - financial and physical audit requirements (of MRD and DFID) are met, and opportunities for leakage minimised;

## Annex 8 Monitoring and Impact Assessment

- performance and process indicators are agreed and used by project staff and associated stakeholders in order to track the quality of project implementation and enable improvements during the project;
- impact assessment, both periodic and regular, of different interventions, will be undertaken when feasible, throughout the project, to monitor achievement of outputs and purpose.

6. In order to be effective and robust, the APRLP M&E system will need to consider and balance various issues:

- take into account lessons from monitoring systems in other rural projects;
- the information needs of different stakeholders, including primary stakeholders and senior decision makers;
- the need for good quantitative and qualitative data; avoiding generating unwanted information by balancing the costs of monitoring with the benefits of such work;
- ensure the compatibility and integration of different data (financial, performance and impact) to assist the analysis of effectiveness and efficiency of interventions;
- the use of conventional and participatory methods to enable complementary perspectives;
- monitoring equity issues throughout, by assessing the distributional aspects of project participation, benefits, and any negative impacts against the special focus groups identified by the primary stakeholder analysis.

### Putting M&E objectives into practice

7. Financial and physical audits. DLR watershed programmes require financial audit by independent auditors drawn from a state empanelled list. This permits a full and timely audit of accounts, but does not do away with the regular audit requirements of the Comptroller and Auditor General (CAG); which being a sample audit may not cover all projects every year. These arrangements will apply to APRLP. Some improved record keeping by the PD-DPAP may be needed to permit linking financial data with other monitored data on performance and impact of samples of interventions.

8. Also, GoAP and DFID will agree TORs, and appoint TC funded independent national consultants to monitor bi-annually 10% samples of the project's physical works carried out in the preceding two years. Such physical-financial audit trails have been used to good effect in DFID India's urban projects to (a) reduce risks of corruption at field level, (b) assess quality of works, and (c) verify quantitative coverage indicators for the project.

9. Performance and process indicators will be developed, during start-up of the capacity building work. Logframe outputs 3 and 4 and their associated OVIs provide examples of such monitoring. Much DFID work has been done on such indicators, so the PMIAS can draw on primary stakeholder group monitoring developed by the Aga Khan Rural Support Programme in India and Pakistan, the BRAC Rural Programme in Bangladesh, and the Western

India Rainfed Farming Project and the performance monitoring procedures for different stakeholders developed in the Karnataka Watershed Project design.

10. Impact assessment (IA) will seek to provide regular feedback to improve quality of interventions, and help in their prioritisation. Impact within micro-watersheds will be monitored from various perspectives. Technically, to investigate changes in: ground water use and recharge; land productivity; cropping patterns; biomass production; adoption of new technologies; and the environmental aspects of non-land based interventions like micro-enterprise. Socially, IA will investigate: the distribution of benefits; impacts on vulnerable and marginalised groups and women; vulnerability and coping dimensions like indebtedness and food security; benefits of non-watershed interventions; capacity of village groups and primary stakeholders; changes in entitlements; success of different interventions in reaching the poor; impacts on secondary stakeholders. Economically: income changes across target groups; distributional issues; financial viability of micro-enterprises; sustainability of impacts; benefit-cost ratios; comparisons with APRLP appraisal assumptions; and cost-recovery. Managerially, IA will address: the impacts of capacity building initiatives; effectiveness and replicability of DCBCs; planning systems; PRIs; and, working arrangements between WCs, WDTs, MDTs, DCBCs, PIAs, PRIs and the State bureaucracy.

11. Methodologies will be mixed: quantitative, sample surveys and more qualitative and purposive methods like focused PRAs, case studies, and on a small scale, some process documentation. To generate robust findings, there will be 'before-after' and 'with-without' comparisons. These will require good baseline information before entering a block, and even comparisons with watersheds where APRLP or similar schemes are not operating.

### **The wider research and policy agenda**

12. The PMIAS will underpin the project's wider research, policy and replication objectives (outputs 6 and 7 in the logical framework), to influence the enabling environment for rural development. There will be regular studies to understand the changes taking place in associated schemes operating in AP. These studies will monitor changes in programme guidelines; policies impacting on the poor; institutional arrangements for rural programmes in the State; and success achieved in mainstreaming lessons from APRLP blocks, for example through the wider GoAP Action Plan. Such analysis, dissemination and replication will contribute to the project's goal.

### **Resources, phasing and management**

13. The project provides finance for the PMIAS additional to that available under MRD schemes. This is shown in the project budget under the M&E head and funds for associated work are included in the consultancy and capacity building heads.

## Annex 6 Monitoring and Impact Assessment

14. During project Year 1, consultants will help develop the PMIAS by consultation. The system will be field tested in a limited area during Year 2. The project review at the end of Year 2 will recommend ways of scaling up PMIAS to cover the entire project area. During Year 2, comprehensive baseline surveys will be carried out in accordance with the design of the Impact Assessment system in the PMIAS. The baseline studies will include remote sensing and GIS to map the natural resource base of the project blocks, including non APRLP watersheds. Minimal household surveys will be carried out to collect baseline information on the economic and social aspects. These will be supplemented with information from focused PRAs.

15. The PSU will have an M&E specialist, working with the M&E person in DRD, GoAP, to establish state systems and ensure they are generating effective information. This specialist will contract consultants as necessary. One of the new Assistant Project Directors (APD) in the PD-DPAP will have M&E skills, and ensure effective implementation of the PMIAS in the district. One member of the DCBC will have specialist M&E skills, and will ensure that the PMIAS works effectively in the mandal.

16. M&E staff working on the project will need an induction programme, and continual skills training during the project. This will be part of the overall training for APRLP staff, and may require some reorientation of staff who have been used to only physical and financial tracking. APRLP will place particular attention on training people in participatory assessment techniques.

17. M&E management will stress transparency of the process, and the need for wide discussion of its findings. Truly participatory approaches require sharing of all information among stakeholders; but experience suggests that primary stakeholders are often unaware of a lot of information about project activities. During appraisal PIAs were often found not to share information on project costs and sources of funds with primary stakeholders. This approach goes against the principles of participatory planning and implementation. APRLP will work towards ensuring good practice, by requiring PIAs to put all project information in public domain, through public notices etc. The DCBCs will need to work with PIAs in managing this process.

## ANNEX 9: RISK ASSESSMENT

1. Project design included consultation with stakeholders of possible risks and how these could be minimised. The effectiveness of the project's risk mitigation strategies will need constant monitoring. Risk assessment was conducted from the perspective of the project meeting a minimum performance standard, i.e. delivering a cost-effective project while helping to raise the incomes of target households by at least 40 percent in project watersheds, and also impacting on the larger rural programme in AP.

2. The main risks in meeting this performance standard fall under six heads. These are considered below followed by a description of their possible impacts and mitigation measures. Overall, the project is assessed as medium to high risk; with relatively higher risks for the capacity building and influencing agenda, and much lower risks for field level work. The main mitigation measures are available through project reviews; an agreed set of milestones for the Year 2 and 5 reviews; and the possibility of slower disbursement should the need arise.

**Risk A:** anticipated production and income gains for target groups not achieved, thus compromising the cost-effectiveness of the investment.

**Risk B:** project not providing real benefits to the poor, thus compromising the equity and distributional aspects.

**Risk C:** broader livelihood objectives to be met through convergence are not realised, thus project brings less than expected benefits to the poor.

**Risk D:** capacity building objectives for secondary stakeholders not significantly achieved, thus undermining overall project impact.

**Risk E:** project management arrangements do not perform to required levels, thus undermining effective project delivery.

**Risk F:** project having less than desired impact on the larger rural development programme in the state, thus hampering donor and other efforts to consider moving from project to sector assistance in Andhra Pradesh.

3. **Risk A:** Project benefits may not reach the anticipated levels, thus undermining the value for money provided by project investments. This could happen due to any of the following factors operating singly or in combination: benefits from land-based activities are insufficient (considered low probability); benefits from livelihood interventions are insufficient (medium); a severe drought pulling back the local economy (low); participatory technology development either does not deliver new products/approaches, or they are not effectively disseminated (medium); sustainability of impacts doubtful (medium probability). As the following analysis makes clear the overall assessment of this risk is medium probability and medium impact.

4. Benefits from land-based activities are unlikely to fall below expectations as there is substantial scope for increased productivity of land and water use and the assumptions are based on evidence from similar watershed programmes in India. Sensitivity analysis shows even a **xx** percent decrease in level of benefit provides a cost-effective project. Therefore, this risk is considered low probability, but could have an high impact on meeting minimum standards. Benefits from livelihood (watershed plus) interventions have a greater risk of falling below expected levels; they will be tested for the first time as part of a watershed programme, and there appear to be limited options for non-land based activities in the area. Many of the interventions are being tried out for their impact on poverty reduction, so whatever be the results the lesson learning objective would be fulfilled. So this particular risk is considered medium probability, but with a low impact on meeting minimum standards.

5. The possibility of widespread drought occurring during project life is considered low probability. A more severe problem could be if more frequent droughts occur in localised project villages, thus increasing transient poverty. The project is expecting to address this problem through effective drought proofing of the main Kharif crop. Thus this risk is considered low probability and medium impact.

6. DFID projects in India have demonstrated the benefits of participatory technology development (PTD). However, there is no *a priori* guarantee that PTD within this project will successfully deliver improved technologies, which in turn get widely disseminated. Economic analysis has assumed that no breakthrough technologies will be generated; but if they were, then potential returns to project investment could increase manifold. With the unpredictability of such research, this risk is considered medium probability, but with low impact on achieving minimum standards. The risk of benefits to target groups proving unsustainable is considered low probability with medium impact as the economic analysis has assumed lower levels of benefit accruing after end of project. Groups may become less effective when project support is withdrawn, and particular effort will be made early on to link groups to institutions like banks or panchayats (elected local bodies).

7. **Risk B:** Project benefits may not reach the very poor target groups due to the following, operating singly or in conjunction: capture of benefits by rich; continued high levels of indebtedness; proposed livelihood interventions ineffective in reaching the poorest; and seasonal migration continuing to be a major source of livelihood to the landless and marginal farmers. Overall, this risk is considered medium probability with medium impact on achieving the minimum performance standards. Treating a complete watershed should bring benefits to all farmers, including the marginal farmers. Thus farmers would, at the very least, get some additional benefits from land-based interventions which should have a positive impact on poverty reduction.

8. Project design sought to reduce the risks of inequitable distribution and a number of mitigation measures form part of the project - particularly the



approach towards strengthening of women's self help movement, and the clause that microplanning should start by addressing the interests of the poorest. Senior GoAP functionaries recognise the importance of reaching the poorest through their own interventions. Such an environment should help the project make a reasonable start in addressing this complex agenda.

**9. Risk C:** The project's broader livelihood objectives may not be met through convergence due to the following operating singly or in conjunction: government line departments do not change their traditional isolated ways of working and work to different guidelines; insufficient enabling actions are taken by the State to help district co-ordination; approaches to pilot convergence in mandal/district planning found ineffective; community empowerment not effective in increasing demand on government schemes; and self-help groups losing interest in this effort due to insufficient results. Overall this risk is considered high probability with medium impact.

10. The larger political and bureaucratic environment in AP seems conducive to making convergence happen. There is a well articulated government policy on encouraging self-help groups of primary stakeholders; the *Janmabhoomi* programme is all about encouraging departmental co-ordination. These are positive signs but will need to be sustained in the future. Project mitigation measures will be through the work of the PSU and the DCBC, and by regular monitoring and review. There will be other opportunities to influence convergence through the involvement of DFID and other donors in the State's public sector reform programme.

**11. Risk D:** The project's capacity building objectives for secondary stakeholders may not be significantly achieved due to any of the following, operating singly or in combination: capacity building becomes too supply driven; improved skills are rendered sub-optimal due to insufficient improvements in the larger system; training capacity in state and district institutions not significantly strengthened; capacity building is not integrated with wider programme delivery and runs in isolation; capacity building strategies difficult to replicate due to financial or institutional constraints. Overall this risk is considered high probability with medium impact.

12. Project design sought to reduce this risk through plans to strengthen the training institutes. A wide constituency of stakeholders agree the need for capacity building, and this seems likely to be sustained. Further opportunity to mitigate this risk will arise when the Capacity Building Strategy is prepared in Year 1. The Year 2 review will examine these mitigation measures further.

**13. Risk E:** If the proposed management arrangements do not allow effective project implementation, this could seriously affect achievement of minimum standards. This is considered risky due to the following factors, either operating singly, or in conjunction: the PD-DPAP offices find it difficult to cope with expanding workloads; inadequate numbers or skill mix of staff is deployed; insufficient competent PIAs can be found; convergence between departments does not happen; overmuch politicisation of Zilla Parishads and

Gram Panchayats; watershed selection doesn't reflect project priorities; DCBC cannot / do not work effectively or not found replicable; PSU gets marginalised; administrative problems or corruption affect fund flow; and existing political commitment in GoAP does not continue. This risk is overall considered as medium probability with medium impact.

14. Mitigation measures comprise: substantial capacity building, involving APARD and the DCBCs, designed to promote appropriate skills, attitudes and ways of working to ensure effective implementation; project review following the two-year start-up phase, when the pace of project expansion can be considered in the light of implementation capacity; substantial monitoring and evaluation, to help provide for mid-course correction.

15. **Risk F:** The Economic Annex points out that the cost-effectiveness of project investments would be improved if there is wider uptake by GoAP of project lessons. This would also help fulfil the project goal and may attract donors towards sector-wide support for rural development in the State. The following factors contribute to this risk: policies not focused on the poorest; larger institutional constraints in government not adequately addressed; overall administrative environment not conducive to programme aid; and programme design not recast in the light of emerging experience. Overall, this risk is considered medium probability and medium impact.

16. The mitigation measures available to the project for this risk include: high-level of commitment to change at top levels of state government; GoAP has demonstrated commitment to reform in the power and public sectors; efforts towards co-ordination by many donors to significantly impact upon poverty in the state; DFID's ongoing dialogue with GoAP across many sectors; APRLP being based around the Common Guidelines and falling within the IWDP, which enhances the prospects for read-across within MRD schemes; project proposals to provide technical capacity to GoAP through the PSU for strategic / policy analysis; the proposed MRD-DFID Co-operation Project, which provides a mechanism for wider dissemination of APRLP approaches.

PROBABILITY IMPACT	Low	Medium	High
Low			
Medium		A,B E,F	C,D
High			

## ANNEX 10. PROJECT PHASING/TIME CHART

1. The first year of the project's full life of seven years will be to 'start-up' key activities. Largely not resource-based watershed activities they will include:

- staff recruitment and establishment of PSU in Hyderabad; CBSU in districts; and APDs in PD's offices;
- establish and test fund flow mechanisms;
- develop capacity building and PMIA strategies;
- identify policy issues;
- identify and contract consultants;
- identify APRLP watersheds;
- PRAs;
- social mobilisation, group formation; WC formation;
- EPAs;
- microplanning, identification of priorities;
- develop strategies to address livelihood issues;
- identify and train PIAs;
- establish DTIs and training programmes; undertake training;
- identify and train first batches of professionals.

2. Over project life, 500 micro watersheds (250,000 hectares) will be developed, 200 initiated by PY2, and 300 by PY3. Contingent upon the GoAP watershed programme going ahead as planned, project finance for additional capacity building and livelihood support will be spent by PY5.

### Reviews

3. In addition to annual project monitoring there will be two critical reviews at the end of years two and four. Annex 8 sets out the principles against which monitoring and review will be conducted.

4. By the first review the following options would be available:

- assist GoAP to 'saturate' watershed and capacity building activities in the five districts.
- start capacity building in new districts (e.g. Cuddapah, Chittoor, and Ranga Reddy which are contiguous; and Srikakulam, Visakhapatnam and Vizianagaram - a cluster of very poor coastal districts in the NE).

5. During appraisal it became clear that pursuit of either option will require the co-operation of other donors. GoAP is planning to take a lead in donor co-ordination and to actively seek the interest of other donors in contributing to its long term programme. (See Annex 1).

6. Performance indicators for the first review might include:

- Staff for PSU and CBSU and APDs and MDT Social mobilisers recruited and functional;
- 200 watersheds underway with capacity built and microplans completed;
- Community mobilisation streamlined with more effective functioning of SHGs;
- Participatory technology development in hand;
- Results available from independent impact assessment in existing watersheds which will come to an end by PY 2.
- Capacity building strategy developed, being institutionalised and implemented;
- Project Monitoring and Impact Assessment System developed with streamlined quantitative and qualitative approaches and indicators (to include bench marking and experiences of WOTR model of testing communities capacities);
- Policy issues identified which are critical for the poorest;
- PSU in active dialogue on policy issues with appropriate Ministries;
- Roles and responsibilities of identified partners defined;
- Management structures modified where necessary, roles and responsibilities redefined;
- Convergence being tested;
- Watershed Plus in government's programme defined, and some components operative;
- A comprehensive strategy and criteria for selection of watersheds and PIAs developed;
- Experiences with other donors shared, and some examples of collaboration with them.
- GoAP actively leading donor co-ordination with PSU assistance.

7. The second review will examine the impact of the project's new approaches to watershed development and adjust project strategy accordingly. This review will be informed by an independent evaluation of project progress and impact.

## Timechart of Main Project Activities.

ACTIVITY	PY1	PY2	PY3	PY4	PY5	PY6	PY7
Phasing	Startup			Main phase			
Main Reviews		X		X			
<b>Output 1. Productivity of land and water resources developed in 500 MWS</b>	Continues throughout project life. Watershed work continues in each project for 4 years. First year primarily capacity building. Post-completion support after 4 years.						
Ananthapur: # MWS	0	40	100	100	100	60	0
Kurnool: # MWS	0	40	100	100	100	60	0
Prakasam: # MWS	0	40	100	100	100	60	0
Mahboobnagar: # MWS	0	40	100	100	100	60	0
Nalgonda: # MWS	0	40	100	100	100	60	0
TOTAL# operational MWS	0	200	500	500	500	300	0
<b>Output 2. More income and employment options for poorest in 500 MWS</b>	Develop strategies, start implementation		Implementation and monitoring				
<b>Output 3. Capacity building of secondary stakeholders in 2000 MWS</b>	Staggered, throughout project life						
<b>Output 4. Capacity building of primary stakeholders in 2000 MWS</b>	Staggered, throughout project life						
<b>Output 5. Testing innovative approaches in 10% MWS</b>	Identified approaches tested		New approaches identified and tested				
<b>Output 6. New approaches replicated widely</b>	Identified approaches replicated		New approaches replicated				
<b>Output 7. Sectoral policy environment strengthened</b>	Develop strategy (policy analyst)		Implement				
<b>[Output 8.] Project management and support arrangements operational</b>	develop systems		implement and manage project				
Establish PSU Hyderabad							
Recruitment (PSU, APDs, CBSU)							
Main consultancy support							
Develop PMIAS, MIS, D/bases							
MWS, PIA selection	200	300					

## ANNEX 11: CLAIMS FOR REIMBURSEMENT OF LOCAL COSTS

Information requested in all sections must be supplied before payments can be made:

Serial Number of this Certificate .....

### Section (1) (aid source and allocation)

(a) Title of aid source (United Kingdom

.....

Grant/Loan ..... 19..)

(b) Project Allocation Title .....

### Section (2) (Project location)

(a) Provide project location details ie Map references and official address of the:-

(i) Constructions .....

(ii) Administration centres of services .....

(iii) Locations where purchases based if not at (i) or  
(ii) .....

### Section (3) (Audit discharge)

(a) State the method by which the local cost expenditure under this project is to be audited, (see section C of the Procedures).

.....

(b) Confirm that the audit authority has been informed and given details regarding this claim.

(c) If the system of discharge is other than audit, enclose original documents supporting this claim with the claim to the appropriate United Kingdom representative.

### Section (4) (Project expenditure details)

1. State the value of local cost expenditure to-date on the Project.

.....

2. Deduct any local cost expenditure provided by other organisation.  
.....

3. Deduct any local cost expenditure not eligible for reimbursement.  
.....

4. Deduct any local cost expenditure already claimed.  
.....

5. Claim now due for reimbursement.  
.....

Section (5) (This claim expenditure details)

Attach details of how the sum claimed at Section (4)5 was used ie work carried out, material purchased, labour used, machinery hired or bought, contracts entered into, and services used etc.

Section (6) (Certification)

Certification of Claim and Request for Reimbursement

I certify that this claim for ..... reimbursement is correct and that the sum requested is properly due on the basis of the information provided above and on the work carried out, material bought in, and other expenses necessarily incurred in connection with the Project.

I have the authority to sign this on behalf of the Government of

.....

Signature .....

Date .....

Section 7

I have examined this claim and satisfied myself that the information requested in all sections has been provided, and that the claim complies with terms of the Exchange of Notes. I have the authority to sign this on behalf of the Government of United Kingdom.

The claim for reimbursement is approved.

Signature .....

Date .....

**ANNEXa: ANNUAL AUDITED STATEMENT**

for the period ..... to ..... in respect of the

UNITED KINGDOM/(1)COUNTRY AND GRANT LOAN TITLE ((2)PROJECT NAME )

PROJECT TITLE	DATES OF RECEIPTS TO ACCOUNTS	LOCAL CURRENCY	EXCHANGE RATE	STERLING VALUE	COMMENTS
---------------	----------------------------------	----------------	------------------	-------------------	----------

I have examined the above Statement and obtained all the information that I have required. I certify as a result of my audit that in my opinion the Statement is correct.

I certify that the expenditure on these projects has been actually and necessarily incurred in accordance with the terms and conditions of the projects concerned and that the [3] provided by the Government of the United Kingdom has been applied to the purpose for which it was provided.

.....

.....