

# WATERSHED PROCESSES

# WASSAN ACTION STUDY PROJECT







# CHAPTER

# Context of Watershed Program in India

The resource rich areas, particularly those endowed with irrigation were pampered for long with heavy subsidies in the name of nation's food security and the dry land areas were neglected. However, these regions were major producers of food grains, pulses and oilseeds. The severe drought of early 1970's was an eye opener to the Government, which has initially started with relief programmes like Food for Work. These later, along with Employment Assurance Scheme, Rural Labour Employment Programme became the mainstream programmes to provide wage labour. However, mere employment programmes cannot tackle problems of drought and dry lands and the Government initiated the area development programmes such as Drought Prone Area Programme. Several changes occurred in these programmes the chronology and the shifting focus of which are given in Table 1. Recognition of the linkages of poverty with land degradation and the need for community collective action has brought about this shift. The first state effort in soil conservation started way back in 1962-63 with River Valley Projects aiming at arresting siltation and thereby protecting the large dams. This program was largely modelled on the design and technology drawing from the Tennessee Valley project in the US. From the River Valley Projects, over years the emphasis has radically shifted to an integrated people centred watershed approach in 1995.

Following the Technical Committee Report in 1994, Drought Prone Areas Program, Desert Development Program, Integrated Wastelands Development Program were brought under common 'Guidelines for Watershed Development'. Additionally 50 % of funds available under employment generation programs like Employment Assurance Scheme, Intensive Jawahar Rojgar Yojana were allocated for watershed based,

3

WASSAN ACTION STUDY PROJECT WASP

drought mitigating area development activities. Coming into operation from 1995, these Guidelines have made a fundamental shift in the way drought-proofing programs are implemented.

Year	Programs & Reviews	Reorientation
1962-63	River Valley Projects	Arresting siltation of large dams
1970-71	Rural works program	Deploying drought relief funds (wage employment) in the areas chronically affected by drought for creating assets designed to reduce severity of droughts
1972	Drought Prone Areas Program (DPAP)	Shifted to area approach, implemented by line departments. Interventions are scattered over a large area
1973	Task Force headed by Dr. B.S. Minhas	Suggested an integrated area development approach. More stable incomes and employment to weaker
1977-78	Desert Development Program (DDP)	Arresting desertification is the main objective
1982		Excluded income generation and infrastructure- oriented schemes like chilling plants. Greater stress on land based infrastructure. Watershed as a basis for planning. Special targeted beneficiary oriented approaches to area development approach. Subsidies
1987	Central Sanctioning Committee	To include only soil and water conservation, land development, afforestation and pasture development in the watershed development programs. Sectorally implemented by various line departments and scattered efforts across an area.
1994	Technical Committee on DPAP and DDP	Recommended integrated and people centered watershed development approach.
		$\rightarrow$ this is the present watershed development program under common " <i>guidelines</i> "

Table 1: Evolution of watershed development program in India

Under the common guidelines, all the area development programs of the government are implemented through watershed development approach (see Box1). Watershed development has been conceived basically as a strategy for protecting livelihoods of people inhabiting the fragile ecosystems experiencing soil erosion and moisture stress *(Hanumantha Rao Ch. 2000)*.

# Box : 1

# People Centred Watershed Development Approach

While bringing about three fundamental reversals i.e. from top – down to bottom-up, from sectoral to integrated and from short-term to long-term, the watershed approach has the following main principles:

- Organising community and building their institutions to plan and manage their own development
- An integrated approach to treatment of a well defined micro-watershed area of around 500 ha from ridge to valley- duly recognising the indigenous technical choices
- People's contribution to ensure their stakes in the process and also sustainability of infrastructure developed
- Focus and priority for poor and women, and equitable sharing of benefits
- Increased capacities to access income generation opportunities
- Convergence of programs that can build upon the regenerated resources and organised strength of the communities

Currently 961 blocks of 180 districts in 16 States are covered under DPAP. Similarly, 232 blocks of 40 districts in 7 States are covered under Desert Development Programme (DDP). The coverage under Integrated Wastelands Development Programme extends to 216 districts in 28 States. The total area of wastelands under development under DPAP/DDP/ IWDP is about 9.7 million hectares. In addition, an area of 6.4 million hectares was taken up for development prior to March 1999 under Employment Assurance Scheme.

# 1.1 Context in Andhra Pradesh

Andhra pradesh has been in the forefront in implementing watershed based area development programmes. It has dynamic leadership in the administration and large number of voluntary organisations working at grassroots level. It had good experience in forming of self help groups of

5

STEPPING STONES IN NATERSHED PROCESSES

S.No	Scheme	No.of WS Treatment	Area Under State	Central
1	DPAP Drought Prone Areas Program	2966	(Lakh ha) 14.93	Assistance 75.25
2.	DDP	552	2.76	75:25
3.	IWDP Integrated Wastelands Development Project	758	4.36	91.66:8.33
4.	EAS Employment Assurance Scheme	1884	9.52	75.:25
5.	APHM A.P. Hazard Mitigation Project	100	0.50	World bank assisted
6.	RIDF VI Rural Infrastructure Development Fund	1244	2.63	Loan from NABARD
7.	RIDF VIII	1807	0.00	Loan form NABARD
8.	WDF Watershed Development Fund	15	0.15	NABARD and DPAF
	Total	9326	34.85	

Table : 2 Watersheds in Andhra Pradesh - A Scenario

women and within short time the programme has been scaled up considerably. As a result Andhra Pradesh has now largest number of watershed development projects in India (see Table 2).

# 1.2 WASP Emergence Context

6

# A Concern turned into a conscious effort

Scaling up of the watershed program without the required capacities has inherently weakened the program. There were no experiences and capacities on ground in facilitating the people centered participatory processes in organizing community, planning and implementation suggested in the Guidelines. More significantly a demonstrated approach towards building capacities of various functionaries in the program was lacking. Failure to

establish good examples on such processes would discredit the policy itself or dilute the participatory efforts. Concerned NGOs started making efforts in trying out participatory methodologies in watershed programme even prior to the framing of Watershed Guidelines in 1995. After the formulation of the guidelines and possible scaling up of the programme in the state all NGOs concerned formed into Watershed Support Services and Activities Network and met several times to address the arising issues. Several NGOs were already functioning as Project Implementation Agencies (PIAs) for the watershed projects. The Network also felt that it is important to learn from the hands on experience of operationalisation of processes envisaged in the watershed guidelines and use these learnings for advocacy.

WASSAN Action Study Project (WASP) emerged in this context and implementation started with NGO PIAs in 1998 May. The project was a major learning exercise evolving over the course of its implementation.

# i) Purpose

The project started with a limited goal 'to demonstrate that the participatory watershed management process can be actually put into practice broadly within the framework of government policy and program' i.e. the Guidelines of 1994-95.

With this primary goal, the project evolved in due course of time to encompass the goals of mainstreaming the processes and also, to provide support services to those NGOs who would like to practice such participatory processes. Over time it evolved into an institutional mechanism within WASSAN.

As the name indicates, the project has the elements of **experimentation/ generating experience** *and* **learning**. Broadly the project as it shaped up, has three main objectives viz.,

1) To evolve and demonstrate participatory processes toward

7

WASSAN ACTION STUDY PROJECT WASP

community organization, planning, implementation and capacity building with the assumption that these approaches if practiced, would realize the objectives of watershed development program detailed in the Guidelines.

- 2) To influence the district and state governments to improve the operational and administrative procedures
- 3) To provide support services to those NGO-PIAs willing to practice such participatory processes.

# ii) Approach and Design

The strategy was to establish participatory planning and implementation process in about 12 watershed projects of 6 PIAs in 2 districts in the first 16 months, then extend the work in a new set of 8 villages in the second year and use these experiences for extensive diffusion to other villages in the third year.

## a) Partnership

The project was designed in a partnership mode - between the government and NGO - Project Implementing Agencies, with a professional back up provided by WASSAN - Cenre for World Solidarity (CWS). It was envisaged that the professional capacity building support to implementing agencies in a partnership mode would help in evolving better participatory processes/ approaches on ground; and a collaboration with government would lead to scaling up, wider dissemination and policy changes.

The following are the partners in the project:

#### Government

- Commissioner, Rural Development, Government of Andhra Pradesh
- Drought Prone Area Program (DPAP), Ranga Reddy district

# Training Institutions

- A.P. Academy of Rural Development (a state government training organization). The Commissioner, Rural Development, released part of the training budgets for the project watersheds directly to APARD.
- MANAGE (a national level training institution) (informal collaboration)

# NGO-Project Implementing Agencies (PIA)

- VIKASAM
- Serene Services
- Research in Environment and Education Development Society (REEDS)
- ✤ ARTHIC Discontinued after initial phase

A brief profile of the partner NGOs is given in Annexure No. 1.

# During the Expansion Phase

 Deccan Development NGOs Network (DDNN), Nalgonda district

# Technical Collaboration

AFPRO, Hyderabad - providing technical backstopping for the project.

# b) Finances

The main watershed development project was funded by the DPAP as a part of the government watershed development program. This budget includes the costs of community organization, training, administration costs of PIA and the costs of works and other programs. The total budget was Rs.2.0 millions per watershed with 80% for works and field programs and 20% for administration, training and community organization. Of the later 20%, government of A.P has retained 5% towards meeting the

9

#### STEPPING STONES IN MATERSHED PROCESSES

administration costs of DPAP. Also, the budgets for community organization and training were centralized at the DPAP level.

AEI, Luxembourg supported WASP for providing the capacity building inputs, experimentation, project management inputs and also, for scaling up activities to an extent of Rupees 3.2 millions for a period of four years.

## iii) Project Time Line

WASP is a learning program. The project in itself has undergone a process of evolution with many learnings coming in between changing the course of action.

To start with, in 1998, the project was designed to support initial capacity building process in 16 months in 12 watersheds and move to another set of villages. This design has undergone substantial changes over the four years and new concepts emerged. During a mid-term review by DPAP, WASSAN-CWS and PIAs, in 1999, the need for continuing with the support till the logical completion of watershed project was strongly expressed. After due consultations with AEI, it was agreed to extend support till the scheduled completion of the watershed projects, i.e. upto 2002.

# 1.3 Spin offs ...

On the foundation of the Action Study Project WASSAN emerged as an independent institution out of CWS for providing focused professional support to bring about quality changes in the watershed program in the state. Impressed by the achievements in WASP watersheds, the district administration requested WASSAN to study the processes followed in other watershed projects in the district and suggest appropriate interventions to improve their quality. On the basis of these studies, successive Project Directors initiated several changes in the administrative procedures and processes.

The need and demand for scaling up support services to other NGOs as in WASP emerged prominently. WASP gradually got integrated into WASSAN

4'/

as its 'Support Services Center'. It was also decided to take up innovative programs to integrate agriculture, livestock and related interventions in the watersheds being supported.

The support services under WASP were on an individual basis (between PIA and WASSAN). The demand and opportunity to try out a *network based approach* to facilitate 14 watershed projects emerged in Nalgonda district with Deccan Development NGOs Network (DDNN). This was crystallized in May 2001 with a tripartite agreement among WASSAN, DDNN and DPAP, Nalgonda district. Thus the initial project objective of working in Nalgonda district has also materialized. A similar capacity building network emerged in Ranga Reddy district initially with 4 NGO-PIAs implementing 14 watersheds. Later this has been extended to all the NGO PIAs in the district. Another area of intervention i.e. working with a mandal level federation of self-help groups (in Ranga Reddy district) is gradually taking root.

# 1.4 Learning Programme

Towards the end of the action study project the following major areas of interventions were crystallized. During the project period new avenues of support services were explored. One idea was to work with network of NGOs rather than individual NGOs to facilitate monitoring and expeience sharing within the network members. Community Based Organisations (CBOs) have emerged as a strong peoples institutions in the state. These aree primarily engaged in thrift and credit activities. Facilitating these organisations to take up Natural Resource Management (NRM) initiatives would yield positive and sustained results.

- Completion of the 6 watersheds taken up for implementation by 3 PIAs in Ranga Reddy district
- 2) Extension of support services to 14 watersheds implemented by DDN Network in Nalgonda district (the processes being scaled up

11

by the district administration to 100 watersheds)

- 3) A capacity building network with 4 NGO-PIAs in Ranga Reddy district.
- 4) Collaboration with a federation of women SHGs in Gandeed mandal of Ranga Reddy district for promoting NRM related interventions.
- 5) WASP taking the shape of a major Support Services Centre in WASSAN.

Thus, WASP has been a 'learning' program being open to innovative ways of looking at problems/ issues and evolving new concepts and approaches. With the learnings in its own course WASP thus, evolved into a stable and innovative institutional system of providing quality support services to the mainstream watershed program. This learning approach has been made possible by a flexible and comprehensive support received frrom AEI, Luxembourg.

12



# Learnings From Action Study Project

# 2.1 Selection of Watersheds

Initially it was planned to take up 12 watersheds in two districts i.e. Ranga Reddy and Nalgonda. As the district administration of Nalgonda withdrew from the project, it was restricted to 6 watersheds implemented by 3 PIAs in Ranga Reddy district. The names of the watersheds and other details are given in Table 3.

S.NO.	Village	Watershed Name	Mandal	PIA
1	Girghitpally	Girghitpally –I	Vikarabad	REEDS
	Jambapur Thanda	Girghitpally – II		
2	Nazeerabad	Lothu Vagu	Parigi	Vikasam
	Mallamonigudem	Pedda Vagu		
3	Rompally	Vivekananda	Bantaram	Serene Services
		Maisammakatta		

Table : 3 Villages and Watersheds under Action Study Project

A brief profile of the villages is given in Annexure No. 2.

The district level policies, procedures and administrative practices mostly depend on the perspectives and initiatives of the Project Director (PD) and the influential members of the Multi Disciplinary Team of DPAP, who advice the Project Director.

The villages (two watersheds in each) were purposefully selected in a dispersed way as it was thought that live examples of good processes would inspire and influence the cluster of watersheds around. These watersheds are dispersed over a radius of approximately 40 kms. DPAP played a major role in selecting the PIAs.

S.NO.	Village	Nature of village	
1	Girghitpally	Highly fractured society – along caste and political affiliation	
	Jambapur Thanda	SC and ST community, Homogenous and highly cohesive	
2	Nazeerabad	Only ST, Highly cohesive community	
	Mallamonigudem	Hindu, Muslim and ST– fractured but became cohesive in course of the program	
3	Rompally	BCs and SCs, Traditional leadership very exploitative, contractual and non-transparent.	

*Table : 4* Strengths and Weaknesses of Selected Villages

# Changes in the district administration

Project Directors (PDs) changed four times during the course of implementation of the WASP. The procedures and practices pursued by the District Administration also changed with them. While these changes were brought about by the pro-active initiatives of the PDs, the action study project's experience in itself had contributed to some of these changes.

Project Director	Processes hindering participation	New Initiatives taken
Mr. Rajendra Prasad		
Mr. K.V. Ramana	<ul> <li>MDTs being joint signatories in the Watershed Committee account</li> <li>PIAs were not given any budgets</li> </ul>	
Ms. Sreedevi		<ul> <li>Joint cheque power of MDT removed</li> <li>Decentralised nurseries with women SHGs</li> <li>People's technology of Vanduru accepted</li> <li>Emphasis on labour groups to take up work</li> </ul>
Ms. Shailaja Ramiyer		<ul> <li>Trainings to groups</li> <li>Importance to processes</li> <li>Facilitating Capacity Building Network</li> </ul>

14

# Key Constraints & Lessons Learnt

- Watersheds in Bantaram mandal are in an interior location and were less accessible – both in terms of communication and transport. The distances among the watersheds are also considerable. It was particularly difficult for WASSAN team to communicate and visit these watersheds.
  - In case of interior villages it is necessary to have a viable number of projects at one place so that the facilitating team and a PIA field office can be stationed in the vicinity.
- 2. Girghitpally village is almost a part of the Vikarabad town. Influence of urbanization is quite strong on the village culturally and economically. People were generally not interested in dry lands- labour get higher wages in the town and farmers were only interested in irrigated agriculture. These villages are often highly fractured politically. This imposed significant constraints in community organization- the program was almost a failure in this case.
  - The near urbanized villages are not appropriate for watershed development program. The probability of success would be low as people have very low stakes in the development of rainfed dry lands.
- Lothuvagu watershed in Nazeerabad has three separate hamlets with few households. In such cases the facilitators had to repeat participatory exercises for community organization several times, thus delaying the processes.
  - Time frame for community organization provided in the project need to accommodate such geographical constraints.
- 4. Pedda vagu watershed only covers half of the village Mallamonigudem. Households having lands within the watershed

15

WASSAN ACTION STUDY PROJECT WASP

are dispersed across the village. It was difficult to organize groups with only some of the households. There was also some resistance from those households not covered in the program.

- If the watershed does not cover lands in the entire village, then more number of watersheds needs to be sanctioned.
- Though the watersheds were sanctioned officially to WASP in 1998 May, the sanction date was shown in the records as being 3<sup>rd</sup> batch (1997) watersheds. This had resulted in undue pressure in timeframe.

After the initial sanction of the watersheds and selection of the villages the **Project Management Cycle** is spread over the following phases : **Preparatory Phase, Entry Phase, Community Organisation Phase** which includes capacity building inputs, **Planning Phase** and **Implementation Phase**. The learnings from the WASP project are also organised under these broad phases. Issues concerning livestock development, agriculture production enhancement and larger impacts are dealt towards the end.

# 2.2 Preparatory Phase

This is the phase in which activities like selection of facilitators and their orientation/ training are taken up. Preparation of entry into the villages also took place during this phase. This phase was spread over a period of one year.



16

The PIAs in consultation with WASSAN identified and recruited watershed development team (six in number- one per PIA in two districts). In the WASP programme they were given separate identity and were called facilitators. Many of them were fresh graduates from college. The facilitators and PIA coordinators had

WASP WASSAN ACTION STUDY PROJECT

undergone an intensive training spread over 30 days in five modules focusing on community organisation. Each module had a component of hands on experience. They were also taken to exposure visits to all major organizations in the state.

As each PIA was sanctioned two watersheds each, only one facilitator would be available for both the watersheds. For intense interaction with the watershed community these facilitators were asked to stay in the villages and facilitate the program. All the activities were demonstrated in one village on rotation by WASSAN team. All the facilitators and PIA coordinators participated in these events. The support services model thus, emerged.

Within 2 months there was a fund flow problem from the governmentmainly in Nalgonda district. The PIAs in Nalgonda withdrew from the program. Facilitators in Ranga Reddy also left within 3 months as they found it inconvenient to stay in the villages. There was fast turn over of facilitators. For e.g., in Vikasam and Serene Services 4 and 6 facilitators changed respectively during the project period. The model of initial intensive training was discarded later on and the training method was more 'on the job'. The fast turn over of facilitators, associated delays and consequent pressure from the district administration had impelled WASP team to involve directly in several primary functions.

## Key Constraints & Lessons Learnt

- Initial intensive training was not an appropriate model considering the faster turnover of facilitators. This would also exhaust the limited training budgets faster.
- PIAs interest in the program, creating required facilities for facilitators to stay and smooth fund flows were important factors to retain the staff and their interest.

# 2.3 Entry Phase

In this phase the facilitators get acquainted with the villages, their socio-economic profiles. Opinion



leaders, youth, traditional power structures and possible hurdles would also be identified in this stage. Awareness of the community is built through several meetings, cultural shows and video programmes. The facilitators should understand the status of natural resources, various stakeholders, and possible interventions.

Meeting gram panchayat president & seeking GP's cooperation & resolution is undertaken in the very beginning of this phase. Different *wadas* (sections of village where specific communities are concentrated) are identified in the village and the Facilitators getting acquainted with the community in each *wada*. This is done in the morning and evening times, when people are generally available. Social mapping is done in each *wada* for identifying households, their occupations etc., and the consent and

# Informal Meeting with the Community

In Rompally village there was initial indifference to the facilitation. The facilitators had taken a room in the SC colony and started teaching in the Anganwadi School for 15 days in the nights. This drew the parents to the facilitators and helped in starting the watershed program.

The informal 'Chit' Groups' meetings were another major source for making personal contacts and initial mobilization. cooperation of the opinion leaders in the *wada* is sought.

SHGs & other traditional institutions like traditional caste groups, devotional groups are identified. Meetings are organised with them and cooperation sought. Informal meetings with groups of farmers on general issues related to their agriculture, lands etc., were organised, which helped in building rapport. The meetings in *wada*, the issues raised etc., were monitored rigorously.

Youth organizations and other interested youth in the village were identified and their

Box : 2

18 WASP WASSAN ACTION STUDY PROJECT

help was sought in organizing meetings in the *wada* and in surveys - they are called 'barefoot social workers'. Household survey on members, occupation, livestock holding, indebtedness, etc. was organised in all the watersheds.

# **Communication Tools**

In building the awareness of the community communication tools play an important role. Apart from intense meetings with the community in small numbers communication material was particularly developed for the purpose.



#### Slide shows

When planned properly slide shows have a matching effect of a video, but with far less costs. Photos of the watershed villages and those from Rayalaseema Watershed Development Program, were developed into

slides and a narrative story was developed on land degradation, droughts and benefits of watershed program. Each slide show was preceded by an exhibition and a rally by children around the village.

## Cultural Shows

We have a rich tradition of folk arts, which is primarily rooted in oral culture. Where literacy levels are low and reading habits are not ingrained folk arts play an important role in communication. Apt messages can be powerfully communicated to the community by specifically designed folk arts.



WASSAN ACTION STUDY PROJECT WASP 19

#### Exhibitions

Photographs of the same village were mounted on chart papers along with



20

posters on various themes and exhibited during meetings, slide shows, etc. These formed important visual communication and created awareness among the community regarding the status of their village and the possibilities under the watershed programme.

#### Key Constraints and lessons learnt

- Recognising *wada* (instead of a village or watershed) as a unit for awareness building and monitoring related tasks proved to be successful. It is important to note that village is not a homogenous unit and given the traditional hierarchies of caste and class certain sections cannot voice their concerns in open meetings. Separate meetings with different communities and women would help in voicing their stakes and building capacities.
- Meeting opinion leaders and youth leaders in each *wada* and seeking their consent/ active support neutralized some forces and helped in smooth conduct of meetings.
- It would be useful to design a database system and monitoring charts for storing the information generated during the entry period – like names of opinion leaders in each *wada*, their age group, occupation etc. Lack of such a well organized database management system was a major constraint in the WASP.
- Building in specific tasks (including timings) for awareness building and their monitoring systems in the project management was a major innovation by Dr. Vijay Kochar, who initially led the team.
- Using the barefoot social workers in surveys raised their expectations. But, the community did not select many of them as volunteers, secretaries or group leaders. This has distanced this

group from the program and created conflicts. It is therefore not appropriate to use voluntary services of those who come forward initially. They may not have real stakes in the program. Using services of social workers on payment basis (on daily wages) may be an appropriate strategy. Thus there is a need to carefully plan for a slection process of volunteers/ barefoot social workers.

# 2.4 Community Organisation Phase

Vibrant and functional peoples institutions are the main expectations of the watershed programme. It has been recognised beyond doubt that people's participation is important in all the stages of the programme so that the conservation works broaden into natural resource management and continue even after the project period. The role of the facilitator is to

give a pro poor bias to the entire process of community organisation and capacity building.

As per the Watershed Guidelines, people dependent directly and indirectly on watershed resources need to be organized into Self-Help Groups and User Groups.



These groups together constitute the Watershed Association, which will have an executive committee. This association would also be registered legally and is expected to take care of resource management functions after the project. In addition, a Watershed Committee, constituting members nominated from the groups will manage the project implementation on a day-to-day basis.

# 2.4.1 Formation of SHGs

The Self Help Groups in the watersheds are intended to give pro-poor bias and build in stakes of those indirectly dependent on the natural resources

in conservation and management practises by providing access and control over them. However, there was no clarity either at the district or the state level on issues of formation of SHGs, release of revolving fund, provision for facilitators to strengthen the groups, etc. A major programme of the government – Development of Women and Children in Rural Areas, DWCRA – has been organising women for thrift and credit purposes. Thus the potential of those who are using the resources indirectly (grazing in



common lands/ forests, leaf picking, etc) becoming managers of that resource for sustained flows and drought proofing has been lost.

Initially, there was not enough clarity even in the project on the concept of Self-Help Groups - i.e. whether the existing thrift and

credit based women SHGs were adequate or new SHGs be formed on the basis of occupation/ activity with mixed membership of women and men. Lack of such clarity also diffused the project efforts. In the watersheds the list of already existing SHGs (formed under the DWCRA program of the government) was prepared. New groups were organized with people not covered under these groups. The number of SHGs in each watershed is given in *Annexure - 4*.

The DPAP had taken a stand that it would not recognize SHGs formed under DWCRA for release of any revolving fund. This created a lot of confusion and commotion in the villages. Later, in the watersheds Self Help Groups took the shape of Labour groups and works were implemented through them. Much later in the project period few groups based on their functioning received revolving fund from the watershed project. Many groups were indebted to banks and government and were not eligible for the revolving fund.

There was undue delay in the community organisation phase due to turnover of facilitators. This had shifted the focus to formation of User

Groups and Watershed Committees and the group building process had not received required inputs.

# 2.4.2 Formation of User Groups

User Groups are those, which take up conservation activity of natural resources. However, there was a popular mis-conception that User Groups

should compromise of landed people. For people to take up activity on land, they need not necessarily be the owners; they are the 'users' of that resource based on ownership, right, access and tenancy. It is important that such users are organised right from the beginning to build their stakes into not just conserving the resources, but also into



management and sustainability of the resources. The User Groups can be formed on basis of sub-watershed, contiguity of area, homogenous community or type of activity.

Box : 3

# **User Groups**

One User Group is formed for every 90 – 100 acres and there would be about 12 – 15 User Groups in every watershed. Farmers with patta lands, and those enjoying Government lands would be the members of User Group. The B C and O C farmers in the Group contribute 10% and S C and S T farmers about 5 % of the costs of the work. The contribution can be made in terms of cash, material and labour.

> The Group leaders liaise between the group and the labourers. They also organises a monthly meeting. In this meeting the work done is reviewed. The possibility of taking up water harvesting activities like ponds, check dams is discussed in these meetings. The Group Leader, who is trained, would create

awareness among the members regarding the natural resources. The leaders should also facilitate the net-planning process. The group leader also prepares the farmer wise estimates for various works. One of the groups also has taken up pest management.

Formation of User Groups was a unique experience in WASP. The process of forming these groups is as follows:

PIAs, facilitators and the community went around the area and identified the drainage systems etc. Watersheds were delineated at this stage. Resource mapping exercises were conducted in each identified watershed. In these participatory resource mapping exercises, the drainage lines and subwatersheds were identified. Based on these sub-watersheds user groups were



formed. This information was transferred to the revenue/ cadastral map.

This was followed by preparation of subwatershed wise list of farmers. Meetings were organized independently with each group in

the nights and the boundary of each user group was finalized. Simple readjustments on the basis of borders, caste, location of habitation, etc. were made.

Each group has about 15 to 20 members covering 30 to 40 ha area. Each group chose their group name and nominated their group leader. This was uniformly achieved in all watersheds with one exception. In Rompally, user groups were formed after the formation of Watershed Committee as there was no facilitator for two months. Women were also invited for user group meetings. Though they participated in some watersheds initially, their representation in user groups became insignificant.

# 2.4.3 Formation of Watershed Association and Committee

As already indicated Watershed Association is the registered body meant to look into the issues of natural resources management at the Watershed level, the Committee looks into the day to day affairs of the project during the implementation phase. Association is the apex body at the watershed level consisting all the members from User and Self Help Groups. This is

equivalent to the Gram Sabha of a Panchayat village. Looking from the point of institutions, sustainability is measured in terms of the functioning of the Association and the Groups even after the project period. The sequence of community organisation should be as follows: formation of Self Help Groups



25

and User Groups, formation of Watershed Association, formation of Watershed Committee with representatives from concerned groups.

In Lothuvagu and Pedda vagu watersheds, the nominations for representation in Watershed Committee were sought in separate meetings with leaders of user groups and self help groups. Their respective nominations were ratified in a village level meeting (Grama Sabha). A chairperson was nominated from the committee members. The village in the general meting (Grama Sabha) directly chose a watershed President. In Jambapur thanda and Girghitpally watersheds the President was elected in a village meeting. Committee chairperson was also nominated by the villagers (from the leaders of user groups). Rest of the Committee was formed by seeking representations from SHGs, user groups and Gram Panchayats.

In Rompally as the groups were not formed in the beginning itself, watershed Association President, Committee Chairperson, members etc., were elected directly in the village meeting. It was politically and caste-wise a balancing act. As there were inadequate efforts in strengthening SHGs due to various reasons, the women groups did not emerge strongly in the initial stages.

## Key constraints and Lessons Learnt

- Though WASP team was keen in forming self help groups, the lack of clarity at the district level hindered the process initially.
- Delays in release of revolving fund resulted in loss of faith and interests in the community.

- Group formation and strengthening is a lengthy process. It needs inputs at several layers and for a long time. The district project authorities refused to support facilitators needed for strengthening of the groups as the community organisation budgets were centralised.
- Capacity Building efforts for the Self Help Groups were carried out of funds with WASP as centralised training budgets were not released by the district administration.
- Where the PIA leaders and facilitators intensively facilitated the group formation process (night meetings, transect walks with the members etc.), group leaders with real stakes on land emerged. On the contrary, for e.g., in Girghitpally watershed traditional leaders with no clear stakes had taken key positions due to weak facilitation. This had a longstanding impact on the success of the program.
- Considerable time was lost in Rompally to settle the incongruities emerging out of missing the sequence of processes;
   i.e. issues like some user groups not having any representation in the Watershed Committee and some groups having many representatives.
- All user groups selected local names of the streams/ land in their area for their groups - this made communication easier.
- The user groups by and large remained male groups.
- Though the groups were active during the watershed imple mentation phase, they were not strengthened to function on a long-term basis. Thrift and Credit by the members of the User Groups could have formed a binding thread for continuation of these groups.

 Based on the learning in Ranga Reddy, a process of watershed committee formation was evolved and fine-tuned while working with the DDNN watersheds in Nalgonda

26

# Watershed Committees – Most popular of Village Institutions

Apart from the Watershed Committee, there are Village Education Committee, Panchayat, Vana Samrakshana Samithi and Thrift groups at the village level. These groups were analysed on a matrix with parameters of transparency, n an state Manu AD benefit, norms for meetings, book keeping and implementation of works. . wave A scale of 1 – 5 has been used to for ranking. As most of the participants 2000 2 who participated in the ranking were very familiar with watershed committee they have ranked it high. But behind they have very solid reasoning.

#### Transparency

Transparency in thrift groups is high as the groups are small. Next position is for Watershed Committees. People get to know about the watershed activities through regular meetings, measurements and social audit. Such systems do not exist in Panchayat.

#### **Benefits**

Watershed programme is a blessing to the farmers as it conserves water and soil and is ranked first. Thrift groups stand second as they make available credit in times of need. Next are Panchayat, VEC and VSS in that order.

#### Norms for meetings

Watershed Committee holds meetings regularly and decisions are made in groups. Resolutions for payments are also made in the group. Due to this transparency, ownership and responsibilities are high. Such systems are seen to an extent in Thrift groups and Panchayat, but not in VSS and VEC.

## **Book Keeping**

Gram Panchayat and Watershed Committee have been ranked equally in this respect. However, records in Panchayat are kept nominally where as they tally with actual works in the watersheds. Books are important for Thrift groups also, but are not seen in VEC and VSS.

#### Implementation of works

In watersheds works are planned and implemented with people's participation. Enabled by this the villagers were able to solve some of their problems outside watershed also. Such experiences are not available in other groups/ institutions. Support of implementing and support agencies and WDT members was very much appreciated in this regard.

## Corruption

Panchayat, VSS and VEC are reeking with corruption. Some vested interests wanted to corner watershed works also with an eye on the profits. Even some farmers were behaving like contractors in their own fields. However, the Action Study Project has succeeded in making this a peoples programme and in building their real stakes into the programme.



San frank

\$52.a

Balan





Box : 4

#### STEPPING STONES IN MATERSHED PROCESSES

#### Box : 5

# Watershed Chairperson and Secretary Two wheels of the Programme

Watershed Committee Chairperson and Secretary play a key role in the Watershed Programme. They co-ordinate between the groups in the village and PIAs and District Officers. They should be fully aware of their responsibilities and duties and should be aware about the programme objectives and goals. Thus, in Action Study Project several

training programmes and orientations were organized for these key functionaries. Let us know some of their experiences in their own words.

Jaffer Mia of Rompally and Balaiah of Jambapuram thanda: 'We came to know about the responsibilities of the



Chairperson when the Committee was being formed in the village. After the Committee was formed WASSAN has organized a training programme in Hyderabad and took us to exposure visit to Arutla village. We have come to know about several things through direct interaction: taking measurements, records to be maintained, conducting meetings, payments, etc. Afterwards we conveyed these messages to the villagers and the User Groups. Another



training programme was organized at APARD regarding the responsibilities of various stakeholders, viz. Committee, Secretary, Chairperson, Volunteer, WDT, Association. Slides, video, Kala Jatha were organized to create awareness amongst the community. Palle Suddulu, a form of local ballad, was used

to communicate the responsibilities of Chairperson, Secretary and President. Later we were given hands on training in works execution by the WDT. Our responsibilities increased after the cheque power was transferred to us from the MDT.'

district. It is also available in a Video CD. This process is built on a 'building blocks approach' where the committee is evolved from the members nominated from each group instead of the entire village. It has helped in keeping away all the vested interests and party politics out of the watershed committee formation process (see page 60 - section :4.3.2.d).

The sequence of processes in the formation of Watershed Committee is important. Formation of groups first, and intensive facilitation in the process of selection of group leaders by its members helps in the real stakeholders taking key positions. Choosing group leaders in a meeting of all group leaders to represent the committee helps in eliminating most of the vested contractual interests.

# 2.5 Capacity Building Inputs

The processes in a participatory watershed programme revolve around two main issues: one is organising the community into primary stakeholder groups and the other is building the capacities of the community so that

they can discharge the responsibilities assigned/ expected out of them. Training is only one aspect of capacity building. Exposure visits, communication material, on job training/ hand – holding form integrate part of capacity building.



WASP has consciously designed capacity building inputs for various stake holders, including the facilitators and PIA leaders. The list of training programmes, exposure visits, field demonstrations organised in the WASP Project is given in *Annexure No.5*.

# 2.5.1 For SHGs

Several training programmes and exposure visits were organized to all SHG leaders group building and women participation in watershed programme. Initially they were oriented on women participation in watershed program. They were taken to exposure visits to Arutla and Maheshwaram watersheds which were implemented by MANAGE as the PIA. Trainings were organised on Sangha concept for the women leaders. Trainings on conducting of Sangha meeting, deciding on who should get the loan, decision



making process, maintaining records (accounts etc.) were organised for SHG leaders at the village level. Video shows and posters on functioning of groups and characteristics of members in a group (prepared by UNDP) were exhibited to the women and volunteers. Women SHGs in

Jambapuram thanda and Nazeerabad thanda involved in nursery raising were given appropriate training. Trainings were also organised at village level in kitchen gardening in Jambapuram thanda. Skill development training (tailoring) for self employment was given in one of the villages. Skill development and construction management was also done in implementation of the watershed works. Involvement of SHGs in the program has become dynamic with the initiation of the labour groups. Several training programs were organised for the labour groups in construction, accounts management etc.

## 2.5.2 For User Groups

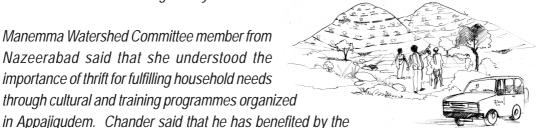
30

Orientation on group functions, resource mapping etc were organised for the User Groups. They were taken on exposure visits to various watersheds to see their functioning. User Group leaders were trained in Net Planning process and site selection for drainage course treatments. User Group leaders were trained in various aspects as a means to reaching out to the larger community. For example User Group leaders were trained in non-pesticidal pest management who in turn trained their group members.

# Training-cum-Exposure

Watershed Committee members and farmers feel that the trainings and exposures organized under the WASP have brought new light to their lives. "By seeing new places we have learnt new ideas" is what the villagers say.

Manemma Watershed Committee member from Nazeerabad said that she understood the importance of thrift for fulfilling household needs through cultural and training programmes organized



trainings organized for agriculture production. Those who attended the trainings shared the knowledge with the villagers. Before the watershed programme he couldn't cultivate much of his 5 acre plot. Under watershed programme he has constructed a percolation tank and started fish raising and is cultivating irrigated-dry crops such as chillies, turmeric, cotton, etc.

Anthaiah of Jambapuram thanda said that he has learnt a lot about the traditional crops during the training programmes in Hyderabad and Zaheerabad. After undergoing the training on nursery raising he is now having a nursery of 20,000 saplings. Rukkamma of Peddavagu



Watershed Committee said that she has learnt about vermi-compost and integrated pest management practices in the training programmes. This has been very beneficial and economical she said. V Bheemaiah Watershed Committee member from Girghitpally said that he has learnt a lot through orientation and awareness programmes on watershed. In Gandipet

WASSAN organized a programme on the concept of Self Help Groups. 'We have understood the concerns and issues faced by women. Now we are

sending more women to the training programmes' said Bheemaiah.

The User Groups leaders along with watershed committee participated in reviews, which were organised on rotation basis in all the watersheds. They were taken on exposure visit to DDS programme area and Aranya for understanding sustainable agriculture interventions and afforestation programmes. They were impressed by the seed bank being maintained. The varieties were mainly of traditional crops and varieties.

WASSAN ACTION STUDY PROJECT WASP 31 Box : 6

# 2.5.3 For Watershed Committee

A two day orientation and exposure visit (to watersheds implemented by MANAGE) on the process of planning and implementation was organised. Two days training program at APARD dealing with watershed concept, functions, roles and responsibilities etc. (in two batches -three watersheds at each time) was organised involving Watershed Committee members, user group and SHG leaders.

Series of slide shows were organised in all watersheds on the roles of user groups, committees etc. A technical training program on site selection for different treatment measures for Watershed Chairpersons and Secretaries was organised in one of the villages. Trainings were organised on net planning, structures in watershed programme and their site selection, animal husbandry



(relating to fodder storage and milk production), soil sample collection, orientation on livestock action plans. Demonstration on construction of structures was organised. Several exposure visits were also conducted. These trainings and exposure visits resulted in

enhancement of the capacities of the committee members in discharging their responsibilities effectively and are the real assets that will remain with the community.

# 2.5.4 For WASP Team and Facilitators

The first batch of facilitators has received intensive training and exposure visits for one month duration. Specific trainings were organised in tune with the project cycle to enable them to function efficiently. Trainings were organised on Watershed guidelines and concept, entry phase activities, PRA techniques, SHG and UG formation, net planning including technical aspects

such as survey, site selection, book keeping, etc. Mr. Sekhar Reddy, facilitator with REEDS, who is 10<sup>th</sup> pass was at the end of the project able to undertake survey and estimates for check dams, percolation tanks including all other works. It is not surprising that he has received the best watershed development team member award from the district administration. The WASP team visited watershed programs under Indo-German Watershed Development Program in Maharashtra for understanding Net Planning concepts.

One WASSAN team member stayed for 10 days in the watersheds being implemented by MANAGE to understand the planning processes.

The turnover in facilitators at this crucial point distorted the processes. The capacity building inputs were concentrated on the facilitators and not so much on PIA coordinators. In the absence of facilitators the PIA coordinators played significant role in the project activities. However, PIA coordinators experience may not be appropriate or completely relevant to what is expected. Only two watersheds were given to each PIA under WASP. The number was quite inadequate, particularly with respect to PIA administration budgets. The PIA ARTHIC left WASP on this issue, replaced later by REEDS. During a review meeting with DPAP, it was decided that WASP should provide Rs.1000/- per PIA per month for meeting the expenses related to monitoring. During the second phase of the project this was enhanced to Rs.1500/-.

The action study project watersheds have become a learning ground for functionaries in and outside the district. There were several exposure visits to these watersheds as a part of various training programs (mainly by APARD, WASSAN and DPAP). About 5000 persons have visited these watersheds (particularly Lotuvagu, Pedavagu and Jambapuram Tanda – because of their proximity). Such exposure visits from outside also helped the watershed community gaining self-confidence.

#### Key Constraints and lessons learnt

- PIA coordinators should be involved in all capacity building inputs as they are important decision makers in the process. This was also made difficult as the watershed program does not provide for the salaries of PIA coordinators, due to which they were not able to give sufficient time.
- PIAs ownership of the designed processes is crucial.
- Retaining facilitators at least for a full phase of activities is important.
- Two major constraints observed in capacity building were centralisation of training budgets and lack of a planning process for capacity building inputs while implementation.
- Though Dr. Vijay Bhai conceived the modules initially, it has become difficult to operationalise due to the above reasons.
- There was not much enthusiasm with the SHGs as their role in the program was not well defined. The district administration not releasing the revolving fund meant for them also did not help motivating them. But once, these groups taken the shape of labour groups towards the end, the process was energised and the capacity building inputs helped them articulate their right for wages and wage fund.
- Formation of user and self-help groups should precede the committee formation. If the process is reverse, as in the case of Rompally and Girghitpally, committee formation becomes a balancing act of accommodating political, caste and other interests.
- Intensive facilitation in the formation of user groups and in choosing their leaders helps in the long-term as the Watershed Committee is key to the success of the program.
- Though women members were selected from SHGs (3 to 4 members out of 11 in the committee as per guidelines), they did not play an active role in the Watershed Committee. Focused efforts on SHGs in the initial processes and insisting on equal membership could have altered this situation.

34

 $\Delta A$ 

# 2.6 Planning Phase

Planning is a key step in participatory watershed development programme. The level of involvement of the people in this process has influencing impact on not only the quality of works implemented but also on their maintenance. An open and transparent planning process increases the ownership of the programme by the community.

In participatory planning process joint analysis of the production constraints is undertaken, options available identified and community enabled to take a decision as to the necessary interventions. Planning is a process where

answers to the seven key questions are attempted, the questions being: why, what, where, when, who, how and how much.

A series of training programs on net planning, site selection, construction, etc.. were organized before starting the actual planning process. A perspective



action plan was prepared and submitted to DPAP based on the series of participatory exercises viz., social mapping, resource mapping, seasonality, time line and transect. It was approved by watershed association and also by DPAP. AFPRO initially helped in the PRA exercises and in technical training.

The first instalment of the works budget was then released to Watershed Committee account by DPAP.

The planning procedure adopted for soil and moisture conservation works in individual fields and for drainage courses are different and are detailed below:

#### 2.6.1 Soil and moisture conservation/ field treatment

For this field to field to planning on a group basis was adopted based on the method adopted under the Indo German Watershed Programme in Maharashtra. This method is more popularly known as net-planning method.

#### Net Planning

The user group in the ridge area was selected first for action planning. WASP project team demonstrated the process of preparation of action plans (in 4 to 5 plots) to the facilitators, Watershed Committee secretaries and user group leaders. The user groups along with



facilitators completed their group action plans. Implementation of the plans started simultaneously in consultation with the multi disciplinary teams, as it was the main work season.

In Rompally water logging is a major problem in the black soils. The user groups identified 'drainage channels' (*Vandur Kalawa – in vernacular*) as an activity to solve the problem. The multi disciplinary team objected to this and argued that watershed means 'conserving' and not 'draining' water. No



36

amount of persuasion from the community and the WASP team helped them relent on this stand. The watershed association took a firm stand that watershed works would start only if the government agrees for revival/ construction of drainage channels. The stalemate continued for a long time. This

case is a glaring example of how insensitivity in the project administration could thwart people's choices and traditional knowledge! This issue was solved only after the Project Director was transferred.

In the second and third years the user group leaders along with secretaries and volunteers completed the group plans and facilitators helped in consolidating the plans and getting approval of the multi disciplinary teams.

Box : 7

#### Vanduru – rich traditional knowledge

It has been a tradition with people living in difficult terrains and facing problems to identify appropriate solutions to the issues that impinge on their livings. In Bantaram mandal of Ranga Reddy District there are areas where soil (black cotton) layer is shallow and water does not seep in resulting in water logging. Farmer's drain the water in canals – locally called

vanduru – to save the crops. In Rompally village out of 2500 acres 800 acres face such problem and during net-planning farmers have identified vanduru as one of the works in place of contour bunds in such lands. The facilitators could understand the point only after explanation by the farmers but the DPAP officials refused to give



permission and insisted that farmers go ahead with bunding. This resulted in a stalemate for a long time, which was resolved with the new Project Director joining in.

WASSAN facilitated a technical study involving scientists of Central Research Institute on Dryland Agriculture (CRIDA), which validated the traditional practice. After these recommendations were made available to the DPAP vanduru was permitted in the name of diversion drains. However, problems were created again at the time of payment for these works. Ultimately, the farmers had to make provision to collect the drained water into small ponds, after which payments were made. Vanduru canals on an average costed Rs. 800/ per acre.



It was insisted that women and men should be present in their fields during the planning exercise. This helped in ensuring women's participation (particularly of working women) in the planning process.

## 2.6.2 Planning in Drainage Courses

A format was prepared for selection of structures along the drainage course with the help of AFPRO. Facilitator and secretary along with the respective user group leaders surveyed all the drainage courses and identified appropriate structures and their location. After compilation of all these



surveys, AFPRO conducted a feasibility study of treatment structures and also helped in the preparation of estimates. During the later period, an engineer was employed as part of WASP team who provided technical help.

Activities other than soil and moisture conservation and drainage line

treatment were mainly 'activity driven' without much planning. For e.g., list of interested farmers was compiled during Watershed Committee meetings

Box : 8

## Pro Poor Bias

AFPRO, while doing the feasibility study identified two sites for a percolation tank (Totala Vampu Bavi Kunta)- one with greater in size and with larger area downstream & the other smaller on both counts.

Villagers selected the second one with the logic that the first site though bigger, would only benefit rich farmers but the second would benefit mostly the small farmers.

This example shows that if there is real participation, people can make collective choices to benefit the weaker community.

38



to take up horticulture and social forestry related activities.

At times, Multi Disciplinary Teams also used to dump plants raised in a central nursery for plantation in the watershed.

## Key Constraints and lessons learnt

- Planning time overlapped with peak work season. As a result, there
  was considerable pressure on completion of plans and starting
  the work simultaneously.
- The issue of vanduru (drainage channels) stalled the process for considerable time.
- User group and plot-wise survey and planning helped in frontending people in making key decisions related to improving their own lands.
- Drainage line treatment plans were prepared bit by bit user group wise. Instead planning should be done in integrated manner for the entire drainage line for proper allocation of funds.
- There was resistance and ridicule from the MDTs on the planning process in the initial periods. They were only interested in the final product; thus, demoralizing the facilitators. With this the facilitators also started feeling that the participatory planning process is a burden!
- There was a gap of 6 months between the time ARTHIC left the project and REEDS taking over; when the MDTs implemented the project. Net planning process was not followed in this period in Girghitpally and Jambapuram.
- In Rompally as the PIAs did not own the process of participatory planning initially, the monitoring responsibilities shifted to WASP team.
- Insisting on women's participation in the field during net planning helped in involving women in a major way.

39

WASSAN ACTION STUDY PROJECT WASP

- Surveying total drainage course irrespective of the user group boundaries should be taken up at a time so that the treatment is complete, unbiased and need based.
- Misconstrued perceptions of the administrators were a major hurdle for accepting indigenous technologies or people's choices. A neutral mediation/ facilitation is necessary to break such stalemates.
- It is important to give due credit to the facilitator's efforts and achievements regarding participatory processes by the administration and PIAs while htey are involved in the work. Excessive emphasis only on expected targets may demoralize the facilitators. Rewarding systems for good processes should be integrated into the project management.

# 2.7 Implementation Phase

Once the planning process is completed and the community capacitated to take up works implementation becomes a mechanical repetitive process. However, there are issues of community contribution and payments for

work done that are of concern in this phase.

## 2.7.1 Contribution

While the money for natural resource conservation works is given as



grant, a token amount of contribution is collected from the concerned group/ individual towards Watershed Development Fund. This fund is meant for use by the community after the project period is over for maintenance and repair of assets created and to create newer assets. However, the facilitating team and the community should decide on procedures that give continuous accruals to the Fund.

The facilitators along with the Watershed Committee and User Groups have decided initially that the work would start in those lands where farmers' have paid contribution in the form of cash or labour in advance. It was the user group leader's responsibility to collect contribution. The secretary used to collect the amount from User Group leaders and deposit in the bank. Watershed Committee maintains a record of farmers' contribution. Secretary would give a receipt for contribution amount. However, there were varying experiences on the issue.

In Rompally the committee members and Secretary delayed depositing the contribution amount in the bank in the initial stages. It was insisted, even by the MDTs and PIAs that the payments for completed workswould be made

only after depositing the amount in the watershed development fund account.

Initially labour in Rompally were paid only part wages (deducting contribution) pending realization of contribution from farmers. The facilitators and WASP team told the labour



that they were not expected to pay contribution. They then demanded full wages from the committee and user groups. The user groups then tied full payment with good quality of work, which the labour fulfilled. The user groups then started paying contribution. The lesson is that transparency and information sharing with labour group is an important process.

In Girghitpally contribution came easily in the works on the ridge areas consisting predominantly of poor dalit farmers; many of them paying in terms of labour. As the works were taken up in the valley region, farmers' (who do not do earthwork) collected contribution from labourers. PIA and the facilitator insisted on farmer's contribution, which they refused. Work had stopped as REEDS had taken a principled non-negotiable stand on the issue. A WDT member was also manhan dled by some vested interests once. This issue is not not resolved. This village was a case where

the processes could not be taken forward for reasons explained earlier.

In Lothuvagu and Pedda Vagu watersheds contribution for bunding was collected, but not for other works in common lands. PIAs own beliefs, interpretation, articulation and perseverance on the issue are important determinants in negotiating with the farmers.

Payment of contribution is an important indicator of stakeholders' interest in the program. In spite of the above variations, it was one of the major achievements of WASP; particularly considering that the contributions were mostly not paid by the farmers in the district.

## 2.7.2 MDT as Joint Signatory in WC Bank Account

As a joint signatory, the multi disciplinary teams had to sign on the cheques for withdrawal of money from Committee's account for payments. This had resulted in considerable delay in payments and also put undue pressure on the MDTs time. The Process Studies of WASSAN clearly brought out these anomalies. The new Project Director reacted affirmatively by discontinuing this non-participatory practice.

## 2.7.3 Labour Groups

42

#### Contractors and 'Contractorship'

By transferring the watershed works fund to the community, the watershed program has successfully kept the external contractors out of the project. These vested interests had been a bane in the history of the dry land development in the country. However this could not ensure eliminating the 'contractual interests' in the program as many within the village eyed for the works budgets. Even the farmers themselves were eying at the amount they could net from the difference between the Schedule of Rates for works and the local wage rate - a process Dr. N.K. Sanghi of MANAGE calls 'Contractorship'. Restoring the control over the project funds to the primary

stakeholders' **production interests** rather than **contractual** has been a major historical battle! The labour groups is a process evolved in this struggle.

In Lothuvagu watershed the works were initially undertaken by a group of labourers. This initiated the process of formation of labour groups in the

village and was extended to other watersheds. Initially labour started working in small groups at times convenient to them. This motivated several others to form small groups and take up works in each user group. This had



created a competitive environment and works started moving at a greater pace. The WASP team and the facilitators extended this idea to other watersheds by formally organizing labour groups as Self-Help Groups. The

Box : 9

#### Labour complete work without machines

In Jambapuram thanda there is a hillock. During the rainy season, the rain water would rush down the hillock resulting in several problems. It was decided that C.C.T.s, diversion drains and plantation works should be taken up on this hillock. The villagers decided that they will do the work without using any

machinery and formed two labour groups. The work was hard and the labourers would get only Rs. 15 - 20/ per one day's effort.

These labour groups also took up execution of rock fill dams. Initially, their work was not upto the standard and the MDT refused to pay them. At this juncture technical trainings were organised to these people and they were able to execute the work properly. For this type of work they were getting daily wages of Rs. 60 - 70-/ per day. As the wages were attractive work more people wanted to join the group and benefit from the work. However, it was stipulated in the Gram Sabha that one week's work on C.C.T.s is mandatory to work for rock fill dams. This way low wages in the former were compensated by higher wages in the later works, both paid on work turnover (volume basis).

Project Director Ms. Sreedevi further built on this idea during one of her visits to this watershed by issuing a formal circular from DPAP insisting on all the PIAs to form labour groups in the watersheds and assign works to them. Now it is a common practice in the district to organize labour groups.

It gave the labour good support as the program made special effort in formally organizing them. They can be women, men or mixed groups. Special training programs were organized for labour groups on the themes like skills in construction methods, measurement, calculating wages and book keeping.

Box : 10

## **Employment for Women**

Watershed Guidelines lay major emphasis on participation. However, there is great resistance to this and the women do not get any assistance. But women of Mahila Sanghams of Rompally village made valiant efforts in this regard.

The women of DWCRA groups were asked to implement some works even before watershed, but the works were hijacked by the local bigwigs. In the watershed programme they were sanctioned works with support and lobbying from district administration. Nandini group was sanctioned a check-dam. They were intentionally harassed by the Watershed Committee and



44

were made to work more than necessary, which resulted in a loss of Rs. 2,500/- for 6 women who took the supervisory responsibilities. However, when new works were sanctioned the women groups were set aside. Women took up the issue to the PIA demanding 'Work to workers and not for contractors' and 'accountability' of the Watershed Committee Chairman. The PIA studied the situation and discussed in Gram Sabha within a week. The women put up valiant struggle and insisted for a fair deal. This resulted in

the removal of the entire Watershed Committee. A new committee was formed, this time with more women representatives. The new Watershed Committee has sanctioned works to the Women Groups. Though other women groups were earning satisfactory wages through stone works Nandini group suffered because of the deeds of the earlier Watershed Committee Chairman. But the women of Rompally are marching heads despite such adversities.

This process is in stark contrast with the implementation of works in contractorship mode wherein one person advances money needed and makes profit at the expense of the labourers.

These labour groups had transformed the process of implementation in Rompally village. Five women SHGs in this village had taken the works as

Box : 11

labour groups. These women used to migrate to nearby mines for work. They were taken to an exposure visit to nearby village to show the construction of a checkdam and were also given good handholding support by the engineer in WASP team. They

#### Wages based on Work output

The payments are made as per the Standard Schedule of Rates fixed for the work. However, depending on the terrain earnings of the labourers may vary: if the terrain is hard the daily earnings would be low and if the terrain is easy the earnings would be high.

45

employed a skilled mason (male) from the village and also employed male labour when needed for carrying heavy stones.

These labour groups faced severe intimidation from some of the male Watershed Committee members and others, Chairman in particular who created many hurdles in their path. Finally these groups held the Chairman to task and demanded transparency, which led to three watershed association general body meetings. Finally they succeeded in changing the committee. More women members were selected in the new committee. The PIA coordinator, Ms. Vijaya Lakshmi supported the women labour groups and stood by them all through this process.

It was an empowering process. The process of organizing labour groups cut down the contractual interests in some user groups. The user groups in turn took monitoring of works done by labour groups very seriously thus, resulting in improving the quality of works.

Much earlier to these labour groups, skilled labour from Kadapa district used to take up all gully control works. These groups are specialized in

Box : 12

#### Some yearn for work, some vie for profits

Nandini Mahila Sangham of Rompally, Ambajpur Sangham of Jambapuram were Labour groups that have taken active role in implementation of watershed works. They have requested Watershed Committee to sanction works to women groups and encouraged women to take up the works. In this process three women's groups were assigned implementation of one check dam.

This created a big rustle in the village. One of the users with an eye on the profits wanted to corner the work and started troubling the women. Despite this and several problems/ losses women completed the work. Seeing the quality of work 2 check dams were assigned to men

groups and one to women's group. The same person again tried to create trouble for the women's group.

Many men are of the opinion that women can't work. And they do not co-operate when they are

assigned works. This resulted in many problems/ financial loss to women. For example the day women engage labour, the material would not be provided resulting in payment to the labour without any work.

The wage employment generated in the watershed programme is of paramount interest to the labourers. Special efforts are needed to see that the labour and women get these entitlements. Norms have to be developed in a way that the machinery and outside labour are kept out. All works have to be planned well and responsibilities fixed clearly so that the works are executed smoothly. Estimates should be prepared in advance and made known to all, which will reduce the profit mongering vested interests.

stone work. They would liaison with MDTs and get the contracts. It used to be a powerful contractual network. local masons were organized and given training in the construction of these works. And with these newly acquired skills, they had taken up all the works in the watersheds replacing the external Kadapa contractors.

#### 2.7.4 Other Issues

 Before any work was taken up in common lands like checkdams, percolation tanks etc., the User Groups would give an undertaking

46

on a legal paper that they would maintain and manage the asset. Conditionalities like no one would lift water directly from the storage, would not cultivate water intensive crops like sugarcane or paddy were part of the agreement.

- Many centralised activities like nurseries, etc. which are supported by DPAP proved to be vehicles of corruption and undermine participatory processes. People were not consulted in the choice of species.
- Centralised directives on specific activities also hindered participatory processes. In a blanket reaction to malpractices elsewhere in the district, DPAP restricted expenditure on bunding to Rs.3.0 lakhs. In many of WASP watersheds, bunding was a major activity, particularly in Rompally. 'Neeru – Meeru' ('Water & You' campaign) also put emphasis on specific structures bypassing the action plans.

These watershed villages because of their organized strength could access good amount of resources under Food for Work Program. This convergence helped in completing several works not covered under watershed program.

# CHAPTER

# Beyond Soil and Water Conservation

By and large WASP had achieved major objectives it had set forth initially. These watersheds were live examples of several of the processes suggested in the 1995 watershed guidelines. However, there were some clear gaps like building the strength of SHGs, in spite of conscious efforts.

In the second phase of the WASP project (during the extension period) the focus of the team was in production enhancement activities and on strengthening the SHGs. These exercises had become fore-runners to watershed+ initiatives and were gradually becoming live examples for other bilateral projects like AP Rural Livelihoods Project to take them forward.

# 3.1 Livestock development action plans

Livestock is a major natural resource and a livelihood asset of poor. But the issues relevant to livestock are not addressed in the watershed program. WASP made an effort to integrate the concerns of livestock resources into the watershed action plans.

Initially WASP had taken help from ANTHRA, an organization specializing in livestock. Along with the facilitators and PIAs a livestock development planning exercise was taken up in Pedavagu watershed. With this experience, the facilitators and WASP team had facilitated preparation of such



action plans in other four watersheds. Broadly three types of activities were identified:

> a) Activities related to water for livestock particularly along the grazing tracts



- b) Fodder development mainly in the common property resources
- c) Developing animal health workers as primary health service providers

The water and fodder related activities (like construction of checkdams, tanks, regenerating commons etc.,) were integrated into the normal watershed action plans. In Jambapuram thanda and Lothuvagu watersheds, this action plan triggered protection of patches of common land. 100 acres of common land was brought under community protection by banning

మమ్మల్ని గుర్తించండి వాటర్ పె పచ్చిమేత ఇచ్చే చెట్ల ຕໍ່ສາວວ່າ ວິດເວທີ່ສີສີວິດເບ రాంటిక్, వనరుల పటం, సీజనారిటీ వంటి లా ర్యాచరణ ప్రణాళిక ద్వారా చేయగల పన వచ్చిమేత ఇచ్చే చెట్ల వర్పరీ `సం పతు గాపాల సాగు కోపం గటు "పు ఇచ్చే వం టల పోత్సాహ ంలో గడి వితనాలు చలిప ంచి వశు వైద్యం చేస్తున్న వారిని, వ 00 ఎంపిక చేసి శిక్షణ ుర్చువు వాటర్షడ్ విధుల మండే ఉప ర్తలు (పాంతీయ వశు వైద్య కేందాలతో కలిపి వనిచేస్తే మరింత ఉవం

50

free grazing in Jambapuram thanda.

The issue of animal health training needed considerable advocacy. Watershed training budgets were quite inadequate for such training. WASP lobbied with DPAP to allow the Watershed Committee to spend the amount needed for training from works budget as this activity amounts to creating a sustainable service provision mechanism for livestock in the village. The Project Director, Ms. Shailaja Ramiyer pro-actively took the agenda forward and accorded the necessary sanction.

WASP WASSAN ACTION STUDY PROJECT

#### **Regeneration of Hillock for Fodder**

In Jambapuram Thanda during Livestock Action Plan preparation a revenue poramboke of 300 acres was identified, known as Veerlaswamy Gutta. A Committee for the protection of this hillock was formed. 43 families became members in the Committee with the inspiration

from exposure visit to DDS area. The impact of Vana Samrakshana Samithi in the neighbouring Somaram village motivated them to take up this step. Nursery of tree and fodder species identified during the livestock plan was



Box : 13

raised and planted on the hillock. Out of 20,000 tree saplings planted 50 % only survived. Free grazing was banned. Collection of dry wood was only permitted. Norms and fines were framed. They hope to get adequate fodder and fuel wood supply from this hillock in due course of time.

Livestock health workers' training was organized with the help of Dr. Shaheen in 6 modules spanning over 25 days. These health workers were identified and deputed by the Watershed Committees by a resolution.

They have subsequently formed a professional SHG and meet every month to review and refresh their subject knowledge. The cases they were treating were also reviewed.

This experience is being mainstreamed into AP Rural Livelihoods Project and also to other districts.



## 3.2 Agriculture Related Interventions

Linkages established with some of the agriculture research centers and the expertise with Mr. M.A. Qayyum, who led the WASP team during its crucial

period helped in taking up several production enhancement activities.

#### a. Improved Varieties

8 – 10 demonstration-cum-trails of improved varieties were organized.They include,



- ✤ 4 improved short duration varieties of dry land rice,
- ✤ 3 varieties of green gram,
- ✤ 2 varieties of Pigeon Pea and
- ✤ 3 varieties of chick pea

These on farm trials were aimed at addressing some of the critical constraints in the cropping systems like reducing the crop period, avoiding the problem of germination of seed while in pods, yield improvement etc. The results



52

were mixed. In some cases like ML 267 variety of Green Gram, the seed is still being rotated among the farmers. LGG 410 variety of green gram was also adopted by farmers for its multiple characters like nongermination while in pods, higher yield, pods in clusters making it easy for picking etc. LGG 407

variety proved to be sensitive to water logging and had failed.

## b. Sweet Sorghum

Constant erosion in the area of dry land food crops is a major threat to these regions. An important problem of dry lands is to sustain the dry land crops. Value addition to the products of dry land crops, increasing the

demand for these food crops therefore, assumes significance. In this context the sweet sorghum variety was tried.

A sweet sorghum variety (SSV 84) was tried in collaboration with National Research Center for Sorghum (NRCS), an ICAR institute. Like in sugarcane, jaggery can

be prepared from the sweet juice extracted from the stem. In the first year only two farmers tried in a very small area but in the second year about10 farmers tried it in about 30 acres. The first year jaggery was prepared at



NRCS laboratory on a sample basis; but in the second year it was prepared in the village with the help of NRCS technical staff. Though yields were good in the first year, the second year crop was heavily infested with 'shoot bug' affecting the yield. The drought

like situation was also a reason for heavy infestation of shoot bug. The quality of jaggery was also affected. The experiment needs to be carried out for some more time to see its real impact.

## Key constraints and Lessons

- This experiment needs to be tried over three years in case of any unforeseen pest outbreaks. This would allow an average picture to emerge for farmers to make an objective judgment.
- Linkages and logistics for processing, value addition were also constraints.
- Interest of PIAs in continuing the support to such activities is critical.
- Lack of priority to such programmes in the management of watershed activites in the district is a constraint.



53

144

WASSAN ACTION STUDY PROJECT WASP

#### c. Non-chemical Pest Management (NPM)

User Groups can be effective platforms for converging agriculture related technologies. These groups could effectively plan and implement the soil and water conservation programs. Their logical next step should be to address the problems related to agriculture in their sub-watersheds. With an aim to facilitate such a process, natural pest management programs were organized with the help of sustainable agriculture wing of Centre for World Solidarity. The following were the steps viz.,

- Visiting the watersheds along with the resource persons, identifying the pest complexes and incidence in the fields along with the Watershed Committee members
- 2. An informal discussion with the watershed community explaining the need and opportunities
- 3. Watershed Committee making a resolution to depute interested persons from the user groups (proposed by the groups) for the training program on NPM.
- 4. Organising a three day training program
- 5. Cultural shows (palle suddulu) on NPM in the watersheds
- 6. The trainees after returning from the training demonstrated the NPM practices to their group members.
- 7. Following up with the user groups while they practiced in their farms

#### Key Constraints

54

- There was confusion on the measurement for diluting the formulations (litres to local units)
- Farmers resorted to the application of the 'formulations' (garlic, chillies, cow urine, neem decoction, etc.) very late when the pest complex was in an advanced stage; whereas they had to start the

practices from an earlier stage.

- The dose of application was also not appropriate mostly out of panic reaction to pest incidence
- Rains occurring, in some cases, immediately after application, thus, making it ineffective.



- Lack of an intensive follow up from the early stages of the crop
- Holding back the farmers from spraying pesticides is a major problem as they see it initially as a risky proposition. Needs good counselling.

#### Lessons

- NPM needs to be adopted as a total package with one user group to start with for the entire crop season i.e., from start to end.
- Regular follow up and intensive technical support in judging the pest incidence etc., need to be planned.
- It takes anywhere between 3 to 4 annual rotations for these alternative pest management systems to stabilize.
- The usual practice is to employ a village level facilitator for constant monitoring during the crop period for which budget availability in the watershed program is a constraint.



55

 The program has to be planned integrating all the above factors and over a period.

WASSAN ACTION STUDY PROJECT WASP

#### d. Nursery

In the initial stages plants (for afforestation) were supplied centrally by the district administration. The MDTs used to ask for the local preferences for plants, but it was not respected while supplying the seedlings. Plants used to be dumped – resulting in much wastage.

Later Vikasam requested the district administration to allow growing of nurseries by the SHGs. The new Project Director had encouraged this initiative and gave permission. Initially MDTs used to supply the poly bags, seeds and other material required. This nursery failed for lack of supply of seeds in time and problem of irrigation water. Later the program was made



flexible allowing the SHGs and Watershed Committees to decide. By this time the Watershed Committee in Jambapuram thanda started protecting a patch of 100 acres of common land. The varieties identified in the livestock action plans were chosen for nursery raising. The seeds were collected locally and

STUDY PROJECT

some were procured from outside. Mr. Narsanna, a specialist in Permaculture, provided the necessary technical support in this process. The nursery was a success and the plants were planted in the common land being protected.

#### Key Constraints & Lessons

- The above experience reinforces the need for people's participation.
   A facilitating leadership at the district level is crucial for involving people.
- Centralised control/ supply of material would be counterproductive.

ACTION

56

- Linking the plantation needs/ demand with the nursery is an important aspect in promoting localized nurseries.
- Training to SHGs in nursery raising is crucial.



Monitoring and backstop support while in the initial stages (like monitoring germination, supply of additional seeds for gap filling etc.,) is an important factor.

## 3.3 Efforts in Convergence

#### a. With Forest Department

During the participatory exercise of resource mapping in Lothuvagu watershed a patch of 92 acres degraded land was initially identified as common land. This was thought to be land under revenue department and some farmers were also given *pattas* (land right) on the border of this patch of land. An user group was also formed in the name of : '*Danumgutta Parirakshana Committee*' (Committee for the protection of the hillock – *Dhanumgutta*). Mining of stones was a major problem in this land.

After formation of the committee, the hillock was brought under protection and mining was regulated – allowing only loose stones to be collected. The committee published a pamphlet announcing the details of protection and rules and regulations. When it came to know about the protection the Forest

Department contended that the land was under reserve forest according to its records. It objected to the users group taking up any treatment works in the land and advised them to transfer the budgets to the



Department for implementing the treatment. The Watershed Association and the protection Committee objected to this as they wanted usufruct rights over the regenerated biomass.

Villagers approached the District Collector (head of district administration), public representatives like Member of Legislative Assembly (MLA) and also the officials of the forest department; but the problem was not solved. The matter was also brought for discussion in the Joint Forest Management wing of CWS. Mr. S.K. Mukherji (ex- Principal Chief Conservator of Forests, Government of Andhra Pradesh) visited the site along with WASP team and the department officials. Even this intervention did not solve the problem. Forest Department refused to give permission to the Watershed Association to treat the land and get usufruct rights. Even a proposal of forming a *Vana Samrakshana Samithi* (Joint Forest Management Committee) was not entertained. Forest department wanted to implement the program by itself.

In spite of prolonged negotiation, having sufficient budgets, a clear will of the community to protect and regenerate the land and relatively higher order facilitation, the issue of treating forest lands within the watershed area could not be resolved. It was caught in the quagmire of inter-department jurisdictional problem and the land continues to degrade.

## b. Livestock

During the initial phases, orientation programs to farmers on fodder, types of breeds and first aid were organized with help from the local veterinary doctor. The local veterinary doctor also distributed *Stylo hamata* grass seeds. Later after the Animal Health Worker's training, a preventive vaccination program was taken up jointly by the workers and the local veterinary doctors.

#### c. Agriculture

These initiatives to introduce better quality seeds with the help from the Agriculture Research stations were already discussed.

## d. Drinking water

Good social capital in terms of organized community is a good vehicle for convergence. In Lothuvagu watershed the community could negotiate with several officials and political representatives to mobilize required funds for social mobilization (*see box 14*).



Box : 14

## People Solve their Drinking Water Problem

Nazeerabad is a hamlet of 85 tribal families. This is situated on a small hillock. Drinking water is a major problem. The villagers get water from an open well from 1 km away. They approached the Mandal Development Officer, Rural Water Supply office in vain as adequate

funds were not available with them. They also met the District Collector with the same result.

They found that some funds were released to Gram Panchayat under wage employment scheme and got Rs. 60,000/ by putting great pressure. With this money motor and pipes were purchased. They got hydraulic excavator from the local MLA to dig the well. One member from



each house hold contributed voluntary labour for a week to dig the trenches for a pipeline. With such co-ordinated efforts people solved their drinking water problem. Now they have confidence that they can solve their problems unitedly.

# CHAPTER

# **End Results Assessment**

Watershed guidelines (1994) outline the results expected at the end of the project period. The end results are different from the project impacts in that they relate to the project activities (in terms of completion of the project

activities etc.) while impacts are the consequences of the activities. Impacts of the watershed program can be measured only after few monsoon seasons.

The WASP team along with the watershed committees and other community members have taken up an



end results assessment exercise at the completion of the project. The exercise was not conducted in Girghitpally 1 watershed. The end-results study involved a series of participatory exercises. This chapter presents the results.

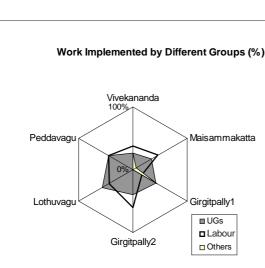
# 4.1 Who Implemented the program?

The control of primary stakeholders on the decisions related to investments on their resources is critical to a participatory process. The planning process was described in the earlier chapters. The works are implemented by

watershed committee or user groups or self-help groups of labour. The Spider Graph in *Figure 1* presents percentage of works implemented by these groups in the six watersheds. SHGs and UGs are nearer to the primary stakeholders than



WASSAN ACTION STUDY PROJECT WASP 61



others (mostly watershed committees). In Girgitpally 1 and Vivekananda watersheds the implementation was to an extent centred at 'Others'. The labour groups have taken over implementation at some stage. Except in Girgitpally 1 watershed they account for substantial percentage of work implemented by the labour groups. The User Groups have monitored the works while the SHGs implemented them

PPING STONES **HED PROGES** 

Fig : 1

Except in Girgitpally 1, the works were mainly in control of the primary stakeholders.

## 4.2 Profile of Works

*Table 7* presents the detailed physical achievements and expenditure on various works taken up watershed-wise. *Fig 3* presents the percentage expenditure on different works across all the watersheds in a pie chart.



Bunding, check dams, percolation tanks and gully control structures are the predominant types of interventions accounting for more than 70% of the expenditure. Girghitpally 1 and Vivekananda watersheds are the exceptions. In Vivekananda watershed the problem is more of drainage than water

conservation. In Girghitpally 1 watershed there is a general disinterest among farmers on dry land agriculture. The percentage expenditure on water harvesting structures is about 40 per cent.

For the purpose of the assessment, bunding, gully control structures and water harvesting structures are considered. After a general resource mapping exercise identifying the works, sample transects are selected for assessment.

A team consisting of the WASP team (including WDTs), some of the user group and watershed committee members surveyed all the plots within the sample area visiting each bund making observations. The data was tabulated and analysed. Though the teams have also surveyed the gully control structures, it was not systematically done in all the watersheds. The survival rate of plantations is very poor and the team did not make any effort to analyse the same. Water harvesting structures are mostly intact and do not need any maintenance is such a short time span.

This exercise has also helped the community to review the work and build pressure on those farmers who have not repaired the breaches.

# 4.3 Watershed Development Fund

Watershed Development Fund is one of the institutional mechanism for sustainability of the structures. The table gives the fund available in the WDF account of each watershed. In many places the contribution was not collected for structures in the common lands (mostly water harvesting structures). In all the watersheds the people have contributed except in Girghitpally-2 watershed where the committee has collected contribution from the hydraulic excavator owners or from labour.

The fund is in the bank account jointly operated by the watershed President and the WDT. There are no operational guidelines in the state so far on the

S.No.	Watershed	WDF amount (Rs.)
1	Lothuvagu	22,600
2		,
	Peddavagu	45,000
3	Girgitpally – 1	32,414
4	Girgitpally – 2	57,661
5	Mysammakatta	69,269
6	Vivekananda	51,660

Table : 6 Watershed development fund

use of the watershed development fund and in all the places it was invested as a fixed deposit.

# 4.4 Institutions

64

The project succeeded in organising the people into user and self-help groups. Almost all the households are represented in one or other group. The watershed committees also have good capacities in managing such programs and also accessing other government programs. But adequate efforts were not made on nurturing these institutions to sustain.

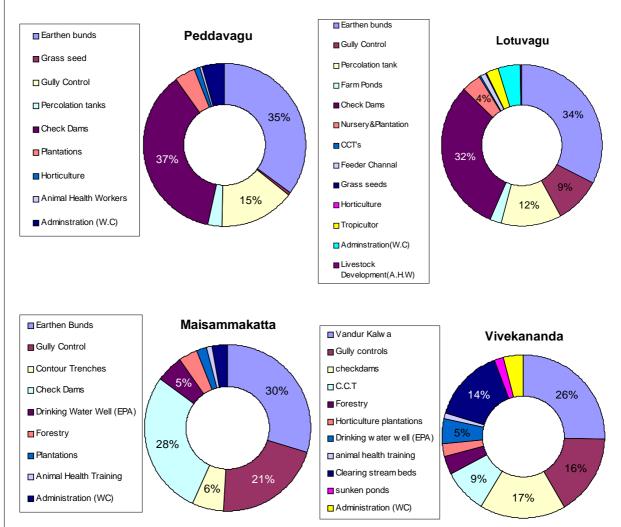
The watershed committees are found to be dormant after the watershed program is completed. They could not be nurtured up to *formal* (meeting regularly, transacting business etc.) functional levels. However, they could access several programs of the government and the villages have become politically active. The user groups have been quite active and effective during the implementation of the program. But due to absence of systematic efforts to converge services on to the user groups they have become dormant. The efforts on agriculture (replicating improved seeds and integrated pest management) though started in the groups could not go forward. The labour groups could negotiate for higher wages but are not functioning as formal self-help groups. Some of the self-help groups are active and are integrated into the regular government programs of promoting SHG movement.

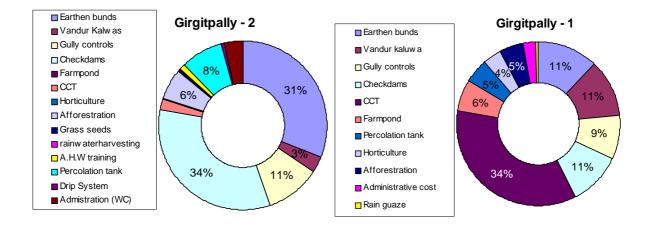


				VIKASA	AM			Serene	Services	5		REEDS		
	Activity	Units	Lotuvagu		Pedavagu		Maisammakatta		Vivekananda		Girghit-pally -2		Girghitpally -1	
			Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	Earthen Bunds	На	317	531.31	247	565.64	208	382.00			264	429.66	99	152.9
2	Vandur Kalwalu	На							156.68	325.80	63	41.82	100	143.0
3	Gully Control	Nos.	187	145.34	193	243.01	452	272.00	122.27	205.00	125	147.60	111	109.3
4	percolation tank	Nos.	5	198.60	2	43.91					1	112.94	2	60.0
5	Sunken / Farm Ponds	Nos.	53	36.09					5	25.00	2	1.51	22	79.3
6	Check Dams	Nos.	11	497.12	12	588.90	10	361.00	6	215.00	9	461.42	3	134.9
7	Nursery & Plantation	На	48	62.00	52	66.28	15	46.00	15	48.00	29	81.66	38	58.1
8	CCT's	На	1.6	3.67			20	78.00	30	114.00	13	26.05	234	444.6
9	Cleaning stream bed	Km	1	17.50					2	183.00				
10	Grass seeds	На	60	5.60	60	5.85					40	3.80		
11	Horticulture	На	1	2.00	4	17.20	12	26.00	12	30.00	5.7	3.00	20	47.4
12	Tropiculture	Nos.	1	38.00										
13	Administration (W.C)	Years	4	71.20	4	69.75	4	41.00		50.00		48.37		33.4
14	Drinking water wells						1	66.50	1	66.00				
15	Rain water harvesting	Nos.									1	2.95		
16	Micro-Drip irrigation system	Nos.									3	9.72		
17	Rain-gauze installation	Nos.												6.8
18	Animal health workers' training	Nos.	1	6.00	2	13.00	2	13.00	2	13.00	2	13.28		
	Grand Total			1614.44		1613.54		1285.50		1274.80		1383.77		1270.0
	Grand Total : Physical; Fin : Financial E te: the above figures d	•		Rupees (all	0	in thousa			rlz progr			1383.77		12
110	The financial figures					0			in progr					
	0			neds under		0			uarv. 20	03				
				neds under										
• Act	ion plans for the balar							<i>j,</i> <b>_</b> 00 <b>_</b>						

Fig : 3

VIV





66

WASP WASSAN ACTION STUDY PROJECT

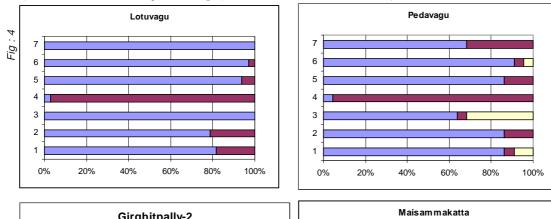
# 4.5 Qualitative Assessment of Bunding

Sample transects were identified in the resource mapping exercise. In each such sample, about 100 acres area was selected for qualitative assessment. In the exercise the following seven parameters were evolved along with the participants in the community. Quality grades are identified for each parameter, listed as below.

S.No.	Parameter		Quality Grades	5
1	Bund cross section	Good (Blue)	Average (Red)	Poor (Yellow)
2	Bund top level	Good	Poor	
3	Soil stored	(0.3 to 0.45 mts)	(0.2 to 0.3 mts)	(0.1 to 0.2 mts)
4	Breached	Yes	No	
5	Grass on bund	Grass grown	Grass not-grown	
6	Repairs	Not required	Required & Done	Required & not done
7	Excess water flow	Available	Not available	
	structure			

Table : 8 Quality parameters for bunding and quality grades

Qualitative assessment of bunding. (index as in S.No.1 in table 8)





WASSAN ACTION STUDY PROJECT WASP 67



68

The compiled analysis of the aggregate sample areas (chosen along a transect) studied in each watershed is presented in the *Figure 4*. The series numbers from 1 to 7 on the vertical axis corresponds to the serial numbers in the *Table 8*. The

horizontal bars indicate the quality grades from left to right in each serial number. The horizontal axis represents the percentage of bunds surveyed. For e.g., in Lotuvagu watershed over 80% of the bunds surveyed have good cross section maintained while the rest have average cross section. In Pedavagu watershed about 10% of bunds have poor cross section.

It can be seen from the bar charts above that there are very limited number of breaches in bunds in all the watersheds. There are some breached bunds that were not repaired by farmers themselves in Girghitpally 2 watershed. The status of bunds on the whole is good as can be discerned from the graphs.

# 4.6 Quality Assessment of Gully Control Structures

The following is the assessment done on a sample basis in two watersheds; the same has not been done in others.



Mysamma Katta Watershed : Assessment of sample Gully control structures S.No Bund Soil Breached Repair Repair Outlet Section Stored Required Done 1 Good 0.5m Yes Yes Yes Yes 2 Good 0.2m No No Yes -3 Good 0.1m No No \_ Yes 4 Good 0.2m No No Yes -5 Good 0.2m Yes Yes No Yes

*Table : 9* Assessment of sample Gully control structures

Of the five gully control structures surveyed two have breached and only in one case the repair has been done. There is varying soil deposition behind the structures.

Table: 10 Assessment of sample Gully control structures

	Vivekananda Watershed: Assessment of sample Gully control structures											
	S.No	Bund Section	Soil Stored	Breached	Repair Required	Repair Done	Outlet					
	1	Good	0.2m	No	No	-	Yes					
	2	Good	0.2m	No	No	-	Yes					
4	3	Good	0.1m	No	No	-	Yes					
75	4	Good	0.2m	No	No	-	Yes					
6	5	Poor	0.2m	Yes	Yes	No	Yes					
7	6	Poor	0.1	Yes	Yes	No	Yes					
)	7	Poor	0.2	Yes	Yes	No	Yes					

All the gully control structures with poor cross-section were breached and no repairs were taken up. This indicates the poor levels of maintenance for gully control structures, though they are within the capacity of the farmers

or user groups. This experience points out the need for institutional mechanisms for maintenance at the group and watershed levels.



Name of the watershed	No.of WHS	TotalCost of WHS (in Lakhs)	Capacity of WHS	Capacity							
Water Sirea					Livestock		Human		Irrigation		
					Drinking	Washing	Drinking borewells (Nos)	Washing (Nos)	Through wells/ (Nos)	Through Diversion channels	
Girgitpally											
Check dams	7	3.85	880	438	7	3	3	6	10	0	
Percolation Tanks	1	1.13	11333	10	1	1	0	1	2	0	
Total	8	4.98	12213	41	8	4	3	7	12	0	
Maisammakatta											
Check dams											
Total	10	3.61	2263	160	10	7	1	8	15	0	
Vivekananda											
Check dams	6	2.15	705	305	6	1	5	4	5	0	
Percolation tanks	1	0.7	5000	14	1	1	0	1	0	0	
Total	7	2.85	5705	50	7	2	5	5	5	0	
Peddavagu											
Check dams	11	5.29	1886	280	11	6	0	8	15	0	
Percolation tanks	2	0.9	6600	14	2	2	5	2	3	0	
Total	13	6.19	8486	73	13	8	5	10	18	0	
Lothuvagu											
Check dams	11	4.97	2186	227	11	5	1	8	12	3	
Percolation tanks	4	1.61	13716	12	4	4	0	3	5	0	
Total	15	6.58	15902	41	15	9	1	11	17	3	
For all watersheds	45	10.07	7000	051	45		10				
Check dams	45	19.87	7920	251	45	22	10	34	57	3	
Percolation Tanks	8	4.34	36649	18	8	8	5	7	10	0	
Total	53	24.21	44569	54	53	30	15	41	67	3	
									L		

WATERSHED PROCESSES

VV/

# 4.7 Assessment of Water Harvesting Structures

*Table 11* presents a summary of all the water harvesting structures in the five watersheds. The checkdam wise detailed data is presented in *Annexure 3*. These include check dams and percolation tanks. Total 53 water harvesting structures were constructed of which 45 were check dams. Quality of these structures is no cause for concern and there were no breaches at the time of the study. About 33% of the total water harvesting structures will have water till April/May months and about 68% of the total structures become dry during December/ January.

## 4.7.1 Percolation Tanks Vs Check-dams

*Table 11* presents the cost of construction per cubic meter of storage volume of all the water harvesting structures. The storage volume is calculated on the basis of actual water retention area. The cost per cubic meter of storage volume created is much higher in the case of check dams (Rs. 251) relative to percolation tanks (Rs.18). The percolation tanks use the natural depressions for storage while checkdams are constructed mostly on narrow streams in between cultivated lands. As the percentage of material costs in checkdams is high, labour absorption is low. It is also observed that the checkdams on the upstream stretches are ineffective (higher cost of storage and lower water retention periods) compared to those in the down steam.

The experience suggests that construction of checkdams should be limited to the lower stretches of the streams only and greater number of earthen percolation tanks in the upstream would be a better strategy.



WASSAN ACTION STUDY PROJECT WASP 71

## 4.7.2 Water Harvesting Structures- Livestock and Other Uses

All the structures were used for livestock drinking water and 30 of them are used for washing livestock. They are recharging 67 irrigation borewells

and 15 drinking water borewells at the time of the study. In several cases checkdams nearer to the habitation are very well used and serve the purpose of providing drinking water to livestock, which was a major constraint earlier. For e.g., in Girghitpally -2 (Jambapuram) watershed persons with larger herds of livestock used to take their animals for about 6 k.ms for drinking water, which is now

PROJECT

available within the village. Such constraints could also

be overcome. The Livestock Action Plans also helped to systematically address this critical constraint.

In one village an impact identified by the people was increase in the number of days they could take bath.

## 4.8 Regenerating Lands

Regenerating productivity of the degraded dry lands is a major concern of the watershed program. Dry lands are important livelihood assets of the poor; investment on these lands improves the livelihood asset base of the poor. The experience also shows that the rate of returns on these investments is high, both in terms of productivity gains and livelihood benefits.



Of the total land in the five watersheds, 19% of land was uncultivated – of this 10% is uncultivable. 89% of the cultivable and 29% of the uncultivable lands were treated. About 75% of the total dry lands area is treated. Cultivated land treated in Vivekananda watershed is very low (35%) as most of the land has a problem of drainage due to hard rock underneath. Total of 332 acres of uncultivated area was brought into cultivation in all the five watersheds, which is about 38% of the total cultivable land in all the watersheds together.

A total of rupees 1.9 million were invested on bunding in these watersheds (excluding Girghitpally-1 and Vivekananda watersheds). Assuming an average annual net benefit of about Rs.700 per acre from a single crop of jowar of the lands brought under cultivation, the annual benefit flows would be about 0.2 million rupees from this activity alone!

Watershed		al Area of the (acres) /ated Land Un-culti- vable		Total Land	Culti- vable	Area Trea (acres) Unculti- vable va		Total land	Uncultivated Area brought under cultivation after treatment
Peddavagu	138	10	822	970	138	10	763	903	73
% **	(14)	(1)	(85)	100	100	100	93	93	53
Lothuvagu	133	70	801	1004	89	10	789	888	98
%	(13)	(7)	(80)	100	67	14	98	88	74
Maisammakatta	44	30	533	608	44	17	479	534	43
%	(7)	(5)	(88)	100	100	57	90	88	98
Vivekananda	16	10	847	873	10	8	296	315	10
%	(2)	(1)	(97)	100	63	80	35	36	63
Girgitpally-2 **	129	375	1249	1753	129	100	872	1001	107
%	(7)	(21)	(71)	(100)	100	27	70	57	83
Girgitpally-1	Data not	available							
Total for 5 watersheds	460	495	4253	5208	411	145	3199	3642	332
%	(9)	(10)	(82)	(100)	89	29	75	70	72

*Table : 12* Area treated and uncultivated area brought under cultivation(Area in acres)

\*\* % : figures in brackets are the percentage of the total land & figures in italics are the percentages of land area treated under each category

#### 4.9 Some General Observations

During some of the exercises, the watershed community has identified the following changes after the watershed program. However, a detailed study is need to assess and quantify such changes.

*Table : 13* Changes in occupation after watershed program in Girgitpally - 2 (Jambapuram)

Migration Reduced	30 households
Migration Reduced to ha	alf 4 households
Migration Not Reduced	13 households
Live stock before	239 nos
Increase in Livestock after	er 17 nos

In an exercise to identify the changes after watershed program, it was observed that migration for wage labour has comedown significantly in 34 households. Migration during the program has been negligible in almost all the watersheds as sufficient wage employment is available. The wage fund accrued to the households significantly. The changes in livestock are mixed and no clear trend nor reasons for the changes could be deciphered. It warrants a special study to understand the changes in depth. The protection of common land initiated in this watershed would yield substantial results after its gestation period.

Table : 14 Follow up	of	technical	trainings in	Pedavagu watershed
	-		0	

S.No	Type of Technical Training	No.of persons trained	No. of persons making use of the skills	No. of persons not using the skills	Reasons for not practicing
1	Stone bunding	15	5	10	No use & being in other work
2	Check Dams	8	3	5	No use & being in other work
3	NPM	8	4	4	incurred loses
4	Animal Health	2	2	0	
5	Methods to reduce Animal-grazing	30 (women)	0	30	No Follow Up

A sample analysis of the follow up of technical trainings in one watershed is presented in Table 14. The technical skills provided to the wage labour

groups can only be used only when the labour are taking up such works. After the completion no watershed works are being taken up. Only half of the farmers who have been trained in organic pest management practices are following some of the practices. The animal health workers are providing livestock health services. It is the experience that such programs need to be followed up for some years to take roots, which has not happened.

There has been positive changes in the drinking water situation in the villages. Villages like Nazeerabad could access government funds to have safe drinking water facilities, while the Rompally villagers dug wells for drinking water as a part of the entry point activity. Substantial improvement in water for livestock has been achieved. Improved hygiene, improved leadership, education of the children, group efforts and collective learning and local conflict resolution/ reduced conflicts, bank linkages etc., are some of the changes reported. A more detailed study is needed on analysing the gender impacts of the program.

The analysis presented above suggests substantial improvements in the ecological, economic and social aspects in the watersheds as a result of the watershed program. Indications are that the benefits in the areas of improving the productivity of the degrading lands, livelihood benefits, easing the scarcity of water for basic requirements etc., far out-weigh the investments made. Quantification of the overall impacts, which are outside the purview of this end-results assessment study is much needed. The end results assessment exercise also need to be taken up in all watersheds.

The investments on participatory processes, improving the capacities and institutional systems have been the backbone of the program and its results. However, the project did not achieve substantial results in sustaining the institutional mechanisms for maintenance of structures and resource management. Freezing of the watershed development fund account, lack of a clear exit protocol did not help in the continuance of the functionality of institutions. Though the institutions are not functional in a formal sense, the quality of the investments, sustainability of the structures and the convergence of various programs indicate the internal vibrancy.

#### **Process Documentation**

Apart from capturing one's experiences, documentation is also a process of empowerment. Documentation process helps to conceptualise lessons learned from a particular experience. Generally external "experts" conceptualise the lessons from experiences of field workers and carry



out the documentation. In this process, field workers and villagers who have shared an experience remain like "providers" of data and remain passive. Contrary to this standard process, WASSAN organized "Process Documentation Workshops" in which persons who shaped a particular experience themselves narrated their story and wrote them. Secretaries, leaders of user groups, labour groups, women self help groups, animal health workers, chairpersons and others from all watershed villages and facilitators from all partner NGOs participated in this "Write Shop". WASSAN team consisting of editors, artists and facilitators helped them



to think through their own experience and draw lessons. Those who could not write took the support of WASSAN facilitating team. But all of them actively participated in visualization of their

own experiences and gave feed back to others. The high lights of such experiences are interspersed in this report. A separate compendium of their stories and experiences is also published by WASSAN in Telugu, local language. A copy of this report is shared with each contributor, who not only gave life to an experience but also a created a new source of knowledge in the form a document that captures their own experience.

# CHAPTER 5

#### Experiences in Network Approach With DDNN

In WASP – Ranga Reddy the main objective was to demonstrate participatory processes in the implementation of watershed program. WASSAN provided support services to individual PIAs in Ranga Reddy district. The enabling environment for the project has a strong correlation with the leadership at the district level. This project was subjected to ups and downs in the enabling environment changing with the leadership (especially the Project Director) in the district administration.

As WASP generated considerable experience in operationalising the participatory processes in the field, the next logical step was to evolve innovative management systems that may insulate a group of PIAs from

the *vagaries* of the district level management of the project. The stage was provided by the DDN Network which was just sanctioned 14 watersheds (under the Integrated Watershed Development Project) and the Project Director, DPAP appreciating the idea and entering



into an agreement. Though two individual members of the network are responsible for the implementation on ground, the network is responsible for overall monitoring and capacity building. With this background, WASSAN extended its support services to the DDNN with two key objectives:

- 1. Develop and demonstrate network based monitoring and capacity building systems
- 2. Establishing participatory processes in the implementation and also innovative approaches in the ongoing and completed watersheds with respect to livelihoods

The main purpose of this extension is to build on the learned/demonstrated processes in Ranga Reddy and to address higher levels of management issues. That this kind of network-based approach will help create decentralized management systems of watershed programs across the district is a major policy advocacy agenda.

This model has mainly two elements viz.,

- a) WASSAN working with a network of NGOs
  - 1. The network would employ a coordinator
  - 2. Network level monitoring systems would be developed and operationalised
  - 3. Capacities will be built at the network level
  - 4. Build upon the learning of WASP in Ranga Reddy district to further improve the participatory processes in community organisation, planning and capacity building.
- b) With a clear agreement with the district administration on
  - 1. Flexibility in operational procedures with guidelines as a benchmark
  - 2. Developing monitoring systems at the network level so that the role of MDT in routine monitoring is reduced
  - 3. Release of the training and community organization budgets to the PIA as per a quarterly action plan

The collaboration with Deccan Development NGOs Network started on ground from May 2001 though the negotiation process started 5 months before in December, 2000. DDNN and DPAP entered into an MOU covering the above aspects and WASSAN entered into an agreement with DDNN for the support services.

As it is a collaborative effort involving many actors, roles, responsibilities and expectations of each were discussed and defined. This forms the basis for collective functioning of the individual PIAs (ADRESS and GRASS), DDN Network, WASSAN and the DPAP.

The capacity building model being followed is -

#### For Field Activities

- An activity is conceptualised by WASSAN along with the DDNN team
- DDN Network and the project team tries out the activity at one place along with WASSAN
- Review and fine tuning the process
- WASSAN acts as observer in few places while the activity is replicated in other watersheds by WDTs
- The watershed team completes the exercise in all other watersheds

#### For Training Programs

- WASSAN prepares the modules and training material involving DDNN members
- WASSAN organises one program along with the watershed team (PIA & WDT) with Network members as resource persons
- observe in the other program as the watershed team organises the next program & suggest necessary changes/ improvements

#### 5.1 Achievements

The major achievements in these watersheds are as follows :

#### 5.1.1 Preparatory Phase

- A communication campaign designed using the traditional folk art of *'Palle suddulu'* heavily emphasising on the process and the self-regulation required
- 2. Social mapping exercise in each segment of the watersheds identifying



the poor and vulnerable and those who are not part of any self help groups (SHG) & building this information into a database.

3. Identifying social workers – i.e. persons to strengthen existing SHGs and build new ones with those who are left of any group.

4. Training of social workers in

group building

- 5. A resource mapping exercise with all the villagers in which,
  - a. The natural resources are mapped
  - b. Watershed and sub-watershed boundaries are delineated
  - c. This is followed by a transect around the watershed along with people

#### 5.1.2 Community Organisation Phase

a) Building Self Help Groups

- 1. A communication program by the WDTs and the social workers for all the SHGs in the village as a process of strengthening them.
- 2. Organising the new groups and strengthening existing groups in terms

of regularising their meetings, updating records and account books

- b) Building User Groups
- 1. A village meeting in which the resource map with subwatershed boundaries is



projected using slides and the households within a sub-watershed are identified

- 2. User groups are formed based on the identification and the meetings organised – a register opened for each user group.
- c) Membership in Watershed Association: All households should take membership by paying Rs.22 per household (one male and one female (a), Rs.11 each). This is to define clear stakes and membership of the general body.

d) Watershed Committee Formation

These watersheds have completed the Community Organisation phase. All the Watershed Committees are formed with representatives from user and self-help groups, with more than 50% women and at least one-third from SC&ST. The Chairpersons of all the committees are women. These steps ensure that the primary stakeholders have a control over the program. The process has been presented in a Video form with the help of APRLP.

# *5రుక్*

81

#### 5.1.3 Implementation phase

- a. Planning
- 1. User group based action planning is initiated in 10 watersheds and part implementation has also started in 4 watersheds with a priority to ridge

WASSAN ACTION STUDY PROJECT WASP areas, dalits and assigned lands. The UG Plans build on the Net-Planning

methodology. Each plan incorporates a resolution from all the members regarding compulsory Contribution, protection and maintenance of infrastructure including plantations.

2. A perspective action plan for the period of 4 years was completed in a participatory process.



3. All the WDTs, PIAs and 13 Watershed Secretaries are trained in the soil and moisture conservation techniques and net planning.

#### b. Implementation

1. Implementation of the UG plans started in 4 watersheds. To address the immediate needs in some watersheds, planning and implementation is initiated for commonly identified activities like check dam, percolation tank etc.

In these watersheds several innovative approaches in community organization with **a focus on poor and User Groups**, a network based monitoring and capacity building systems are being tried out.

#### 5.2 Limitations

- 1. In the process of monitoring and support through network systems, there were certain hiccups as several actors were involved. There are certain problems in decision making, fixing of responsibilities and follow up in the process of collective action.
- 2. The release of budgets from DPAP is irregular, though quarterly/half yearly action plans were submitted. The submission of accounts from the network is also not timely. These factors affected the progress of the program and regular training programmes could not be taken up.

Proper fund flow is a crucial link in making these efforts successful.

3. Compared to the other mainstream watersheds, the process of community organisation and planning took a longer period and it created an impression of prolonged delay in the minds of people and also the district administration.

The program is in the implementation phase. Following completion of an intensive capacity building phase, WASSAN has shifted its role from providing 'need' based support services to demand based'.

#### Mid-Term Stock Taking

WASP was initially taken up as a 2 year project. And it was taken up as part of CWS. Later it was extended to 4 years and WASSAN emerged as an independent Trust. Thus in November 3<sup>rd</sup> and 4<sup>th</sup>, 2002 a mid-term stock taking took place with PIAs, facilitators, representatives of Watershed Associations, Watershed Committees, Self Help Groups and User Groups, MDT and WASSAN team.

After initial re-orientation of the objectives and the background of the WASP programme the participants divided into 5 groups, viz User Groups, Self Help Groups, Watershed Committee and Association, Secretaries and WDTs. Each group discussed within itself and came up with list of issues while working with other stakeholders which includes User Groups, Self Help Groups, Watershed Association, Watershed Committee, PIA/WDT, WASSAN, MDT and DPAP. This exercise was further sharpened by



forming three groups, on the second day, consisting of PIA/WDTs, Watershed Committee/ Villagers and WASSAN. Each group reflected upon roles and responsibilities of each stakeholder, including self. These two exercises have resulted in role clarity

and in focussing on issues concerning the implementation of the programme. At the end of the day it was decided that the PIAs and WASSAN should organise review meeting to decide upon ground rules, capacity building needs and inputs, smooth implementation of the programme by evolving strategy for technical sanction of the estimates, etc. It was also decided to organise a meeting with DPAP, PIA, representatives of Watershed Committees and WASSAN team.

# CHAPTER

#### Larger Impacts

The lessons from the Action Study Project could create a multiplier effect for two reasons viz., a) the project work is within the mainstream watershed programs with regular monitoring and involvement of the government officials, b) as WASSAN's work is spread into the areas of training, research and advocacy. For many, including the officials it has become a learning ground on processes.

#### Learning Ground

The Jambapuram, Lotuvagu and Peda vagu watersheds have become a place for exposure visits, particularly for their processes. More than 5000 persons might have visited these watersheds from both within and outside districts. Proximity to Hyderabad is also a reason. This has become a regular place for exposure visits in training programs of institutions like WASSAN and APARD. The planning and implementation processes, impacts were there for everyone to see. These exposure visits were like 'a visual primer' on watershed processes.

#### Labour groups

Ranga Reddy district DPAP officials have been vibrant in scaling up the critical achievements. Both net-planning and labour group formation have now become regular features in all watersheds. As the field experience and facilitation skills are available within the district, taking these initiatives to the district policy has also become easier.

The livestock experience was documented and published in the form of a Poster; now running into a reprint. DPAP offices and NGOs in several

districts have purchased and distributed these posters. But it has not yet come a common practice. Efforts are being made to further refine the methodology and try out for scaling up and also develop training modules.

Many of these experiences in WASP were also incorporated into the 'Operational Guidelines' of the Government of Andhra Pradesh, in which WASSAN played a critical anchor role.

#### Support Services Centre

Support Services Centre at WASSAN is a logical extension of WASP – as a sustainable institutional mechanism. A mechanism of revolving fund to be used for any contingency is created at Centre for World Solidarity to be used by the partner PIAs under support services. WASP in a major way has helped in giving firm footing and field experience to WASSAN. The support services center has an ambitious agenda of providing support services to about 100 watersheds across the state.

#### Capacity Building Network

86

WASSAN has taken up a research study for the DPAP (district administration) on assessing the participatory process on ground (in a sample of 10 watersheds) and the enabling management/ facilitation environment at the PIA and DPAP level. An off-shoot of this study is the capacity building strategy, which the Project Director has firmly put into practice. The 'Ranga Reddy Capacity Building Network' (CBN) emerged in this process as a major breakthrough in streamlining the training programs for watershed development in the district.

As a part of this initiative, four organisations in the district including Vikasam, along with a pool of resource persons from various other organisations have collectively formed the capacity building network. The network entered into a tripartite agreement with the district administration and WASSAN. Part of the capacity building budget has been transferred to

an account of the CBN operated by the core committee including an MDT, a member from WASSAN and a network representative. The cost of resource material and resource persons will be met from this fund, while the cost of participant travel, venue, board and lodge will be released to the respective PIAs by DPAP.

A perspective training calendar for a year was developed with all the PIAs in the district. Monthly calendar will be developed in a planning and review meeting of the CBN where the officials from DPAP also participate. WASSAN has taken the responsibility of improving the training skills of the pool of resource persons, developing modules and training material. WASSAN is anchoring the CBN for a year after which this responsibility will be transferred to an organisation within the CBN.

The CBN is founded on the values of decentralisation of capacities and institutionalisation of delivery of capacity building inputs. Every month the CBN could take up 10 to 15 training programs, thus catering to the large scale needs of the program.

# 

#### Overview of the Programme

- The watershed guidelines of 1994 have heralded watershed based rural development era with people's participation and holistic planning as well as addressing concerns of equity, gender and sustainability. Andhra Pradesh has been in the forefront in implementing of the watershed development projects. However, there were no experiences and capacities on ground in facilitating the people centred participatory process. Concerned NGOs started making efforts trying out participatory methodologies. They have also come together as Watershed Support Services Activities Network, initially as part of Centre for World Solidarity. Later WASSAN evolved as an independent body.
- 2. Wassan Action Study Project (WASP) started with a goal to demonstrate the participatory watershed management processes within the framework of government policy. Its objectives include influencing the project administrators to improve the operational procedures and to provide support services to those NGO-PIAs willing to practice such participatory processes.
- 3. The project initially intended to work in 12 watersheds with 6 PIAs in 2 districts but had to limit to one district with 6 watersheds and 3 PIAs. It is a partnership project between the government and NGO-PIAs with professional backup provided by WASSAN. The main watershed development project was funded by the DPAP and AEI, Luxembourg supported WASP for providing the capacity building inputs, experimentation, project management inputs and for scaling up. The project was for four years starting in 1998.
- 4. The project was divided into distinct preparatory phase, entry phase,

community organisation phase, capacity building, planning phase and implementation phase. A facilitator was appointed for every 2 watersheds for whom intensive trainings were organised in the beginning. PIAs interest, facilities for facilitators and smooth flow of funds are important factors to retain the staff and their interest.

- 5. During the entry phase the external facilitators get acquainted with the village and its resources and create awareness among the community. In this wada wise meetings proved to be successful. Cultural shows, slide shows, exhibitions and rallies with children were organised during this phase.
- 6. The community needs to be organised into Self Help Groups (SHGs) and User Groups (UGs) federating into Watershed Association with a Watershed Committee nominated to look into day-to-day affairs. The lack of clarity regarding SHGs at the district level has hindered the process and release of revolving funds was delayed. WASP was successful in demonstrating sub-watershed based User Groups. Where the process was intense it had a longstanding impact on the success of the programme. However, the UGs were not strengthened to function on a long-term basis.
- 7. Where the groups were strong the formation of Watershed Association and Committee followed the suggested processes and where the groups were not formed in the beginning it was politically and case-wise balancing act. Watershed Committees were most popular amongst the village institutions and were ranked high in terms of transparency, norms, book keeping and implementation procedures. The Chairperson and Secretary are key persons in the Watershed Committee.
- 8. Capacity building, starting with the WASP team and facilitators was high on the agenda. Several training programmes, exposure visits, workshops were organised for the primary stakeholders. Hitherto the execution of stone works was considered as expertise of the Kadapa labour. However, the villagers and women were training in execution of these works, which has resulted wage employment as well as higher

wages for the local people.

- 9. An open and transparent planning process increases the ownership of the programme by the community. For soil and moisture conservation works field to field planning on a group basis was adopted. The user group in the ridge area was selected first for action planning. Initially the WASP team demonstrated the planning process to the facilitators, Watershed Committee Secretaries and User Group leaders. In the later years the UG leaders with Secretaries and volunteers completed the group plans, whereas the facilitators helped in consolidation and getting approval.
- 10. Farmers who have been living in the given environment since generations have evolved systems that are suitable to their needs and the environment. While harvesting of rainwater is important, it is equally important to drain out stagnant water in soils with very little water infiltration capacity. Vanduru Kaluva is one such traditional technology to drain out water. However this activity was not permitted in the watershed project stating that it drains rather than conserving water in the watershed. Insistence of farmers, facilitation by WASP team and support from reputed scientists ultimately lead to limited acceptance to vanduru kaluva.
- 11. Contribution is the litmus test for participation. Transparency helps in avoiding all forms of contractorship. In a process oriented programme while the farmers make sure of quality implementation and pay contribution from their pocket the labourers enjoy the full wages that are due to them. Formation of labour groups can also be crucial in this process. WASP has been able to demonstrate actual contribution in a environment where normal procedure was deducting from wages of labour.
- 12. Organisation of labourers into groups was a very positive experience. They were able to resist outside labourers such as Kadapa stoneworkers. They were even able to oppose the machinery. Where women were given the responsibility of implementing the works they had to face

non-cooperation and resistance. Their persistence has ultimately paid them off and proved their grit.

- 13. Administrative procedures and top down policies such as joint signatory of cheques with MDTs, centralised activities such as nurseries, blanket reactions to malpractices elsewhere in the district have hindered the processes in the programme. Resistance and ridicule from the MDTs on the planning process demoralised the facilitators.
- 14. While focussing on processes, WASP has also been experimenting with other innovations in production enhancement and livelihood opportunities. In agriculture demonstration of improved varieties, seed production, non-pesticidal pest management were tried out. Trials of sweet sorghum were organised which has dual benefits of yielding grain as well as grain and jaggery production. Self Help Groups were trained in raising nurseries.
- 15. WASP made an effort to integrate the concerns of livestock resources into the watershed action plans. These related to increasing fodder production, making drinking water available to the animals particularly during the summer and near grazing tracts. Animal health workers identified from the villages were trained over a period of 25 days spread in 6 modules. These workers provide first services and are in close access to the villagers. The villagers in one watershed protected a hillock in one of the watersheds by forming a committee and framing their own norms and regulations.
- 16. Watershed programme provides a foundation upon which other projects/ departments need to converge for fruitful benefits. Such attempts were made with forest, animal husbandry and agriculture with varying degrees of success. The villagers of one watershed facing acute drinking water shortage were able to draw upon several resources so as to solve the problem. They added their contribution through voluntary labour and were successful in getting tapped water to the village.
- 17. The experiences in WASP have led to formation of Support Service centre within WASSAN. Various models are being tested in extending

these services to larger number of watersheds. One such attempt is with a Network being PIA, which will internalise the monitoring, and capacity building aspects of the project. This would also build on learned/ demonstrated processes and address higher levels of management issues. A clear cut agreement is made between all the parties. Another approach is to work with Community based Organisations in taking up NRM initiatives.

- 18. The Network approach has demonstrated successful communication campaign using 'Palle Suddulu', building Self Help Groups and User Groups and Watershed Committee formation. Apart from the perspective plans for the four years user group based action plans were prepared, which are implemented with self help groups. Management issues like regulations for water use were also raised with the community.
- 19. A small exercise on end results assessment was taken up through participatory exercises with community at the end of the Project. The works were mainly in control of the primary stakeholders. 70% of the expenditure was on activities like bunding, check dams, percolation tanks and gully control structures. Water harvesting structures are mostly intact and do not need any maintenance in such a short time span. Survival rate of plantations was very poor.
- 20. The project succeeded in organising the people into user and self help groups. The watershed committees could not be nurtured upto formal functional level after the closure of the Project. The contributions from the community deposited in the Watershed Development Fund are in the bank and unutilised due to lack of operational guidelines in the state.
- 21. Bunds were assessed for their cross section, top level, soil stored, breaches, grass on bunds, repairs and waste weirs. It was observed that there are very limited number of breaches in the bunds and their overall status on the whole is good. In the five gully control structures that have been surveyed two have breached out of which one has been repaired. There is varying soil deposition behind the structures.
- 22. It is observed that the cost per cubic metre of storage volume created

93

WASSAN ACTION STUDY PROJECT WASP

is much higher in the case of check dams in comparison to percolation tanks. The experience suggest that construction of checkdams should be limited to the lower stretches of the streams only. All the water harvesting structures are being used for livestock drinking water and are recharging borewells used both for irrigation and drinking water purpose.

- 23. In the watersheds 89 % of the cultivable and 29 % of uncultivable lands were treated. 75 % of the total dryland area was also treated. The rate of returns on these investments is high, both in terms of productivity gains and livelihood benefits. Total 332 acres of uncultivated area was brought into cultivation in all the watersheds. Migration for wage labour has come down significantly.
- 24. The investments on participatory processes, improving the capacities and institutional systems have been the backbone of the programme. The quality of the investments, sustainability of the structures and the convergence of various programmes indicates the internal vibrancy.



Annexure No.1

#### Profile of the Partner NGOs

#### VIKASAM

VIKASAM is a voluntary organization registered under the Public Societies Registration Act. Gopi David is the PIA Coordinator. It is mainly involved in watershed programme as this is addressing the problems of the village with comprehensive development approach. Apart from its main components of conservation of rain water and prevention of soil erosion, the project is attracting the attention of the entire village towards development and awareness in organized manner. As part of the Action Study Project it has implemented 2 watersheds and 9 more watersheds were sanctioned by the DPAP. NABARD has also sanctioned watershed programmes under the Watershed Development Fund. Apart from the conservation and community organization/ capacity building works in the watershed, the following activities are taken up:

- □ Cleaning of streets and drainages with people's participation
- D Facilitate settlement of disputes related to boundaries of farm holdings
- D Motivating and admitting child labour in schools
- Organising group meetings for DWCRA women
- Conducting health camps

The Managing Committee consists of 9 members with woman and the staff strength is nine members with one woman.

- Registered Office: H. No. 1-1-49, St. No. 1, Habsiguda HYDERABAD - 500 007
- Field Office: Opp. MM Court Rajiv Gandhi Nagar PARIGI Ranga Reddy District - 501 501 Phone: 08412-223246

WASSAN ACTION STUDY PROJECT WASP 95

#### SERENE SERVICES

Serene Services is not for profit, voluntary organization, registered in 1995. Serene Services has been running under the able leadership of a team of 29, mainly through women empowerment. Ms. Vijayalakshmi is the PIA Coordinator.

#### Some of the activities of Serene Services

- (1) Watersheds in Bantaram, Marpally, Medchal and Ibrahimpatnam Mandals, totaling 30. Funded by State Government.
- (2) An Ashram for needy elderly and others with anna danam scheme (Free meals to the poor on Daily basis). Ashram brand salt is packed and marketed for the benefit of developing local employment and Ashram inmates.
- (3) Low cost sanitation in Alwal, R.R.District, funded by MCH. Built bathrooms in schools in Marpally Mandal, funded by CAPART.
- (4) Health related programs: Participated and conducted Medical camps, vaccination programs and prevention of blindness project. Funded by Serene Services.
- (5) Recharging of wells: This is new project developed by Serene Services, Funded by CAPART.
- (6) Serene Services has conducted several national level meetings to bring awareness in the public issues like Rural development, real estate business development, religious, etc.

Address:

Serene Services D. No. 6-3-788/n/12 Durganagar Colony Ameerpet HYDERABAD Phone: 55615572 e-mail: ofindia@servicelinksintl.com

WASSAN ACTION STUDY PROJECT

WASP

## RESEARCH IN ENVIRONMENT, EDUCATION AND DEVELOPMENT SOCIETY (REEDS )

Operational area is Kodangal and Bomraspet mandals of Mahabubnagar district and Vikarabad Mandal of R.R.Dt. This was established on 8th October 1992 under public societies act. It has 24 staff members out of which 14 are women. The Management Committee has 9 members out of which 6 are women. Satya Bhupal Reddy is the PIA Coordinator.

#### Activities of REEDS

- (1) Women empowerment: Formation of Self Help Groups, Formation of Village Development Society, Formation of Mandala Mahila Samakya, Lalana Kendrams, Adult Education Centres, Skill improvement programmes, Reproductive Child Health Programme, Training to Traditional Birth Attendants, Trainings to Women leaders.
- (2) Community management of drinking water, sanitation & hygiene education: Drinking water, Sanitation, Hygiene Education
- (3) Environment education: School Environment Education Activity
- (4) Agricultural development programme: Land Development, Soil management, Trainings, IPM, Vermi culture, Agro forestry, Seed bank, Exposure visits, Networks
- (5) Human resource development programme: Adolescent Girls Programme, Youth clubs, Children clubs
- (6) Community forest programme: Promotion of VSS, Trainings, Net works
- (7) Panchayat raj initiative programme: Trainings, Group meetings, Exposure visits
- (8) Sexual health programme: Trainings, Exposure visits, Condom promotion
- Registered Address: REEDS, 17-1-386/S/22, S.N.Reddy nagar Vaisalinagar(po)Champapet Area Hyderabad - 500 079 Phone: 040-4076701. Fax: 040-4078942. email: reedshyd@yahoo.com
- Field Office: REEDS, Kodangal, Near water tank, Mahabubnagar (dt) A.P 509 338. Phone: 08505-84789, 84923.

WASSAN ACTION STUDY PROJECT WASP 97

Annexure No.2

#### Profile of Watershed Villages

#### Nazeerabad

The village is in Parigi Mandal at a distance of 4 kms from Parigi the mandal headquarters. It is connected with a metal road and is very near to State highway. It has a rolling topography of hill slopes with deep cuts and innumerable drains. There are barren hills occupying the eastern and northern border of the village consisting mostly of government lands. This was once a fertile forest, which now stands with exposed substrata made of doleritic boulders of various sizes. Moderate slopes and plains near the streamlets are cultivated and have black cotton soils. There are no tanks in the village.

Climate is dry for 8 months from October to May. Average rainy days per year are 39. The month of May is hottest with temperatures normally rising to  $44^{\circ}$ C and above.

The Nazeerabad village has 2 watersheds with 5 hamlets – Hanuman Gandi, Shakapur, Malleboinagudem, Maisamma thanda and Bichiralla thanda. The two watersheds are named Peddavagu and Lothuvagu with an area of 1138.04 and 1104.25 acres, respectively. The community consists of mostly Lambada tribals involved in agriculture, petty business in Parigi, etc.

The village has 2 primary schools, but has neither Panchayat office nor Post office. Phone and bus facility are available at Hanumangandi and there is a community hall in Hanuman Gandi.

#### Girghatpally

The village Girghatpally is in Vikarabad Mandal at a distance of 5 kms from the mandal headquarters, which has a railway station also. The village is connected by buses and three wheelers.

A hilly range running through north to south divides the village into two parts. The eastern part has 2/3<sup>rd</sup> of cultivable area and the western part is marked by rugged topography tapering off into moderately sloping cultivated area in the west. This is made up of very shallow clay loam to clayey soil under laid by doleritic stones and boulders forming almost

impervious layer of more than 10 metres depth. Out of total geographic area of 1364 ha 863 hectares is of cultivated land. Out of this 773 ha is rainfed and an area of 70 ha is irrigated under wells (16 wells in operation and 64 dried up). Another area of 501 ha is mostly uncultivable fallows and government poramboke. The average rainfall is 945 mm per year.

Due to its proximity to Vikarabad the rural population has an urban style and consists of marginal, small, medium and few large holdings. The community consists of tribals, muslims and dalits. Cotton, floriculture, turmeric and vegetables are the commercial crops. Sale of milk and vegetables is common. The total population of the village is 1625 with 790 men and 835 women. Total number of households is 350.

#### Rompally

This is an interior village in Bantaram mandal with poor communications. Road communications is bad. No development projects were implemented in the village prior to the programme. The northern half of the village has a rolling topography and the eastern half has plain areas with medium clayey soils under laid by solid dolerite rock. There are both black and red soils.

The village has a geographical area of 1160 ha out of which 660 ha is private land, 152 ha is assigned land lying fallow and 345 ha is common waste land. There are 2 community wells, 7 open wells, 5 bore wells and 1 tank. There is a primary school and post office in the village.

There are 409 households in the village with a total population of 2009. Out of this women are 935 and men are 1074. Community wise the population is as follows: SCs 700; BCs 674 and OCs 635. The village has a primary school and post office.

#### Annexure: 3

V/V

### STEPPING STONES IN WATERSHED PROCESSES

Name	Туре	Storage	Dries up	Live	stock	Hun	nan beings	irr	igation
of the watershed	of Structure	Capacity created (cum)	in the month of	drinking	washing	drinking wells/ borewells	washing	wells	diversion
Girgitpally-2									
Jambapuram	Check								
Tanda)	Dams								
	1	225	Mar-April	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	4	
	2	70	Dec	$\checkmark$		$\checkmark$		1	
	3	90	March	$\checkmark$			$\checkmark$	0	
	4	110	Dec-Jan	$\checkmark$	$\checkmark$		$\checkmark$	1	
	5	90	March	$\checkmark$	$\checkmark$		$\checkmark$	2	
	6	225	Dec	$\checkmark$		$\checkmark$	$\checkmark$	1	
	7	70	Dec	$\checkmark$			$\checkmark$	1	
	Total	880		7	3	3	6	10	0
	Kuntas								
	1	11333	April-May	$\checkmark$	$\checkmark$		$\checkmark$	2	
	Total	11333		$\checkmark$	$\checkmark$	0	$\checkmark$	2	0
Grand To	tal	24427		8	4	3	7	12	0
Maisamma	akatta								
	Check								
	Dams								
	1	413		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	2	
	2	350	Dec	$\checkmark$			$\checkmark$	2	
	3	250	Jan	$\checkmark$	$\checkmark$		$\checkmark$	2	
	4	56 Dec	$\checkmark$			$\checkmark$	1		
	5	117	March	$\checkmark$	$\checkmark$		$\checkmark$	2	
	6	58 Dec	$\checkmark$				2		
	7	396	Jan	$\checkmark$	$\checkmark$			1	
	8	144	Jan	$\checkmark$	$\checkmark$		$\checkmark$	1	
	9	280	March	$\checkmark$	$\checkmark$		$\checkmark$	1	
	10	200	Dec	$\checkmark$	$\checkmark$		$\checkmark$	1	
	Total	2264		10	7	1	8	15	0
Vivekanar	nda								
	Check								
	Dams								
	1	140	Jan	$\checkmark$		2	$\checkmark$	1	
	2	234	Mar	$\checkmark$		1	$\checkmark$	1	
	3	111	Jan	$\checkmark$		-	$\checkmark$	0	
	4	53	Jan	$\checkmark$				0	
	5	48	Mar	$\checkmark$				1	
	6	120	Jan	$\checkmark$		2	$\checkmark$	2	

#### Assessment of Water harvesting Structures

WASP WASSAN ACTION STUDY PROJECT 100

	Total	705		6	1	5	4	5	0
	Kuntas								
	1	5000	Mar	$\checkmark$	✓		✓	0	
	Total	5000		1	1	0	1	0	0
Grand Total		11411		7	2	5	5	5	0
Peddavagu									
	Check								
	Dams								
	1	175	Dec	$\checkmark$				2	
	2	317	April-May	$\checkmark$	$\checkmark$		$\checkmark$	2	
	3	160	April-May	$\checkmark$	$\checkmark$		$\checkmark$	1	
4	4	288	April-May	$\checkmark$	$\checkmark$		$\checkmark$	2	
Į	5	63	Dec	$\checkmark$				1	
	6	70	Dec-Jan	$\checkmark$				1	
	7	96	Dec-Jan	$\checkmark$				1	
8	8	170	Jan-Feb	$\checkmark$			$\checkmark$	1	
(	9	96	Dec-Jan	$\checkmark$	$\checkmark$		$\checkmark$	2	
	10	132	Dec-Jan	$\checkmark$	$\checkmark$		$\checkmark$	1	
	11	320	Dec-Jan	$\checkmark$			$\checkmark$	1	
-	Total	1887		11	6	0	8	15	0
	Kuntas								
	1	5100	April-May	$\checkmark$	$\checkmark$	5	$\checkmark$	2	
	2	1500	Dec-Jan	$\checkmark$	√		$\checkmark$	1	
-	Total	6600		2	2	5	2	3	0
Grand total		16973		13	8	5	10	18	0
Lothuvagu									
	Check								
	Dams								
	1	135	Dec	$\checkmark$	$\checkmark$		$\checkmark$	1	
	2	80	Jan-Feb	$\checkmark$			$\checkmark$	1	1
	3	160	Jan-Feb	$\checkmark$	✓		$\checkmark$	1	1
	4	800	Mar-April	$\checkmark$	✓	1	$\checkmark$	1	1
	5	180	Mar-April	$\checkmark$	√	· ·	$\checkmark$	1	- '
	6	96	Dec	$\checkmark$	+			1	
	7	30	Dec	$\checkmark$				1	
	8	80	Dec	· ✓				1	-
	9	225	March	$\checkmark$				2	
	10	300	Jan-Feb				· · · · · · · · · · · · · · · · · · ·	1	
	10	100	Dec	▼ ✓			v √	1	
	Total	2186	Dec	11	5	1	8	12	3
	Kuntas	2100			5		0	12	5
	1	11333	April-May	$\checkmark$			✓	2	
	2	800	Jan-Feb		↓ ↓ ↓ ↓		↓ v √	1	
	2 3	650	Dec	v √			•	1	
	3 4	933		V V				1	
			Dec	4		0	3	5	0
	Total	13717 <b>18089</b>		4 15	4 9	0	3 11	5 17	0
Grand total									

WASSAN ACTION STUDY PROJECT WASP 101

#### Annexure No.4

V/V

#### No. of SHGs in Watershed villages

S. No.	Village	Name of the					
NO.		watershed	Women	Men	Mixed	Total	Revolving fund
1	Nazeerabad	Lothuvagu	8	2	-	10	-
2	Mallemonigudga	Peddavagu	10	3	-	13	10
3	Girghitpally	Girghitpally 1	14	1	-	15	-
4	Jambapuram	Girghitpally 2	6	3	-	9	-
5	Rompally	Maisammakatt	4	2	1	7	2
6	Rompally	Vivekananda	4	4	-	8	-

STEPPING STONES IN WATERSHED PR<u>OGESSES</u>

Annexure No.5

#### List of Capacity Building Activities

DATE	ACTIVITY	PARTICIPANTS
16-19th May, 1998	Training on Module 1 at APARD Orientation to the facilitators and NGO partners (PIAs)	Facilitators PIAs, Project coordinator
21-24th May, 1998	Training on Module 4 at APARD. General Orientation to the tasks and process of entry phase work of the WASSAN action -study p project	Facilitators, PIAs, Project coordinator
26-27th May, 1998	Field training visit to Chowderpally village of Nalgonda District in continuity with Module 4. (Field exercise on PRA-Resource Mapping, Venn diagram, Time-line Transect.)	Facilitators
1st June, 1998	<ul> <li>Training on Module 2 at CWS (Field exposure and sensitization) The objective of field exposure and sensitization was:</li> <li>1) To observe and learn from what is happening in Watershed projects in AP in relation to the process and procedures designed for the actionstudy watersheds.</li> <li>2) Develop the ability to differentiate between situation and arrangements which represent the top-down process and participatory process and apportunistic participation and empowering participation.</li> <li>3) Acquire sharper understanding of the process and tasks involved in the entry phase of the Action Study Project</li> </ul>	Facilitators
2nd June, 1998	Field exposure visit to Dorapally, Lakshmipally, S.Rangapuram Watersheds of Kurnool District	Facilitators
3rd June, 1998	Field exposure visit to Mogilichetla, thanda village of Rayalaseema Watersheds of Anantapur District	Facilitators
4th June, 1998	Field exposure visit to Maheshwaram Watersheds of RR District	Facilitators
5-9th June, 1998	Field exposure visit was made in to two groups Group 1: Visit to villages of Ranga Reddy District Mogilithanda, Dargulapally, Kamshatpally villages of SERENE SERVICES Konapur village of ARTHIC Jinnaram, Konapur Noorullapur villages of AID yelgo, mettlakunta villages of DDS	Facilitators, Project coordinator Facilitators, Project coordinator

WASSAN ACTION STUDY PROJECT WASP 103





	Shekapur village of KVK Group 2: Visit to villages of Nalgonda, district of PEACE, BIRDS, PROGRESS, VIP Agencies	Facilitators, Project coordinator Facilitators, Project coordinator
12-13th June, 1998	Two-Day evaluation of Field exposure and Training at APARD	Facilitators & Mr.Mashady, RD
23-26th June, 1998	Training on Module 5 at APARD Training on First Round of Entry phase	Facilitators, Project coordinator
27-29th June, 1998	Field training visit to Girghatpally village of ARTHIC Agency	Facilitators, Project coordinator
3-4th July, 1998	Field training visit to Vookondi village of PEACE Agency	Facilitators
5-6th July, 1998	Field training to Parigi thanda of VIKASAM Agency	Facilitators
7-8th July, 1998	Field training visit to Rompally village of SERENCE SERVICES	Facilitators, Project coordinator
13-14th July, 1998	Field training to Gorampadu village of BIRDS Agency	Facilitators
15-16th July, 1998	Field training visit to Bandapalem village of PILUPU Agency	Facilitators
17th July, 1998	Training on Documentation to the Facilitators at Satyodayam	Facilitators
18th July, 1998	preparing the Facilitators for the Field held at Satyodayam	Facilitators
2nd, 3rd Sept,1988	Review at APARD	Facilitators
11th sept, 1998	Review at Satyodayam	Facilitators
12th -14th Sept. 1998	Training on Module 6 at APARD Training on 2nd Round of Entry Phase	Facilitators, Project coordinator, PIAs.
15th-16th sept, 1998	Field Training on Module 6 at Vikarabad Field exercise like Transect, Matrix)	Facilitator, Project coordinator
5th-6th oct, 1998	Mid-term review meeting on Round 2	Facilitators
27th-28th oct, 1998	Mid training of Module 6 at CWS	Facilitators
12th-13th Nov, 1998	Mid-term Review meetings at CWS	Facilitators
16th-17th Nov, 1998	WASSAN organised technical support in collaboration with AFPRO on reconnaissance study in 3 villages Girghatpally village -ARTHIC Nazeerabad village - VIKASAM	Facilitators, Technical persons, Mr.Narendra from AFPRO

104 WASP WASSAN ACTION STUDY PROJECT

	Rompally village - SERENE SERVICES Nazeerabad village -VIKASAM	
4th January, 1999	Training on Module 3 & 7 at CWS. (Third round of Entry Phase)	Facilitators, PIAs, Project Coordinator.
17th - 18th January 1999	Training to volunteers and facilitators at Moinabad	PIAs, Facilitators, Project Coordinator and Volunteers of ARTHIC, SERENE SERVICES & VIKASAM
22nd - 23rd January, 1999	WASSAN in collaboration with AFPRO conducted PRA in Girghatpally village.	Facilitators, Project Coordinator, Technical Persons from AFPRO.
25th - 27th January, 1999	WASSAN in collaboration with AFPRO conducted PRA in Nazeerabad village.	Facilitator, PIAs, Technical Persons from AFPRO.
3rd-4th February, 1999	WASSAN in collaboration with AFPRO conducted PRA in Rompally village.	Faciliatator, Project Coordinator & Technical Persons from AFPRO.
11th February, 1999	Field demonstration at Nazeerabad thanda on Net planning	Committee members and women members of the community.
16th February, 1999	Field training for User group formation was conducted at Rompally village	PIA, Facilitator and Farmers.
19th February, 1999	Review and self assessment for 3 PIAs was conducted at Satyodayam, Tarnaka.	PIAs, WASSAN team members, facilitators and some colleagues of CWS.
22nd February, 1999	Meetings for men and women of Girghatpally Watershed for User Groups	Men and women farmers of Girghatpally village Facilitator & PIA.
6th March, 1999	A training for Women villagers on "Women's participation in Watershed Programme.	Women members of Rompally and Girghatpally village, PIAs, Facilitators and some colleagues of CWS.
30th March, 1999	Training at Satyodayam for orientation on Watershed.	Watershed Committee members, PIAs and Facilitators.
31st March, 1999	Exposure visit to Manchal Watershed of MANAGE	Watershed Committee Members, Facilitators and PIA.
7th & 8th April, 1999	Training at APARD ; Orientation on Watershed Concept.	Watershed Committee members of Rompally and Girghatpally village, Facilitators & PIAs.
20th & 21st April, 1999	Training at APARD; Orientation on Watershed Concept.	Watershed Committee members of Nazeerabad Thanda and Jambapuram Thanda Watersheds, Facilitators & PIAs

STEPPING STONES IN WATERSHED PROCESSES
---

		<u>IONLU INUULUULU</u>
23rd April, 1999	Village level training at Jambapuram thanda/ ARTHIC on different components and implemen- tation of Watershed.	Members User Groups of the Village, PIA and Facilitators.
3rd May, 1999	Village level training at Girghatpally on different components and implementation of Watershed of ARTHIC Agency	Members of the Village, Village Community PIA and Facilitator
4th May, 1999	Village level training at Rompally on different components and implementation of <i>Watershed of SERENE SERVICES</i>	Members of the Village Community PIA and Facilitator
18th May, 1999	Village level training on Watershed at Nazeerabad, (VIKASAM AGENCY), Mandal - Pargi.	Members of the Village Community PIA and Facilitator
20th May, 1999	Village level training on Watershed at Mallemoniguda of VIKASAM AGENCY	Members of the Village Community PIA and Facilitator
31st May, 1999	Village level training on Watershed at Hanumangandi thanda of VIKASAM AGENCY	Members of the Village Community PIA and Facilitator
24th July, 1999	Training Programme on site selection process and construction of structures at Parigi Nazeerabad Watersheds of VIKASAM AGENCY	Watershed Members of Serene Services and Vikasam. AFPRO Hydrogeologist, Engineer and WASSAN Team
12th August, 1999	Training programme on Horticulture Plantation and social forestry at Parigi - Nazeerabad	Watershed Members, Volunteers and Facilitator of Nazeerabad Watersheds and WASSAN Team Watersheds of VIKASAM AGENCY
24th August, 1999	Training programme on Self Help Groups functioning and maintenance of records	Self Help Group leaders of Nazeerabad Watersheds, Watershed Committee Chairman and Secretaries, PIA and Facilitator
12th October, 1999	Organised Milk vendors training at Bichiralla thanda	Villagers whose occupation is Dairying facilitator and PIA
26th October, 1999	Organised training programme on construction of Gully checks and field demonstration at Mysamma katta thanda	Farmers, PIA and Facilitator
4th November, 1999	Organised Women's workshop at Vikarabad	Women members of Girghatpally, Rompally and Nazeerabad village, facilitaors and PIA
18th November, 1999	Organised Animal Husbadry training at Parigi	Villagers whose occupation is Animal Husbandry facilitator and PIA

 $V_{\perp}V_{\perp}$ 

106 WASP WASSAN ACTION STUDY PROJECT

ИНІЕПЭПЕИ	<u> </u>	
20th January, 2000	Workshop for refelctions from the Watershed committee, Association, User groups and SHGs	Waterhsed Secretary, President, Chairman and members, facilitators and PIA Lothuvagu, Vivekananda,Girighapally.
27th January,2000	Workshop for refelctions from the Watershed committee, Association, User groups and SHGs	Waterhsed Secretary, President, Chairman and members, facilitators and PIA Peddavagu, Jambapurithanda,Mysammakatta.
13th March,2000	Exposurevisit for S.H.G Leaders of Girighatpally to Kodangal (REEDS)	S.H.G. Leaders, Group mmbers of Girighatpally Fecilitators
23rd March,2000	Exposuevisit for Women S.H.Gs to Lingampally Orientation on construstion of Checkdams.	Women S.H.G Members of Rompally village Fecilitators
6th April,2000	Training on soil collection for soil testing	Farmers of Nazeerabad, Fecilitators
11th April,2000	Training on soil collection for soil testing	Farmers of Jambapuri thanda, Fecilitators
17th May, 2000	Cultural program on women participation and Role and Responsibility of Watershed committee	Villagers of Girighatpally,Fecilitators,Sambaraju and Team
18th May, 2000	Cultural program on women participation and Role and Responsibility of Watershed committee	Villagers of Jambapuri thanda,Fecilitators,Wassan team, Sambaraju and team.
22nd May ,2000	Cultural program on women participation and Role and Responsibility of Watershed committee	Villagers of Lothuvagu Watershed,Fecilitators, Wassan team,Sambaraju and team.
24th May, 2000	Cultural program on women participation and Role and Responsibility of Watershed committee	Villagers of Peddavagu Watershed,CWS Staff, Fecilitators,Wassan Team,Sambaraju and team
29th & 30th May, 2000	Orientation on formats filling of ImpactAsessment Survey at WASSAN	Voluteers, Fecilitators, Wasan team
16th May, 2000	Technical skills on consturuction of Structures at Rompally	Rompally women Self Help Groups Secretaries, Wassan team.
11th Oct, 2000	Training to Massion group members on Construct ion of Gully control at Jambapuri thanda	Jambapurihanda Massion groups, Wassan team
29thJan, 2001	Exposurevisit to ICRISAT	Ropally Watershed community,Project Implementation Agency,MDT,WDT,WASSAN team

WASSAN ACTION STUDY PROJECT WASP

	S T E W A T E R S	PPING STONES IN Shed processes
19th Feb, 2001	Priliminary study and Orientation on Live stock AnalysisandAction plan preparationatMallaboinaguda	Anthra team, Wassan team, Project Implementation Agency, Watershed community
April 8th-10th, 2001	Livestock Action Plan preparation at Peedavaguws	Anthra team,Project Implementation Agency, WDTs,Pool of Resource Persons members,Wassanteam
Ap 25th -26th, 2001	Livestock Action prparation atLothvagu WS	WDT,WASSN team,WS Community.
May 16th- 17th, 2001	Livestock Acton plan preparation at Jambapuri	WDT,WASSN team,WS Community.
May 27th - 28th,2001	Livstock Action preparation at Rompally	WDT,WASSN team,WS Community.
July 26th - 28th, 2001	Orientation on NPM Field Demonstaions at All Watersheds	NPM wing of CWS,WDTs,WASSAN team
Sep 13th - 14th, 2001	Training on NPM methods preparation and Practices	NPM wing of CWS,WDTs,WASSAN team
Oct 10th ,2001	Demonstration on Kitchen Garden	Narasanna,WDT,Wassan team
Nov 6th - 8th,2001	Training to newly elected Wareshed Committee of Vivekanada Watershed, Rompally	Watershed Committee Members,WDT,Wassan team
Nov 19th - 20th, 2001	Exposurevisit on CPR management to DDS and ARANYA	Jambapuri thanda,Lothuvagu Watershed Committee, Self Help Group Representatives,WASSAN Team
Dec 5th , 2001	Cultural Show on N.P.M practices at Girighatpally	WDT,Cultural team,Wassan team
Dec 6th, 2001	Cultural Show on N.P.M practices at Jambapuri thanda	WDT,Cultural team,Wassan team
Dec 7th, 2001	Cultural Show on N.P.M practices at Lothuagu WS	WDT,Cultural team,
Dec 8th, 2001	Cultural Show on N.P.M practices at Peddavagu WS	WDT,Cultural team,
Dec 21st, 2001	Cultural Show on N.P.M practices at Rompally	WDT,Cultural team,
Dec 22nd-24th, 2001	Animal Health workers Training on 1st Module	Animal Health Workers,Dr.Shaheen,Wassan team
Jan 23rd, 2002	Livelihood Analyss at Rompally	Wassanteam
Jan 27th - 30th,2002	Animal Health workers Training on 2nd Module	Animal Health Workers,Dr.Shaheen,Wassan team
Feb 9th - 12th,2002	Animal Health workers Training on 3rd Module	Animal Health Workers,Dr.Shaheen,Wassan team
Feb 23rd - 25th, 2002	Animal Health workers Training on 4th Module	Animal Health Workers,Dr.Shaheen,Wassan team

108 WASP WASSAN ACTION STUDY PROJECT

#### STEPPING STONES IN WATERSHED PR<u>OCESSES</u>

Mar 8th - 10th,2002	Animal Health workers Training on 5th Module	Animal Health Workers,Dr.Shaheen,Wassan team
Ap 7th - 9th,2002	Animal Health workers Training on 6th Module	Animal Health Workers,Dr.Shaheen,Wassan team
April 22nd-24th,2002	Workshop on Process Documentation of WASP	Watershed Representatives, PIAs, Facilitators, WASSAN Team
May 3rd, 2002	Animal Health Workers veldictory program at WASSAN	WASSAN,Animal Health Depatment,APARD,Anthra, Animal Health Workers,cws,PIAs and WDTs
June 18th, 2002	Animal Health Workers exeperience sharing and In put Session	Animal Health Workers, Dr.Shaheen,WASSAN team
July 27th, 2002	Animal Health Workers exeperience sharing and In put Session	Animal Health Workers, Dr.Shaheen,WASSAN team

Annexure No.6

#### STEPPING STONES IN WATERSHED PROCESSES

#### WASSAN TEAM

The WASSAN Action Study Project has the following management structure: Convenor & Team Leader heads it with support from Training Officer, Documentation/ Programme Officer and Programme Officer.

Professor Vijay Bhai Kochar, an eminent sociologist who retired from the Central University was the first Leader for the Project. In fact, he is the one who has conceptualised the entire project and has prepared detailed scheme for implementation and training modules. He has led the Project from January 1998 to December 1998, when he retired on health grounds. Later Mr. M A Qayyum, who was consultant with CWS, was entrusted with the responsibilities of the Team Leader from January 1999 to December 2000, when he retired on achieving superannuation for consultants in Centre for World Solidarity. The Project was initially held in Centre for World Solidarity, parent organisation of WASSAN and the programme responsibilities rested with it until April 2001. WASSAN has evolved in this process and Wassan Action Study Project has emerged as a Support Services centre of WASSAN. A Ravindra is the Team Leader for Support Services in WASSAN.

G. Surendranath has joined Training Officer in June 1998 and is continuing in the position. However, we were not fortunate to have such a long-standing support in other colleagues. Nagesh has worked as Programme Officer from Jan 1998 to December 1999. Prathima worked as a consultant for a brief period. Ms. S D Amitha Kamath gave her services as Documentation-cum-Programme Officer for the period May 1998 to September 2000. Johnson provided technical support for a short period. C. Bakka Reddy joined as Field Officer (Diploma in Civil Engineer) at Vikarabad in September 2000 and is continuing till date. Ch. Ravi Kumar worked as Programme Officer for extension of Support Services in the Nalgonda District.

110



#### WASSAN

#### ACTION STUDY PROJECT

1998 - 2002

= Partner NGOs =

VIKASAM

#### SERENE SERVICES

REEDS

*Opp. Munsif Court* **PARIGI** Ranga Reddy Dist 8-3-788/A, Durganagar Colony Ameerpet HYDERABAD

17-1-386/22, SN Reddy Nagar, Champa pet **HYDERABAD** 

#### STEPPING STONES IN WATERSHED PROCESSES

WASSAN ACTION STUDY PROJECT

1998 - 2002

Published: August, 2003Copies: 1000

Coverpage Desing: M.SrikanthLayout Design: T.Ravi

Printed : Charitha Graphics, Hyderabad

#### Centre For World Solidarity (CWS)

WASSAN	12-13-438, St.No.1, Tarnaka
12-13-452, St.No.1, Tarnaka	Secunderabad - 500 017
Secunderabad - 500 017	Andhra Pradesh (INDIA)
Andhra Pradesh (INDIA)	Ph : +91 40 27018257/ +91 40 27007906/
Ph : +91 40 27015295/ +91 40 27015296	+91 40 27005243
e mail : wassan@eth.net	e mail : cwsy@hd1.vsnl.net.in
web : www.wassan.org	web : www.cwsy.org

#### FOREWORD

WASSAN, a network of NGOs in Andhra Pradesh (the precursor to its present institutional form), came up as a response to government's announcement to initiate a massive Watershed Development Programme in the mid-1990s. NGOs immediately recognized the inherent merit of the watershed approach to water and soil conservation and were anxious they should play an active role in the overall designing and implementation of this important programme. As the NGOs realized in the course of several network discussions of these years, their effective role had to have two aspects:

In the first place, since watershed development was to be put entirely in the people's domain, through people's institutions and participation of the stakeholders, NGOs viewed their own role as ensuring that what was visualized was exactly carried out at the ground level, in the true spirit of the programme. Enough space was provided in the programme for such an NGO role, and NGOs were keen not to be found wanting in doing what was possible by them. This meant employing to good effect all the community organization skills that NGOs historically acquired and sharpened, particularly those skills, which were their prized specialization in the matter of work with the socially and economically backward sections of communities.

The second aspect of the role NGOs wanted to carve for themselves in watershed development work came out of some much-needed introspection. It is true that NGOs had all the experiences implicit and explicit in the comprehensively defined watershed development programme, and these covered the entire range of development requirements and nuances. But it had to be admitted by the NGOs that it was rarely that any given NGO had all these experiences in itself, and this was in contrast to the situation elsewhere in the country (e.g. Maharashtra). Therefore it was important that at least some NGOs acquired such comprehensive experience in what it takes to perform wholesome watershed development work. This, NGOs were honest to admit, needed critical support of a competent group. Such a group should provide the required services to the first wave of NGOs involved in watershed development so that such NGOs would later underpin the efforts of the subsequent NGO entrants into watershed development through a network that would facilitate learning from one another.

Even before the NGO learning becomes possible, it was also recognized that the service group should itself acquire some hands-on experience so as to be authentic in its role of guiding and advising the NGOs pioneering watershed development.

KEW

iii

The WASSAN Action Study had its genesis in this set of considerations and was facilitated by Centre for World Solidarity (CWS) precisely for the purpose of charting a clear course for NGOs.

WASSAN as an institution thus became a consequence and creature of the WASSAN Action Study.

The study was undertaken with the blessings and active participation of the Commissionerate of Rural Development of Government of Andhra Pradesh. APARD and the DPAPs of Ranga Reddy and Nalgonda districts supported the Action Study in several ways.

The lessons of the Action Study and the community organization and implementing phases have been several, and documented in the following pages. WASSAN as an organization is today commanding a fair degree of respect from NGOs and government as a support and advocacy group, and this is in no small measure because of the lessons learnt from the Action Study. It is important to emphasize that the lessons are in technical areas as well as in community organization. The Action Study paved the way for WASSAN increasingly to gear up to fulfil the purposes of its founding and the mounting expectations from it from several actors in the challenge of watershed development.

The Wassan Action Study Project received unstinted support from AEI, Luxembourg and its representative Ms. Francoise Wagner. Centre for World Solidarity owes AEI and Francoise a deep debt of gratitude ofr this. WASSAN as an institution is the result of thhe Action Study Project and it is a measure of AEI's, and Francoise's, understanding of the importance of WASSAN that support has been extended to it as an institution also. AEI has thus helped in establishing firmly an underpinning to a great idea in Andhra Pradesh, which is having a spin-off beyond the frontiers of that state.

Place: Secunderabad 10th September, 2003 M.V. SASTRI Convenor, CWS

# FOREWORD

#### WASSAN Action Study Project

A process oriented, people centred participatory approach to development of dry and rainfed regions is the hallmark of the Government of India 'guidelines for participatory watershed development' issued in 1994. However, the process of operationalising these guidelines has become a daunting task during the initial period. WASSAN emerged in this context as a network of concerned NGOs at the initiative of the Centre for World Solidarity. WASSAN provided a platform for consultations, identifying issues and advocacy.

At this stage WASSAN Action Study Project was initiated in collaboration with NGO partners and the Commissionerate of Rural Development, Government of Andhra Pradesh and the DPAP, Ranga Reddy district. The purpose was to demonstrate the feasibility of establishing effective participatory processes as envisaged in the Guidelines. The concept of capacity building through support services was also tried. Generating such a hands-on experience and documenting the learnings were the main objectives.

The Action Study Project initiated in 1998 was taken up in six watersheds implemented by PIAs – Vikasam, REEDS and Serene Services, in Ranga Reddy district. The watersheds and PIAs were selected by the district administration under Drought Prone Areas Program. AEI, Luxembourg supported the project. This report presents the contours of the process of its implementation and the learnings during the period 1998 to 2002. These experiences provide valuable insights into the complicated process of operationalising the participatory watershed development approach; useful for the implementing agencies, government departments and the facilitators.

Project Directors of DPAP, Ms. Sreedevi T.K and Ms. Shailaja Ramiyer in particular, and the members of the Multi-Disciplinary Team have time to time facilitated and supported the project. Initial support from Mr. S.P. Tucker, the then Commissioner, Rural Development was helpful in grounding the project. APARD, Dr. K. Tirupataiah especially, has also provided necessary support from time to time. AFPRO-Hyderabad unit provided technical support initially. The project was conceived and grounded by Dr. Vijay Bhai Kochar, who was also instrumental in initiating WASSAN along with Sri. M.V. Sastri.

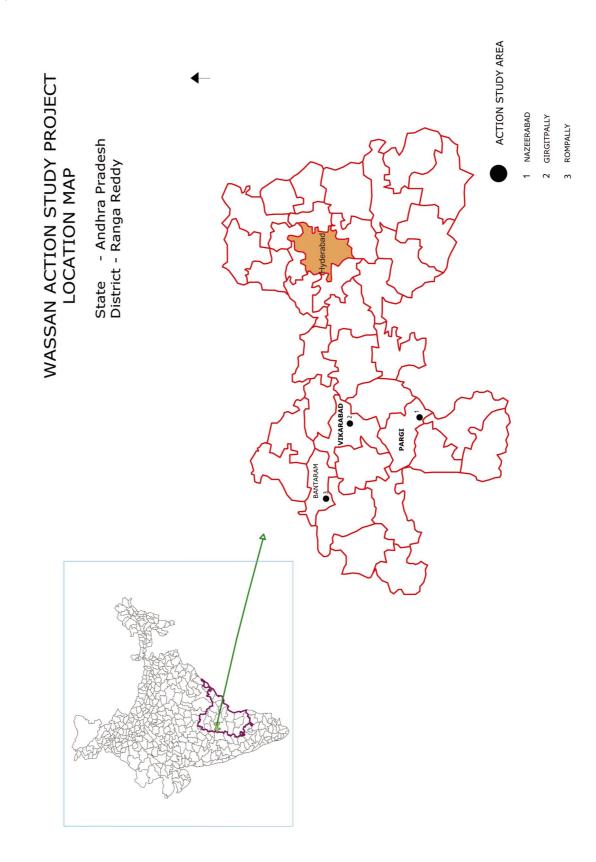
### CONTENTS

		word san Action Study Project	iii V
1.	Cont	text of Watershed Program in India	1
	1.1.	Context in Andhra Pradesh	3
	1.2	WASP Emergence Context	4
		i. Purpose	5
		ii. Approach and Design	6
		iii. Project Time Line	8
	1.3	Spin Offs	8
	1.4	A learning Programme	9
2.	Learr	nings from Action Study Project	11
	2.1	Selection of Watersheds	11
	2.2	Preparatory Phase	14
	2.3	Entry Phase	16
	2.4	Community Organisation Phase	19
		2.4.1 Formation of SHGs	19
		2.4.2 Formation of User Groups	21
		2.4.3 Formation of Watershed Association and Committee	22
	2.5	Capacity Building Inputs	27
		2.5.1 for SHGs	28
		2.5.2 for User Groups	28
		2.5.3. for Watershed Committee	30
		2.5.4. for WASP team and Facilitation	30
	2.6	Planning Phase	33
		2.6.1 Soil and moisture Conservation/field treatment	34
		2.6.2. Net Planning	34
		2.6.3 Planning in Drainage Courses	36
	2.7.	Implementation Phase	38
		2.7.1 Contribution	38
		2.7.2 MDT as Joint Signatory in WC Bank Account	40
		2.7.3. Labour Groups	40
		2.7.4. Other Issues	44
3.	Beyond Soil and Water Conservation		
	3.1	Livestock development action plans	47
	3.2	Agriculture Related Interventions	50
		a. Improved Varieties	50
		b. Sweet Sorghum	51
Vİ		<b>CONTENT</b>	S

	3.3.	<ul> <li>3.2.3 Non-Pesticidal Pest Management (NPM)</li> <li>3.2.4. Nursery</li> <li>Efforts in Convergence</li> <li>3.3.1. With Forest Department</li> <li>3.3.2. Livestock</li> <li>3.3.3. Agriculture</li> <li>3.3.4. Drinking Water</li> </ul>	52 54 55 55 56 56 57
4.	End F	Results Assessment	59
	4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9	Who implemented the program Profile of Works Watershed Development Fund Institutions Qualitative Assessement of Bunding Quality Assessment of Gully Control Structures Assessement of Water Harvesting Structures 4.7.1 Percolation Tanks vs Checkdams 4.7.2 Livestock and other uses Regenerating Lands Some Genaral Observations	59 60 61 62 65 66 69 69 70 70 72
5.	Experiences in Network Approach with DDNN		75
	5.1. 5.2.	Achievements 5.1.1. Preparatory Phase 5.1.2. Community Organisation Phase 5.1.3. Implementation Phase Limitations	78 78 78 80 80
6.	Large	er Inputs	83
7.	Overv	verview of the Programme	
Anne	xures		
	1. 2. 3. 4. 5. 6.	Profile of the Partner NGOs Profile of Watershed Villages Assessment of Water harvesting Structures Number of SHGs in Watershed Villages List of Capacity Building Activities WASSAN TEAM	93 96 98 100 101 108

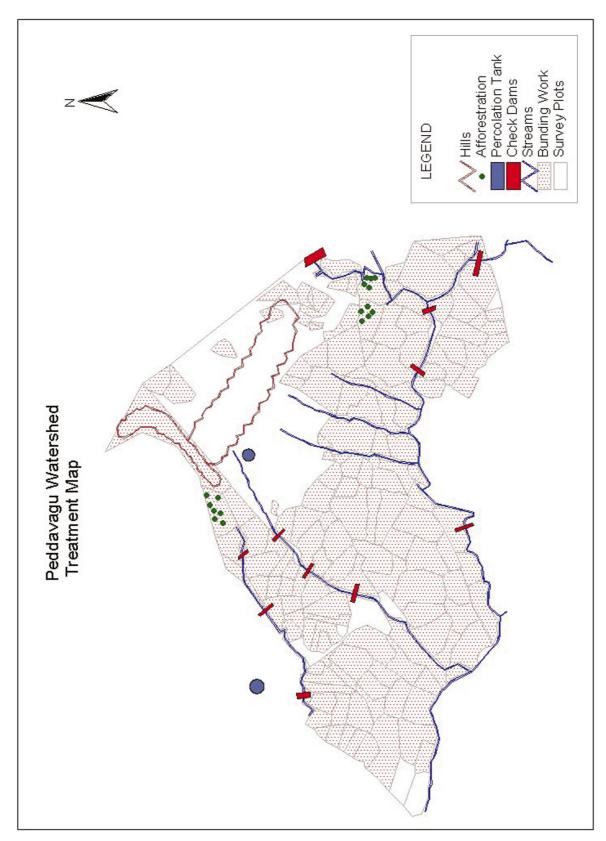
## **CONTENTS**

vii

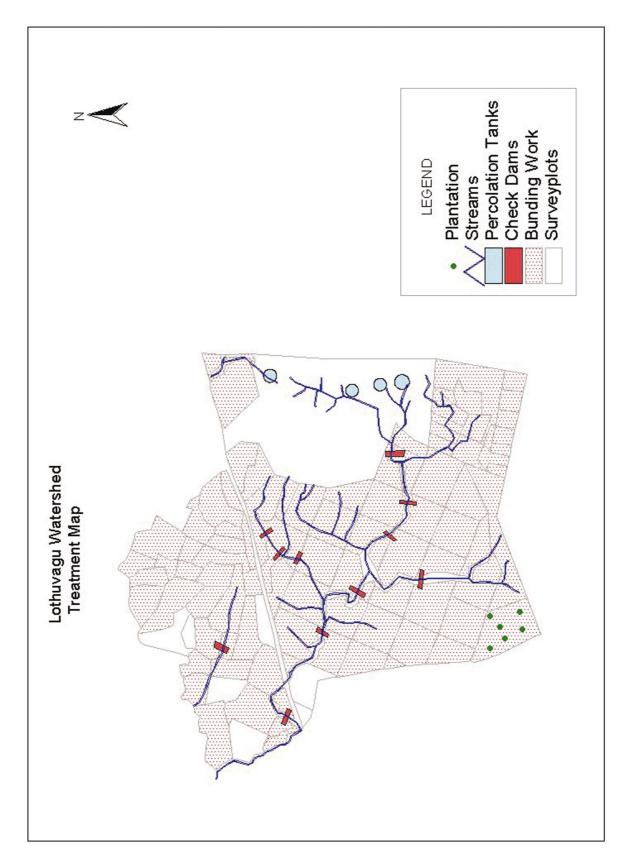


Map : 1

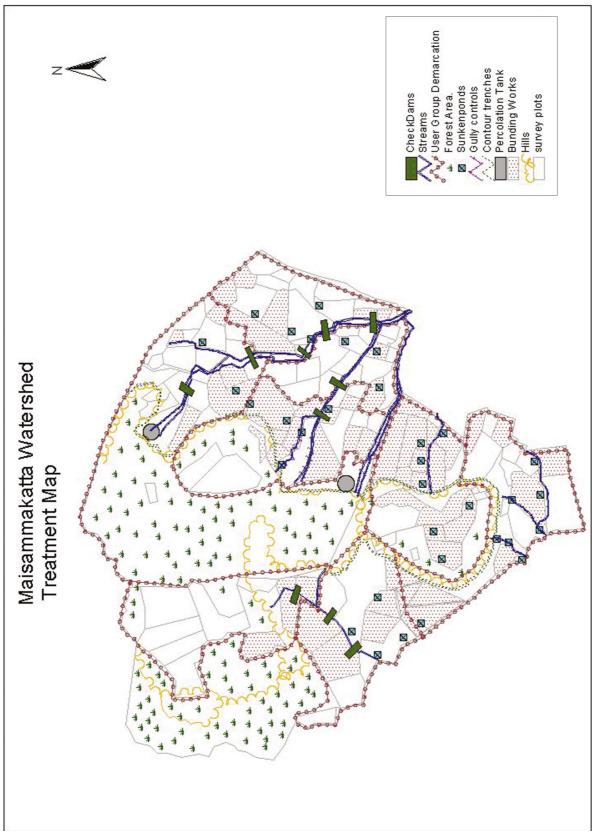




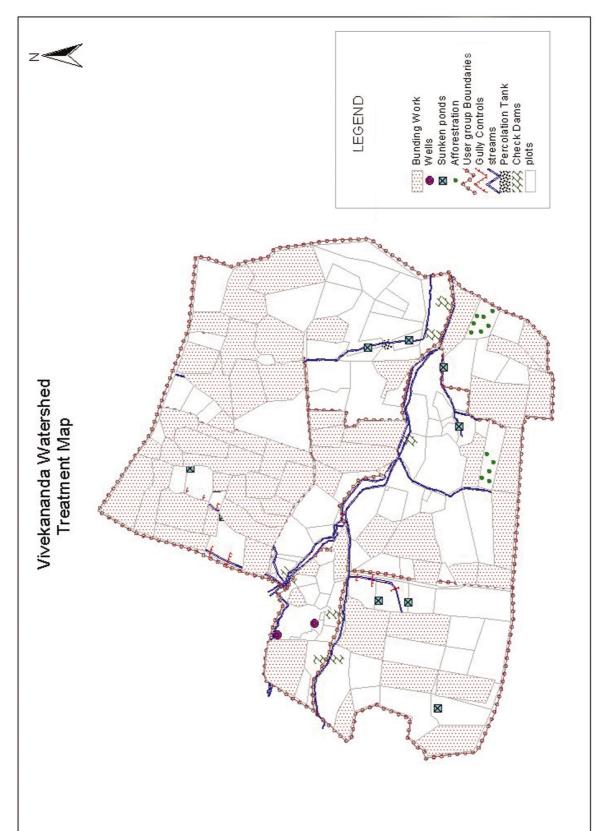
Map : 3

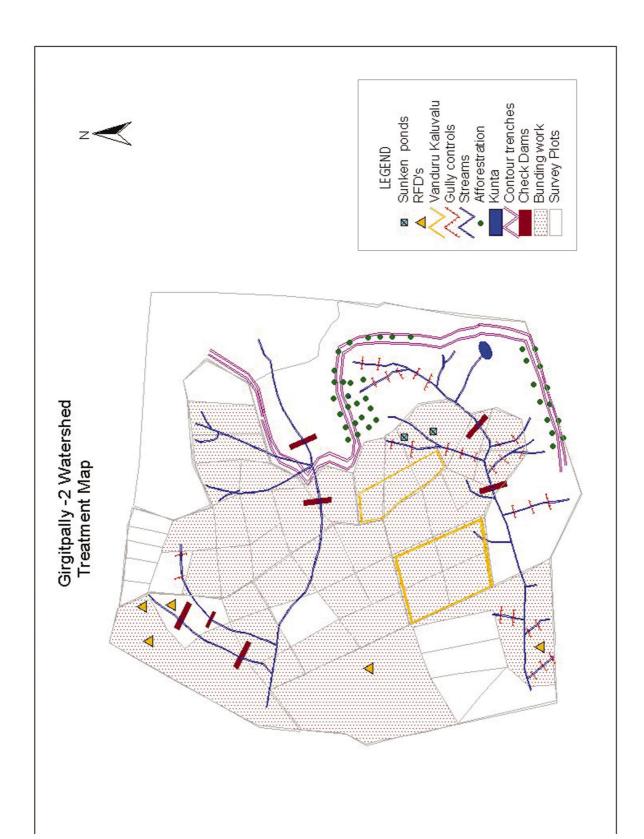












Map : 6

### ACTION



Watershed Guidelines issued by Government of India in 1994 have facilitated a radical shift in its orientation and programme implementation. But in the process, the PIAs from NGO sector committed to participatory approach have raised several issues pointing out deviation from the spirit of the guidelines. A series of consultative meetings among NGOs and with Government were organized by Centre for World Solidarity (CWS) leading to the formation of WASSAN as network for providing support services to the PIAs.

WASSAN initiated "Action Study Project" in collaboration with NGO (PIA) partners to demonstrate the feasibility of establishing effective participatory management approach within "Government Watershed" programmes. Experimentation on the concept of capacity building through Support Services was the hallmark of this Action Project.

This book reflects the Learnings from that Action Research basing upon the Experiments, Experiences and Conflicts in the demonstrated Processes

