

# Watershed Development & Growth: Mhaswandi Watershed

Presented by:

Dr. Marcella D'souza, WOTR

J. Jangal, Intercooperation

CE-WLP Learning Group Members,

Focus area 4: Experiences of Watershed development for growth

# Mhaswandi Watershed

The Indo-German Watershed Programme began at Mhaswandi village with the initiative local leaders, GoM, WOTR, NABARD in the year 1994. The project ended in the year 2000



Mhaswandi Watershed  
Sangamner Taluka,  
Ahmednagar District,  
Maharashtra

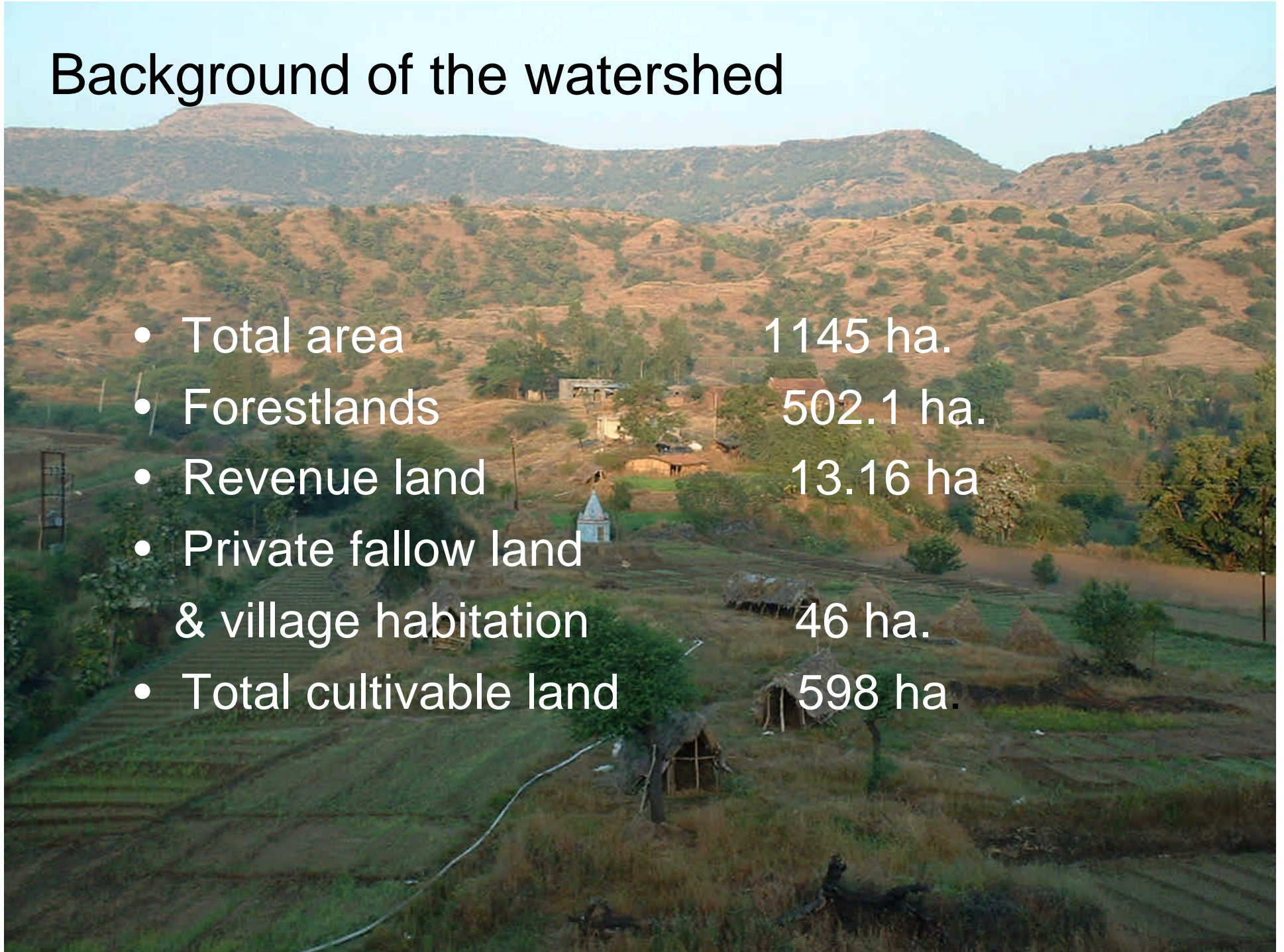
# Focus Area of the CE group

The CE Group decided to study Mhaswandi Watershed for the growth & development in the post watershed scenario

- Local Institutions & CBOs
- Maintenance of the Watershed assets
- Market linkages.

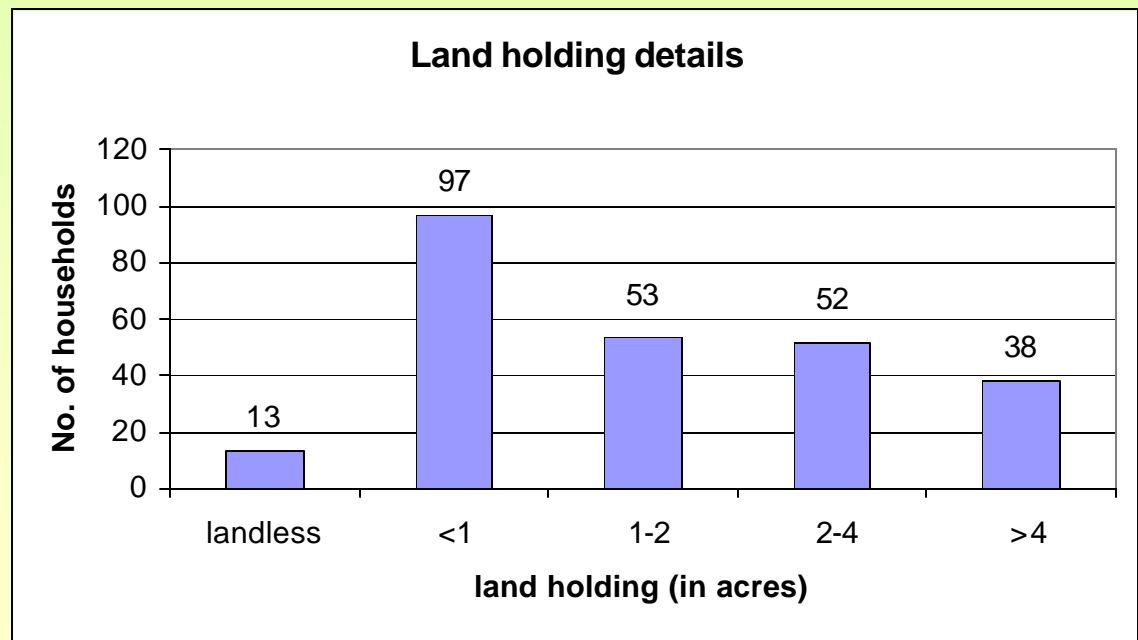
# Background of the watershed

- Total area 1145 ha.
- Forestlands 502.1 ha.
- Revenue land 13.16 ha
- Private fallow land & village habitation 46 ha.
- Total cultivable land 598 ha.



# Some Demographic Data

- Total population 1209
- Total households 253
- Male Literacy 57.48%
- Female Literacy 42.33%



# Project Interventions

## Capacity Building Phase 1994 – 1996

- Hands-on Training for implementation of a micro-watershed; Capacity Building of VWC, SHGs & SMS, PLS
- For Project cycle management, records and accounts keeping, maintenance of the required disciplines, interaction with other projects, workshops.
- Watershed development activities (area treatment , drainage line treatment) such as CCT, contour bunds, check dams, nalabund, gully plugs, WAT, Afforestation etc.

## Full Implementation Phase 1997 - 2000

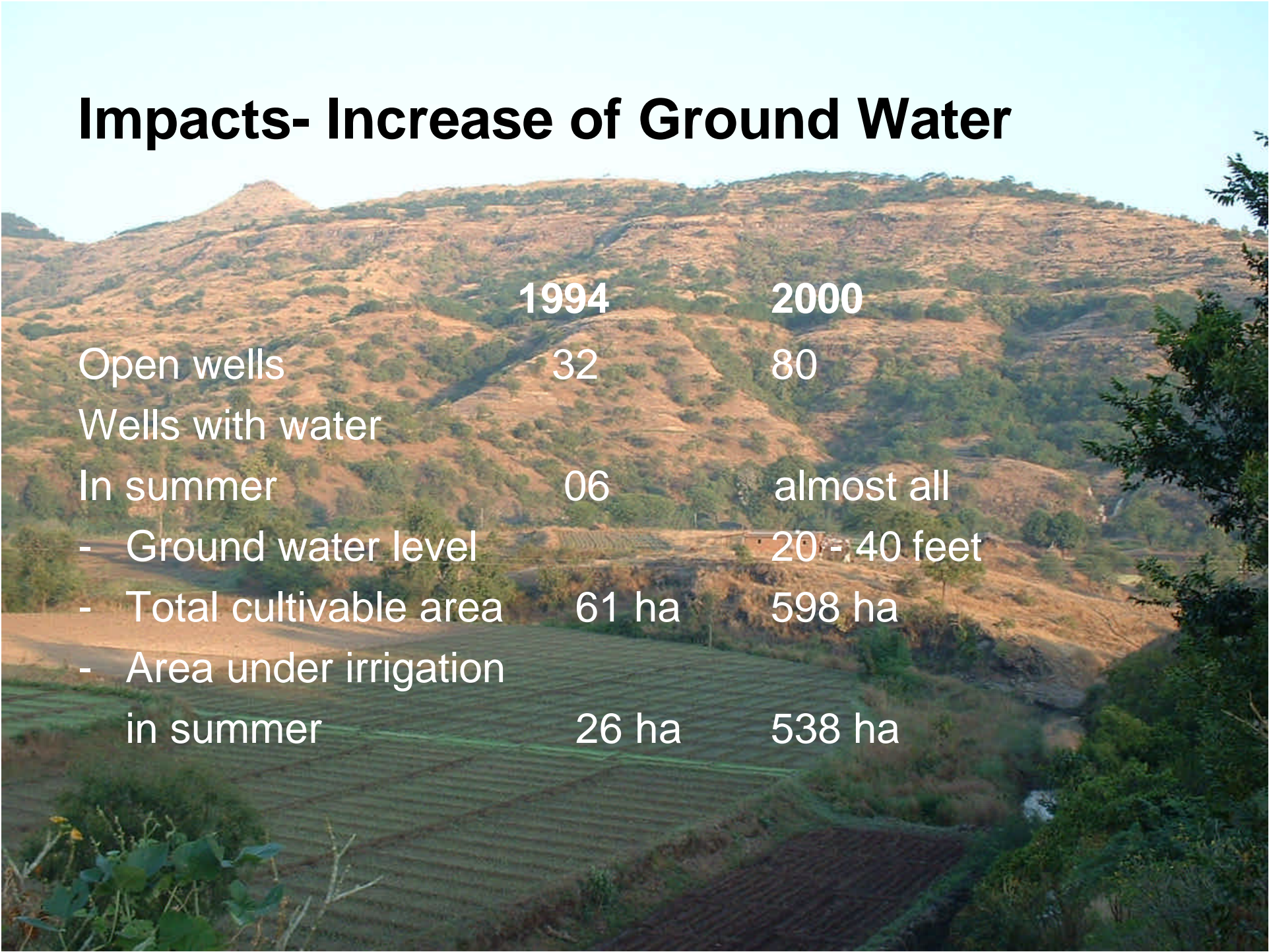
- Similar activities and the trainings continue.
- Planning and implementation of the Project fund for women's development



# Project Institutional setup

- Maladevi Village Watershed Committee –VWS
- The SHGs & Samyukt Mahila Samiti (SMS)
- Facilitating NGO- Sangamner Bhag Sahakari Sakhar Karkhana
- Capacity Building Agency for NGO and Village WOTR, Ahmednagar
- NABARD provided funding and support for the project in the FIP.

# Impacts- Increase of Ground Water



	1994	2000
Open wells	32	80
Wells with water		
In summer	06	almost all
- Ground water level		20 - 40 feet
- Total cultivable area	61 ha	598 ha
- Area under irrigation in summer	26 ha	538 ha

# Impacts: Changes in cropping pattern

- Out of 598 ha of cultivable area the farmers said that they cultivate about 120 ha of onions as commercial crop in second cropping season (October - February).
- The farmers on an average cultivate 0.5 acre to 1.00 acre vegetable crops like tomato, lab-lab, ladies finger, cabbage etc in summer which will give them a regular income.
- The farmers also grow flowers for market. On an average a farmer grows 0.25 acre to 1.00 acre.
- The farmers continue to cultivate the traditional food crop - Bajra, jowar, red gram to ensure family food security.



# Impact- Changes in Live stock

- There are 150 cross bred cows, each producing an average of 12-15 liters of milk per day.
- The local breed of cattle reduced from 312 in 1994 to 30 in 2000. In November 2006 the local breed of cattle is 60. (Increasing trend ?)
- The sheep and goat population was 271 in 1994, 93 in 2000 and in 2006 the goat and sheep population was more than 180.
- It has been observed that on an average most of the families have one or two goats under stall fed/controlled grazing. (Increasing trend with different management system)

# Veterinary service

- The MPCS also provides the required medical service for livestock.
- The services are available as and when required. (Vet is from the village)
- MPCS also provides additional nutrients & de-worming medicines
- A farmer in the village has a jersey bull for natural service and he charges Rs.100/- per animal.

# Market Linkages – The Milk Market

- The Milk Producers Cooperative Society (formed after the watershed development programme).
- Approx. 500 liters of daily procurement of milk by the MPCS.
- Price Rs. 8.50 per liter in flush season & Rs.9.50 in lean season.
- The farmers get a bonus from MPCS ranging between 0.50 paise and Re.1.00 per liter of milk at the end of the year.
- Income from the sale of milk ranges from Rs1000 to 13,000.
- The farmers said that they also keep sufficient milk for home consumption.



# Onion Marketing

- The onion crop is considered one of the major commercial crops in the watershed area after watershed development.
- The farmers on an average harvest about 16 -17 tons per acre. If the market offers Rs.4.50 per kg after two months of the harvest, the income will be about Rs. 72000/-.
- Some times if the market offer good price of Rs. 8/ to Rs-9/- .then the farmer will make good income in that season.



# Vegetable Marketing

- The farmers sell vegetables in private market at Narayangaon, Bankar Phata, Bota.
- The price fluctuation in the market is very high. Some time they don't even get the cost of cultivation of tomato and some time get a very good income



# Flower Marketing

- Flowers like marigold (Zendu), shevanthi were cultivated for market. It is sold at private markets at Bankar Phata, Narayangaon and Bota. Some times they get good price for the flowers.
- The price varies between Rs.30/- to 40/- per kg. Again it is also depend upon the market price, supply and demand.



# Institutions in the Post watershed Scenario

- **Village watershed Committee**
- **SHGs & SMS,**
- **Credit Cooperative Societies, MPCS, GP, Vividha Karyakari Cooperative Society.**
- **Socio – Cultural, Religious Groups**



# The post watershed scenario - VWC

- The project completed its activities in the year 2000 and since then the VWC was managing various assets on their own and developed new initiatives in the villages.
- The entire VWC members were changed by selecting a new set of people by the Gramasabha.
- The committee members were drawn from all the village institutions such as Samyukta Mahila Samiti a Federation of SHG, Credit Cooperative Society, Milk Producers Cooperative Society.
- At present there are 15 members in the VWC. Out of which 11 are male and 4 female members.
- The VWC audits the accounts annually and submit to the Registrar of the Societies.
- The Gram Sabha of the village approve all the expenditures and plans.

# The post watershed scenario - VWC

- The VWC has a Maintenance Fund of Rs.9.13 lakhs
- VWC meeting is held once in three months
- Agenda discussed are maintenance of the assets in the watershed, expenditures and plans.
- The VWC auctions three check dams for fish rearing and earn annually an amount of about Rs.45,000 and the amount earned is used for village fairs and festivals.
- Also auctions the fodder grass grown in the common lands and earn about Rs.40000 – 45,000 annually.

# The post watershed scenario - VWC

- The VWC has taken up a loan of Rs.2 lakhs from NABARD for developmental works in the villages and decided to take up the promotion of individual latrine to make all the families to have their own toilet.
- The VWC members make a regular visit before setting up of monsoon to verify all the assets and its conditions in the watershed for the maintenance of assets.



## **Self Help Groups (SHGs)**

- The women SHGs were organized in 1996.
- During the implementing phase there were only 8 SHGs with 160 members and after the completion of the watershed, the number of SHGs have increased to 22 with 400 Members.
- There are two men SHGs in the village.

# **Samyukta Mahila Samiti – SMS (A Federation of SHGs)**

- Samukta Mahila Samithi was formed in 2000 as SHG Federation
- SMS has 19 women members in the governing body and meets every month
- The SMS is empowered to address the problems and issues affecting the women and the village.
- Distribution of seeds and fertilizers to farmers and later on handed over to VWC.
- Insurance coverage through Bheema Policy – Life Insurance for 126 members of SHGs.
- “Poshak Agara Yojana” of the government and provided nutritious meal to the children – one meal.
- Chilly Pounding Unit and Vermicelli making unit

## Increase of socio-cultural Institutions

- 8 Associations of socio-religious and cultural have emerged after the watershed development.
- All have developed financial resources to take up activities which build cohesion, recreation, unity and solidarity among the village communities.

# The Gram Panchayat in Mhaswandi

- Women is the Sarpanch selected by the communities.
- Since the last four elections there is no election for GP members and Sarpanch and the entire community selected them unanimously.
- The GP meets once in a month and she chairs the meeting.
- Activities planned are informed to each of the village institutions by calling for a meeting, consulted with them and their approval was obtained for implementation.

# Savad Padath

- It is a system of sharing laborers & bullock in the village and there is no money paid for the laborers. The family shares labor on a rotation basis.
- This system has emerged to cope with up with the labor needs for agriculture due to change in the cropping pattern & increase in cultivated area post watershed development.
- This is a practical way of meeting their labor needs through cooperation and collective sharing.



# Challenges for the Way Ahead

- Stable marketing linkages for the farmers produce eg. onion, vegetable and flowers.
- Exploitation of land resources by applying heavy chemical fertilizers to keep the commercial agriculture going on for increased income, resulting in land degradation.
- Information on market trends, price, demand and supply for various produces on a day-to-day basis by using information technology to provide information to farmers.

# Learnings

- Landless farmers' livelihood opportunities can be developed within the village even after watershed development.
- Implementing agencies/NGOs can still have a role in the post-project period in a Keep-in-Touch mode to bring in new ideas and to provide linkages to the village level institutions

# Acknowledgements

- WOTR, VWC, SMS, GP, MPCCS who have shared their time, information, experiences and wisdom.



Thank you



**This presentation was made as part of “Capitalization of Experiences Water Land & People”, an initiative of the Swiss Agency for Development and Cooperation (SDC) facilitated by Intercooperation and implemented in Bolivia, India and Mali during 2005-2006. It aims at sharing and deepening the knowledge base of SDC and partners on issues related to integrated water resource management.**