 **Study on Credit Intensification in  
Two Completed Watershed Projects in  
Udaipur District of Rajasthan**



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### **Disclaimer**

This document has been prepared by Shri Sunil Kumar Mishra and Vinod Kumar Bist, Faculty members of NBSC, Lucknow based on the field study conducted by them from 27-31 March 2017 in Udaipur district of Rajasthan. The views expressed in the report are that of the authors. The report does not necessarily represent or reflect the policy or view of NBSC or NABARD (National Bank for Agriculture & Rural Development). NBSC/ NABARD accept no financial liability or any other liability whatsoever to anyone in using this report as also for the accuracy of facts and figures quoted in the report.

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## Executive Summary

- NABARD has been implementing watershed projects under Indo German Watershed Development Programme since 1990s with the basic tenet of “catch the rain where it falls” through participatory approach. Success in these projects led to formation of Watershed Development Fund (WDF) with contribution of Rs.100 crore each by NABARD and GoI. Under WDF programme, “Ridge to valley approach” was adopted with area treatment first and drainage line treatment later.
- Major objective of the interventions under WDF was to improve soil moisture regime in the catchment area for increased production, productivity, livelihood and poverty alleviation of the watershed community.
- Though, overall objective of implementation of watershed projects aimed towards increasing agriculture productivity and production, the initial focus was oriented more towards implementation of soil and water conservation, water resource development, afforestation, dryland horticulture, etc. with less focus given on sustainable development.
- With the increased aspiration of rural population, the programme was reoriented towards promotion of sustainable livelihood development, integrating interventions such as technology transfer, extension, financial inclusion, **credit intensification**, value addition, aggregation of farm produce, skill development, climate proofing, climate change mitigation and adaptation, convergence of state/centrally sponsored schemes, convergence of social infrastructure development with CSR funds, implementation of social security schemes like PMJJBY, PMJSBY and APY, etc.
- With high success of WS projects, **credit intensification and credit dispensation** in post watershed situations are among the important parameters to measure real success and sustainability of the project in the context of deployment of scarce financial resources in creating avenues for increased production, productivity, income and livelihood.
- Hence, it was felt essential to launch a quick study to assess the credit purveyance to the project areas from formal financial sources in two watershed project areas of Mandli and Rawatpura WS in Udaipur district of Rajasthan. Accordingly, two FMs from NBSC, S/Shri S. K. Mishra & V. K. Bist, DGMs

conducted a field study during the last week of March 2017. Study objectives were as under :

- To study level of increase in crop production, productivity and income generation due to complete watershed projects
  - To find out the extent of credit intensification in completed watershed project areas
  - To study role and engagement of banks in credit dispensation and deepening in the project areas
- Rajasthan has 65 Watershed Projects under implementation/completion covering an area of 66,825 ha supported from WDF and IGWDP. Under IGWDP Rajasthan, there are 31 watersheds financed in 5 districts which are in final stages of implementation/completion and are being looked after by a PMU set up at Udaipur district HQ.
  - Two projects implemented in the district under IGWDP, Mandli and Rawatpura WS were chosen for the study from among the projects where banking plan have been prepared and launched to make the programme sustainable by integrating the progress under watershed with the financial services leading to overall development of the beneficiaries.
  - The study team had interaction and discussion with various stakeholders including the farmers, VWC members, SHG members, PIA functionaries, banks, departments of the State Govt. and the DDM apart from the PMU at Udaipur. Based on interactions, findings are briefly described below :
    - Both the projects are nearly complete and in the process of being closed.
    - The physical targets as delineated in the beginning of the projects have been largely achieved with infrastructural interventions, agricultural practices, livelihood options, etc.
    - Water table in the water bodies have improved. This has resulted in improved agricultural practices including use of better technology and machinery, better crop planning and taking up new income generating crops.
    - Farmers' income have been augmented with subsidiary occupations like cattle rearing, goat/sheep rearing and other livelihood options which have raised their income.
    - Migration has been curbed to some extent as the farmers have started getting improved income from their own agricultural land and other assets.

- Improved infrastructure and demand for higher IGA, however, have not been commensurate with better banking facilities and services in the form of credit availability not only due to lack of awareness at the level of the beneficiaries but also due to lackadaisical attitude of the banking sector.
- Banking plan prepared by the PMU and launched in the project areas by the PMU in collaboration with DDM, LDM and district authorities could not be grounded basically due to banks' apathy and also due to inadequate follow-up by the stakeholders.
- Banking penetration appeared to be low with less number of branches, low CD ratio, low share of Agriculture Term Loans (ATLs), trust deficit with the people of the area due to historical reasons of wilful defaults, etc.
- Policy limitation, particularly in the case of a major service area banker in the project area, i.e., ICICI by insisting for minimum of 5 bighas (4.60 bighas equals 01 hectare) required for eligibility for KCC has been a major impediment in credit dispensation and intensification in the region.
- Good institutional structure in the form of VWCs formed as a part of the watershed covenants appeared to be losing direction beyond watershed project period in the absence of efforts to ensure their sustainability by leveraging on the goodwill and trust generated in community action by the farming community. It is suggested that it should have culminated in ownership of the projects for their progress and development.

# Chapter-I

## I. Introduction

NABARD started implementing participatory watershed projects under Indo German Watershed Development Programme since 1990s. The approach followed in the programme was “catch the rain where it falls” through participatory approach. Based on the success of the above programme, Watershed Development Fund (WDF) was created with contribution of Rs.100 crore each by NABARD and GoI. Under WDF programme, “Ridge to valley approach” was adopted with area treatment first and drainage line treatment later.

Major objective of the interventions under WDF was to improve soil moisture regime in the catchment area for increased production, productivity, livelihood and poverty alleviation of the watershed community.

The position of sanctioned watershed projects under various programmes as on December 2016, is as under.

**Table No. 1**

<b>Sr no</b>	<b>Programmes</b>	<b>No of projects sanctioned</b>	<b>Area coverage (in lakh Ha)</b>
1	IGWDP (4 states of Maharashtra, AP, Gujarat, Rajasthan)	326	3.37
2	PM’s Package for Distressed Districts under WDF	764	8.86
3	Watershed Development Fund- Non Distressed Districts:- Participatory Watershed Development Programme	699	5.24
4	Convergence of CSR funds in watershed projects	99	NA

Though, overall objective of implementation of watershed projects aimed at increasing agriculture productivity and production, the initial focus was oriented more towards implementation of soil and water conservation, water resource development, afforestation, dryland horticulture, etc. with less focus given on sustainable development. With the increased aspiration of rural population, the programme was reoriented towards promotion of sustainable livelihood development, integrating interventions such as technology transfer, extension, financial inclusion, **credit intensification**, value addition, aggregation of farm produce, skill development, climate proofing, climate change mitigation and adaptation, convergence of state/centrally sponsored schemes, convergence of social infrastructure development (health, education, sanitation, drinking water, etc.) with corporate CSR funds, implementation of social security schemes like PMJJBY, PMJSBY and APY etc.

While a large number of projects have been completed with significant success as far as their implementation is concerned, **credit dispensation and credit deepening** in post watershed situations are vital measuring parameters to know about the success



and sustainability of the project in the context of deployment of scarce financial resources in creating avenues for increased production, productivity, income and livelihood.

It may be mentioned that Rajasthan is one of the four states where watersheds are implemented under different funds, viz. WDF of NABARD and KfW (IGWDP). The state has 65 Watershed Projects in implementation/completion covering an area of 66,825 ha. supported from WDF and IGWDP. Further, 19 projects are being implemented with CSR support. Under IGWDP Rajasthan, there are 31 watershed financed in 5 districts of Rajasthan which are at advanced stage of implementation/completion. NABARD has already ventured into climate proofing of 9 watersheds under IGWDP in Rajasthan. Further, the state is one of the few states where Banking plans of Rs.34.21 crore have been prepared in the watershed areas.

**District Profile:** As per 2011 Census, Udaipur district has a total population of 30,68,420 of which 80% are rural population. Agriculture and allied activities form the backbone of the economy of the district. Of the total farmers, small and marginal farmers constitute about 95%. The district is rich in natural resources like copper, lead, zinc and silver, industrial minerals like phosphate, asbestos, calcite, lime-stone, Talc (soap stone), barites, wollastonite and marble. However, due to the absence of required infrastructure, the district is lagging behind in development. The district has thirty one Commercial Banks, four Private Banks, one RRB, one StCB and one SCARDB. The branch network of the CBs, RRB and StCB at 370 is meeting the banking needs of the population of the district.

There is about >30% growth trend in the loans and advances sector during the last three years. The average achievement under Annual Credit Plan during last three years is recorded at more than 100% of the target. While the CD ratio at the State was pretty comfortable at 92.96% as on 31 March 2015 showing a marginal increase over 92.76% of previous year, Udaipur is among the four districts along with Dungarpur, Sirohi, and Rajsamand which have CD ratio around 50% and below the benchmark level of 60% though the priority sector achievement in Udaipur district is above 40% (at 54%).

As regards the banks in the project areas, it is largely serviced by ICICI, SBBJ, RMGB, UBI. The banking parameters in the project area may still be poorer than the district as a whole due to the undulated terrains, backwardness of the area and absence of improved agriculture practices and other resources.

## Chapter II

### Study Objectives and Methodology

The four days study was taken up during 27-31 March 2017 in Udaipur district of Rajasthan with the following objectives.

- To study level of increase in crop production, productivity and income generation due to completed watershed projects
- To find out the extent of credit intensification in completed watershed project areas
- To study role and engagement of banks in credit dispensation and deepening in the project areas

Accordingly, the team of officers made a study of the extent of credit intensification in completed watershed project areas in the following two completed watersheds under IGDWP, one of the earliest experiments by NABARD in watersheds in the state of Rajasthan.

**Table No 2**

<b>Name of the watershed</b>	<b>No of villages involved</b>	<b>Area of watershed (ha)</b>	<b>Block</b>	<b>District</b>	<b>PIA/NGO</b>
Mandali Watershed	08	937.00 ha	Sarada	Udaipur	Gayatri Seva Sansthan
Rawatpura Watershed	05	1104.16 ha	Kurabad and Bhinder	Udaipur	Prayatna Samiti

#### **ii. Methodology Adopted**

The study team visited the two watersheds and interacted with the Project Implementing Agencies (PIAs), farmers, village watershed committees (VWCs), milk society in the Rawatpura watershed region, various banks and SHGs besides line departments operating in these areas. The team also interacted with the Lead District Manager, Udaipur as also bank controllers of ICICI Bank Ltd, SBBJ and the Rajasthan Marudhar Gramin Bank. The team spent two days in each of the watersheds to see various physical interventions as also interviewing the farmers and other stake holders. Efforts were made to seek information so as to get an idea of the pre watershed as also the post watershed development.

About 15 farmers were interviewed to seek information regarding their pre and post watershed cropping pattern, involvement in the watershed planning and implementing stage, production and productivity aspects, credit availed before and after the project, assets created due to increased income level of the farmers, role of money lenders, role of departments/extension agencies, convergence with departments and other related aspects. The observations emanating from the interview with farmers are given in Annexure I.

The team also had elaborate discussions with the Udaipur PMU and the DDM Udaipur about various interventions and efforts made by NABARD in implementing the watershed projects.

## **Chapter-III**

### **III. Brief Outline of the Watersheds**

NABARD set up a Programme Management Unit (PMU) at Udaipur in September 2007 to monitor the Indo-German Watershed Development Programme (IGWDP) that was initiated in Rajasthan during 2007-08. Shri Sukant Kumar Sahoo, AGM, NABARD was in-charge of the unit supported by three consultants in the field of Soil & Water conservation engineering, Animal Husbandry and Forestry & Pasture development and are placed with the PMU. The study team had detailed discussions with the PMU on the status of the projects. Some of the highlights of the IGWDP projects are discussed as under:

#### **III.A. IGWDP - Status**

- There are 31 watershed projects financed under IGWDP which are at advanced stage of implementation/completion. Of the 31 watershed projects, fourteen (12 in Udaipur and 2 in Dungarpur districts) lie in southern Arawali hilly region with around 70% or more of the treatable area under pasture/sloppy track. The other 17 projects in Chittorgarh (2), Pratapgarh (11) and Banswara (4) districts are in relatively flatter tracks (though having 15~20% slope or more especially on nala-sides/ hillocks) with major area under field crops.
- The predominant farming system in the watershed areas is rain-fed. The areas have rugged terrain, sandy loam soil and poor water availability.
- Under IGWDP Rajasthan, NABARD has already ventured into climate proofing of 9 watersheds. While climate proofing of 2 projects had been completed by August 2015 with GIZ support, that for seven projects with Adaptation Fund is in progress (implementation period till Sep 2018). Climate proofing of the remaining 22 projects is in pipeline (implementation period till Dec 2018).
- The PMU offers handholding support through rigorous monitoring of projects and training & capacity building measures. It undertakes mid-course corrective measures in the projects so as to generate best outcome in line with the programme objectives.
- List of projects with physical and financial details of watersheds being implemented under IGWDP in Rajasthan and monitored by the PMU, Udaipur is given at Table No.3.

**Table No. 3**

<b>Indo-German Watershed Development Programme (IGWDP), Rajasthan</b>							
<b>District-wise, Watershed-wise Status as on 30 Sep 2016</b>							
Sl#	Name of watershed project	PFA	District	Area sanctioned (ha) **	Sanction Date/ 1st instalment date (FIP)	IGWDP Grant Sanction (FIP)	Total Eff. Sanction (cbp~fip)
1	Baverikheda - I	FES, Pratapgarh	Pratapgarh	799.00	10-Mar-2010	113,40,788	124,43,282
2	Baverikheda - II	FES, Pratapgarh	Pratapgarh	1102.00	3-Aug-2010	152,78,024	164,05,324
3	Puniyakundi	GVT	Banswara	1204.00	3-Aug-2010	99,51,459	109,21,080
4	Mandwa Bherabhai	RBKS	Dungarpur	839.00	10-Mar-2010	86,40,757	96,58,150
5	Kajili	WASCO	Pratapgarh	1055.00	10-Mar-2010	111,53,349	121,11,924
6	Devpura - I	RRIDMA-BAIF	Udaipur	1055.00	3-Aug-2010	130,77,318	140,17,982
	<i>Tadi Obari</i>	<i>RBKS</i>	<i>Dungarpur</i>	<i>89.63</i>	<i>19-Dec-2007</i>	<i>0</i>	<i>5,27,851</i>
7	Devpura - II	RRIDMA-BAIF	Udaipur	939.00	3-Aug-2010	125,27,912	135,51,433
8	Khunta - I	NMSadguru	Banswara	1110.00	30-Aug-2010	124,66,181	135,59,664
9	Khunta II	NMSadguru	Banswara	850.00	10-Mar-2010	104,60,479	115,49,987
10	Khunta III	NMSadguru	Banswara	960.00	14-Feb-2011	119,07,881	131,49,811
11	Veerpur	IFFDC	Pratapgarh	1022.00	14-Feb-2011	109,31,294	122,96,014
12	Fulda Banjari	IFFDC	Pratapgarh	1045.00	15-Mar-2011	109,82,873	123,07,835
13	Rawach	FES	Udaipur	1178.00	14-Feb-2011	124,84,184	140,40,398
	<i>Haldupura</i>	<i>GVT</i>	<i>Banswara</i>	<i>113.00</i>	<i>28-Mar-2011</i>	<i>0</i>	<i>15,81,921</i>
	<i>Ambadara</i>	<i>Prakriti Foundation</i>	<i>Banswara</i>	<i>113.64</i>	<i>20-Mar-2009</i>	<i>0</i>	<i>3,83,817</i>
14	Balua	RRIDMA-BAIF	Udaipur	1220.00	20-Jul-2012	161,47,300	175,07,842
15	Kulmipura	WASCO	Pratapgarh	1305.00	23-Feb-2011	134,35,474	147,43,968
16	Gundalpur	WASCO	Chittorgarh	1067.00	23-Mar-2011	90,13,710	102,21,937
17	Baverikheda - III	FES, Pratapgarh	Pratapgarh	1007.00	15-Mar-2011	101,34,703	113,13,923
18	Jhabla	Seva Mandir	Udaipur	1232.00	20-Jul-2012	217,14,800	231,75,563
19	Vagda	ALERT	Udaipur	984.00	20-Jul-2012	117,12,800	130,57,725
20	Garnala Kotra	Mahan Seva Sansthan	Udaipur	1105.00	16-Mar-2012	121,76,900	136,24,448
21	Malvi	Mahan Seva Sansthan	Dungarpur	1424.00	20-Jul-2012	128,21,900	141,91,900
22	Chainpuriya	WASCO	Chittorgarh	1202.00	16-Mar-2012	118,66,000	131,68,510
23	Piparna	FES - Udaipur	Udaipur	830.43	16-Mar-2012	90,80,100	105,03,199
24	Khad	RRIDMA-BAIF	Udaipur	1330.08	16-Mar-2012	179,08,800	191,79,855
	<i>Pithapur</i>	<i>VAGDHARA</i>	<i>Banswara</i>	<i>113.24</i>	<i>15-Jun-2009</i>	<i>0</i>	<i>3,18,358</i>
25	Kherot - I	ITC-FES, Pratapgarh	Pratapgarh	1712.00	15-Mar-2011	96,70,810	110,51,344
26	Kherot - II	ITC-FES, Pratapgarh	Pratapgarh	850.00	15-Mar-2011	56,22,749	62,42,229
27	Kherot - III	ITC-FES, Pratapgarh	Pratapgarh	1220.00	15-Mar-2011	59,81,369	68,94,414
28	Achalpur	ITC-FES, Pratapgarh	Pratapgarh	1512.00	15-Mar-2011	84,69,402	93,99,902
29	Rawatpura	Prayatna Samiti	Udaipur	1104.00	14-Dec-2012	132,08,000	142,31,150
30	Anjeni	AFPRO	Udaipur	972.00	14-Dec-2012	98,51,900	111,70,580
31	Mandali	Gayatri Seva Sansthan	Udaipur	937.00	20-Jul-2012	136,07,800	151,76,295
	<b>TOTAL/ Average</b>			<b>34601.02</b>		<b>363627016</b>	<b>403679615</b>
<i>pithapur, Haldupara, Ambadara and Tadi Obari closed prematurely, hence not shown here</i>							

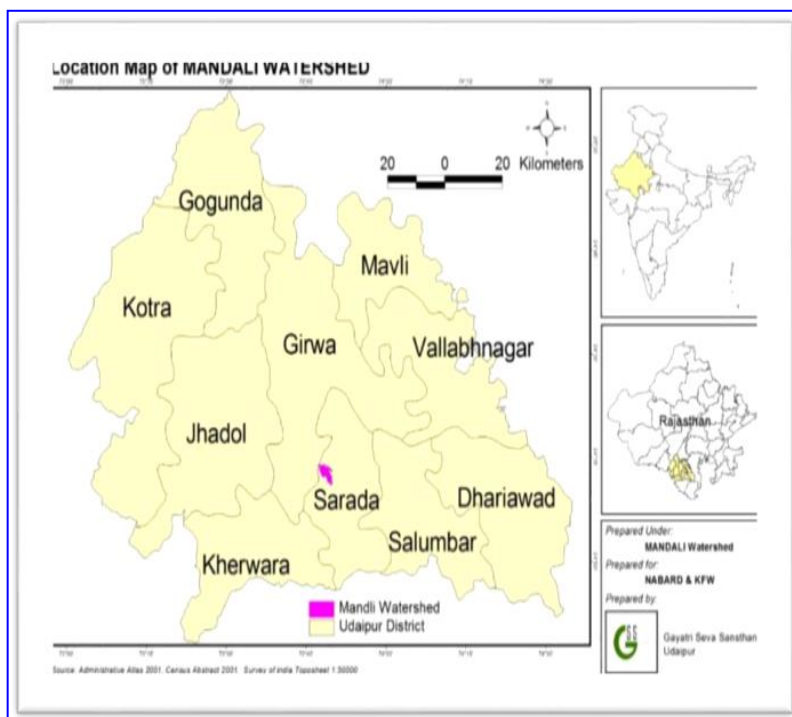
### **III. B. Outline of the two completed watersheds visited by the Team**

Profile of the two completed watersheds, i.e., Mandali and Rawatpura which were visited by the Study Team, are as under.

**III. B. (1) Mandali watershed** – The watershed is located in tribal dominated Sarada block in Udaipur District, Rajasthan. It is nearly 60 km from district headquarters of Udaipur and about 5 km from block headquarter. Watershed area covers 8 revenue villages of 2 Gram Panchayat (GPs) named as Nathara and Thana. Total area covered under this watershed is 975 sq. km with a population of 2,805 as per 2011 census.

- The nearest town is Chawand which is 3 km from Mandali. Chawand is the place where The Great Maharana Pratap took his last breath. The watershed is drained by a small stream which is tributary of Som River. The watershed is typical of semi-arid area with moderate but erratic rainfall, gently rolling topography, moderately poor soils, and low irrigation potential. Most of the families (around 70%) in this watershed area belong to BPL whose livelihood is largely based on rain fed agriculture and labour work.

**Map No 1**



- The recurrent drought in every 2-3 years coupled with small land holding forces the local community to migrate. Average land holding is around 1.5 acres per family. The average family size is five (5).

The watershed project was planned keeping in view the following strategies.

- Capacity building and empowerment of community and their local institution/body in such a manner that can develop a sense of ownership towards the works done during the project period.
- Treatment of the catchment area with suitable soil and water conservation measures using ridge to valley concept aimed at reducing soil loss and maximum harvesting of water.

- Utilization of the land according to its capability for realizing its production potential on sustainable basis.
- Introducing improved techniques of farming and building up of infrastructure for credit availability, processing & marketing, so that along with increment in production better price can be assured to the producers.
- Development of secondary sources of income for the people in watershed area such as dairy, poultry, nursery raising, compost production, horticulture, honey bees keeping etc. for ensuring sustainability of their livelihood.



**Photograph No 1**

The watershed programme is being carried out by an experienced Project Facilitating Agency (PFA) Gayatri Seva Sansthan. The watershed project was sanctioned to the PFA with a grant component of Rs.1.51 cr.

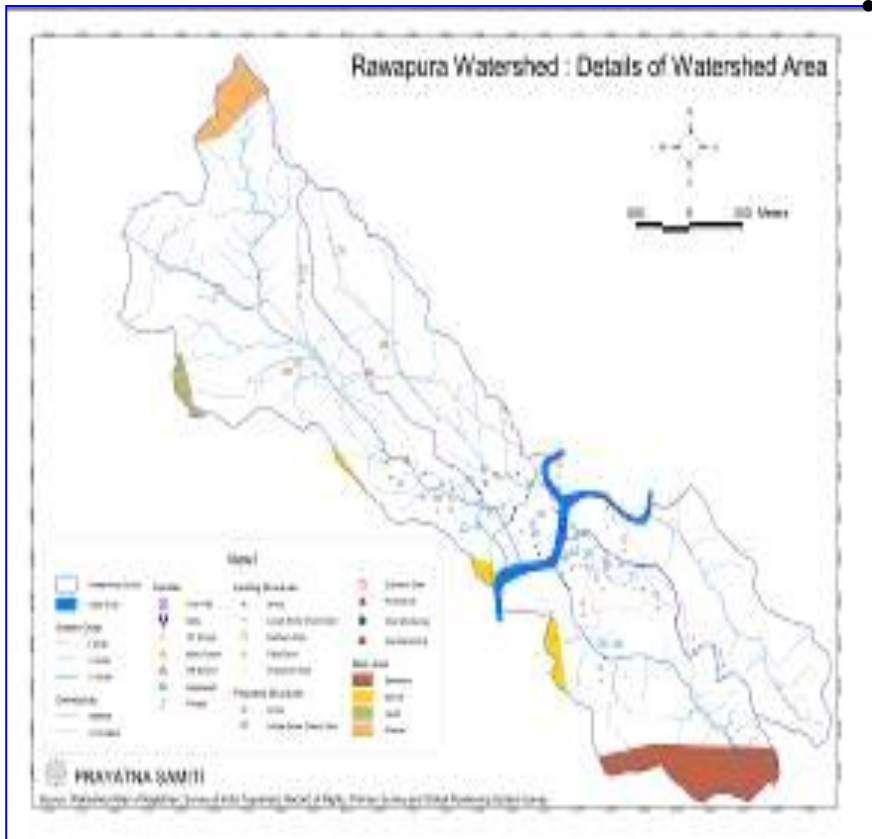
**III. B. (2) Rawatpura watershed** -- Rawatpura is a mini-watershed located about 65 kms towards South East of Udaipur district of Rajasthan State at Latitude 74°02' E and 74°05'30" E and Longitude 24°25' N and

24°27'15" N. The watershed occupies total area of 1104.16 ha which comprises Government/Public land of 419.65 ha; crop cultivation area of 213.36 ha; and private land (cultivable and uncultivable waste) of 684.51 ha.

- The watershed consists of 5 villages namely Rawatpura, Malo ka Guda, Rathoro ka Guda, Karmal (partly), and Sinhar (partly) which are situated in Kurabad and Bhinder blocks. The major drainage system is Makradi river. Highest elevation of watershed is 458 metres and lowest is 340 metres.
- There are 245 households with a population of 1,245 (625 male and 620 female). There are 740 people who can read and write, primary, secondary, matriculate and graduate pass and above; 406 people are uneducated. The main sources of livelihood are agriculture and animal husbandry.
- Average gross land holding per household is 1.38 ha. The landholding pattern shows that majority of the farmers own 1 to 2 ha of land which consists of agriculture land, pasture and waste land. Kharif crops are maize and guar with

yield of 27.90 Q/ha and 4.65 Q/ha, respectively. Rabi crops grown are wheat and mustard with yield 32.55 Q/ha and 9.30 Q/ha, respectively. The production is mainly for self-consumption. Livestock resources are indigenous breeds of cattle which include work animals, buffaloes, cows, goats, sheep and hens and fowls. The milk yield has little marketable surplus.

**Map No 2**



There are 2,013 animals of which majority are goats. Surplus milk is sold in local dairy. Total fodder production is 522.18 tons per year of which Kharif, Rabi and summer production are 152.66 tons, 190.21 tons and 168.379 tons respectively.

- The watershed development work started by the PFA, Prayatna Samiti in the year 2010 with Pre CBP. In CBP and

FIP phases the work included land area treatment, drainage line treatment, pasture land development, capacity building and women development with focus on climate proofing. The project in FIP was also supported to develop as climate proofing model watershed. An agro advisory lab was set up in the year 2013 to forecast the weather conditions in response to shifting climatic patterns.

- The major interventions include construction of field bunds; drainage line treatment with gully plugs with recharge pit; convergence models with National Innovations in Climate Resilient Agriculture (NICRA) for big masonry structures; recharge pit, aloevera and bamboo plantation for soil improvement; box trench with thawla interventions in pasture land; *Boswellia serrata* (Salar) plantation on ridges for fodder generation; direct seeding; CCT for intercepting water flow and increasing recharge; stone bunds; leguminous plantation on bunds; gardonies; bio gas units for reducing fuel wood cutting ; hybrid napier demonstrations for nutritive fodder ; compost pits etc.

- The special interventions consist of formation of Farmers Field School (FFS) through which organic farming has emerged as replicating model. Manufacturing and use of vermiwash and cow urine has got importance in seed treatment and as bio-fertilizer ; RAJ 4083 variety of wheat is adapted as climate resilient variety. Institutional building is addressed by Village Watershed Committee and 10 Self Help Groups.



**Photograph No 2 : View of Mandali Watershed**

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## Chapter-IV

### IV. Study Findings and Inferences

#### IV. A. IGWDP in Rajasthan

##### IV. A (i) Overall progress/impact of IGWDP in Rajasthan:

The study team had a detailed interaction with the officials of PMU, Udaipur including the AGM (In-charge) and two consultants. Out of 35 watershed development projects sanctioned under IGWDP-Rajasthan, four had earlier been closed pre-mature due to poor community participation/ project area overlap, leaving effective number of projects at 31. All of these 31 projects were completed by March 2017. While climate proofing of 2 projects had been completed by August 2015 with GIZ support, that for seven projects with Adaptation Fund, is in progress. Climate proofing of the remaining 22 projects is in pipeline.

Major impacts as emerged from the discussion with them are summarised below in the tabular format.

**Table No 4 : The Programme Impact summary - IGWDP, Rajasthan ( over 05 years period)**

1	Increase in ground water table	1.50 m avg.
2	Increase in no. of open wells	229 (20% up)
3	Reduction in distance to fetch drinking water by	21 % avg. (680 m avg. distance presently)
4	Increase in area under irrigation	553 ha
5	Area brought under micro-irrigation	653 ha
6	Decrease in fallows	15.24 ha
7	Decrease in un-culturable waste	50.90 ha
8	Increase in net sown area	421.91 ha (3% up)
9	Increase in gross cropped area	1,575 ha
10	Increase in crop yield	5 % ~ 35 % for major crops
11	Increase in Agril. Production (MT)	2,197 MT during FY17; total 28,763 MT
12	Increase in area under horticulture	244 ha-equivalent
13	Increase in area under vegetables (ha)	39 ha (97% up YOY, 111 ha cumulative)
14	Increase in area under forestry	1910 ha-equivalent
15	Increase in no. of tractors	153 (204% up YOY, 295 cumulative)
16	Increase in no. of electric motor/ diesel engine pump sets	487 (306% up YOY), 1254 (205% up cumulative)

17	Increase in no. of pucca houses	367 (1621/131% up cumulative)
18	Increase in no. of TV sets	465 (2676/ 605% up cumulative)
19	Increase in no. of motor cycles	867 (3233/ 574% up cumulative)

#### **IV. A (ii) Livelihood initiatives**

The livelihood initiatives focus on marginalized section, viz. the poor landless / poor widow headed household/poor physically challenged people. These included improvement in goat breed through introduction of goat units and community bucks (883) of Sirohi breed, kitchen gardens (996 units developed) and vegetable cultivation through 196 trellis units. Twelve units on grocery shop/ flour mill/ tent house/cycle repair shop/sewing machine/ agarbatti/ candle making have been supported under the programme. At least 1,044 families have been supported with alternate livelihood.

#### **IV. A (iii). Women Development/ Empowerment**

- Drudgery reduction through activities like (drinking water) well deepening/ parapet/ pulley installation (100), transparent fibre glass sheet (*Kavelu*) for natural light in kitchen (1693), improved *chulhas* (1002), biogas units (50), chaff cutters (128), improved sickles (300) and training programmes for capacity building.
- Compulsory one-third membership for women in VWCs.
- Total 440 SHGs formed [17 SHGs formed during the reporting period; 373 have bank accounts, 89 groups availed Rs.130.77 lakh bank loan; cent per cent repayment, banks are approaching for more finance to groups; total savings Rs.94.35 lakh and intra loaning Rs. 231.38 lakh].
- Two SHG Federations were formed during the reporting period taking the total to 30. Four PFAs, viz. GVT, NMSWDF, RBKS and GSS are acting as SHPI in the project areas with NABARD support. Two proposals from WASCO for Chittorgarh and Pratapgarh district project areas were under consideration of NABARD.

#### **IV. A (iv) Maintenance Fund –**

Of the total due amount of Rs.103.86 lakh towards Maintenance Fund (MF) contribution by the community, an aggregate amount of Rs.78 lakh had been collected. Collection of dues was maximum @ 167 % in Baverikheda-I, 165 % in Jhabla and 144% in Khunta-I watershed. An aggregate amount of Rs. 112.55 lakh had been released as project contribution to MF. With infusion of funds from other sources like bank interest, collections against CPR usage, etc., the total resources with VWCs in the form of MF reached Rs. 208 lakh under the programme (max. Rs.12.05 lakh in Garnala). Loaning worth Rs. 8.60 lakh from MF account took off in five watersheds for livelihood activities.

#### **IV. A (v). Credit delivery through banking plan**

Making of a banking Plan for the watershed project areas is an important initiative taken up by the PMU covering 20 watersheds. The banking plan exercise, inter alia, aims at 100% coverage of households with SB A/c and KCC/JLG, sanction of CCL to SHGs and intermediation among credit-worthy villagers and bankers for loaning as individuals.

- An aggregate credit need of Rs.4,076 lakh has been assessed against an investment need of Rs.5,276 lakh in these 20 watersheds.
- Under the programme so far 1,241 SB accounts have been opened, 819 KCCs issued, Rs. 7.00 lakh loan disbursed to individual borrowers.
- SHGs have total savings of Rs. 94.35 lakh and have extended internal loaning of Rs.231.38 lakh so far. Rs. 131 lakh bank loan has also been availed so far. Incremental credit flow was Rs.378 lakh.
- Rs.9.00 lakh loan was disbursed from Maintenance Fund to 49 farmers in Mandali, Khad, Balua, Devpura-I and Devpura-II watersheds. In Garnala watershed, 20 persons received Rs.10 lakh loan under "Pradhan Mantri MUDRA Yojana" for grocery shop.
- Total 489 KCCs issued and Rs.4.90 lakh loan disbursed to individual borrowers.
- In Kulmipura watershed Rs. 59.25 lakh, in Gundalpur Rs.20.56 lakh, and in Chainpuriya Rs.17.73 lakh bank loan was extended through SHGs (incl. male groups). Encouraged by the SHG story, the District Administration was covering all SHG households in these two watersheds (151 & 187 respectively) under *Nirmal Bharat Abhiyan*; 115 toilets (costing Rs. 12000/- each) had been constructed by 30 Sept 2016.

#### **IV. A (vi). Climate Change Initiative**

- Special drive on vegetative measures with onsite PMU support in all 31 watersheds during monsoon - promoted 17717 fruit plants, 119473 forestry plants (39000 through convergence), 28596 branch cuttings, 5535 kg (~1282000) tree seeding and 1870 kg (583 ha) grass seeding.
- "Har paudhe ko paani" campaign was launched for preserving soil moisture regime for plants through box trench cum thanwla and mulching.
- 5 biogas units (78 cum), 595 LPG stoves (790 cum), 220 improved chulhas (611 cum), 150 Mewar Angithi (base for traditional chulha) promoted for energy efficiency.
- District level workshops on Water Campaign and Agriculture Contingency Planning were organized under IGWDP-Rajasthan.
- Inputs given on Climate proofing initiatives, Water Conservation & Management by NABARD, Agri Extn System in the State, MWC workshop, etc.

#### **IV.B. Interaction with Stakeholders in Mandali and Rawatpura WS**

The study team visited two watersheds, Mandali and Rawatpura and also had interaction with farmers, SHG members, VWC members, bank branches apart from the PIA functionaries. The watershed villages visited by the team were found to be very low in endowments with undulated terrains, villages being small, hamlets like and inhabited mostly by tribal and SC/OBC communities. Landholdings are highly fragmented with holding averaging less than an acre per head, migration was very high earlier due to lack of employment/income from their own lands or from other activities. Most of the patches of agriculture lands were found to be in few bighas with unassured irrigation facilities.



**Photograph No 3 and 4 Interaction with VWC and SHG members in the WS areas**

The team interacted with the PMU unit as well as the PIA functionaries to obtain responses about the overall impact of the watershed projects which are nearly completed in these two cases. The PMU is in the process of compiling PCR data and impact analysis of the IGDWP projects under their jurisdiction. Thus, the data as obtained from the PMU on the impact and the progress in various parameters and aspects of the project are appended in the Annexure.



**Photograph No 5**

Going by their responses and the data, it may be stated that the project has been able to achieve the projected targets under various parameters including physical structure, agricultural innovations, creation of livelihood opportunities which included providing livestock animals, formation of SHGs, etc. Although the PMU had prepared banking plan for 20 projects including the two visited projects, not much progress could be seen on these fronts with lack of enthusiasm among bankers to provide credit

and also lack of awareness among the villagers to access the services from banks. These aspects are discussed later in the report.



**Photograph No 6**

#### **IV.C. Field observation and interaction with farmers, VWCs, SHGs**

The team visited 5 out of 13 villages covered in the two watershed projects and also interacted with a number of farmers (15), VWC members and SHG women (two groups) and discussed about the project, bank services, credit availability, etc. While the farmer wise responses have been appended in a tabular format, major observations from the field study are summarised under relevant heads.

**a) Major physical interventions carried out in the watershed areas** -- Both the watershed programmes are nearly complete and as reported by the VWC members and farmers apart from the PIAs, all the physical interventions planned while doing the net planning had been completed. The study team while conducting the field visit had an opportunity to see some of the area treatment and drainage line treatments done by the PIA with community support. The PIA had carried out various area treatments like farm bunds, continuous contour trenches, water absorption trenches and plantations etc. In the drainage line treatment various structures made were earthen gully plugs, stone gully



**Photograph No 7**

plugs, check dams, farm ponds, gabion structures etc. Most of the structures seen by the team were satisfactory.



**Photograph No 8**

**b) Change in Moisture level :** Most of the farmers were seen to be having dug wells in their farms and some were also having tube wells. As reported, the level of water in the dug wells, tube wells and tanks was very low particularly in summer months prior to the project. Most of the farmers and members of VWCs appeared to be very happy with the increased level of water in the wells / water

bodies (8-10 feet on an average) in post watershed situation, which has made their standard of life better due to higher engagement in income generation activities including in agriculture and allied sector activities. The level now is reported to be at



**Photograph No 9**

at least 10 feet in wells even in March/April summer months.

**c) Change in cropping pattern:** As a result of the watershed programmes in the project villages, it was found that the farmers had changed the cropping pattern to a large extent. Interactions with the farmers revealed that most of the farmers were earlier cultivating low moisture crops like Maize, wheat and



**Photograph No 10**

Guar in the pre watershed condition. However, in the post watershed phase, the farmers in addition to Maize were also cultivating crops like Jowar, Bajra, fodder crops and also vegetables. Even in certain cases, some progressive farmers were found to have gone for fruit plantations like high density guava orcharding, lemon, ber with bud seeding, etc., as a result of which, the income levels of the farmers had significantly increased. The change was more

evident in the fourth year of the watershed programme i.e. after the moisture level in the farmers' field as also the water table in the dug wells had shown a perceptible increase.



**Photograph No 11**

**d) Production and productivity aspects**  
 – The average production and productivity of the crops as reported by most of the farmers had shown an increase over the pre watershed phase. On an average the farmers reported the production of 300 kgs / bigha and 600 kgs / bigha for maize and wheat in the -

- pre-watershed phases respectively and in the post watershed conditions the same were reported to be 450 kgs/bigha and 800 kgs/bigha respectively. Farmers also reported an enhancement of production in case of Moong dal from 80 kgs/bigha (pre-watershed) to 150 kgs/bigha (post watershed situation). Apart from these crops many farmers had shifted to fodder crops which fetched them quite high production. This also had direct effect on productivity of animal husbandry activities like dairy and goatery. Most of the farmers interviewed were practicing dairy activity. Some of them had purchased new animals after they witnessed an increase in their agricultural income. In both the cases, the farmers reported a higher milk yield owing to the higher production of fodder crops.

Some of the farmers had also adopted vegetable crops in their fields. Due to supply of HYV seeds both by the PIA (under the project) as also from the agriculture department, the farmers reported a higher yield of vegetables. Thus, the changes in the production and productivity led to higher income for the farmers.

**e) Rise in water levels in farms as also in dug wells** -- -- All the farmers contacted and interviewed informed that the immediate impact of the watershed was increase in the water levels in the dug wells as also in the tube wells. It was informed that there was an average of 8-10 feet increase in the dug wells which has been observed after the 04<sup>th</sup> year onwards. The water level which used to touch the bottom of the dug wells was usually seen having at least 8-10 feet of water during the summers. Similarly, as reported by the farmers, there used to be poor water supply in the tube wells and no water/moisture used to be available during the period of wheat flowering. This had adversely affected the wheat production earlier.

However, this issue was resolved in view of sufficient moisture availability as also increase in water level in dug well and tube well. Rise in water level had direct impact on issues like change in cropping pattern in favour of fodder crops, vegetable crops, milk production etc. thus ultimately enhancing the farm income.

**f) Role of PIA in carrying out various interventions** – The PIAs of both the watersheds, viz., Gayatri Seva Sansthan of Mandli WS and Prayatna Samiti of Rawatpura had carried out various interventions related to area and drainage line treatments, agricultural, social and other activities including formation of VWC, SHGs, etc. During interaction with the VWCs, farmers as also the SHG members, it was gathered that the PIA had involved all the households in the gross and net planning as also while carrying out various interventions. Their role has also been positive in liaising with various line departments which could ensure supply of HYV seeds, providing fodder seeds to the farmers, supply of goats and cattle sheds, conduct of animal camps etc. The PIAs also helped the farmers in providing them the necessary market intelligence so that the farmers were able to sell the produce especially vegetables and milk in the mandis and milk society, thus, maximising their income. Gayatri Seva Sansthan was found to have formed an online sales company of vegetables and other agri-produce from the watershed project areas and provided a good market platform to the farmers of the project area. The company is named as GREALFRESH.

**g) Role of extension agencies and convergence of the watershed programme with other programmes** – In both the watershed projects, there was presence of various initiatives which proved that the extension agencies had been involved in the projects so as to bring convergence in the areas of change in agriculture practices like use of HYV seeds, change in cropping pattern, improvement in animal husbandry practices, switching over to fodder crops etc. While interacting with the Department of Watershed Management, it was observed that there was no direct link between IGWDP and the department's programme, except for the fact that an NOC was being issued by them so as to enable us to take up the watershed project.

### Box No 1

#### **Shri Roshan Meena, a progressive farmer**

*The farmer of Mokati village (350 population) in Mandali watershed area has only 3 bighas ( 0.65 ha) of land growing traditional maize and guar (cluster bean) crops before the project. Before the project, there was scanty water available in the dug well (1-2 ft in summer) and was mostly dry. However, now the well is having 8-10 ft water even in peak summer, which is helping him to take up summer crops that were mere dream earlier. He has also sunk one TW with departmental assistance. Due to better moisture availability post watershed, the farmer is taking up vegetables apart from wheat, maize and pulses. On the day of the visit of the study team, one could see the happiness of the farmer as he sold tomato for Rs.1,300.00 @Rs.20 per kg and is hopeful of getting around Rs.60,000 from one bigha of tomato in the whole season. The income generated from agriculture has helped him to get his children better educated as his son is among the first in the village who has gone into science stream in polytechnic. However, the farmer has not been able to get loan from any bank as the banks have not shown any inclination to lend to the people of Nathara Panchayat, as the locals are infamous for untimely repayments and defaults. Shri Roshan, though agrees to such a notion, says that this is an old story and now genuine people like him are victims of such image. He has, however, availed loan through his*

**h)Income enhancement of the farmers** – The average agriculture land holding in the watershed regions was found to be 2.50 bighas (0.54 ha). Interview with the farmers revealed that on an average there was an increase of nearly 25% in the income of the farmers after the completion of both the watersheds. The farmers having 2-3 bighas had reported an income of approximately Rs.50,000 to Rs.55,000 per year from their farms in the

pre-watershed phase. The same was enhanced and was reported by the farmers to be approximately Rs.1,00,000/- in the post watershed period. Assuming inflation @6% pa, there was an enhancement of the farm income by nearly 25% in real terms.

**Supplementary livelihood** -- Income of the farmers has been supported through supplementary occupations/assets like milk cattle or sheep/goatery supplied to them from the watershed budget. In Rawtpura, Mahila Dugdha Utpadak Sahakari Samiti Ltd. with 113 members mostly from watershed project villages and with assured returns has helped them to go for cattle rearing in larger way. A few of them have been purchasing



CB cows/buffaloes out of their own sources of income. The details of the Rawatpura, Mahila Dugdha Utpadak Sahakari Samiti is as under.

**Table No 5**

<b>Sr No</b>	<b>Rawatpura, Mahila Dugdha Utpadak Sahakari Samiti</b>	
1	Membership	113 households
2	Secretary	Ram Lal Patel
3	Milch animals available within the society	20 CBs and 200 buffaloes
4	BMC	01 of 550 litres capacity
5	Collection / day	Presently 400 LPD, Average 600 LPD, Peak months 800 LPD
6	Payment made to the farmers	within 20 days
7	Rate of mik	Rs.6 for one % of fat content
8	Profit distribution	Regular, usually profit is to the tune of 07%, which is redistributed
9	Other facilities from society	Animal feed, medicines and mineral mixture

**(i) Community mobilization** – The PIAs were able to form Village Watershed Committees in each of the watersheds having representation of all the villages. The team had interacted with functionaries of both the watersheds, i.e., Mandali Jalgrahan Vikas Samiti and Rawatpura Jalgrahan Vikas Samiti. The VWCs were involved by the PIA in planning and construction of various infrastructure. Interaction with the Rawatpura Jal Grahan Vikas Samiti revealed that the VWC was also involved in FIP survey, promotion of 07 farmers clubs, 12 SHGs, crop planning, liaising with some of the line departments like AH, Dairy and Horticulture. Similarly the VWC of Mandli WS could form 2 farmers clubs (Dayali and Mokatt villages) and 14 SHGs. The members of VWCs not only appeared to be closely involved in the process of watershed interventions, they were also happy with the progress made in watershed project. Individual progressive farmers were found to have gained from the project.

However, the VWCs, as community structures, were not found to be having much clue regarding furtherance of their causes in the post watershed scenario when the PIA would exit the project on its closure. Although VWCs have been able to bind the community of farmers due to watershed by way of community planning, strategies, group work apart from many other benefits, these vital community structures appeared to be losing direction beyond watershed project period.

A strong and robust mechanism should have been put in place to fully transfer the ownership of the project to the VWCs before stakeholders exit the project so that it would be in the interest of the farming community to consolidate the individual gains of the project by making agriculture and other livelihood options more remunerative through better combined action. Converting the VWCs into FPOs, linking the community to banks, better marketing facilities, making water user associations to

make judicious use of water in agriculture etc. are some of the initiatives needed to make VWCs as robust sustainable structures.

#### **j) Credit delivery system in the watershed areas – Banking scenario**

Udaipur district has a total population of 30,68,420 as per the 2011 census of which 80% are rural population. Agriculture and allied activities forms the backbone of the economy of the district. Of the total farmers, small and marginal farmers constitute about 95%. The district is rich in natural resources, however due to the absence of required infrastructure the district is lagging behind in development. The district has 31 Commercial Banks, 04 Private Banks, 01 RRB, 01 StCB, and 01 SCARDB. A network of 370 branches of CBs, RRB and StCB is present in the district for meeting the banking needs of the population.

There is more than 30% growth trend in the loans and advances during the last three years. The average achievement under Annual Credit Plan during last three years is recorded at more than 100% of the target. While the CD ratio at the State was pretty comfortable at 92.96% as on 31 March 2015 showing a marginal increase over 92.76% of previous year, four districts viz., Dungarpur, Sirohi, Rajsamand and Udaipur have CD ratio around 50% which is below the benchmark level of 60% though the priority sector achievement in the districts is above 40% i.e. at 54%. A study has been undertaken by a joint team of NABARD, SLBC, Lead Bank and RGAVP to analyse the low CD ratio and find out reasons.

#### **Ground level credit scenario**

To know the ground level situation about the credit dispensation, the study team had elaborate discussions with the Lead Bank, three branches of Rajasthan Marudhara Gramin Bank (Kejar, Jaisamand and Bamboora), its Regional office at Udaipur, two branches of ICICI Ltd. (Chawand and Bamboora), one branch each of Union bank of India (Kurabad) and SBBJ (Sarada village) apart from the farmers, VWC members, SHG members and the Project Implementing agencies (PFAs).

#### **Credit portfolio of banks -Share of ATL**

- **Position of advances under PSL, ATL :-** The position with regards to CD ratio and share of AL in the bank branches operating in the district as a whole is not so rosy. As per the data made available from the LDM office, percentage of ATL out of the Priority Sector Advances in the area is very low at around 11% only as on 31.03.2017.

**Table No 6**

<b>Lead Bank office, Udaipur</b>		
	<b>(Amount in crores)</b>	
	<b>2015-16</b>	<b>2016-17</b>
ST – Agriculture	555.12	305.61
ATL	192.74	173.56
Total agriculture	747.86	479.17
Total PSL	2020.83	1564.88
% share of agriculture	37.01	30.62
CD Ratio ( March 16 and Dec 16)	53.61	44.28

**Table No 7 : Bank-wise CD Ratio-Udaipur district (March 2016)**

<b>Sr no</b>	<b>Banks</b>	<b>CD ratio %</b>	<b>PSL as %</b>
1	CBs	53	51
2	RRB	36	95
3	CCB	66	211
4	Others	79	15
	<b>All Banks</b>	<b>54</b>	<b>54</b>

- It was learnt from interaction with bankers that most of the banks had extended meagre financial support for ATL activities in spite of increasing demand for credit for long term loans in the area. The interaction with the farmers not only gave very grim picture about their awareness about various banking facilities but also about strong sense of apathy from banks operating in the area.
- While data on basic parameters related to deposits and advances of banks in the service area of the projects visited by the team, are given in the annexure, it was not possible to collect specific data related to Watershed project villages in the absence of the same with the banks. It was observed that in general the banks were not very active in the watershed villages.
- The SBBJ, Sarada branch hinted at certain factors like lack of savings habit among people of Sarada region, drinking habit among male persons, high migration etc. which discouraged them to finance as can be gauged from the fact that out of a loan portfolio of Rs.15 cr, the agriculture sector contributed Rs.7.50 cr and of this, only 1.50 cr was towards ATL.
- **Issuance of KCC:** Despite the fact that the watershed projects were more than 05 years old, issuance of KCC was extremely poor. In the case of Mandali WS region, some of the villages were in the SAA of various branches of the ICICI Bank Ltd. which were not issuing KCCs to the farmers with less than 05 bighas ( 1.08 ha) of land. Average land holding in the villages being 2.5 bighas (0.54 ha), prevented

them to get KCC cards. Further, it was also seen that only a few of them had availed loan for shops, housing and other activities.

- Many of the farmers were found to be unaware of the KCC and its uses. Even the Sarpanch, Shri Mohan Lal Meena of Thana village falling in the Rawatpur watershed area with 2 bighas did not have a KCC. Many farmers spoken to reported to have availed loan/funds for agriculture through the SHGs belonging to their spouses in the absence of positive response from banks for KCC/crop loan.

**Table No. 8 : Rawatpura Watershed**

S.No	Village name	No of SHGs formed group	No of house holds	No of KCC issued	KCC amount (Rs. lakh)	No of Kisan Clubs
1	Rawatpura	9	180	10	14.00	2
2	Karmal	0	48	2	1.80	1
3	Malal ka gura	3	60	1	0.70	1
4	Rathora ka gura	2	45	0	0.00	1
5	Sinhar	0	30	0	0.00	1
	<b>Total</b>	<b>14</b>	<b>363</b>	<b>13</b>	<b>16.50</b>	<b>6</b>

**Table No 9 : Mandali Watershed**

S.No	Name of village	No. of KCC	No. of Farmer clubs	No. of SHG
1	Dayali	18	1	3
2	Mokat	20	1	4
3	Bandoli	28	0	2
4	Lalpuriya	5	0	1
5	Sasai	3	0	1
6	Nathara	16	0	3
7	Thanna	15	0	0
8	Chawand	19	0	0
	<b>Total</b>	<b>124</b>	<b>2</b>	<b>14</b>

The farmer wise bank loan position in both the watersheds was as under :

**Table No 10**

Sl No	Name of the farmer	Village	Watershed	Land holding including hillock land (bighas)	Loan/bank facilities
1	Pooja Ram	Rawatpura	Rawatpura	1	Mostly from Informal sources, Applied for KCC
2	Ratan Singh	Rawatpura	Rawatpura	3	Mostly from Informal sources, recently, got Rs.50,000 under KCC from RRB
3	Ramlal Patel	Rawatpura	Rawatpura	19 (15 HLL)	Applied for KCC
4	Mouzi Lal Meena	Rawatpura	Rawatpura	4 (3 HLL)	No loan
5	Lala Jee Meena	Rawatpura	Rawatpura	2	No loan
6	Roshan Meena	Mokat	Mandli	3	no loan
7	Chhatar Singh Meena	Mokat	Mandli	3	no loan
8	Nandu Lal Meena	Dayali	Mandli	2	no loan
9	Nandu Lal Meena	Lalpura	Mandli	4	no loan
10	Jagmal Meena	Mokat	Mandli	2	no loan
11	Champa Lal Meena	Dayali	Mandli	5	no loan

- Strangely, people of Nathara Panchayat in Mandli WS area have almost been declared as not credit worthy based on some historical reasons of loan delinquencies. This has resulted in poor response for credit dispensation to some of the progressive farmers, who have taken up advanced agricultural practices but with hardly any support from the banks in the area.
- On enquiry with ICICI bank branches and their RO at Udaipur, they confirmed about existence of such an instruction (about issuance of KCCs with minimum landholding of 5 bighas or more) from the bank. The PMU and the DDM have unsuccessfully tried to reason out with the banks about removal of such a diktat. Although position as regards RRB and PSBs may be little better, even then their presence and interest in watershed areas leave much to be desired. However, the PIA and the PMU informed that they were in close touch with the Rajasthan

Marudhara Gramin Bank, who had agreed to issue the KCCs to the farmers. The RM, RRB on the day of the visit showed a lot of interest in improving the position of loans/other banking services in WS areas.

- **SHGs and credit linkage** -- The PIAs in their respective watersheds have promoted 20 SHGs (14 in Mandli WS and 6 in Rawatpura WS). In spite of lack of interest of bankers in lending to farming class in the area, their experience with SHGs is quite good as the loans have been found to be clean without much problem of defaults. The banks including CBs and RRB appeared to be keen to help SHGs in watershed areas. However, the two SHGs in Rawatpura WS area (village: Rawatpura), viz., Radha Mahila Samiti and Saheli Mahila Samiti (SHGs) formed in July 2015 with 20 members each are yet to get any loan from any bank although they are engaged in IGAs including livestock, and agriculture from out of internal lending.
- **Banking Plan:** As per the data/information made available from the PMU, the unit has taken a good initiative to link the watershed projects with bank credit and had prepared Banking Plan for 20 watershed projects under its jurisdiction out of 31 projects way back in 2012-13 including the two projects visited by the team. The plan, which is quite comprehensive has been done by door-to-door survey of households seeking their proposed activities and likely credit needs to implement them. While the plans, both gross plans and individual, are given in the annexure, summary sheet in respect of the 2 watershed project areas is presented below.

**Table No 11**

Types of Loan	Total need/Investment Rs. in lakh)		Likely Govt support Rs. in lakh)		Credit need Rs. in lakh)	
	Mandali WS	Rawatpura WS	Mandali WS	Rawatpura WS	Mandali WS	Rawatpura WS
Agriculture & allied short term	94.23	39.72	0.00	0.00	94.23	39.72
Agriculture & allied term loan	45.63	81.09	1.86	4.17	32.51	56.97
NFS	22.30	14.35	5.58	3.56	11.15	7.19
OPS (Educational Loan, Housing and two wheelers)	7.70	9.50	3.75	4.48	2.81	3.55
<b>TOTAL</b>	<b>169.86</b>	<b>144.66</b>	<b>11.18</b>	<b>12.20</b>	<b>140.69</b>	<b>107.42</b>

**Study Team's Perceptions on banking plan:** It was informed by the PMU that the first banking plan launched by NABARD for the watershed villages was not successful and the same has again been modified for relaunching. It was quite apparent that despite a comprehensive plan prepared by the PMU which should have taken the watershed projects to their logical end in not only improving the resource base of the project areas but also in building up a very strong base for credit intensification in the areas, the desired results were not achieved.

When discussed with the PMU alongwith DDM and the PIAs of the projects and also bankers, it was clear that the banking plan failed to get owned up by the bankers beyond its launching in the district. The PIAs expressed their lack of awareness about the need for pursuing the implementation of the banking plans in the project areas for credit intensification and deepening barring some efforts in promotion of SHGs as part of the covenants of the project MOUs. It was perceived by the study team that there was a low connect even between the PMU and the DDM, Udaipur in integrating the watershed projects with the banking plan which would have given a huge fillip in ensuring credit intensification and deepening in the post watershed scenario.

#### **Box No 2**

##### **Successful endeavours of Shri Ramlal Patel of Rawatpura village**

*He holds 15 bighas (3.26 ha) of hillock land and 4 bighas (0.87 ha) of plain land. Due to increased moisture level, the farmer could get better productivity in wheat to 900 kg/bigha and in maize 400kg/bigha as against 700 kg/bigha and 300 kg/bigha pre-watershed. He is also growing fodder crops like jowar for his cattle. He is the Secretary of milk society, Rawatpura Mahila Dugdha Utpadak Sangh that manages a membership of 113 women farmers and as per his report, due to watershed and better availability of fodder, milk collection has gone up to 800 litres daily than 400 litres earlier. As a farmer, his overall income has gone up from Rs.75,000 to Rs.2,50,000 annually now.*

## **Chapter-V**

### **Summary and Conclusion**

#### **Summary :**

Based on a field study of two watershed project areas of Udaipur district in the State of Rajasthan, detailed analysis of relevant aspects related to the objectives of the study, i.e. “Credit intensification and dispensation in post watershed situation” the findings are summarised below:

- Both the projects are nearly complete and in the process of being closed.
- The physical targets as delineated in the beginning of the project has been largely been achieved with infrastructural interventions, agricultural practices, livelihood options, etc.
- Water table in the water bodies have been improved to the satisfaction of the villagers. This has resulted in improved agricultural practices including use of better technology and machinery, better crop planning and taking up new income generating crops.
- Farmers and households have been benefited by augmentation of their income from subsidiary occupations like cattle rearing, goat/sheep rearing and other livelihood options which have raised their income.
- Migration has been curbed to some extent as the farmers have started getting improved income from their own agricultural land and other assets.
- Improved infrastructure and demand for higher IGA, however, have not been commensurate with better banking facilities and services in the form of credit availability, either due to lack of awareness or due to lackadaisical attitude of the banking sector.
- Banking penetration appeared to be low with less number of branches, low CD ratio, low share of ATMs and trust deficit with the people of the area due to historical reasons of wilful defaults, etc.
- Policy limitation, particularly in the case of a major service area banker in the project area, i.e., ICICI by insisting for minimum of 5 bighas required for eligibility for KCC has been a major impediment in credit dispensation and intensification in the region.
- It was very good initiative by the PMU to prepare comprehensive Banking Plan in respect of 20 watershed project areas with family and household surveys.
- However, the Banking plans launched in the project areas by the PMU in collaboration with DDM, LDM and district authorities could not be grounded basically due to bank’s apathy and also due to inadequate follow-up by the stakeholders. It was observed by the study team that the banking plan failed to get owned up by the bankers beyond its launching in the district. Further, the PIAs expressed their lack of awareness about the need for pursuing the implementation of the banking plans in the



project areas for credit intensification and deepening barring some efforts in promotion of SHGs as part of the covenants of the project MOUs.

- It was perceived by the study team that there was a low degree of connect even between the PMU and the DDM, Udaipur in integrating the watershed projects with the banking plan and pursuing them which would have given a huge fillip in ensuring credit intensification and deepening in the post watershed scenario.

### **Conclusion :**

- NABARD deploys scarce resources in the form of grant assistance in implementing watershed projects with a view to achieving the objective of improving soil moisture regime in the catchment area for increased production, productivity, livelihood and poverty alleviation of the watershed community. However, this needs not only grounding of the projects in all its components, it also has to provide sustainable livelihood and income generating opportunities to the project beneficiaries by way of improved agriculture, allied and other income generation activities through better water and crop planning, technology adoption, community mobilisation, better productivity and returns, better marketing facilities, convergence and trust building measures among the stakeholders particularly for bankers, govt departments etc.
- Though it was observed that the progress and achievement in implementation of core components under watershed projects have been satisfactory, aspects relating to the community ownership of the project, sustenance of the project beyond project implementation period leaves a lot to be desired.
- Credit dispensation, being one of the most vital components in sustenance of any livelihood and income generation activity, has failed to provide hope to the people in the absence of enthusiasm among bankers.
- It is suggested that stakeholders more particularly banks and govt. functional departments need to be sensitised enough to give a serious and sincere attention to the demands of the projects areas .
- They need to ensure that no stone is left unturned to meet the expectation of the poor people from the project areas who are desirous of building on the initial investments made in the project with their toil and financial support from NABARD to get engaged in various income enhancing avenues in situ without travelling far and wide for employment on migration.
- It may be suggested that NABARD may relook into the Watershed guidelines and if need be, modify them by including measures required for more promotional aspects for ensuring ownership of the project by the project beneficiaries and pursuance of credit deepening and intensification in post watershed scenario.
- Good institutional structure in the form of VWCs formed as a part of the watershed covenants should not be allowed to perish after the project period is over and facilitators have exited the scene. Efforts need to be made by all stakeholders to encash the social capital built up over project period and build

up from thereon to institutionalise sustainability factors. This can be done by way of forming of FPOs/PCs, FCs, Activity Based Groups, etc.

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Photograph No 12: View of Rawatpura Watershed