

**Summer Training at
Samaj Pragati Sahyog (SPS)-India, Madhya Pradesh**

2nd April to 23 May, 2019

Report on Watershed Management



BY-SURENDRA KUMAR SINGH

Guidance- Prof. RATNA VERMA

MBA Rural Management

School of Development studies



CERTIFICATE

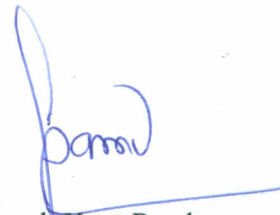
This is to certify that **Surendra Kumar Singh** has undergone Summer Training at **Samaj Pragati Sahayog, Madhya Pradesh** from 2nd April 2019 to 23rd May 2019.

The candidate himself completed the project assigned to him in Summer Training. His approach to project was sincere and proactive. This Summer Training is in partial fulfillment of the course requirement recommended for the award of MBA in Rural Management.

I wish him success in all his future endeavors.

A handwritten signature in black ink, appearing to read 'Ratna Verma'.

Mrs. Ratna Verma
Assistant Professor
School of Development Studies
IIHMR University, Jaipur

A handwritten signature in blue ink, appearing to read 'Piyush Kant Pandey'.

Dr. Piyush Kant Pandey
Dean Academic (Acting)
IIHMR University, Jaipur

Samaj Pragati Sahayog

Bagli, District Dewas, Madhya Pradesh 455227, India

Telephone and Fax: 07271-275757, 275550, 282453

email: core@samprag.org

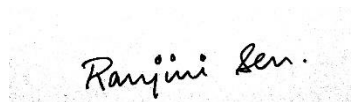
website: www.samprag.org

Pramukh Sahayogi

Baba Amte

TO WHOM IT MAY CONCERN

This is to certify that Mr. Surendra Kumar Singh, a student of MBA in Rural Management from IIHMR University, Jaipur has completed his summer training on understanding watershed management and development with the Watershed Development team of Samaj Pragati Sahayog in Bhikangaon, Khargone. His internship period was from 2nd April, 2019 to 23rd May, 2019. During this period, he took keen interest in the work and was always eager to learn.



Ranjini Sen

Program Officer- Documentation and Research

03.07.2019

Contents

ABBREVIATION/ACRONYMS	4
ACKNOWLEDGEMENT	5
About the organization	6
Watershed.....	7
Agriculture	7
.....	7
Kumbaya	7
Community media center	8
Health and Nutrition	8
Self-help Group	8
Literature review.....	9
Watershed.....	9
Watershed management	9
Hierarchy of watershed	10
Objective of watershed management program	10
Objectives of My Study	11
Methodology.....	11
Primary Data:	11
Observation Method.....	11
Non-participation Observation:	11
Transect walk Method:	11
Secondary data:	11
Demography.....	13
ABOUT THE BHIKANGAON	13
General Information of Khargone District	14
Integrated Watershed Management Programmme-12 Bhikangaon Block	15
Basic information about 12 villages of IWMP-12	16
Micro-Watershed Code, Gram Panchayat and Village Details	18
Reasons of selection the villages under watershed Development Program	19
Structure constructed in Bhikangaon location	19
Stop Dam.....	20

Farm bundling	20
Earthen Dam or Nala Bund	20
Farm pond	21
ASSIGNMENT DONE	21
Dimension measurement of STOP DAM (SD)	22
SWOT analysis of the Project	23
Strength	23
Weakness	23
Threat	23
Findings	24
Observations	24
SUGGESTION	25
Conclusions	25
Reference: http://www.samprag.org website	25

ABBREVIATION/ACRONYMS

SPS	Samaj Pragati Sahyog
IIHMR	Indian Institute of health management
NPM	Non pesticide Management
RRPPCL	Ram Rahim Pragati producer company limited
MSP	Minimum supporting price
NRC	Nutrition Rehabilitation center
SHG	Self-help Group
CP	Community Participation
No.	Number
HH	House hold
POP	Population
SC	Schedule caste
ST	Schedule tribe
M	Male
F	Female

ACKNOWLEDGEMENT

The satisfaction of learning that I successfully achieved during the project would be incomplete without mentioning the people who made it possible.

First, I would like to thank BRLF (Bharat Rural Livelihood Foundation) that provided me such opportunity to study MBA Rural Management in the most Renowned Institution, The IIHMR University, Jaipur.

Next, I will thank Samaj Pragati Sahyog (SPS) India, Madhya Pradesh and Ranjani Sen Program Officer at SPS for giving me opportunity in Watershed program and also the team of Bhikangaon for providing me all facilities for lodging and fooding and THE IIHMR University and Dean and Professor Rahul Ghai for placing me in such a wonderful organization.

I would like to thank my mentor Mrs. Ratna Verma for my moral support during the internship.

I would like to thank team of SPS at Bhikangaon, Radheshyam Patel, Nikhilesh Rathor, Rohit Pal, Mulchand Kaka, Mukesh Jamre, Anokhi Lal, Shanti Lal, Dilip Khande, Dharmendra Chouhan, Mahesh, Jayram, Ashish Kushwaha and Sukhram kaka, Naren Patel and other team members for supporting and giving me deep knowledge of the subject.

I express my gratitude from my bottom of heart towards those villagers who welcomed me with love at their home and express their feeling like family member.

About the organization

Founded in 1990, Samaj Pragati Sahyog organization is one of the leading public organizations of India working on water and livelihood security. The work area of Samaj Pragati Sahyog is the backward, drought-affected tribal dominated region of Central India. The headquarters of the organization is at Nimkheda, a tribal village in Dewas district of Madhya Pradesh.



In this institution there are 25 core members, 225 SPS activists. The founder members are Nivedita Banerji, Pramathsh Ambasta, Dr. Mihir Shah, Dr. Mirdula Banerji, Srinivasan, Jyotsna Jain, Subhalaxmi, PS Vijay Shankar, Pinki Brahma Chaudhuri and Shobhit Jain. To maintain the dignity of the institution and to protect women, the institute has prepared some 'Adabnama' which all are required to abide by. In the organization, there is a family environment along with the responsibilities of the works where all are addressed as their sister and brother.

The focus area of the organization is

Watershed

Agriculture

Kumbaya

Films

Self-help group

Health and Nutrition

These all programs are run to avail livelihood in a packaged form. It means all the activities are interlinked to support livelihood.

Watershed

To stop the distress migration in the local farmers the watershed program is availing water for irrigation in their fields



Agriculture



Next to reduce in growing cost the NPM is being promoted along with that the organic compost and organic pesticides are also prepared. Due to lack of water such crops are being promoted which can grow in less water. To have good yield in production the seeds are treated. To sell the harvested crops there is a company named RRPPCL where the crops are sold at the MSP.

Kumbaya

Next in Kumabaya the women from weaker economic background are being trained to give design to handloom clothes. Also the handicapped men are also getting their recognition from Kumabaya. There is big demand of Kumabaya production in abroad.



Community media center

In films all the success stories are filmed to encourage the rest of the population. There is root approach of the Organization as most parts of the films are made in local language due to that there is great acceptance of the success story and other people attract to go ahead.in this way organization is good enough to spread their messages in communities.

Health and Nutrition



Health and Nutrition is the new initiative which is targeting to Teen Girls and newly born baby. The concept is that the present teen girls will be future mother and any deficiency regarding health will continue in future too that is why they are being awaked towards hygiene and complete food. Similarly and deficiency continued for two year in child may continue for whole life, so to control the deficiency they are being send in Nutrition rehabilitation Centre (NRC).

Self-help Group

To avail or economic support the self-help group (SHG) is playing a big role. We found that the Organization has taken good initiative with the name KIRANA. In Kirana the daily useable things are purchased in group which helps the community to save extra expenditure.

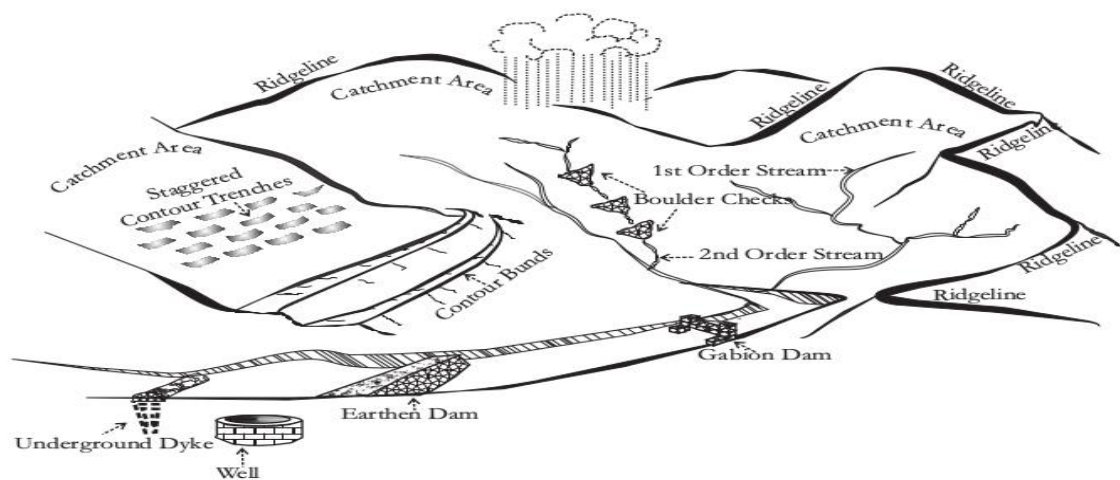


Overall the theme is that to develop any family or community each and every loophole and challenge should be target to remove and same thing SPS is doing it is working to grass root level and trying to finish the cause of poverty.

Study on integrated watershed development program-12

Literature review

Watershed



Watershed is the region or geographical area through which the water flows or drains and the flowing water is received into a specific water body. The water body can be a big lake, river or a small pond. The division from where the rain water start to flow towards a specific direction is known as ridge line and last destination of water is known as specific body namely river, pond, lake and dams.

Watershed management

Watershed Management is the process of developing the watershed region which include the development of water resources and land resources to protect and conserve the hydrologic services that the watershed provide like recharging the ground water, restoring moisture in soil, making the area rich in vegetation etc.

For the develop the watershed the ridge to valley concept is adopted in which the unbound rainy water is firstly tried to be slow down at its respective place and for that the

adequate structures are constructed. Watershed management is basically developing the watershed and also conservation of the soil through siltation.

Hierarchy of watershed

Sr. No.	Category	Size (Hectares)
1	Basin	3000000-30000000
2	Catchments	1000000-3000000
3	Sub-catchments	200000-1000000
4	Watershed	50000-200000
5	Sub-watershed	10000-50000
6	Mili-watershed	4000-10000
7	Mini watershed	1000-4000
8	Micro-watershed	100-1000

Objective of watershed management program

- To reduce run off & soil erosion
- To increase soil moisture & ground water level
- To make water stream perennial
- To rejuvenate the past flora and fauna
- To enhance productivity of land
- Overall sustainability of ecosystem

Objectives of My Study

- To Understand Organization approach to watershed management interventions.
- To learn the Various techniques of Stop Dam and community Participation
- To develop our own various skills-
- Communication skills, Behavior changes, Participation, working in team

Methodology

We had 4 villages in which we had to go through to meet our objectives. Kholwa, Sangavi, Amankhedi, Padlya Babaji were the some specific name of the villages where we spent almost 2 months and went through different activities of local people also the watersheds were being developed in those very areas.

Primary Data:

Observation Method

Participant observation: We involved in the activities of local communities like Gangour one the famous festivals of celebrated in Nimar the Bigger region of Madhya Pradesh. We actively participated in one of our CRP named Dharam Chouhan and got opportunity to observe the thing from very close.

Non-participation Observation: During our working hours I seldom observed the same activities performed by the same community also the culture prevailed among the different communities was same.

Transect walk Method: While working with the laborers at different working sites I almost keep talking with laborers and CRP about their basic needs, lifestyle etc.

Secondary data:

Source of Data: website of SPS, report available at Bhikangon Location; I referred the document available at Bhikangaon Location and also visited Samaj Pragati Sahyog website.

STUDY AREA

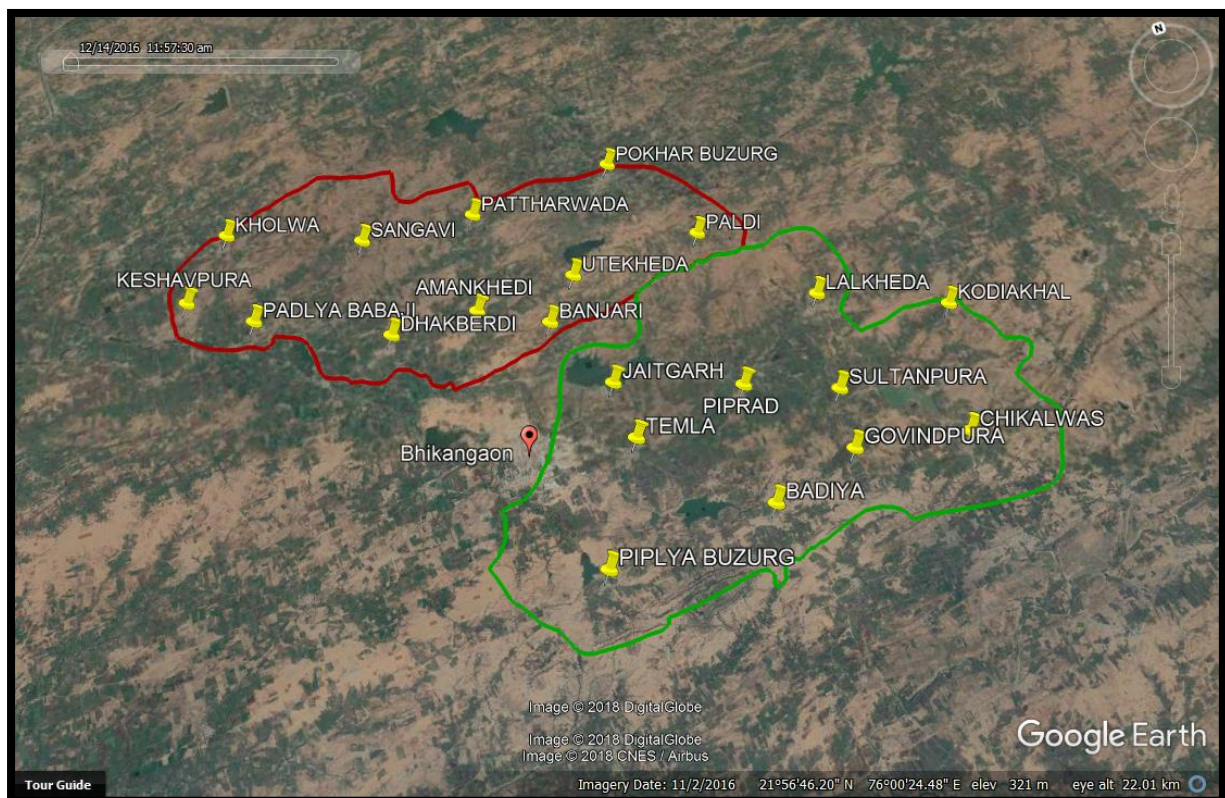
Since I wanted to know about total process and mechanism along with challenges during the watershed management. So we had been allocated in Bhikangaon on of the location of Samaj Pragati Sahyaog where the watershed program was running under the integrated watershed Development program 12. We went through various information regarding location and targeted areas also came to know the challenges and opportunity for implementing the program.

State: Madhya Pradesh (M.P)

District: Khargone

Block: Bhikangaon

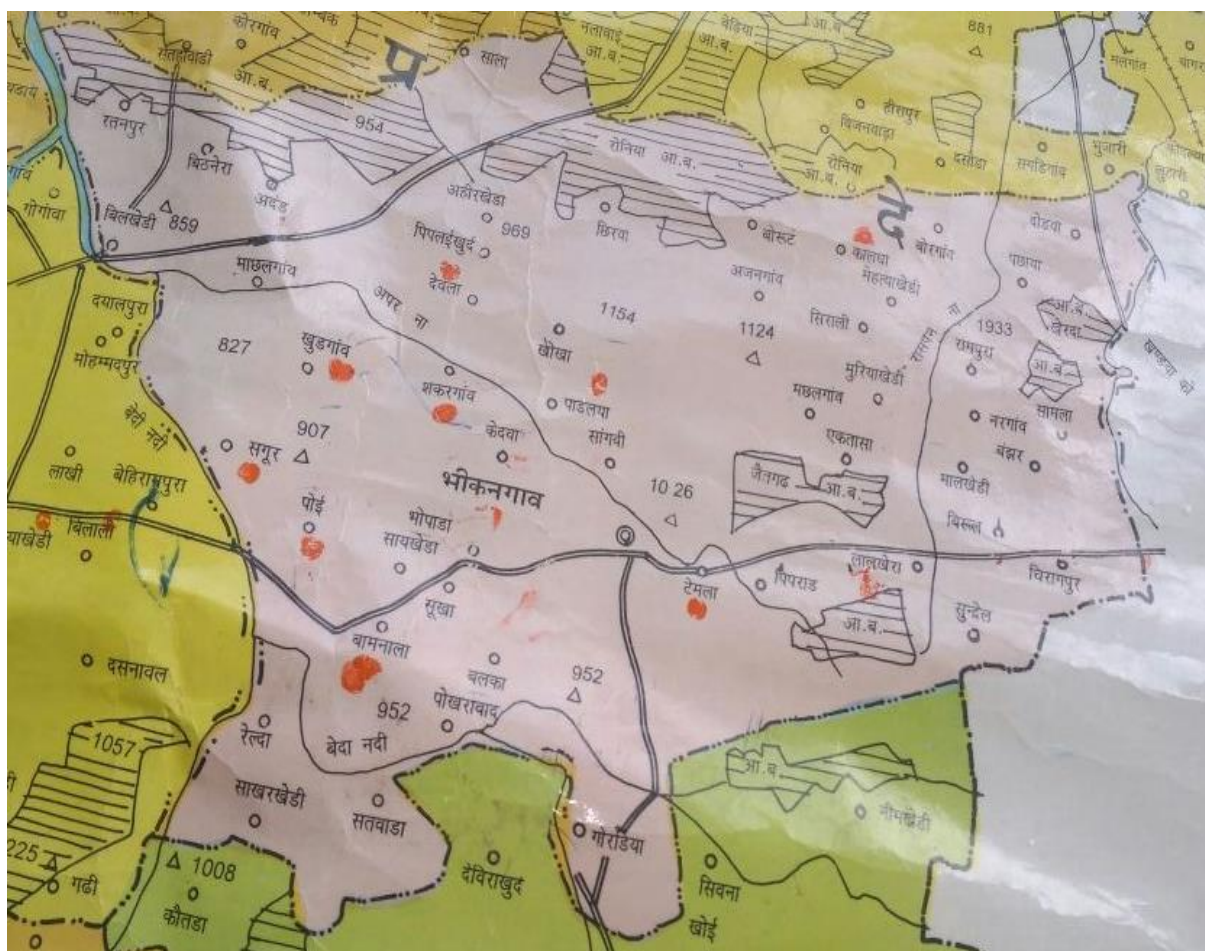
Village: Kholwa, Sangavi, Pattharwada, Pokhar Bujurgk, Utkheda, Paldi, Amankhedi, Padlya Babaji, Keshawpura etc.



Demography

ABOUT THE BHIKANGAON

- ❑ Firstly, Inaugurated Bhikangaon location started on 22 August 2014 by SHG Program.
- ❑ After MOU with MP Government District Khargone 01 October 2014 IWMP-12 watershed Project Bhikangaon.
- ❑ IWMP-12 Watershed Project Sanction Year 2013-14.
- ❑ Bhikangaon Block Covered of 132 villages & All Population Depends on Agriculture and Labor works.



General Information of Khargone District

Sr. No.	Title	
	Total Geographical Area	8030 sq.km
	Total Agriculture land	420450 Hectares
	Total Forest Area	2687.987 sq. km
	Total Irrigation Area	167350 Hectares
	Annual Average Rainfall	832 mm
	Total numbers of revenue villages	1169
	Total number of forest Villages	68

	Total numbers of gram Panchayat	600
	Total numbers of blocks	9
	Total numbers of CD Blocks	2
	Total numbers of Tribal Bocks	7
	Total Population (Urban + Rural)	1529562
	Total Rural Population	1292174
	Total BPL Families	83403
	Literacy %	63.22
	Road connectivity	2301.95 km
	Nationalize Banks	46
	Co-operative Banks	51
	PDS Public Distributions Systems	410
	Population Density Per Sq. Km	191
	Main Crops	Cotton, Jawar, Wheat, Maize, soybean, moong, urad etc.
	Average Agriculture land Holding	3.1 Hectares

Integrated Watershed Management Programmme-12 Bhikangaon Block

Sr. No.	Name of Project	IWMP-12
1	Total Project Area	5046 Hectors
2	Project Cost	605.52 Lakh
3	District	Khargone
s5	Topography	Disparate
6	Maximum and Minimum Height above sea level	332 miter and 246 miters
7	Approved Year	2013-2014
8	Date of contract with District Panchayat	01 October 2014

9	Total Gram Panchayat	5 (Padlya Babaji, Sangavi, Pttharwada, Amankhedi, Pokhar Bujurg)
10	Total Villages	11(Padlya Babaji, Sangavi, Dahkabrdi, Pttharwada, Amankhedi, Bajari, keshavpura, Kholwa, Utkheda, Paldi, Pokhar Bujurg)
11	Total Household (Census 2011)	1742
12	Total Population (Census 2011)	11999
13	Total	7502 (62.52%)
14	Total	607 (5.06%)
15	Man Occupation	Agriculture and Agriculture Labor
16	Main Crops	Cotton, Chilli, Soyabin, Wheat
17	Main Sub Caste	Bhil, Bhilala, Harijan, Gavali, Yadav, Rajput, Mulsim
18	Soil Types	Murum, Kali, Uthali
19	Main River	Awar River
20	Main Irrigation Tools	Well, canal, Tube-well etc.
21	Average Rainfall	706 mm
22	Main Languages	Hindi and Nimadi

Basic information about 12 villages of IWMP-12

S	Name	No. of HH	Total POP	No. M	No .F	SC	Ma le	Fe ma le	ST	Ma le	fema le	No other	M	F
1	Padlya	161	838	423	415	234	116	118	463	232	231	141	75	66
2	Sangavi	385	2375	1202	1173	16	10	6	2355	1189	1166	4	3	1
3	Pattharwada	281	1714	842	872	19	9	10	1694	832	862	1	1	0
4	Keshavpur a	18	97	52	45	0	0	0	84	46	38	13	6	7
5	Kholwa	144	860	451	409	2	0	2	21	8	13	837	443	394
6	Banjari	14	82	49	33	1	1	0	81	48	33	0	0	0
7	Pokhar Bujurg	302	1362	687	675	165	94	71	169	83	86	1028	510	518
8	Dhakabrdi	67	413	209	204	0	0	0	413	209	204	0	0	0
9	Amankhed i	220	1155	592	563	66	39	27	313	153	160	776	400	376
10	Kedwa	375	2202	1081	1121	103	53	50	1009	484	525	1090	544	546
11	Untkheda	75	492	250	242	1	0	1	491	250	241	0	0	0
12	Paldi	75	409	217	192	0	0	0	409	217	192	0	0	0
Total		2117	11999	6055	5944	607	322	285	7502	3751	3751	3890	1982	1908

Micro-Watershed Code, Gram Panchayat and Village Details

Sr. No.	Block	Micro watershed Code No.	Included Gram Panchayat	Village	Treatment Area in Hectares	Total Household
1	Bhikangao	5D3B5d4	Padlya babaji	Padlya babaji	870	161
2		5D3B5d5	Sangavi	Sangavi	1198	385
3			Pattharwada	Pattharwada		281
4		5D3B5d7	Amankhedi	Amankhedi	718	220
5			Amankhedi	Thakwadi		67
6		5D3B5d8	Amankhedi	Banjari	901	14
7			Pokharbujurg	Pokharbujurg		302
8			Pokharbujurg	Paldi		75
9			Pokharbujurg	Utkheda		75
10		5D3B5d6	Padlya babaji	Keshawpura	873	18
11			Padlya babaji	Kholwa		144
Total					4560	1742

Reasons of selection the villages under watershed Development Program

As we know that SPS works in package form, so it identified the challenges in those villages then decided to transform gradually. Samaj Pragati Sahayog always focuses on livelihood and demand-based work. When it enters in any area it tries to sort out the fundamental challenges step by step and reaches to the total development. Based on following challenges SPS has to select the villages of Bhikangaon, Khargone

- ✓ Chemical agriculture
- ✓ Lack of soil fertility & depth
- ✓ Depletion of ground water (water level)
- ✓ Poverty
- ✓ Lack of sources of livelihood
- ✓ Credit dependency on money lender
- ✓ Health issues
- ✓ Education issues
- ✓ Social & cultural challenges
- ✓ Topography issues
- ✓ Geological issue
- ✓ Less vegetation

Structure constructed in Bhikangaon location

During internship we came across the following structures:

- Stop Dam
- Farm pond
- Farm Bunding
- Earthen Dam

Stop Dam



Stop Dam is made on the drainage system where the flow of water is slow and flatter bed. In the stop dam the water after rains are conserved while the flood is allowed to pass.

Benefits: It serves the water to Rabi crops. It gradually recharges the groundwater.

Farm bundling

It is made suitably on the outer most part of the farm.

Benefits: It prevent the formation of gullies and conserve the fertile topsoil.



Earthen Dam or Nala Bund

It is made in the upper part of the catchment area and work as percolation pond which help in recharge the well in the lower part of the watershed. They are made up of clay soil and boulder.

Benefits: They retain water for year. Direct irrigation to the field and recharges the water of the nearer well.



Farm pond



This is the small dugout in the farmer field to harvest the rainwater which runoff during the rainy season.

Benefits: helps to protect the Kharif when monsoon is spell out.

ASSIGNMENT DONE

- Worked in the construction of stop Dam structures.
- Supervised the work, made raw materials and equipment available whenever required.
- Maintained decent communication with the beneficiaries and labors of the site in order to understand their life closely.
- Visited villages during festivals (Gangor) to understand the environment and availability of resources.
- Attended marriage ceremony.

Dimension measurement of STOP DAM (SD)



Parts	Dimensions	Comments
Wing wall	4.20m	May vary according to side of drainage
Key wall	3m	Fixed
Apron	3.43m	Always less than width of foundation
AGL	0.4 m	Fixed
Baffle Wall	.6x.6	Fixed
Middle pier	1.5m(top)	Fixed
End pier	Curved out after middle pier measurement	May vary
Gate	1.2mx1.1m	Height may vary
Coping	0.1 m	Fixed

SWOT analysis of the Project

Strength

- ❑ **Devotion to works:** The official along with the sub ordinate consider the work as their own that is why they spent more time than working hours.
- ❑ **Sense of respect:** There is sense of respect in all from higher official to laborers , they call together DIDI and BHAHEYA.
- ❑ **Impact of Adabnama:** It is mandatory for each and every personnel involve with Organization to abide by the Rules and regulation along with respecting the Women, if anyone go beyond the appropriate action can be taken against.
- ❑ **Dynamicity in officials:** If there is need of any official at different sites, they manage to present somehow or the other.
- ❑ **Fame of the Organization:** Organization has earned a big fame among the donors and before the Government, that is why many projects being done by the SPS on behalf of Government.

Weakness

- ❑ **Lake of motivation:** The subordinates have always to say about their low income, and despite of that they have to travel more and there is no compensation form of fuels. They mean nothing remain at the end of the end of the month.

Opportunity

- ❑ **Availability of laborers:** Since there is unemployment in the Tribal community so, they are easily found to work.
- ❑ **Community's participation:** Since there is great requirement of irrigation water so people actively participate in these interventions.
- ❑ **Use fund flexibility:** In watershed many interventions can been done so as per requirement and provision of donation the fund can be used.

Threat

- ❑ **Shortage of funds:** Due to fund shortage the construction process has left in between.
- ❑ **Intervention in forest area:** Due to forest policy the intervention in forest area has become challenge, for that the high level approaches are required.
- ❑ **Untouchability:** Different caste and community work together at work place, but they have sense of caste hierarchy due to that they escape to touch each other and do not share the water pot.

Findings

- ☐ Change in crops patterns
- ☐ Stop the distress migration
- ☐ Challenge to manage the sites due less no. of officials and CRP
- ☐ 90-95 % female labourers at every work site
- ☐ Sometimes delayed in fund disbursement due to technical problems
- ☐ Community actively participate and welcome the project Learning Points
- ☐ Any successful development program can attract other initiatives
- ☐ Need sufficient no. of members to run a project smoothly
- ☐ For sustainability and acceptability of a project CP is necessary
- ☐ Understand Organization's approach to WSDP
- ☐ Learnt skill of Communication, Behavioral changes, working in team.

Observations

- ☐ **Feelings of own works:** The officials along with the sub ordinates had sense of attachment towards works. They spent more time than official time bound.
- ☐ **Respect among all:** Each one even the laborers are treated with respects.
- ☐ **Accountability:** Accountability to end the task in time bound for that the authority work till late night in the office.
- ☐ **Good tuning:** There is good tuning between the district officials and project official which leads to fast disbursement of funds.
- ☐ **Provision of extra laborers:** The numbers of laborers are kept more than sufficient so that the required labor can do his personal work too.
- ☐ **Awareness in construction:** During constructions the all types of faults are avoided , for example once during the hiding the double layers had been done by laborers which was unknown act ,in that circumstances Radheshyam Bhaeya came to know and he make them remove .
- ☐ **Sufficient time to take rest:** During the construction period the sufficient time are given to take rest in one go. It is done due to avoid monotonicity in the construction.
- ☐ **Use of cattily:** To serve the water in any occasion: the people are cultured and understand the importance of water so they never waste the water and use as per requirement.

- ❑ **Dowry to girls:** The girls are given dowry in Tribal which means there is importance of girls in Tribal community.
- ❑ **Educationally backwardness:** As I inspected and asked the people negligible numbers of people have minimum high school degree.
- ❑ **Addiction:** Almost all the laborers were addicted to any one of injurious things.
- ❑ **Prevalent of Untouchability:** There is great sense of caste and community that is the social norms regarding social hierarchies can be seen at work place.
- ❑ **Labor categories:** The laborers category is of women and teen girls.
- ❑ **Double marriage system:** It is seldom find the single marriage is taken place but I observed there were double marriages in same Mandawa, which means avoiding the extra expenses.
- ❑ **Marriage in Day:** For security purpose the marriage is done in day time.
- ❑ **Dancing together:** The tribal male and female dance together, which is slap to them who cite towards gender discrimination.

SUGGESTION

- ❑ Increase organization field CRP staff (under watershed Program).
- ❑ Give some Training of village people to water savings and watershed concept,
- ❑ Need to involve female officials to openly interact with female laborers

Conclusions

We find that after implementation of WSDMP, the distress migration among the farmers has stopped and **they are** harvesting good yield of crops by changing their crops patterns. **The new** interlinked **development programs** like agriculture, livestock has been introduced. **But it is also** found that due to insufficient numbers of members, it is hard to run the program smoothly. More than 90% laborers are female but there is no **any female** CRP or **official to** direct interact with them. Sometimes late payment demotivate the laborers which affects the work's efficiency despite of that there is actively community participation which make the program more sustainable and acceptable. More **on need** more CRP and officials including female and training to locals about saving water and watershed concepts so that the more area can covered under WSDMP.

Reference: <http://www.samprag.org> website
scholar.lib.vt.edu