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Self-Reliant Initiatives through Joint Action (SRIJAN)

Introduction

Self Reliant Initiatives through Joint Action (SRIJAN) at its core is committed to enhance water resource based livelihood opportunities for the weaker and deprived sections of the rural society.

The economic importance of rainfall in a country where agriculture is the mainstay can hardly be exaggerated. A year of scanty rainfall means a year of scarcity. Thus, irrigation and rainwater harvesting have always been attached great importance. Kautilya, in his politico-administrative treatise *Arthashastra*, says:

“He (the Heads of Departments) should build irrigation systems...to those who are building these, he should render aid with lands, roads, trees and implements. If one does not participate in the joint building of an irrigation work, his labourers and bullocks should share the expenses.”

State management of irrigation was not unknown in the past but community management was widespread. Institutions to control or manage irrigation attracted the attention of many social scientists like Karl Marx, who viewed

“...artificial irrigation by canals and waterworks the basis of Oriental agriculture”.

The British turned these into state property. Since then began the systematic plunder in which the local people, having lost control of their environment became increasingly alienated and joined in the plunder. What were once ‘community managed commons’ became ‘free access resources’ where the interests of the powerful, despotically reigned.

Thus central to SRIJAN’s ethic is the guiding belief that absence of access to adequate means of livelihood, and not indolence, is the prime reason for the deplorable state of abject poverty in which people in rural India try and survive. Thus SRIJAN as grassroots implementing and support agency hopes to bring some respite to the people, mired in poverty and with little hope or even the means to salvage their present state of hopelessness, by helping them envision the prospect of “living a life” rather than only struggling to survive.

Though SRIJAN has been working informally since 1997, it was registered as a Trust on January 26, 2000 under the Indian Trust Act. Since then SRIJAN, working in varied capacities, has been involved in promoting interventions geared towards building the capacities of the villagers. These interventions focus on the marginalised sections of the village society who have largely been left untouched by mainstream development, at best deriving some ‘trickle-down’ benefits. SRIJAN seeks to work directly with the socially and economically marginalised sections like scheduled castes, scheduled tribes and women in order to enable at least some shift in the equation between the centre, the

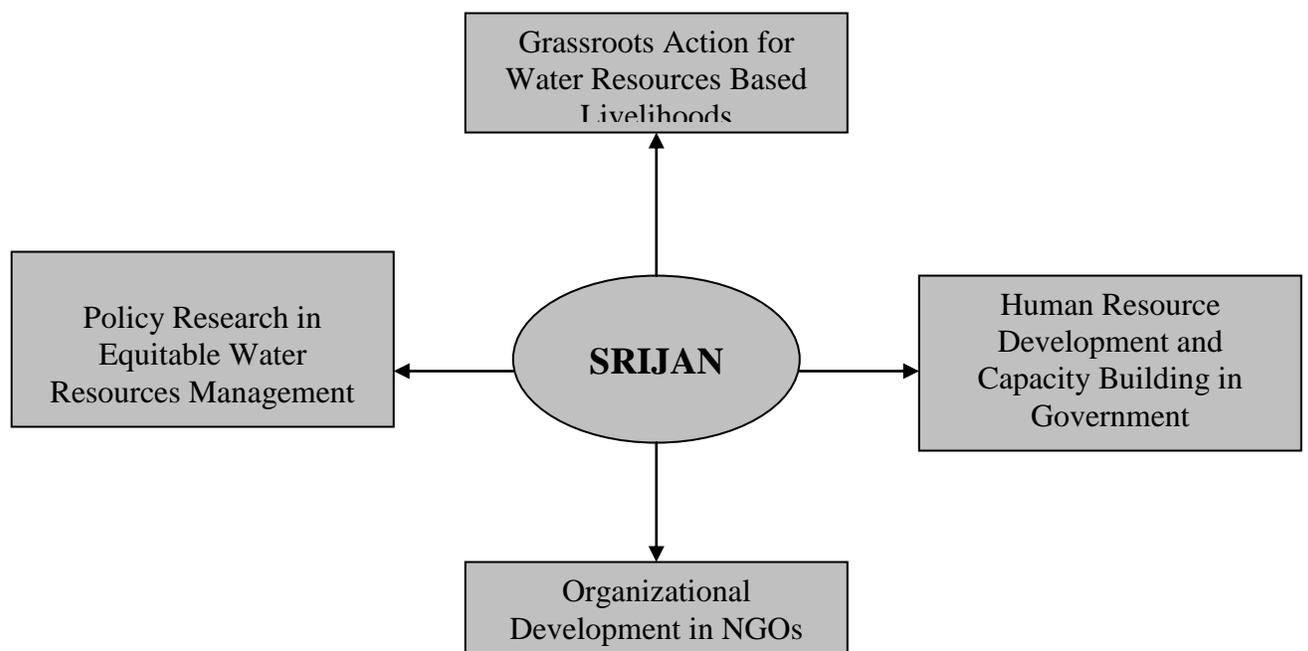
patriarchal feudalistic society, and the margins, hitherto socially invisible leading a cloistered existences as per the dictates of the powerful. SRIJAN thus hopes to induce some dynamism into the presently status quoist situation. This dynamism, as is widely accepted in the development sector, cannot lead to empowerment unless it premised on the ethic of “*participation*” which would then ensure the sustainability of Community Based Organisation that interventions in capacity building plan to set up.

Participation in generating a sense of ownership is a crucial precursor towards propelling an attitudinal change in minds enslaved from generations. The sense of ownership helps wean people out of their subservient mentality and conscientises them to the issue of “rights”, something largely unknown to them.

Utopic as it may sound, professionals in SRIJAN do dare to dream of such a reality. Apart from facilitating increased access to, and ownership of, previously traditionally managed water-harvesting structures SRIJAN further hopes to complement latter by inculcating the practice of water conservation through introduction of water saving devices in irrigation. Irrigation uses almost 90 per cent of the freshwater available for consumption. This sounds sacrilegious given that in India no domestic water supply system reliably provides water 24 hours a day.

Presently SRIJAN’s staff consists of 17 professionals trained in social work and rural and natural resource management in the premier institutes of the country like Institute of Rural Management Anand (IRMA), Jamia Milia Islamia New Delhi and Indian Institute of Forest Management (IIFM) Bhopal. SRIJAN professionals are working in the three states of Rajasthan, Madhya Pradesh and Karnataka on varied projects in about 120 villages with around 1000 families.

The nature of projects SRIJAN has been involved in the last one year may thematically be divided into the following four types:



Grassroots Action for Water Resources based Livelihoods

District Poverty Initiatives Project, M.P.

SRIJAN team identified Jaisinagar as one of the poorest blocks of the Sagar district in December 2000. Since then SRIJAN has been actively involved in the block as the Project Facilitator Team (PFT) of the District Poverty Initiatives Project (DPIP), responsible for the conception, designing and implementation of the various interventions deemed necessary for generating livelihood. In a span of two and half years, the team has entered thirteen villages and the project has reached out to more than 800 farm families.

The project was initially started in low socio-economic disparity villages to achieve early success both in terms of tangible output and building of rapport. This led to increased focus of the team on carrying out demand driven activities like well digging and well deepening. Today out of the 89 Common Interest Groups (CIGs), 39 are those of wells formed across 11 villages of the 13 SRIJAN is currently working in.

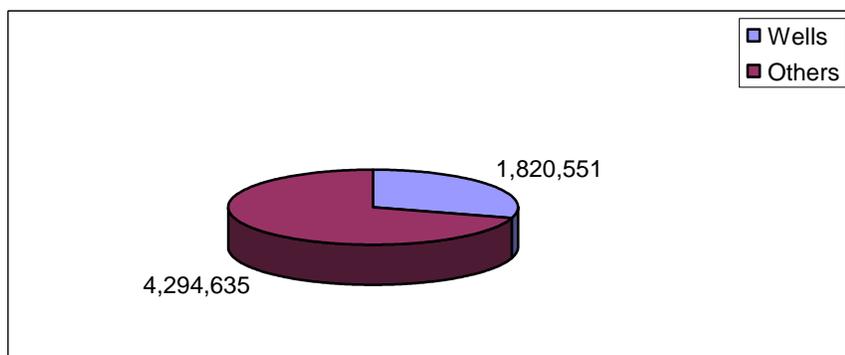


Figure 1. A comparison of the investment made on wells and other activities

Intervention in demand driven activity of wells has helped the team build rapport with the villagers and thus arrive at a more empathetic understanding of the areas requiring intervention. Thrust areas of intervention identified were premised on the actual but hitherto unperceived need of the people in the area. This however is not to say that interventions in Jaisinagar have always been of an innovative character. At times even a “felt need” has to be left unattended by the people given the paucity of funds and absence of technical competence and organisational capacity. The “thrust areas” may broadly be classified into the following:

Water harvesting structures and water conservation devices: Almost 50 per cent of the net arable land is un-irrigated. While utilisation of surface water available in ephemeral streams and rivers has been far below the potential, open dug wells are the major source of irrigation and hence the demand. The hard rock geological structure, undulating terrain and predominantly black cotton soil composition however makes the dependence on wells precarious as the former prevent any absorption of rainwater leading to large run

off as also to huge soil losses. The little ground water that is available is used inefficiently and hence wastefully given the practice of flood irrigation. In the absence of any traditional practices of rainwater harvesting and conservation in the area, SRIJAN has taken up activities like,

- Field bunding, a proven soil and moisture conservation structure that helps improve the quality of the standing crop in the field leading to higher yields.
- Construction of percolation tanks and stop dams which in facilitating gradual seepage of water enable recharging of downstream wells, besides being useful for *Nistar* purposes.
- Installation of lift irrigation systems and sprinklers to optimise the rate of ground water exploitation.

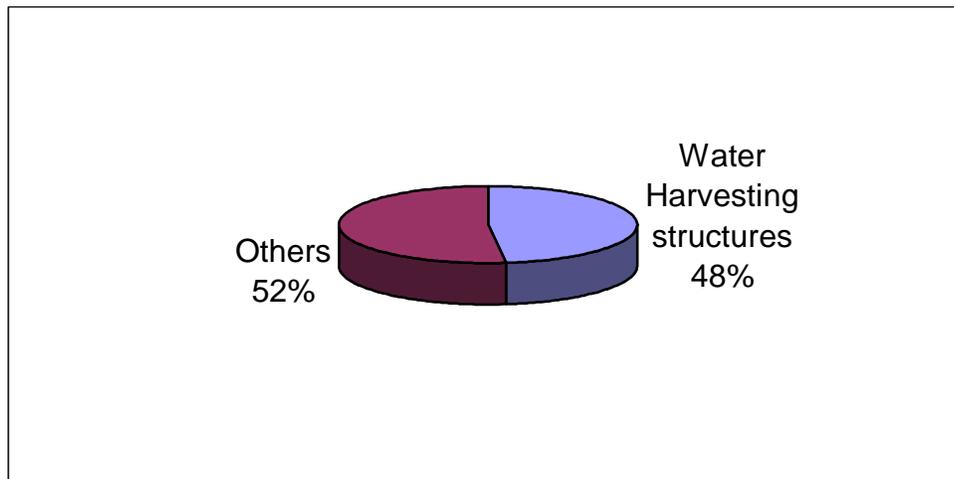


Figure 2. Investment Break-up between water harvesting structures and other activities

Sprinklers were introduced as an innovative programme for the poor farmers engaged in wheat and gram cultivation. Though a capital-intensive technology meant only for rich farmers, the locally assembled sprinklers being promoted by SRIJAN have proved to be extremely cost effective and equally efficient. Successful demonstration of sprinklers has created a genuine demand for it among the poor cultivators. Use of sprinklers have doubled the area under irrigated farming for Charan Singh of Hinnpur village and Hanumat of Ghogri village and increased it by 150 per cent for Pribhu Dayal of Hinnpur village.

Charan Singh initially had only two acres of land under wheat cultivation, which produced 4 quintals of wheat worth Rs 2400/-. Sprinklers in doubling the area under cultivation also doubled the yield to 8 quintals, giving him an additional income of Rs 2400/-. Further sprinklers in undulating terrain have the additional benefit of preventing the washing away of costly chemical inputs applied at the time of cultivation.

Need however remains of developing various models of sprinkler irrigation to ensure its viability in different geographic locations before upscaling the technology and promoting its large-scale dissemination among the farmers of Jaisinagar. This the team views as one of its prime goals in the coming year.

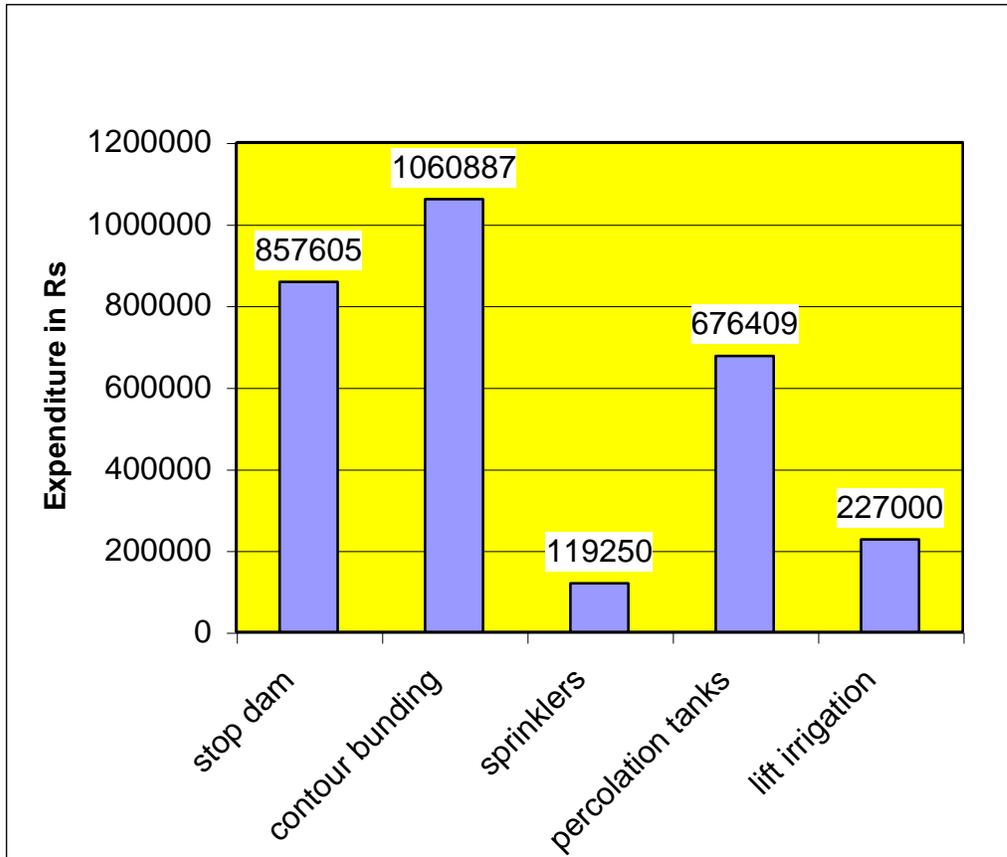


Figure 3. Break-up of the Investment made on water harvesting and conservation structures

Timely availability of credit and at low rate of interest: Indebtedness is very high in the area and the poor villagers are trapped in a vicious circle of debt. Almost every villager has a loan of Rs 25,000 or more from the local moneylender borrowed at exorbitant interest rates ranging between 36 per cent to 120 per cent depending upon the urgency of the need.

Shobha Rani of Bhajia village borrowed a paltry sum of Rs 5000/- in 1996 from a local moneylender at the time of her daughter's marriage. The *Seth* had lent money to Shobha Rani with the words,

“Teri beti meri beti hai” (Your daughter is like my own daughter).

Just by saying this the *Seth* has secured regular inflows from Shobha Rani. A large part of the household's agricultural produce goes to the *Seth*. What is more perturbing is the psychical coercion that the exploiters exercise over the poor whereby the latter instead of resenting the exploitation become complicit in the whole exercise by feeling, not only monetarily, but also morally indebted to the *Seth* for his favour.

To solve the problem related to indebtedness a need was felt to develop a linkage between the community and formal credit institutions. Given this need, formation of Self-Help Groups (SHGs) has been an important focus of the SRIJAN Jaisinagar team. The first SHG was formed in December 2000 in Hinnpur village. Since then SHGs have come a long way acquiring the zeal and force of a movement. Today there are 33 SHGs in the area involving around 500 women from 13 villages.

Formation of a SHG involves bringing together of women who place trust in each other and foresee a possibility of working together as a group, charged with carrying out lending and borrowing activity both internally and with the bank, upon linkage. Linkage with the bank is an important step towards facilitating the emancipation of people from the clutches of the local moneylenders as it entitles the group to loans of much bigger amount and enables gratification of much higher credit requirements of the people than what the SHG could have catered to as a mere internal lending institution.

The repayment record has encouraged the previously skeptical banks to change their loan policy to make it more malleable to the credit needs of the farmers who have been issued *Kisan Credit Cards* on which cash may be withdrawn.

SRIJAN organised two SHG *Sammelans* in Jaisinagar. The *sammelans* were a huge success in terms of the high attendance of women. Attendance was symptomatic of how women were becoming ambassadors of a cause till late being espoused by SRIJAN in a lone voice and secondly of a change in the self image of women wherein they are beginning to shun the identity of being mere receptacles of the social order handed down to them and are increasingly viewing themselves as potent agents of change.

Some two hundred SHG members attended the first SHG *sammelan* despite the fact that it was held in monsoons when the roads are usually cut off from the block headquarters. It was also the occasion for the linkage of five SHGs to the Regional Rural Banks (RRBs) wherein they were handed over cheques amounting to Rs 38,000/-.

The second phase of linkage took place at the second SHG *Sammelan* organised on January 6, 2003 when eleven SHGs got a loan of Rs 93,500. The cheque distribution was done in the presence of Mr. Vivek Shotriya (DPM-Sagar), Mr. Dhumal (NABARD) and Mr. Choudhary (Chairperson RRB) and 350 SHG members.

The slogans that rent the air at the *Sammelan* continue to motivate the women of Jaisinagar as they excitedly repeat to the visitors slogans like “*Hum bharat ki nari hai, phool nahi chingari hain*”, “*Baicharon ne thana hai, apna bank banana hain*”, “*boond boond se ghara bhare, Bachat kare to poori pare*”.

Agriculture extension: Activities in agriculture extension have worked to buttress the SHGs as institutions by developing them into Common Interest Groups (CIGs). The development of SHGs as CIGs has worked to further the participation of women in areas, which till now had been a male preserve, jealously guarded. It has empowered women by

making them a party in the process of decision-making. The organisation of mature SHGs into *Seed Banks* has been the first step in this direction. Apart from empowering women, the other and equally basic objective of establishing Seed Bank has been to ensure timely availability of good quality seeds. The seeds are given to SHG members as loan who are required to return it at a rate decided by the members themselves. Procurement of good quality seeds however does not guarantee a high yield unless accompanied with scientific and informed methods of farming. Hence organisation of training camps precedes the sowing of seeds provided to the seed banks.

In the training camp organised prior to the sowing of soyabean, the expert explained to the women the difference between the certified seeds given to them and the seeds they had till now been using. They were explained the difference between a grain and a seed and how to maintain the genetic purity of the latter. They were trained in the seed treatment that was to be done before the sowing of the seed and told about the various pests and diseases that could infect the crops. For the purpose of land treatment the women were given fertilizers and told about the proportions in which they were to be mixed before being administered in recommended doses. They were further briefed on the benefits of line sowing and trained in modern methods of seed storage, so as to keep them safe from pests, where employment of traditional method of seed storage namely "*Kothi*" was no longer feasible.

High value crops: Apart from improving the prevailing agricultural practices effort has also been made to introduce high value crops in the area to both bolster the income level of the people as also to introduce them to the concept of commercial vegetable agriculture.

Cultivation of ginger has been undertaken under the programme in the four villages of Bakhra, Hinnpur, Ghoghri and Raheli.

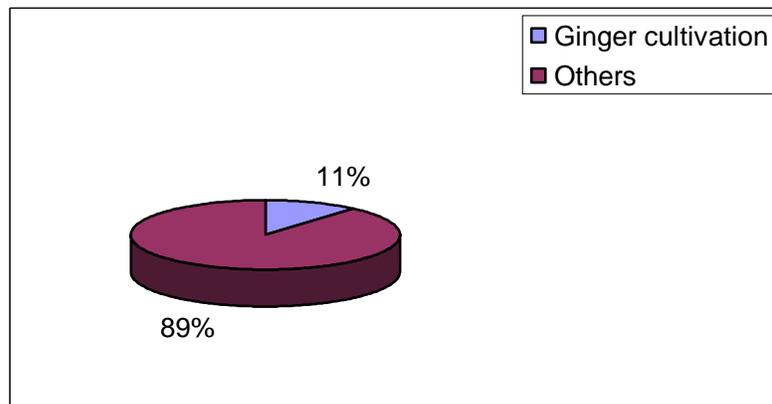


Figure 4. Percentage of investment made in ginger of the total investment.

Done with some 106 families, ginger cultivation has helped the farmers get an increased return from the same plot of land. Carried out with women, ginger cultivation and the market linkages established have helped women come out of their traditional domestic sphere and take a plunge at the male dominated domain of marketing.

District Poverty Initiatives Project, Rajasthan

SRIJAN's first project in Rajasthan and second grassroots action project, SRIJAN joined the Rajasthan District Poverty Initiatives Project (DPIP) on an invitation from the SPMU, DPIP Rajasthan and the recommendation made by the World Bank. A team of four professionals was set up in August 2002. The team visited the different DPIP districts like Jhalawar, Baran and Tonk and finally decided to work in Tonk on the basis of the groundwater situation in the district.

Tonk is one of the oldest districts of Rajasthan. It came into existence on October 15, 1949 on the political map of Rajasthan. The average rainfall in the district is 61.36 cm. Ground water is a scarce commodity for the people in the region, except for places found on the banks of the river Banas. The total length of Banas River in Tonk district is 135 km. There is no natural lake in the district, the tanks however constitute the identity of the district and position it differently from other districts in the state of Rajasthan. In each village one can find at least one tank. These tanks enjoy huge importance in the socio economic and religious life of the people of the district. Apart from being an important source of irrigation, the tanks provide drinking water to large number of livestock and helps in the recharge of ground water. Lately, the fall in the ground water level has reached alarming proportions and is on the verge of reaching the danger zone. The quality of the ground water is also not good. At several places it is alkaline and the fluoride content at 5 to 10 ppm is much more than the permissible limit of 2 ppm.

After an intensive study of the various blocks in the district, Deoli was chosen keeping in mind the poverty situation, the community's response and the opportunities to work on water resources in which SRIJAN has developed interest and expertise over the years. The choice of the cluster in the block was guided by the existing situation of iniquitous water distribution created by the "Bisalpur Drinking Water and Irrigation Project" in the area. The project has greatly and differentially impacted the villages of the region, which may be categorised in the following manner.

- Villages that got submerged and were later on rehabilitated by the government.
- Villages that come under the command area of the project
- Villages that have remained untouched and hence deprived of the benefits of the project.

Main Canal of the project, which being contour by nature, irrigates only the villages below. These villages together form a cluster chosen by SRIJAN on account of their dismal socio-economic condition as substantiated by the figures below:

Total number of villages in the cluster	80
Number of panchayats	20
Villages having more than 50% SC/ST population	40
Number of villages having no private school	20
Number of villages having no roads	40
Number of villages having no electricity	70
Number of villages having no pucca roads	12

While these broad indicators were instrumental in deciding on the cluster, need was felt of carrying out a more intensive and detailed study of the area for an empathetic identification of the interventions crucially required for enhancing the livelihood opportunities of the people constrained by lack of social and technical means to gain access to resources.

Realisation of the above need was a precursor to a month long study undertaken by the Tonk team of the three villages of *Sujanpura, Sardarpura and Akodia* lying in the upper, middle and lower catchment area of the project. The intention of the study was not merely to collect data but also to facilitate the ownership of the project and acceptance of the team by the villagers. Aim was to reach an understanding of the ground level situation at different reaches in conjunction with the villagers and thus convince them of the need of breaking away from the here and now to think more long term. Extend their horizon by pulling them out of their slumber of resignation to the prevailing state of affairs.

The study used a mix of qualitative and quantitative tools. The main tools comprised of Participatory Rural Appraisal (PRA) techniques, particularly resource mapping, social mapping and crop mapping, done with small groups of different social background. The other techniques included focussed group discussions, field visits and in depth interviews. The report on the “existing poverty situation and opportunities for livelihood” based on the above study was submitted to the District Collector of Tonk in October 2002.

The major finding of the study were:

- 1) Water for drinking as well as irrigation and fodder for livestock is a major concern of the village. The problem is more acute in the villages on the plains than those upland, which though an unusual circumstance, is a result of the farsightedness of the latter demonstrated in the existence of several soil and water conservation structures.
- 2) There is a shift in the source of livelihood from agriculture to other activities like carpet weaving and stone quarrying due to the depleting water table and recurring drought.
- 3) Migration is rampant in the area given the lack of opportunities of gainful employment. Delhi and Jaipur being the places where people go in search of wage labour.
- 4) The surface water condition in all the three villages was seen to be deplorable. Lack of rainfall has resulted in tanks not getting filled. On an average, tanks got filled to only 10 per cent of their total capacity this year as opposed to 60 per cent last year.

The above observations have brought forth the realisation that there is an urgent need of promoting construction of new and repair of existing water harvesting structures like tanks and *anicuts* besides also inculcating in people the habit of thrift usage of their meagre natural resources by introducing them to novel agricultural practices of irrigation using drip and sprinkler technology: devices that facilitate efficient and maximal use of available water. The experience in Jaisinagar being a case in point.

Though the agreement came through only in March 2003, the team used the nine months prior to the agreement fruitfully to introduce the people to and ingrain in them the concept “collective responsibility” by organising the women into Self Help Groups (SHGs). By April 2003 the team had entered some twelve villages and struck a rapport with the people who, along with the team, waited desperately and expectantly to realise the dreams SRIJAN had promised them.

SRIJAN proposes a three-year period for the completion of this project. This period has been divided into three phases. In the coming one year SRIJAN will focus on *mobilisation of the community and building of their capacity on one hand and field testing of some of the identified interventions on the other*. The following two years will see the *expansion and consolidation* of the interventions made.

Community Management of Chandela Taals, Tikamgarh, M.P.

The issue of water sharing is one of the most vexed problem that confronts the people engaged in agricultural activity given both the centrality of the resource as also its scarcity.

Given the above, tanks in the district of Tikamgarh, Madhya Pradesh have come to occupy a place of strategic importance. Recognising the pivotal role of tanks in the agrarian economy SRIJAN currently is involved in two projects in the Tikamgarh district, part of Bundelkhand region of central India.



The climate of the region is dry sub-humid. The annual average rainfall is 1000mm with 90 per cent of the rain falling during the four monsoon months (June to September). Agriculture and allied activities are the primary occupations of the rural population. Wheat, as the staple food of the people in the region, covers 34 per cent of the Gross

Cropped Area. Grown in Rabi season, irrigation becomes crucial to get a good yield. Tanks in Tikamgarh are the prime source of irrigation. There are in total some 146 tanks in the district providing irrigation to some 28,966 hectares of land.

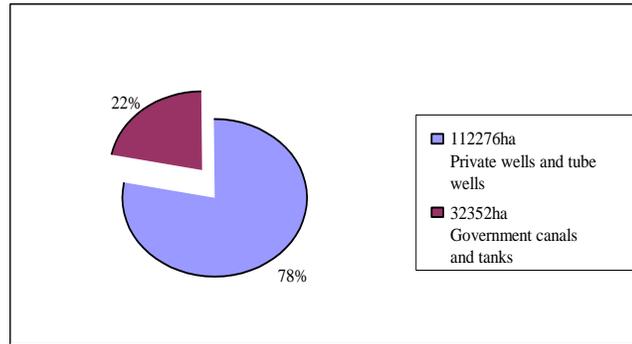


Figure 5 Percentage break-up of the Irrigation sources

Block	WRD		Janpad Panchayat		Total	
	No of tanks	Designed CA (ha)	No of tanks	Designed CA (ha)	No of tanks	Designed CA (ha)
Tikamgarh	21	8,083	10	299	31	8,382
Baldeogarh	24	5,903	9	392	33	6,295
Jatara	27	5,938	14	286	41	6,224
Palera	13	3,399	8	263	21	3,662
Niwari	6	2,140	4	40	10	2,180
Prithwipur	8	2,179	2	44	10	2,223
Total	99	27,642	47	1,324	146	28,966

Table 1: Number of irrigation tanks in different blocks under WRD and JP

SRIJAN while being concerned about the rehabilitation of tanks in Tikamgarh has tried to focus more on rehabilitation of chandeli taals. Chandeli Tanks were built by the Chandela Dynasty that ruled the area some 2000 years back. Built largely for recreation purposes by the Chandelas, these tanks in time came to be used for irrigation purposes. It was the potential of these tanks to provide for irrigation in the area, foreseen by the British that led to the transference of these tanks from being owned by the community to becoming a government asset.

A contract was signed between The India-Canada Cooperation Office (ICCO), a Project of the Canadian International Development Agency (CIDA), and SRIJAN in January 2003 for the “Institutional strengthening for community management of Chandela Taals in Tikamgarh District, Madhya Pradesh”. This project aims at the *physical and institutional improvement of taals* in the Tikamgarh District.

A total of six *taals* are to be selected for this purpose. Beginning March 2003 the project is slated for completion within eighteen months of its inception. The total cost to be incurred in the rehabilitation of the taals having been fixed at Rs 1,260,000, while seventy

percent of it will be borne by ICCO, the remaining is to be raised from the community itself.¹

Water Users' (Farmers'), having never been given the ownership of the irrigation system, the idea behind fixing a high contribution is to kindle within them a sense of ownership of the structure, which they then feel motivated to maintain through setting up of norms and conventions of water budgeting and crop planning to ensure equitable water distribution.

Iniquitous distribution of water between head and tail end farmers, and between big and small farmers and lack of maintenance due to low water charges and poor recoveries have long plagued the chandeli tanks lying in complete state of neglect. Departmental works, if at all carried out, have been done autonomously, without consulting the water users.

Through participatory planning and implementation of repair works, SRIJAN is hopeful of creating strong peoples' institution that is self sufficient in both technical and financial sense. Thus restoring the irrigation system to a minimum operational level and making the handing over of the irrigation systems to the community a reality, in legal terms are viewed by SRIJAN as two sides of the same coin.

Community participation is seen by SRIJAN as a crucial precursor towards having a vibrant institution of Tank Users Group as against the existing defunct WUAs playing into the hands of large and powerful farmers.

¹ The total cost fixed is based on the cost estimation of five primary activities of sluice repair, lining of the canal, inlet channel repair, desiltation and bund repair

Human Resource Development and Capacity Building in the Government

World Bank assisted Karnataka Community based Tank Management Project, JSYS

Vernacularly referred to, as Jala Samvardhne Yojna Sanghe (JSYS), Karnataka community based tank management project, is a grassroots project supported by the government of Karnataka. The project aims at improving rural livelihoods and reduce poverty by developing and strengthening community-based approaches to managing selected tank systems, numbering 2000, across 9 districts.

Karnataka has 37,000 tanks with a potential command area of 6.8 million Ha. The actual irrigated area standing at 2.4 million hectares, is only 35 per cent of the potential.

Districtwise Data on Net Sown, Net Irrigated and Tank Irrigated Area in Karnataka 1985-86 1987-88.

S.No	District	NSA	All NIA Sources	Tanks	Tanks/NIA sources * 100	Tanks/NSA * 100
1	South Kanara	2,97,921	85,740	3,402	3.97	1.14
2	North Kanara	1,10,136	21,250	9,825	46.24	8.92
3	Chikmagalur	3,09,837	27,236	12,804	47.01	4.13
4	Hassan	3,77,547	47,286	20,883	44.16	5.53
5	Kodagu	1,45,940	4,583	860	18.76	0.59
6	Shimoga	3,18,333	1,41,353	56,748	40.15	17.83
7	Belgaum	9,14,920	2,15,012	4,876	2.27	0.53
8	Bellary	5,74,734	1,46,398	3,954	2.70	0.69
9	Bidar	3,56,977	28,132	750	2.67	0.21
10	Bijapur	13,39,550	1,81,872	6,429	3.54	0.48
11	Chitradurga	5,58,845	1,21,410	9,291	7.65	1.66
12	Hardware	10,36,576	97,980	12,583	12.84	1.21
13	Gulbarga	12,24,980	59,442	4,760	8.01	0.39
14	Raichur	10,15,872	1,75,740	2,433	1.38	0.24
15	Bangalore	3,89,085	64,837	25,781	39.76	6.63
16	Kolar	3,54,367	81,676	21,713	26.58	6.13
17	Mandya	2,55,772	98,374	8,637	8.78	3.38
18	Mysore	5,04,480	1,11,496	9,315	8.35	1.85
19	Tumkur	5,32,092	71,812	38,030	52.96	7.15
STATE TOTAL		1,06,17,965	17,81,627	2,53,074	14.20	2.38

NSA: Net Sown Area

NIA: Net irrigated Area

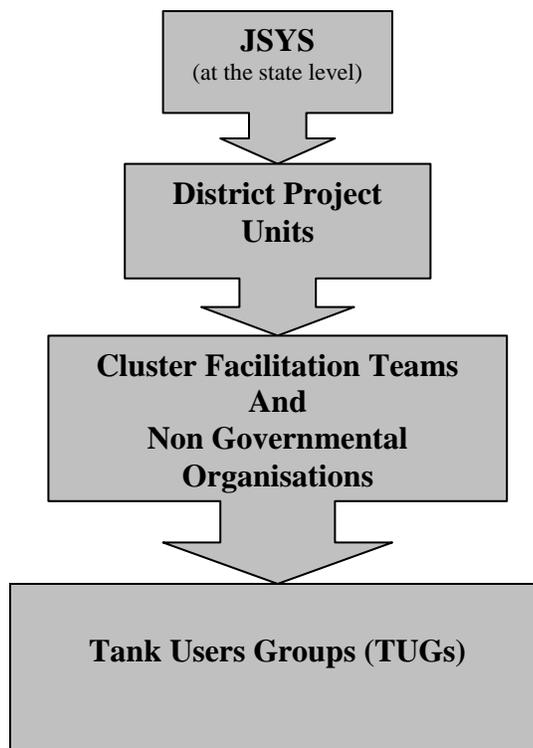
Reasons, similar to those noted in Madhya Pradesh, account largely for the pitiable state of the tanks in the state today. The tanks have had to bear the brunt of government callousness and indifference on one side and lack of sense of ownership in the people on the other. While the government's declining interest in the tanks is rendered palpable in the tapering of budget for tank rehabilitation and absence of any legal framework for conserving traditional water management institutions, open access to tank has led people, especially the dominant interests, to overuse it.

During the four decades ending 1997, Karnataka spent Rs 51 billion under the public sector plan on all forms of irrigation. Of this only about 30-32 per cent was spent on minor irrigation. Even here the main thrust was groundwater development rather than small surface works.

Tanks in Karnataka have small *ayacuts* (command area) averaging at 17 hectares. This is less compared to its neighbouring state of Tamil Nadu where the average command area stands at 26 hectares. 92 per cent of the tanks in the state have less than 40 hectares of *ayacuts*.

The project hopes to address the problem by undertaking physical rehabilitation of tanks so as to ensure that improved water storage and its efficient usage is translated into increased household incomes through increased activities in agriculture and fisheries. As a long term solution the project aims to establish an enabling environment for the sustainable and decentralised management of tank systems whereby strong community based institutions assume responsibility for tank maintenance.

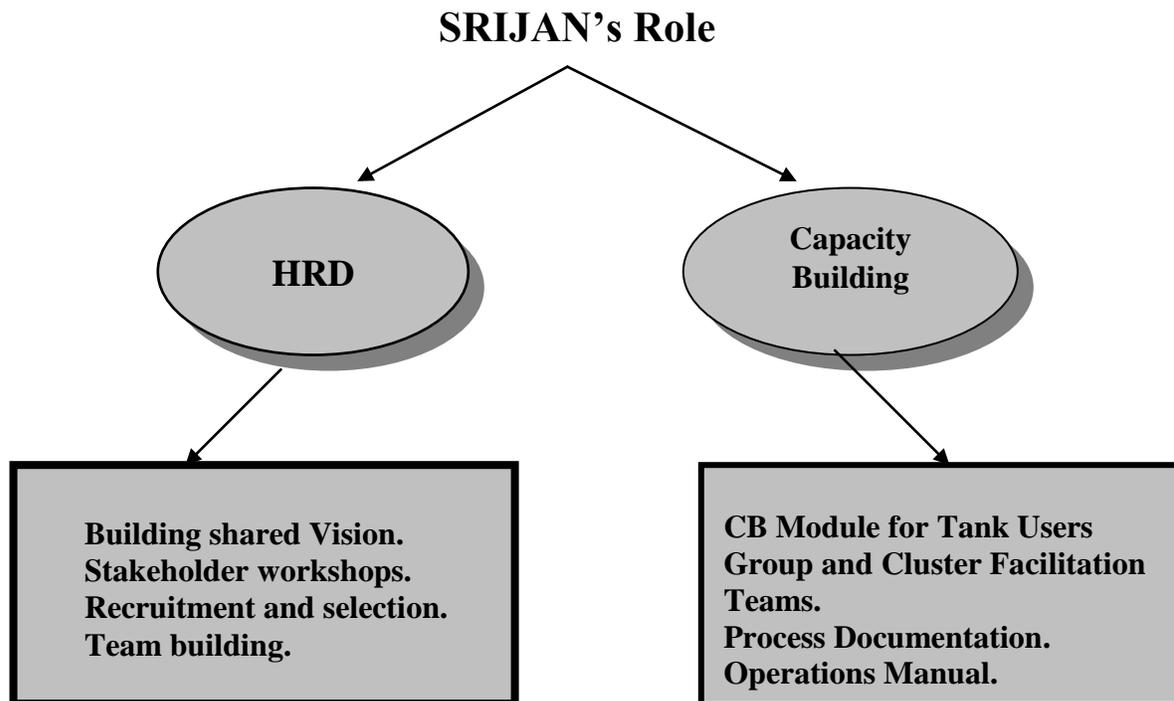
Organogram for Karnataka Community Based Management of Tanks Project



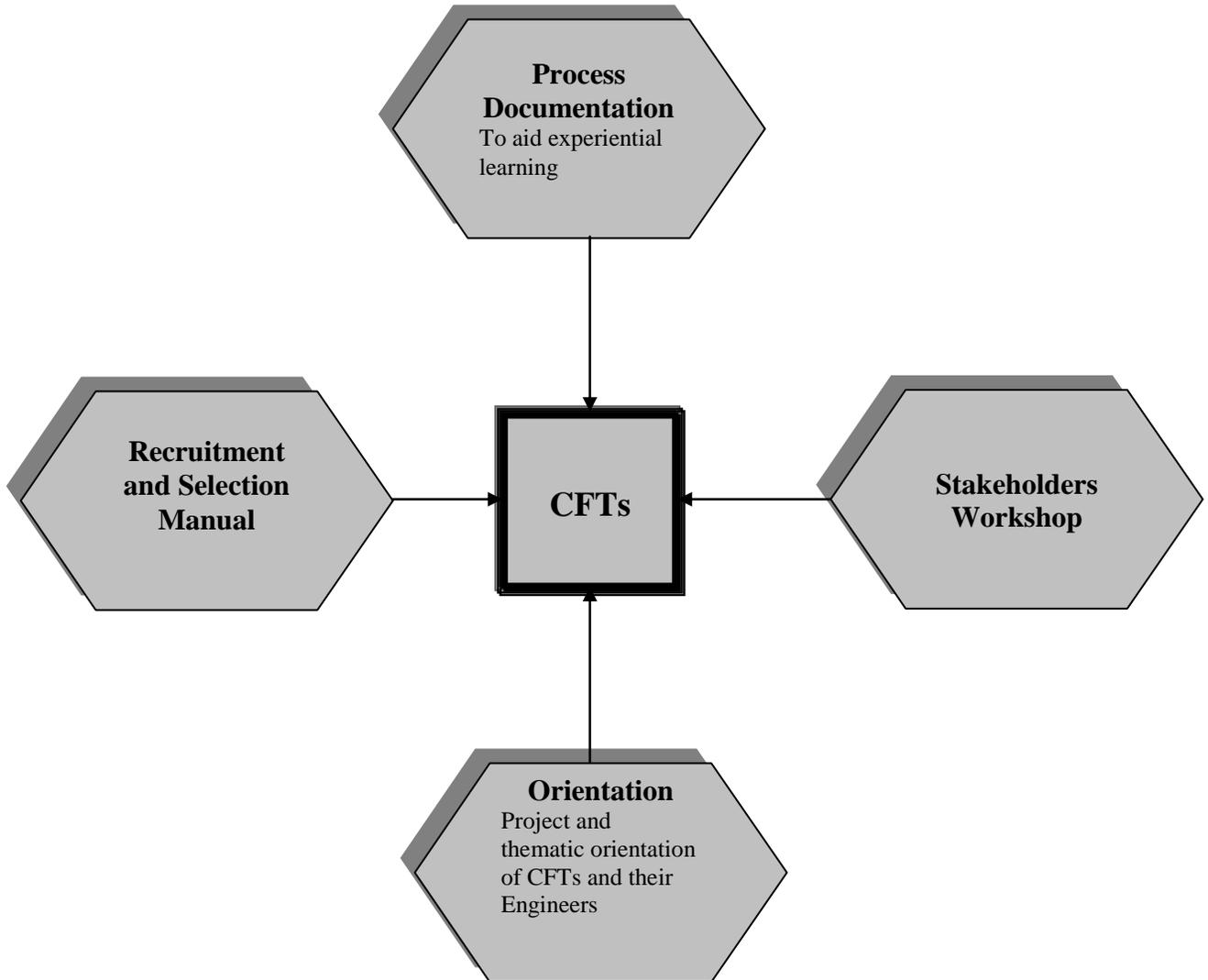
SRIJAN will contribute in this Rs 6705.10 million project by working to *build the capacity of the Cluster Facilitator Teams (CFTs) and the Tank Users Groups (TUGs)* responsible for the direct implementation of the project.

Lately there has been increased realisation of the need of focussing on the development of human resources. This trend is symptomatic of the paradigmatic shift that has taken place even in the concern of the organisational theories that have advanced from being obsessed with scientific management to placing paramount importance on human resource. This has implied a shift from goal orientation to process orientation wherein the human factor, in its turn, has become central. This, as Azim Premji once said has, “turned the entire logic of doing business on its head”.

Human Resource Development (HRD) aims to increase the ‘enabling capabilities’ of the organisation/group in question by improving their problem solving capabilities and diagnostic skills. It helps the individuals in the organisation/group to recognise their potential and helps them contribute their best in various roles that they are expected to perform. HRD seeks to maximise individual autonomy through increased responsibility. Decentralisation, through delegation of work and responsibility, works to encourage participative decision making thereby enhancing the people sense of ownership.

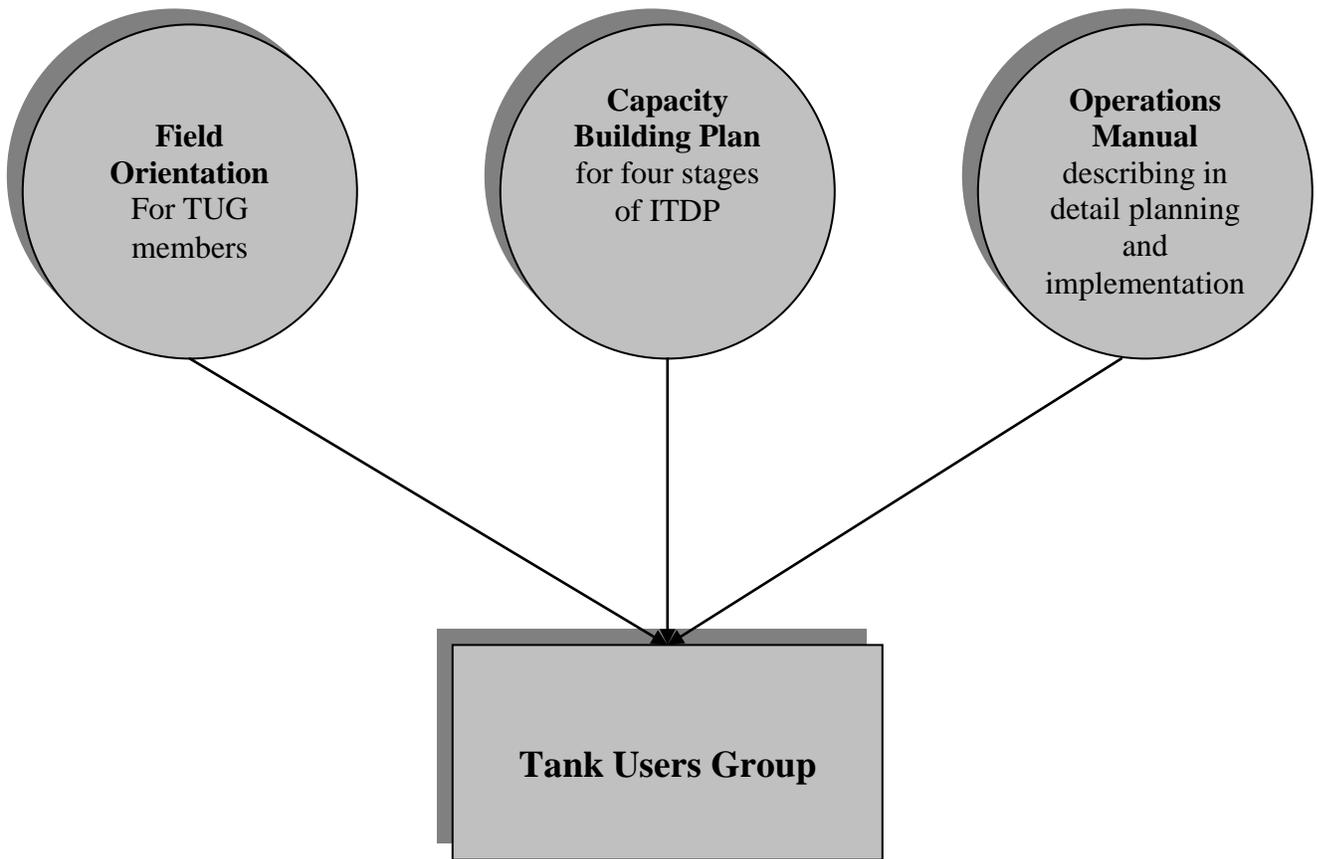


Capacity Building and Human Resource Development Activities for Cluster Facilitation Teams



By focussing on Human Resource Development SRIJAN hopes to put centrestage the importance of recruiting high quality staff and promoting a shared vision among partner Non Governmental Organisations (NGOs) and JSYS, so as to enable both, the formation of a strong team and smooth implementation.

Capacity Building of Tank Users Groups (TUGs)



In building the capacity of the tank users SRIJAN hopes to ensure participation of the traditionally marginalised farmers, which is meaningful rather than being just perfunctory.

Progress made (this section needs more input to be coherent)

For the CFTs, SRIJAN has been able to put in place a recruitment and selection system and organise a project orientation programme.

For the TUGs, SRIJAN has developed an Operations Manual and devised a plan for building the capacity of the members.

This however has been hard to accomplish. There has been inadequate time for understanding and evolving the HRD and CB strategy. Change of leadership has led to a shift in focus away from capacity building and the need of building a team. Bigotry to stated vision has closed people to the idea of incorporating different perspectives, which has been highly detrimental to the larger cause of the project.

Planning Support to DPIP MP for Chandela Taal Rehabilitation in Tikamgarh and Chattarpur District

SRIJAN is involved in another project in Tikamgarh and Chattarpur districts of M.P as a Sectoral Support Organisation on Tanks (SSOT) for the DPIP teams working there.

As per the agreement signed on March 27, 2003 with the MP DPIP, SRIJAN will be required:

- a) To conduct a taal census in the villages covered by DPIP in Tikamgarh and Chattarpur districts.
- b) Prepare and present Integrated Taal Development Project (ITDP) for ten taals.
- c) And do the process documentation of experience while developing ITDPs for 10 taals.

DPIP has 10 Project Facilitator Teams (PFTs) working in some 200 villages of Tikamgarh and Chattarpur.

Preparation of ITDPs would entail firstly the identification of Chandeli taals in the DPIP villages. This would be followed by a technical survey of the selected tank and social assessment of the village situation to gauge the possibility of carrying out rehabilitation work and identifying the beneficiaries.

Working as a specialised agency with expertise in tank rehabilitation work, SRIJAN will help the PFTs with the technicalities involved in the physical rehabilitation work and social dynamics that come into play while working on tanks.

Policy Research in Equitable Water Resources Management

Community Driven Integrated Water Management and Sustainable Livelihoods, Karnataka

Water resources are overexploited in a large proportion of the development blocks in Karnataka. In rural areas, agriculture, livestock, drinking and other domestic water needs are competing for surface water and more recently for groundwater, resulting in an inequity in access and unsustainable exploitation of critical groundwater resource. Lack of regulation, self or imposed by the state, exacerbates the crisis further. Needless to say the case of demand side management is a strong one. Traditionally however it is the supply side approach that has dominated the planning of various public sector water resources projects.

Of particular interest to us are the three water sector projects that have received World Bank assistance in Karnataka, namely in drinking water, tank rehabilitation, and watershed management. These projects address related problems, but in a compartmentalised manner. Investments in one project do not appear to complement those being made by others. Barring one district, Haveri, there is no district where all three projects overlap.

Each project is managed by a different agency right down to the village level. There is no single institution of stakeholders at the micro river basin level that could potentially look at these issues holistically and promote a demand side approach.

KEY FACTORS	WATERSHED	TANKS	DRINKING WATER
Primary Stakeholders	Rainfed agriculture farmers and livestock farmers	Command and catchment area farmers and fishermen	Entire Community
Contribution	Cash and labour	Cash, kind and labour	Cash
Institutional Arrangement	MWMC	TUG or GP	GP

Supported by Sri Ratan Tata Trust, SRIJAN has initiated a research project that assesses competing water demands, analyses the impact of competition and rapidly depleting water resources on access and equity of distribution and reviews management regimes of tanks, watershed and drinking water infrastructure.

Through the study SRIJAN hopes to demonstrate a model for integrated water management and sustainable livelihoods in a sub river basin.

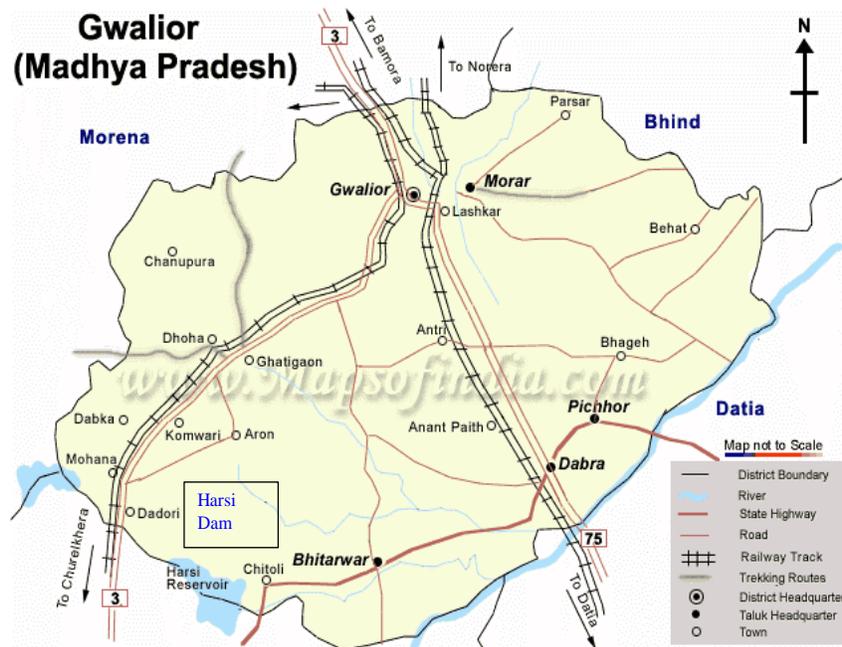
Demonstration of the model rests on the following assumptions:

- Drinking water for all could be a priority over irrigation in village communities.
- Farmers are willing to turn irrigation tanks into groundwater percolation tanks.
- Watershed community sees recharge as the major benefit from watershed development, apart from fodder.
- Water literacy is imperative for efficient and sustainable water management.
- Farmers could be convinced to shift to less water consuming but equally remunerative crops.
- Multi community sub basin integrated water management approach captures trade off of water use management and competing use, and introduces efficiency in public investments.

In the research study SRIJAN seeks to test the above hypothesis and based on these aims to generate options and actionable recommendations for communities to manage water equitably and holistically, whereby integration of groundwater with surface water management, will help create sustainable livelihoods.

Pro Poor Interventions in Canal Irrigated Areas in M.P.

Sponsored by Asian Development Bank, SRIJAN conducted a study in the two irrigation systems of Harsi in the Gwalior district and Halali in the Vidisha district.



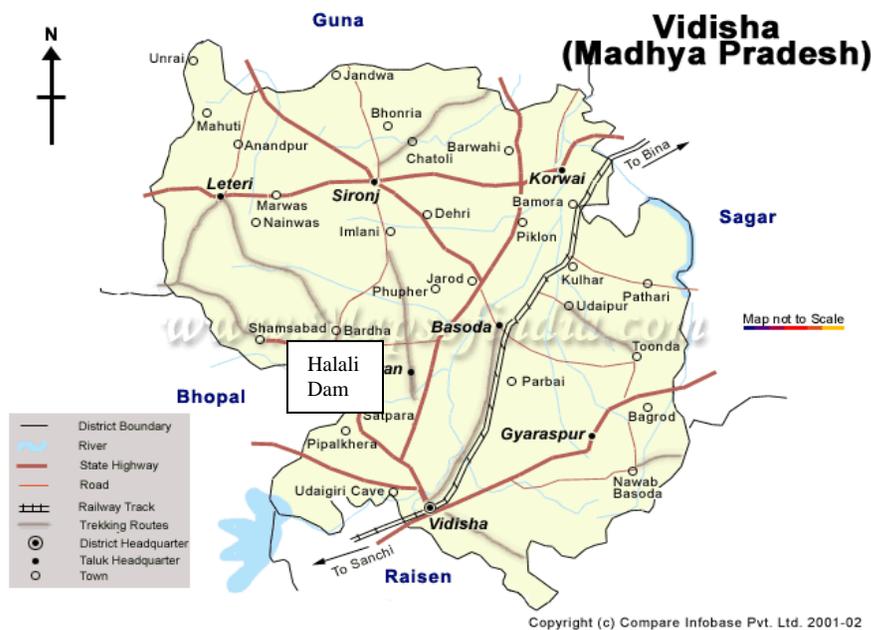
The following table gives the details of agriculture and irrigation in Gwalior district. The figure pertains to the year 1993-94 the year till which official statistics is available².

Crops sown and Area irrigated

District	Gross sown area	Net sown area	Hectares	
			Gross irrigated area	Net Irrigated area
Gwalior	290470	268792	137530	120163

Irrigation Pattern

District	Net Irrigated Area	Sources of irrigation				
		Canal	Tube well	Dug wells	Other sources	Total
Gwalior	120163	64642	3952	43355	8214	120163



The following table gives the details of agriculture and irrigation in Vidisha district. The figure pertains to the year 1993-94 the year till which official data is available³.

Crops sown and Area irrigated

District	Gross sown area	Net sown area	Hectares	
			Gross irrigated area	Net Irrigated area
Vidisha	581133	523812	86562	86562

² Source: District Census Handbook

³ Source: District Census Handbook

Irrigation Pattern

District	Net Irrigated Area	Sources Of Irrigation				
		Canal	Tube wells	Dug wells	Other sources	Total
Vidisha	86562	29324	8545	15329	33364	86562

Madhya Pradesh has eight large irrigation systems the details of which are as under:

S.No	Name of the Project	District	Designed Command Area (Hectares)	Year of Completion
01	Sukhta	Khandwa	18,600	1983
02	Barna	Sehore/Raisen	60,510	June 2002
03	Tawa	Hoshangabad	333,000	1996
04	Rangawa	Chattarpur	17,000	1993
05	Halali	Vidisha/Raisen	37,000	1998
06	Bhander	Datia/Bhind	44,500	1981
07	Chambal	Bhind/Morena	273,000	1970
08	Harsi	Gwalior	68,000	1934

The choice of the irrigation systems was based on the following considerations:

- The systems should be large enough to give us the opportunity to study a range of issues including institutional, social and technical. A small system covering a few villages may not give us the opportunity to understand the complexities and dynamics involved in operating system. At the same time the system should not be so large that it takes us significant time in trying to get a grip of the system.
- The systems should have significant difference in social, institutional and techno-physical dimensions for us to get a wider and better understanding of the functioning of the irrigation systems in M.P. as a whole.

On basis of the field visits, consultation with the WRD officials and keeping the above factors in mind, the above-mentioned Irrigation systems were selected for detailed study.

The study used tools like Household Survey, Participatory Rural Appraisal exercises, Focussed Group Discussions, Interviews with key personnel and Review of Secondary Data to test the following hypothesis:

- Command area of specific canal reaches receiving less irrigation water per ha has lower productivity and a higher incidence of poverty.
- Under existing conditions, small, marginal and poor farmers receive fewer benefits from irrigation than large and non-poor farmers do.
- The greater the degree of Operation and Maintenance cost recovery the better the operation of the irrigation system.
- Effective implementation of PIM/IMT leads to improved irrigation system performance, which in turn reduces poverty.

- An absence of clearly defined water allocation and distribution, and absence of effective and clear water rights (formal and informal) adversely affects the poor more than non-poor.
- There is scope for improving performance of irrigation systems under existing conditions, with effective and improved institutional arrangements.

Collation and analysis of the data collected, apart from substantiating all the above hypothesis, drew attention to certain crucial observations and issues. It was found that

- While irrigation definitely resulted in increased productivity, intense pockets of poverty existed even in irrigated areas.
- Apart from head and tail, factors of caste and class play an important role in the allocation of water, especially during water scarcity.
- Most WUA Presidents being large powerful farmers, ensuring representation of the interests of the small poor farmers would be a herculean task.
- Poor are likely to benefit more from setting up of norms than through physical rehabilitation. This however still seems farfetched as the irrigation department continues to control the system.
- Systemic changes would require intervention of specialised agencies like NGOs, which can work to build the capacity of the poor farmers and thus help generate shifts of an institutional order.