Our Talai: Sangathan members of village Khaari Chaabri in district Churu, Rajasthan

Water, like religion and ideology, has the power to move millions of people. Since the birth of human civilization, people have moved to settle close to it. People move when there is too little of it. People move when there is too much of it. People journey down it. People write, sing and dance about it. People fight over it. And all people, everywhere and everyday need it.

Mikhail Gorbachev, President
Green Cross International

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SEARCH FOR WATER SECURITY

Search For Water Security

Contents

The study on SCRIA's work in southern Haryana and northern Rajasthan is pitched against the ground realities that have gone through dramatic changes ever since the work was initiated 25 years ago. This study would not have been possible without the generous sharing of ground realities & interesting insights by women & men from villages in Rewari, Alwar and Churu. The publication of this booklet is through the generosity of Royal Norwegian Embassy New Delhi. Their support and understanding is gratefully acknowledged.

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SCRIA at a glance

Vision

Sustainable rural development by rural communities

Mission

Building capacities of rural communities for their active & meaningful participation in self governance processes

Outreach

Villages in the districts of Rewari, Mohindergarh, Jhajhhar, Gurgaon in Southern Haryana
and Alwar, Bikaner, Churu in Northern Rajasthan in north west India

Development initiatives

Svashaasan

Women sangathans for social & economic justice
Women in self-governance processes
Men & youth mobilization for good governance & social change

Samridhi

Promotion of rural entrepreneurship & craftsperson
Micro finance program
Fair trade

Sampada Prakritik

Water harvesting
Soil conservation
Vegetation -plantation & regeneration
Alternate energy - extension & research

Partners in progress

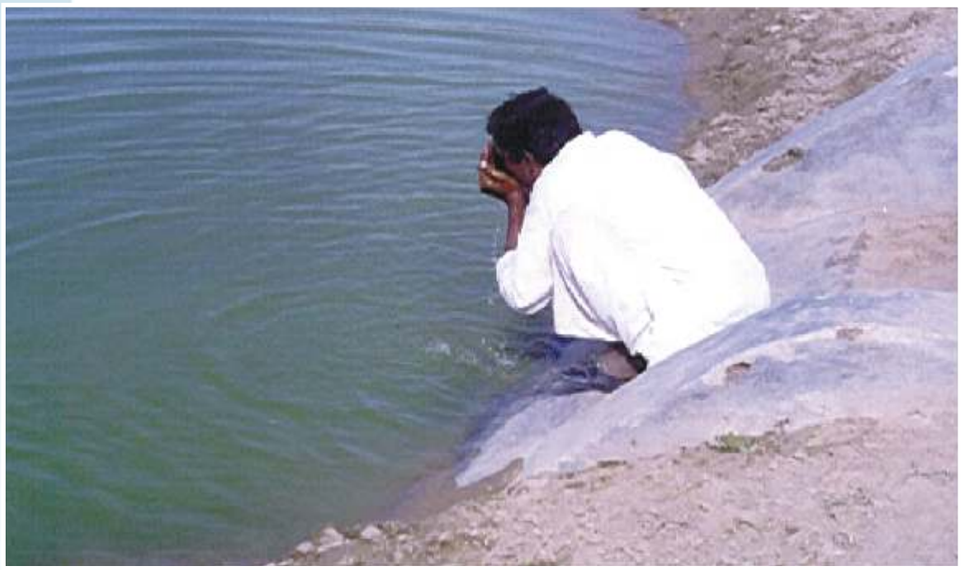
• 9000 volunteers in 830 villages • Australian High Commission
• British High Commission • Canadian High Commission • CAPART
• Department of Science & Technology • CTM - Italy
• Embassy of Federal Republic of Germany • Embassy of Japan • Embassy of Sweden
• European Union • Friedrich Ebert Stiftung • German Agro Action • Helpage
• Habitat for Humanity International • Indian Council for Agricultural Research
• Indo Global Social Service Society • Ministry of Non Conventional Energy Sources
• Ministry of Panchayati Raj • Ministry of Rural Development • Misereor
• One Village - U.K. • Oxfam - U.K. • Rashtriya Mahila Kosh • Rotary International
• Royal Norwegian Embassy • SIDBI • Solidar' Monde
• Swiss Development Cooperation • UNDP.

that-be at equal levels. The 'de-responsiblization' of communities in the post-independence era has had its impact on the current state of peoples' mind. Through local governance an opportunity has been created which need to be harnessed through the connectivity in the emerging 'right to information' environment.

Promote knowledge advocacy

At the core of intended transformation in strategy is the need for creating knowledge that has fingers on changing policy environment and rapidly transforming socio-economic conditions in the society. The multi-stakeholders platform based on knowledge can be pitched to generate requisite energy in helping promote the process of public policy. SCRIA may need to gear up for a newfound role in scaling up the impact of its work through partnerships at various levels.
World over the focus is shifting towards the 'knowledge paradigm' for addressing the millennium development goals. The challenge for SCRIA is to create knowledge capsules around critical areas of its intervention and experience. Such knowledge capsules are also being referred to as 'solution exchange'.

All these three steps, listed above, are interlinked and supplement each other in enhancing the role of the organization.



Traditional rain water harvesting structure quenching thirst

Few kilometers from national capital towards south west is another region, committed to adopt development that may not necessarily match its resource base, its environment, its culture and the rest. Yet, larger picture of development has been perceived as a promise to be sprayed democratically across the country.

A bleak land

Harsh climatic conditions characterize the region where SCRIA has been working for the last 26 years. The entire region of South Haryana is semi-arid in nature whereas Northwest Rajasthan is extremely arid with desert conditions prevailing there. Extensive deforestation and illegal mining in the Aravalli range, especially in the last sixty years, has hastened the process of desertification. Overgrazing and expansion of agriculture into marginal lands with declining forest cover have been other contributory factors.

Development in the rain shadow zone of southern Haryana and northern Rajasthan mainly in Alwar and Jhunjhunu districts of Rajasthan have indeed proved counter productive to the region”

natural resource base. Imitating green revolution in the 1970's, this region except Churu and Bikaner districts due to high investment verses low economic viability, responded with equal zeal in adopting irrigated agriculture. Oblivious of the fact that there have been no irrigation provisions worth the name in the region, ground water became the unintended victim of the new cropping pattern. The increase in population & shift from rain fed to irrigation intensive crops have brought the region at par; though the corresponding cost paid through ground water decline has slid the region into dark zone of hopelessness. Interestingly, at the beginning of the green revolution era farmers were lured through subsidies on sprinklers and pumps to shift to cash crops.

Water is both a social good as well as political tool in the region, used with convenience by the respective proponents. The catch is that majority of the region comprising of Mewat, Gurgaon, Jhajjar, Rewari, Mohindergarh, Bhiwani districts of Haryana and Alwar and Jhunjhunu districts of Rajasthan are part of the watersheds that exist in political boundaries of the adjoining states of Haryana and Rajasthan. Over the years the seasonal flows into the region have all been harvested in the upper catchments, leaving these areas high and dry.

Waiting for water

Chotto Kanwar & others

The entire region faces a chronic shortage of water for drinking and irrigation purposes. Traditionally, villagers in arid areas depended on community wells, village ponds locally called Johads and Talais to meet their water needs. During summer, Johads and Talais too dry up with the result that village women have to trudge for 4-5 kms to fetch water. Often, large pockets of ground water are highly saline, making it unfit for any use. Chotto Kanwar from Charanwasi village in Rajasthan says, “The only source of sweet water is in the neighbouring village, an hour's walk across sand dunes. The other option is to buy water from a tanker. The cost comes to Rs. 400-500 each month! Not all can afford to pay such a price.”

Increased dependence on the government to provide drinking and irrigation water has eroded community management of traditional systems of water conservation and harvesting structures. As a result, it is not uncommon to find traditional water structures neglected and falling into disrepair.

Economy of the region: Dependent on nature

Subsistence agriculture, mainly rain-fed with limited irrigation facilities, is the mainstay of the rural economy in South Haryana. Landholdings are small and fragmented with marginal farmers comprising the majority of the population here. In Northwest Rajasthan there is total dependency on regular monsoons for growing dry land crops such as bajra (pearl millet), jowar (sorghum) and other millets once a year. Over 90% of the population is engaged in livestock rearing which is their primary asset during the stress periods..

Dependency on rain-fed agriculture creates insecurity during times of monsoon failure or droughts. Marginal farmers and land-less agricultural workers are the hardest hit for they lack savings to help tide over such times. The only options are either migrate to nearby towns and industrial centres to work as unskilled laborers or stay back and pray for a drought relief program to be initiated in the village. Lack of food security and unavailability of other forms of work commonly forces the poor to take loans at exorbitant rates of interest from local moneylenders. Inability to repay it pushes them into further indebtedness and they often end up loosing their small piece of land or their belongings to the moneylender.

This vulnerability is exacerbated by a new trend that has emerged in Haryana in the last two decades in agricultural practice. Farmers here have taken to cultivate wheat, a crop that requires intensive inputs of water, fertilizers and pesticides. Today, the situation here is characterized by rapidly increasing input costs, declining yields, degradation of soil and plant cover, declining ground water table and severe shortages in drinking water, fodder and fuel-wood.

Gurdial Singh, 71, has been SCRIA's long time associate and friend. Hailing from the Rajpura village in Haryana, he has been witness to growth of SCRIA's developmental activities ever since the institution was established. He vividly recalls that during his childhood there were no more than 100 households and 2 open wells in his village. Cooperation and conservation were the twin-mantra of what sustained life in the village during those days.

Today, his village has 400 pucca houses in comparison to 100 mud houses of the yesteryears. The village now has 56 tube wells pumping water from a depth of over 400 feet, rendering the 2 open wells dry. He is piqued at the manner in which unscrupulous growth has changed human perceptions. Says he, "the houses might be pucca but the inhabitants are not." Though cash flow might have increased, the village is poor in hygiene and general upkeep.

Dwindling groundwater reserves

Given the rate at which groundwater reserves are getting depleted in the region, SCRIA faces formidable challenge to not only make substantive contribution at the ground level but to bring about significant change in public policy towards a water secure future. Providing water for drinking, recharging of groundwater and promoting harvesting of rainwater seem most rational approaches towards building water security. Tragically, at times water exploitation by vested interests far outstrips the impact of conservation efforts.

District	1996	1998	2000	2002	2004
Rohtak	3.95	3.59	4.49	4.84	5.12
Rewari	12.76	13.23	14.03	16.28	18.61
Mohindergarh	25.27	24.13	27.76	25.73	36.40
Gurgaon	11.03	10.15	11.33	13.18	13.28
Jhajjar	4.34	4.51	4.97	5.79	5.64

Source: Agriculture Department, Haryana **pre-monsoon levels (in metres) measured in June each year*

SCRIA as an institution has been in thick of contrasting perceptions for over two and a half decades. While fulfilling its commitment to serve the people, the institution has kept its learning antenna in place. This report captures the growth, the learning and the strategy of an institution that seems to be growing younger by the year.

This document is more than mere reporting of SCRIA's accomplishments. It captures the challenges it has encountered and the contradictions it has confronted in its work. It also tries to assess how indeed it has handled externalities and what learning's have emerged in the process. Neither has socio-economic conditions remained static nor has SCRIA's approach to trigger change. Therefore, the task has been to assess SCRIA's strategy against a dynamic system.

It goes without saying that an institution in the social domain has its limitations and despite best of intentions can only stretch its reach as far. Neither is it a proxy for the State nor is it so intended. Yet, by design social action tends to reach the 'un-reached' even if it doesn't consider itself to be a parallel service delivery agency. Isn't it a

paradox of being in the business of social action and change?
The impact of SCRIA's work has been commendable, into the remotest of villages in its outreach area under some of the most compelling human conditions. Yet, it tends to fit into the definition of those institutions that aim to bring about change at the micro level from the perspective of transformation at the macro. By setting up creative initiatives under adverse conditions across its area of outreach, SCRIA seems to have moved into the next stage of advocating effective governance for sustaining and enlarging the impact of its collaborative work with the communities.

Yet, there is room for introspection analyzing how the problem was diagnosed and solutions designed; assessing how the strategy kept pace with the changing socio-economic conditions in view; and learning how strategies have been made to work against odds. The proceeding sections of this report provide enough evidences of the outreach and the coverage of SCRIA's work. However, the analysis is aimed at providing insights into the inherent strengths of the institution that are taking it into the next stage of engagement with the stakeholders at various levels.

Celebrating the completion of a Tankaa at Himasar ki dhaani

Way back in 1979, it may have been a difficult choice to select an area for long-term engagement for meeting the challenges of poverty and under-development in southern Haryana. Bounded by Rohtak district in the north, by Gurgaon district in the northeast and by Alwar district of Rajasthan in much of the south, Rewari [part of Mohindergarh district till it was carved out as a separate district in 1989] seemed central to the region. Established over a thousand years ago by Raja Rao and named after her daughter Rewati, the district with its rich historical legacy and poor human development indices proved perfect nesting ground for the team led by Sunder Lal. Setting up their workplace on the slopes of an Aravali hillock in the sleepy village of Khori, the small step from a rented house amongst the 300-households has now grown into an institution that is called Social Centre for Rural Initiative and Advancement with an acronym SCRIA, meaning active.

SCRIA spent the first two years traveling from village to village to establish close contact with the people. This also gave the group first hand knowledge of the problems endemic to this region and helped identify the twin issues of women's empowerment and sustainable management of natural resources that needed immediate intervention. Moreover, it quelled, to a large extent, the hostility that the group being outsiders, had to face from suspicious rural folk.

Undoubtedly, number of villages in the area became the testing ground for a set of activities ranging from promotion of energy saving devices to regeneration of water resources. Given the prevailing water

shortages across villages, SCRIA began to develop programs for improving drinking water situation in the villages.

Initially, SCRIA acted as service provider to rural communities by helping them secure grants and technical assistance from various government agencies to flush out mud from their wells, de-silt village ponds or install hand pumps. “Our aim was to provide information and technical support so that they could access such schemes on their own”, recollects Sunder Lal, Director, SCRIA. Working with farmers groups on water, natural resource management and soil conservation methods gave SCRIA a bigger profile in the region and gradually enabled the organization to gain respect and confidence of the entire community.

Putting across their point of view at a village meeting

According to Sunder Lal, “We could not just come in and insist that people change mindsets overnight. To bring about lasting change in society, we had to adopt a multi-pronged approach. As the problem of water and natural resources impacted men and women almost equally, we decided to make this our entry point.”

SCRIA insisted that communities consult women in taking decisions to choose the location for installing hand pumps, constructing water harvesting structures, establishing fuel & fodder zones, etc.. As well, women were motivated to become primary agents of change. The underlying objective was to gradually ease in women and others in decision-making processes so that they could emerge as equal partners in progress.

SCRIA has had an engaging portfolio of actions and interventions that were and still are towards conserving each drop that falls in the given area. From reviving ponds/talai to watershed development and from sinking hand pumps to installing rooftop rainwater harvesting structures, SCRIA has had a broad canvas of water related programs that had community engagement as an essential component all throughout. Interestingly, some of the current buzzwords like rainwater harvesting have been part of SCRIA's work since the early 1980's.

The number of interventions has continued to grow. In effect, it has taken significant learnings from its work in southern Haryana into its portfolio of activities related to water conservation through traditional systems in the desert villages of Churu in Rajasthan.

A pond providing drinking water & recharging ground water at Balera village watershed eco zone

Jal Jungle Jameen Sangathan of Himasar ki Dhaani, Churu

SCRIA's natural resource management program called “Sampada Prakritik” has been striving for empowering the village communities through capacity building and infrastructure development for an effective and sustainable natural resource management

Building community commitment

SCRIA firmly believes that for any effort to be sustainable the people must initiate development themselves. A basic prerequisite for this is the capacity of people to identify and articulate their own problems, find ways to tackle them, generate or mobilize resources for initiating and implementing it to meet their objectives. To attain this purpose capacity building includes training, sensitization campaigns, padyatras, organizing people for participation in decision-making processes, enabling multi stakeholder partnerships and open forums for dialogue. No infrastructure development initiative is facilitated without active participation of all stakeholders especially women. As such watersheds & other initiatives have been a kickoff for other desired social, political & economic development initiatives.

Promoting community based decision-making process Scria Sangathans [village level women groups] are exclusively involved in all community initiatives, right from program conception & planning stage to being responsible for the work plan, purchasing of material, selection of people to be involved in work, management of the day to day implementation with the technical assistance of unit's team and post completion care. Men are involved in supportive role only.

Sampada Prakritik Natural Resources

Vision

Effective and sustainable natural resource management for people's sustenance

Mission

Empowerment of village communities for efficient management of water, soil, vegetation, fodder & fuel

Development initiatives

- Promote water harvesting & prudent usage practices
- Soil conservation, improved dry land agricultural practices
- Vegetation, plantation & regeneration

A watershed of an idea

Severe drought had affected the region in 1987. Located within the village confines SCRIA had been close to the sufferings of people in Khori village. Come rains and the situation would be no less daunting either. Boulders, stones and water would descend from the slopes of the adjoining ridge and affect villages as far as five kilometers downstream.

Plantation work ongoing at Chawandi watershed eco zone

SCRIA shared an idea of hitting two birds with one stone with the affected community. In consultation with the then Sarpanch Mangtu Ram, the concept of developing a watershed was mooted. The silt from the village pond was excavated to create a percolation tank to conserve free flowing debris from the ridge. Village enforced social fencing for regeneration of the slopes. A watershed project that had integrated slope protection, soil conservation and social fencing was on a roll. Completed before the onset of rains in 1988, the structure was completed at a cost of Rs 150,000 only. It was the first such initiative in the region and proved a model for others.

The impact of the work stretches beyond imagination. Till today, the benefits of the structure are being harvested not only by villagers in Khori but by several downstream villages as well. Water table has gone up in the area. Since soil composition doesn't encourage surface storage, groundwater recharge has been the greatest gain. Though it has been long since the project was completed, social fencing is still in force that not only protects the structure but farmers' fields from undesired rain of rubbles and boulders. The village Panchayat manages all and any maintenance.

Eco Zone Balera

Balera village in the southern part of Churu district is a perennially drought prone region. The village is on the foothills of rocky ridges, which are part of the Aravali range. Few years' back there was no source of clean & potable drinking water. The village had only one well & two hand pumps. All these three sources had very salty water which was of no use to the villagers hence they were forced to travel 6 kms to nearby Gopalpura village for water. At Gopalpura pond the water was less salty but it was a source from where sheep, goats, camels & other cattle all drank & bathed. On top of all this whenever it rained the speedy flow of water from the 15 km long Aravali ridge brought with it big boulders, rocks & pebbles, created gullies and washed away topsoil from the fields. This affected 6 other villages also.

Balera sangathan discussing issues at monthly meeting

SCRIA was working in the region on water harvesting and in 1995 a group of farmers from Balera village approached SCRIA and requested assistance in water harvesting & soil conservation. After several village level meetings & consultation a plan was mooted aimed at developing an eco zone.

A village level consultation cum coordination committee was set up to look after the day-to-day management of the program. Water harvesting structures like check dams, gully plugs, drop structures, earthen bunds, percolation ponds etc. were constructed over the 15 km stretch. Stone pitching, grass sodding, field bunding too was done. Pastureland was developed and afforestation through plantation & natural regeneration. Long derelict village pond was desilted & renovated as a result of which better percolation of rain water took place & within couple of years the hand pump near it bore sweet water!

A village fund has being established by the committee that will enable them to maintain ponds & other rainwater harvesting structures on their own once the program is over. Till date more than INR 12000/- have been collected for the purpose.

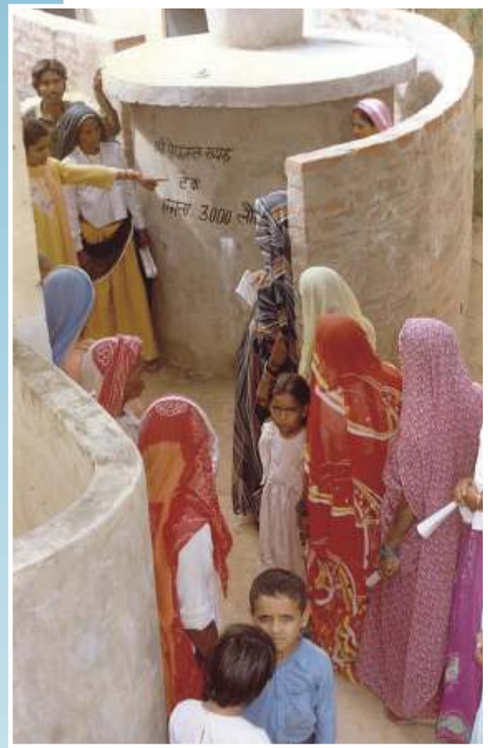
The most positive result of the program in the village was fostering of the participatory spirit of working together as a well-coordinated team among the people from different castes & communities. The village now manages the upkeep of the developed zone and very actively participates in SCRIA's various social, political & economic empowerment programs.

Tapping water

Since early 1980's SCRIA has undertaken numerous infrastructure development initiatives with communities for tapping water in

Type	Intervention	Villages Covered	Beneficiaries
Pond/*Talai*	114	86	14,841
Rainwater Harvesting Tank/*Tanka*	1696	412	36,688
Hand pumps	464	348	30,438
Desilting of wells	30	21	10,049
Laying pipeline	1	1	1,120
Watershed projects	14	18	42,000
Check dams/bunds	102	34	4,700
Farm bunds (in ha)	544	43	1,463

**cumulative figures for the period 1985-2004*



Promoting roof rain water harvesting tank

the region. The table illustrates the efforts.

Rays of hope

Amidst a paradigm of market economy wherein vested interests rule the roost, there are initiatives driven by compassion for nature and natural resources that offer a glimmer of hope. Bawana-gujjar is one such village in Rewari that is building up an institutional decision-making process to trigger change. Having been associated with SCRIA for several years, the key message(s) seem to be getting internalized. Village has decided to do away with decentralized household water connection in favor of communal storage and centralized distribution. Not only does such a move encourage conservation it helps everybody get a feel of what is the status of the resource at hand.

Batori village, on the other hand, has seen the ground water table sink to depths of 100 feet or more in the past two decades. Unless there is crop diversification in favor of water-saving crops, the numbers of people who sink tube wells may go unchecked. Consequently the village has now initiated steps to revert to crops that conserve water alongside a decision that those who draw groundwater will have the onus of reinvesting into water recharging.

Equity at work

SCRIA has been mindful of ensuring equity in watershed & other initiatives. This has been ensured in decision-making process through participatory institutions, in participation, in community contribution and by ensuring gender wage parity.

Developing institutional mechanism is a definite pre-requisite to equity. Initially SCRIA faced problem of equitable distribution of benefits, which it overcame through innovative institutional mechanism in the form of Jal Jungle Jameen Sanghathans. This people's institution provided the much needed institutional support to its work at the grassroots. This indeed has been the strength of SCRIA's two and a half decade of work amongst villagers in the districts of Haryana and Rajasthan.

However, neither can these groups/sangathans replace the existing institutions nor can they be proxy to them. Although Panchayats at the village level now have the constitutional mandate to spearhead development, it still remains within the ambit of top-down subsidy or grant driven paradigm. Though the structure of Panchayats does create institutional space for community voices, the same has thus far been usurped by the powers-that-be in the villages. It seems a mandatory long-drawn out process to seek meaningful engagement and involvement of Panchayats in taking control of the situation.

Institution that works!

Given the fact that the traditional social institutions, for a variety of reasons, are on their lowest ebb, SCRIA has adopted an innovative

Sangathan of village Baapeu, Bikaner: Taking a lead in reviving traditional practices in water conservation

approach to revive them. Every initiative for the development of an eco zone is marked with the formation of a village level committee known as Jal Jungle Jameen Sangathan. The Sangathan is a representative body whose members are nominated by the people during village level meetings. It is through these organizations that SCRIA implements its programs at the village level.

The Sangathan is involved right from the program conception and planning stage and is made responsible for the work plan and its implementation. Every Sangathan has an average of 15-20 members. Efforts are ceaselessly made to involve women in the membership of the Sangathan. As far as possible, the decisions by the Sangathan are unanimous.

For effective operations and maintenance of the facility/ intervention, the Sangathan creates a fund called Jal Jungle Jameen Kosh. The fund for the kosh is raised by charging membership fees from the Sangathan members, donations from the villagers and sale proceeds of fuel-fodder from the eco zone. So far, the Sangathan have been engaged in water harvesting, soil conservation, vegetation regeneration and plantation activities.

Converging opportunities

SCRIA's sustained engagement on water issues has been pitched against conflicting individual interests; emerging communal crisis and growing externalities that impact innovations on the ground. Given the site-specificity of the problem, interventions have been meticulously planned. From resolving the household need to meeting community requirements, the interventions have tried to address the problems in their totality. Despite reasonable success in its work, the challenge has been to upscale them and weave them around an institutional structure that sustains them.

SCRIA is convinced that it needs to work closely with Panchayats to create a synergy of actions and approaches. But the socio-political environment in which Panchayats function has created a plethora of hurdles for playing any positive sum game with them. Yet, there remains an opportunity that would need to be harnessed in the years ahead. Needles to say, grants and subsidies have remained the biggest enemy of Panchayat Raj system. The Panchayats dependence on resources from the district has made it a puppet in the hands of the government, belittling the spirit of decentralization. SCRIA is consistently engaged in the work to bring the spirit of local governance in the Panchayat's functioning.

Critical issue is that of grant-led development that has not only failed to elicit 'public cooperation' but has eroded the decentralized nature of managing natural resources through local institutions. The impact and the reach of the institutional erosion assume special significance in this region of least precipitation. Not only has the legitimacy of the local institutions been undermined, the emphasis seems to have been on taking further control by creating institutions that remain subservient to the state than the people.

Despite odds stacked against it, SCRIA has scaled up its pace of work to create space for converging opportunities of local governance, of resource crisis, of enlightened villagers and of women leadership to create the necessary push for addressing the systemic malaise that has deeply impacted the public policy in the country. It will be pertinent to dovetail the twin task of reducing the impact of externalities alongside scaling up of the local initiatives in creating an environment for desired change over time.

SCRIA stays active

SCRIA, acronym for Social Centre for Rural Initiative & Advancement, from a humble beginning with meager resources, has now registered its presence in over 1600 villages in 4 districts of southern Haryana

Raisarana village watershed eco zone in Alwar

and 3 districts in contiguous northern Rajasthan.

Access to drinking water and improvement in agriculture has been at the core of its activities. However, renewable energy, land development and women empowerment have featured in its work portfolio to create a vibrant self-sustaining and responsible society. Its activities are managed from four field campuses, three in village Khori and one in village Derajsar in Churu district. It has a team of 55 fulltime staff and thousands of village volunteers and supporters. Most of these are women.

SCRIA's priority towards natural resource regeneration and management is evident from the type of projects and programs it has implemented since its inception. Throughout its existence, investments in water-related activities have attracted over 40 per cent of its annual budget provisions. With water being the most critical issue in the region, SCRIA has made significant contribution to water development and conservation work in its operational area. To meet immediate drinking water needs, it has contributed selective hand pump installation as well as desilting of wells. In effect, SCRIA has contributed to sustainable water conservation and regeneration efforts through revival of traditional ponds, de-silting of village wells, promoting field bunds, tanka construction, roof water harvesting and watershed development.

Though SCRIA has completed two and a half decades of its existence as an institution in public domain, it is on the threshold of reinventing itself to be more effective.

Though the thrust of SCRIA's multi-dimensional work has been on re-building and re-strengthening people's science around natural resource conservation and management, the prevailing socio-economic and market-driven contradictions often threaten to reduce the impact of its interventions. While it has focused on reviving the time-tested water harvesting systems with the firm belief that it has been people's science that should be brought back to the people, the institutional mechanism around such systems has been hard to re-build.

It is a constant struggle that SCRIA has been waging to redefine a development paradigm that reinforces the value of institutions as the essential drivers for change. Given the social, economic, political and religious parameters around which the communities have been compartmentalized, dissolving such invisible barriers remains the sole bottleneck to get the impact of development percolate deep down. Over the years SCRIA has realized that an apolitical process based on fund-driven technology can impact the prevailing contradictions only as much!

Past two and a half decades of being on the ground has been a package of desperation and excitement rolled into one. If contradictions pull the steam out of the initiatives, there are rays of hope that reignite the fire of commitment and conviction. SCRIA has had its share and contribution for developing sustainable alternatives for the rural poor. Interestingly, SCRIA has not been shying away such challenges. Conversely, it is seized of the fact that promises by the government programs have largely remained unfulfilled and yet these have been instrumental in eroding some of the traditional practices along with the social institutions that sustained them.

Highlighting the importance of trees in our lives through street theatre

A traditional taanka at village Bhichri

As mentioned earlier in the report for the past few years SCRIA has been working towards restoring the faith of people in their traditional practices and social management of natural resources based on the principle of social equality. The approach has been to make people realize the inevitability of it being the only tangible solution in overcoming the chronic problem of fresh water availability. In its outreach area in Rajasthan, which has a rich tradition of harvesting rainwater organization has been intensively working on revival of traditional practices in water harvesting & agriculture.

In different parts of the state there are many different traditional ways for water harvesting. Tanka/ kund, talai are popular rainwater harvesting structures in Churu district. Before independence rich folks got them built for community as part of their pious contribution to the community. The generosity of a rich person was judged by the community on the basis of number of water harvesting bodies sponsored by an individual.

Tankaas

"Tankaas" or "kunds" are covered underground traditional rainwater harvesting structures with their own structured ground catchment surface and are made of lime & stone. They have a history of hundreds of years. These tankaas are unique to Churu region in Rajasthan and have been an integral part of the desert society. Tankaas are either individual or community owned structures. For the past 35 - 40 years tankaas have lost their appeal among the people as government tried to supply water. Moreover the traditional tankaas are expensive to build for the common farming family in this drought prone area.

A Tankaa is a source of water not only for humans but for animals too in the household and as such its value increases manifold. In many villages tankaas have facilitated marginal farming families to grow vegetables & fruit trees. They follow the technique of drip irrigation for watering limited number of fruit trees & vegetables. The desert community reveres Tankaas as sacred like other water harvesting & storing structures. Every structure has a small "Devaalya" where usually Hanumaanji is the presiding deity. SCRIA has been promoting a less expensive model of this traditional water harvesting body in an effort to revive it. Keeping space constraints it mind it has modified the traditional "ground catchment" model by promoting roof surface as catchment. Other small but significant modifications include silt catchers at water inlet points and small hand pumps fitted on tanks for drawing out water.

Nathu Kanwar's surface water harvesting tankaa at Sajansar, Bikaner

Dhapu Kanwar's roof water harvesting tankaa at Himasar, Churu

Talai

Village ponds are known as "Talai" or "Johad" in Rajasthan. They are open community water harvesting structures. Nearly every village has at least one Talai. Like Tankaas Talai too enjoy a sacred status. There are two kinds of Talais', i] kutcha - simple dug ponds with no stone pitching or masonry work and ii] pucca ponds with stone pitching or

A silted Talai not in use

masonry work on embankment or floor. Usually most of the pucca talais in the region are 70 - 100 yrs. old and have been built by local rich families. But for the past 45 50 years government's water supply schemes resulted in total neglect of traditional water harvesting systems. The unreliable & erratic water supply deepened the water crisis in the desert region. Mohan Ram of village Balera looks at the fully silted talai in the neighboring village and ruefully reminisces the days when the people in the villages were responsible for their own water supply and worked collectively to keep talais in proper condition.

Since mid 90's SCRIA has been motivating & facilitating communities to readopt talais as an integral & viable part of fresh water provider. People in the villages of Churu & Bikaner districts have once again started to embrace their traditional water harvesting structure. But desilted and renovated talais full to the brim after good rains did not solve the problem of water supply. This revival of a traditional water harvesting structure created new problems in the community where the rich transported water to their houses in water

Renovated talai of village Charanwasi: the only source of water in the village

tanks while the poor could get only head load of it! In many villages the water in the talais that was meant to supply the village for 3 4 months emptied within a week. SCRIA encouraged the community to find its solution among them-selves. And the community, especially the women sangathans promoted by SCRIA did so by adopting management systems of their forefathers.

The story of Sanwatiya Bhojasar village in Rajasthan is a case in point. According to Kailash Devi, Sangathan member “I had worked under scorching sun to repair & renovate the village pond. Walking on burning sand led to painful blisters on my feet. How then could I bear to let our johad's water be misused.” Kailash Devi and 36 other Sangathan members passed a resolution prohibiting tankers from collecting water from their johad and imposed a fine of Rs 1,100 for defaulters. The Sangathan's collective force has been such that a year later, there has been no violation! According to Chand Kanwar, “Our johad had water for 8 months last year. It was the first time that water was distributed equitably to both the rich and the poor in our village.”

Khaari, no more

Village Khaari Chaabri drives its name from the high salinity in its soil and water. No surprise, therefore, that the village gets its drinking water from a source in village Biraniya that is 32 kms away. Government had installed a reverse osmosis plant but due to negligent handling, the problem of drinking water in the village was far from solved. The village women sangathan came up with a request for digging a new talai. Agreeing to such a request would have meant investing resources in one talai whereas in the same cost two existing talai could have been revived. Scria had a tough decision at hand but looking at the crisis-like situation in the village it agreed on the condition that the sangathan will take the responsibility of managing the work as per the established norms.

Khaari Chaabri now has a talai of its own that is 74' in diameter and has a depth of 4.5' to store as much as 500 thousand litres of rainwater. It can serve 174 families and their 1998 cattle heads for 90 days at a stretch. The work on this talai had generated 300 man-days of labour benefiting 21 families through daily wages. Of the total cost of Rs.154,707 towards construction, over42 per cent was contributed by the community through materials and labour. A maintenance fund is being established in the village.

Bunding the fields before the rainy season

Kanabundi: moisture based farming

In the landscape of shifting sand dunes' the concept & practice of slope bunding is very old & quite unique. It is used for stabilizing shifting dunes, prevent erosion of topsoil by wind and for making them fertile for agriculture. But like many other traditional practices this too had been discarded/ forgotten for the past 10 years or so. During one of the several village meetings with farmers in southern villages of Churu & Bikaner districts some elderly farmers talked about this practice of bunding, which is locally known as “kana bundi”. Some of the other farmers too recalled it being practiced during their childhood that was practically non-existent at present

Scria's team discussed the matter in detail and persuaded the farmers to revive such slope bunding in their fields. After sustained persuasion, 29 families from two villages came forward to bund 44 hectares of land before the onset of rains. The bunds are vegetative bunds using a local grass known as “sendia” which is considered quite enriching for the soil as it has a high nutritive value. The close style of bunding is also very helpful in conserving & preserving moisture in the field. This kind of bunding is an yearly process and is repeated year after year as the grass rots and gets mulched in the field. Every year the bunds are made in a new area thus ensuring that within a span of 4 5 years the whole field gets a good organic mulch manure. It is estimated by the practitioners that this kind of slope bunding will increase the yield output by 50 100% in couple of years. After witnessing positive results of slope bunding other farming families in at least a dozen or so of nearby villages have on their own started slope bunding their fields. A discarded traditional wisdom is being revived and is in the process of being adopted by a large no. of people.

Bumper harvest: An 800% increase in yield during drought at village Sajansar, Bikaner

Subsidized power supply and stress on cash crops has contributed significantly to lowering of groundwater table in this part of Haryana. Yet, the policy response to such grievous form of natural resource degradation is at best piecemeal. More often than not, the development machinery of the State has been firefighting to avert the crisis like situation. With water scarcity becoming acute by the day, government's response has been to ferry water from distant sources in southern Haryana and/or to provide relief in the form of food-for-work in Rajasthan. However, SCRIA is reinforcing its vision on water security through the sustainable solution of harvesting and conserving rainwater in partnership with a cadre of water-sensitized individuals and community institutions.

Inspite of the socio-political apathy, the community-driven initiatives have survived in their struggle to create institutional space for themselves. Tragically, however, these small in situ initiatives do not get counted in the large picture. Consequently, the political process fuels a policy framework that promises more water, which is not necessarily what communities demand. But like elsewhere in the country, the electoral ploy holds more water than what is actually demanded and what in reality flows through the pipe. Therefore, the challenge before SCRIA is to transform this perception.
The policy environment has created a demand scenario that does not necessarily exist on ground. Neither does it take into account the concurrent developments nor the emerging future. No wonder,

the current policies get viewed with skepticism. However, unless the grassroots realities are seen from community's perspective the skepticism cannot be turned into strength that may have the potential of tinkering public policy for the benefit of the communities, for the sustenance of the ecosystems and for overall betterment of the economy.

SCRIA may need to bring about new thrust in its program strategy to work with the policy planning process. This is critical for the institution for addressing the emerging challenges to help it in its struggle against odds. This will call for an organizational impetus into three distinct directions for adding value to its work.

Create institutional spaces

SCRIA has effectively utilized the social space at the grassroots for impacting change. It has brought about significant transformation in the life, lifestyle and livelihood of people through its long drawn engagement with communities, social organizations and Panchayat Raj Institutions. But it may need to play a proactive role in building multi-stakeholder platform (MSP) for impacting public policy. In the existing power structures, MSP holds an edge in offering a paradigm shift to existing institutional systems that have either failed or are likely to fail viz., government controlled system and the controversial public-private- partnership platform. This may call for sustained engagements through bilateral and multilateral dialogues with existing and potential stakeholders.

Some of the elected women representatives of PRIs'

For transiting into such a paradigm, SCRIA may need to have a pulse on institutional vacuum that has already been created due to a minimalist form of governance that the country is consistently moving towards in a rapidly globalizing world. As governments struggle to provide reliable social services, a window of opportunity seems to have been created. At times, it may seem virtual but at other moment it is for the real. It is a challenge to inch towards this `space' through multi-layered actions from grassroots upward. Such an action will help upscale SCRIA's work at the grassroots by creating forward-backward linkages with the policy advocacy process.

Change by its very nature can only realized if it gets an institutional base. Creating neo or parallel institutional framework does provide ideas on new designs but unless the existing structure is geared to accept it, change is unlikely to be expedited. SCRIA holds strategic advantage in bringing about such a change by virtue of its work at the grassroots

Enhance stakeholder connectivity

The erstwhile term of 'networking' has been replaced by technology-savvy term 'connectivity'. Whatever it may mean, the sole objective is to connect with stakeholders in real time. SCRIA may need to leverage its significant local presence to influence/ co-opt local governance mechanism to mainstream the key message that the government is indeed shifting responsibilities to the communities. The existing resource-dependence on the State will soon be a thing of the past. Unless the communities and Panchayats are seen as equal partners in development by the government, the top-down approach of doling development assistance will not be seen as a necessary evil.

Women, men & youth discussing and prioritizing development issues at Khori

Enhancing information exchange through better connectivity, both physical as well as virtual, will be a perquisite for setting-up multi-stakeholders platform. However, the challenge for SCRIA is to make the communities value their strengths and negotiate with the powers-