

Editor: Dr. Prakash Tyagi ISBN 978-81-976224-2-7

Thar region-living a hard life

It is a typical feature for a desert region like Thar to be affected by frequent drought years. On an average, every three out of five years comes as

living in these regions especially those living in the villages vulnerable to various problems, the prominent amongst them is acute water scarcity. The villages are all dependent on agriculture. Agriculture and livestock raising are mainstay in the rural areas and often the only profession people have in the villages. The drought makes agriculture the worst affected. which is in the form of low productivity, the worst affected are the small and marginal farmers having uneconomic landholdings which becomes uncultivable in the drought years, leading to migration, starvation and malnutrition So, the drought years mean losses of harvest and scarcity of food and fodder for the people and their livestock.

a drought years here. The drought makes the people

Sonda-depleting resources and worsening lives

One of these drought-affected villages in the Thar Desert is the village Sonda Shekhasar. It is situated in Jodhpur district, about 200 kilometers outside Jodhpur city. The village had been facing the typical desert-like problems. Drinking water was not available close to the household areas. Therefore, women often had to trudge long distances to the Nadis or ponds to fetch water for drinking and household purposes. In very severe years, when the available sources of water had dried up, they had to purchase water and transport it by tankers or camel carts. Lack of rain had led to unfertile land and crop failure a recurrent phenomena of the area. Desertification was taking place and took away the land still usable for agriculture. This was not

only shrinking the livelihood of the inhabitants of Sonda Shekhasar, it was leading to migration every year. Many men migrated for more than 6 months every year, most of them to nearby town Baap. So, the womenfolk were left alone with the duty to feed their children, take care of the older members of the family and do all the house- and farm work alone. Often, it was the case that the men were not able to support their family financially with money earned through labour work in urban areas. In addition to decline in jobs due to infertile land, the crop yield was very low. People had to purchase food grains for their own consumption and also fodder for their livestock. Lack of money and work, hunger was a steady companion of many people, especially the women. Several families reported of loss of livestock due to insufficient availability of fodder. Reportedly the area also observed black marketing of fodder, in the year 2002, which was one of the severest droughts in Rajasthan the prices of fodder increased to Rs. 5 per kg while the normal rates are Rs. 1.5 per kg.

The Watershed and its purpose

Watershed development refers to the conservation, regeneration and the judicious use of all the resources: natural (land, water, plants, animals) and human within a particular watershed. Watershed refers to the area from where the water to a particular drainage system comes from. Watershed management is a socio-technical intervention in the micro level. The visibility of impacts is in terms of increased water in water bodies (beris, nadis) in treated area, natural regeneration of shrubs and grass, which was non-existent earlier, and good survival and vigour of crops growth. The watershed dwellers become more aware about their relation between their environment and its impact on their lives. Watershed development creates sustainable infrastructure on which the overall development of the village is possible.

Strengthening village institutions:

Village Level Institution, a binding force for the community

GRAVIS, working as a grassroots-organization, has started the project with the "pre-watershed" phase in the year 2001. Gramin Vikas Vigyan Samiti has a proven long history & experience of helping vulnerable communities in the Thar region, by developing their resource base, health care and the natural resources. The community of Sonda Shekhasar after the implementation of watershed programme are now in a position to face drought with preparedness by reducing its intensity & gravity on their lives. Drought is a natural phenomena here, it can't be done away with, but its affects can be appropriately managed and minimized through drought proofing techniques.

At a glance				
ProjectTitle		Sonda (Shekhasar) watershed development Programme		
Duration		2001-2005		
Project Location		Sonda village, Block -Baap, Jodhpur dist.		
CatchmentArea	Ha	1598 ha		
Total Participant Families	No.	421Families / 2846 Persons:(SC 122 Families, ST 28 Families, OBC 197 Families & General 74 Families)		
Goal		'To improve the socio-economic status and the food security of small and marginal farmers through the watershed development program (as a means to ensure water security)'		
Issues addressed		Mtigating drought through appropriate soil and water conservation measures, gender sensitization & equality, food 7 water security.		
Activities		Physical treatments mainly based and aimed at better utilization of traditional knowledge of water harvesting measures. Khadin construction to improve agriculture production, Nadi desilting, Beri development & Tank for improving water availability for people as well as animals Reduction of women drudgery in fetching water development of patureland		
Financial outlay		The total project cost is \$ 15590 (Rs. 732726/-) and 96505 workdays.		
Financial support		Catholic Relief Services		
Implementation body		GRAVIS, Jodhpur		
Evaluation by		HEDCON, Jaipur		

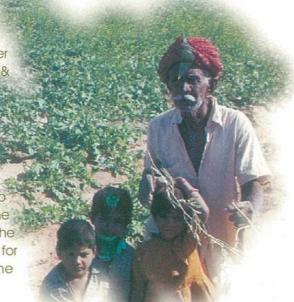
Several interventions were planned and undertaken in the Sonda Shekhasar village towards this direction through the Village Development Committee In addition to the VDC, 10 women Self-Help Groups have been formed in which especially women have become active participants in the village development affairs. Further, they have started micro financing and saving money in groups which has empowered them in an economical way. As the women have their own savings and even bank accounts, they are now able to get loans with low interest rates through their Self-Help-Groups. This has brought about reduction in rural indebtedness trough less dependence on money lenders and mahajans through timely and easy accessibility to credit at low interest rates. This empowers them to take their own decisions about purchasing something. This empowerment has risen their decision making and added to an improved self-confidence and financial independence All this has contributed towards raising the community cohesiveness and unity and has equipped the community with the means and knowledge to address the problems arising out of drought. Enhancement of the community preparedness against natural calamites and disasters like continuous and severe droughts can be seen, the intensity of the drought, the vulnerability towards it and its effects on their lives has been reduced.

As an intervention like watershed needs .i.e. participation of all sections from the community, a preparatory phase called 'pre-watershed was launched. The pre watershed phase focusing more on awareness generation and capacity building of the whole village community is properly done. The exposure visits and trainings of the VDC members and beneficiaries contributed amply in realizing the effectiveness of the interventions. The regular planning and implementation of the watershed activities, the process: decision making mechanism, reaching consensus on the type and place of intervention, conflict resolution mechanism has raised the capacities and skills of the people. They now have a better view and understanding of their developmental needs and how to address them.

BUILDING THE SUSTAINABLE RESOURCE BASE -The Watershed Development process

The implementation of various activities like Nadi desilting, construction of Tanka, pasture land development, khadin construction, horticulture units etc. were successfully completed by the VDC with the support and assistance of NGO functionaries and technical support from agriculture extension departments.

Participation and involvement of the VDC members and the community was ensured and guaranteed through out the project. Al the different interventions under the project have been planned & implemented in detail by the VDC. So, the active participation of the villagers was secured instead of just being treated as beneficiaries. Thus, the interventions were sustainable, because the inhabitants of the village have gained all the knowledge about the up keeping of the physical structures and the village level institutions together with the community have evolved rules and laws for the safe keep of the structures. The



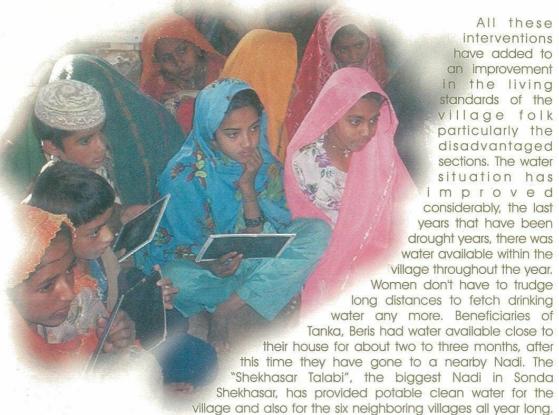
Water security	Improved farming techniques	More Biomass	Capacity building & skill development	Women empowerment
Desilting of 5 Nadi's	Farm bunds on 35 km area	50 ha patureland developed through Chawka system	Desert agricultural practices, cropping methods, usage of fertilizers & pesticides	13 women Self Help Groups formed
11 Tankas built	90 khadins & spillways constructed	13045 tree plantation done	2 Exposure visits	Installation of Seed banks through Self Help Groups
Existing Beris desilted		Grass seeding done on 279.178 km	5 trainings on skill development (Income generation trainings)	Nursery Raising by SHG's
		26 Horticulture units developed		Participation & representation in VDC

interventions have included Tanka construction and Beri desilting to harvest and store the rainwater. Further, they have desilted 5 of already existing Nadis and thereby increased the capacity for stored rainwater. Khadins have been constructed on the agricultural lands to enhance moisture content, enrich top soil and hence increase productivity of land. Pastureland and forest area have been fenced by a smaller embankment and saplings Acacia (desi babool), Acacia Senegal (kumat), Acacia tortilies (Isralli babool have been sown. Furthermore, fruit trees have been provided and farmers have been trained on compost pit making.

Livelihood and health

In drought prone areas, during the agricultural season the entire demand for employment cannot be met in the village itself. This leads to migration in search of work, With watershed activities started in the watershed in Sonda Sekhasar, the people avail of this opportunity to enhance the family income . This has a direct bearing on the family welfare and stability. The program generated 191443 man days of employment during 5 years' project term for desilting of village ponds, construction of farm bunds etc. Similarly, with an increase in soil moisture as well as increased availability of water, the agricultural season lengthens and productivity increases. Agriculture labour opportunities, earlier limited, are now available for a longer period within the village itself. With soil conservation measures, land and agricultural productivity has increased in terms of both food crops and farm products. Increase in fodder has resulted in enhanced livestock maintaining capacity. This was coupled with information and inputs on nutrition and nutrition oriented agricultural practices, e.g. horticulture gardens, agro-forestory, mixed cropping, appropriate food crops etc. the nutritional status of the family and village has progressively improved. Watershed development has resulted in increased availability of clean and safe drinking water, food security, as well as increased income from enhanced agricultural productivity. Over the years a definite improvement is seen in basic health and hygiene as a direct consequence of enhanced nutrition, access to clean drinking water, improved living conditions, basic knowledge of promotive health and hygiene, prevention of diseases and access to basic facilities

Lessons for the future



Therefore, women have saved a lot of time, which they previously had to spend on fetching water. The time saved is now utilized for doing their household chores and now they have leisure time also. As a consequence, more families send their children to school now and the attendance at the local school has risen particularly of girls. In the year 2005 a total of 131 girl students attended Govt. school upto class 1-8th as against 71 in the year 2001, an increase of 64.8%. The girl and boys student ratio has also improved from 3.04 in the year 2001 to 1.65 in the year 2005. Furthermore, the agricultural production has increased due to more fertile land by 2.5 times over the span of 5 years. Most of the farmer families in Sonda Shekhasar produced enough food and fodder for themselves that they don't have to procure it from the market anymore. More people had employment opportunities in their home village in the last years, and migration has reduced significantly, in comparison to previous years. Due to a better water situation, it has added towards the improvement in the hygienic situation and additional food security, the health conditions of the people have improved.

Last but not least, village communities in the village are now more organized as the mobilization of the people has led to a sustainable change in the village community. The Sonda Shekhasar inhabitants have become very active within the VDC and also within the SHGs. They have created useful linkages with banks, Govt. extension departments, NABARD, under ICDS programmes to guarantee further development of the village, even after the completion of the project. The village has improved its community work and the capacity through their self-reliance and democratic decision-making.