

FOOD SECURITY AND OLDER PEOPLE

Field experiences of GRAVIS initiatives



Gravis

Food Security and Older People

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GRAVIS

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The global population is rapidly ageing and while there is growing awareness of the fact, there are still apprehensions over how social and economical policies should take this trend into the developmental paradigm. This is more of a worry for countries like India where population growth is much higher than any other region in the world.

Rural Thar population in India lives with marginal resources and is always at pray of losing even the existing resources because of consecutive droughts and hostile living conditions. Under such conditions food security is an ever growing challenge for older people. Along with food insecurities older people face exclusion and lack of basic facilities for survival. GRAVIS in collaboration with HelpAge International is implementing the project “Promoting older people-led community action to reduce poverty among vulnerable groups in rural Rajasthan” for securing the rights of the older people to food, livelihood and health.

As food security remains one of the prime challenges for older people, activities have aimed at strengthening their livelihood through various interventions in 18 villages of Jaisalmer and Jodhpur districts. This documentation is a compilation of case studies to show how small activities with older people can bring big changes in their lives. It also demonstrates that older people are a resource for their household and community; and can manage their food.

My Thanks goes to everyone who is involved in the project including HelpAge International, my colleagues at GRAVIS and the older people who have shown their belief in themselves and the project. I also thank HEDCON for the documentation. I believe this publication will help policy makers and programme implementers in designing and implementing future programmes for securing food for vulnerable older people.

In solidarity

Shashi Tyagi

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About GRAVIS

Founded in 1983, GRAVIS is a development organization working for the empowerment of the Thar Desert communities, in Rajasthan, India. GRAVIS is based on the Gandhian philosophy of self reliance and works toward the rehabilitation of drought affected and marginalized rural communities, enabling village ownership and control over its environment, institutions, and relations. Till date, GRAVIS has worked with over 50,000 desert families across 850 villages in Rajasthan reaching a population of over 1 million, and has established over 1,100 community Based Organizations (CBOs).

GRAVIS' actions focus on poor, backward and marginalized section of the community with particular emphasis on women, children and elderly and it believes in blending the traditional wisdom with new techniques to create long-term, sustainable and cost effective means for improving the lives of rural inhabitants. Further information can be found at <http://www.gravis.org.in>

About HelpAge International

HelpAge International helps older people claim their rights, challenge discrimination and overcome poverty, so that they can lead dignified, secure, active and healthy lives. The organization is driven by a fundamental understanding that older people have the wisdom and the personal drive to contribute to their own wellbeing and that of their families. Its work in over 75 countries is strengthened through global network of like-minded organizations the only one of its kind in the world. HelpAge is governed by a board of trustees that includes representatives of network affiliates. HelpAge has offices in London and Brussels, six regional centres coordinating its work in Africa, East and South Asia, Latin America, the Caribbean and Eastern Europe/Central Asia, and a number of national programmes and emergency response programmes. Further information can be found at <http://www.helpage.org>

Acronyms and Abbreviations

BPL	Below Poverty Line
POC	Promoting older people-led community action to reduce poverty among vulnerable groups in rural Rajasthan
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
VOPA	Village Older People's Association
PRI	Panchayati Raj Institution
GRAVIS	Gramin Vikas Vigyan Samiti
HEDCON	Health, Environment and Development Consortium
SHG	Self Help Group

Glossary

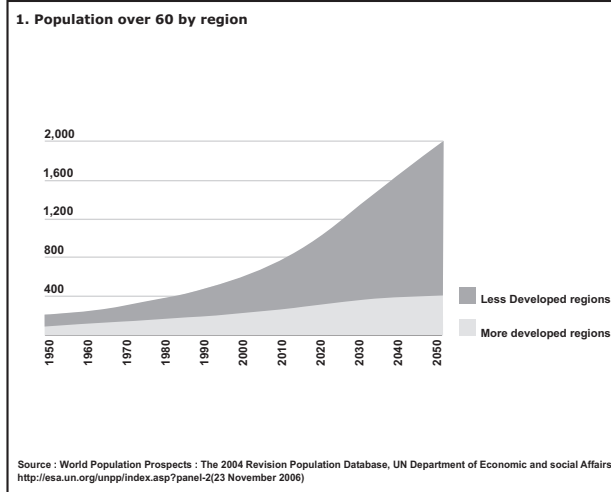
Shoats	Sheep and Goats
Anar	Pomegranate
Awla	Emblic myrobalan
Babul	Acacia sp.
Bajra	Pennisetum americanum
Ber /Bordi	The jujube tree
Bigha	6.25 bigha = 1 hectare
Goonda	
Gwar	Cymopsis tetragonoloba
kharif	Rainy sowing season
Khejri	Prosopis cineraria
Moong	Vigna radiate
Moth	Vigna acontifolia
Quintal	100 kilogram
Rabi	Non-rainy sowing season
Sisam	Yunanca'da Samos
Til	Sesamum indicum

INTRODUCTION

(A) BACKDROP

With the increase in population world over, the demography is also changing in terms of population density and in percentages of age groups. There is a steep increase in older people population. The increase in the percentage and number of older people is surprisingly higher in developing countries. The World Health Organization estimates that the world's 580 million elderly people (aged 60 years and more) include around 355 million in developing countries. By 2020, the total will reach 1,000 million of which 710 million will be developing

countries. At that time, seven of the ten nations with the largest populations of older people will be developing countries: China with 231 million, India 145 million, Brazil 30 million, Indonesia 29 million, Pakistan 18 million, Mexico 15 million, and Bangladesh 14 million. This development indicator of longevity of life in developing countries is worth praising but if one looks at it from food security perspective there awaits a considerable decrease in percentage of productive hands. This means there are less people to feed more mouths. Various studies and statistics have shown that increasing older people population is more prone to food insecurity and struggles for minimum livelihoods. If the issue is not addressed timely, the increasing older people population may face chronic food insecurity.



Insights on Older People

Today almost 1 in 10 people are over 60 years old

By 2050 1 in 5 people will be over 60

By 2050, over-60s will total 1.9 billion of the world's population. People aged over 60 will outnumber children aged 0-14 by 2050

By 2050 the oldest-old those aged 80 years and over, will account for 4% of the world's population compared with 1% today.

72% of older people say their income does not pay for basic services such as water, electricity, food and decent housing.

76 per cent of older people in rural areas say their income cannot pay for basic services such as water, electricity, healthcare, enough food and decent housing. This compares with 67 per cent in urban areas.

Most of the increase in the older population is in the developing world, in countries with an average income per person of less than \$2 a day.

Similarly, there is a serious disruption to the informal support system for older people which was based on extended family and the local community. The informal system was participatory, inclusive and had inherent mechanism for protection of older people; but is eroding with the changing environment and livelihood pattern of poor people. Realistically, it is not practical to get back to older system but there is a scope for ensuring food security for vulnerable older people by enhancing their capacities to earn it. That will allow older people to become independent and the growing economy will have more helping hands for a better development scenario.

HelpAge International through its effective policy interventions and pilot initiatives strives to address the problem of food security for older people. Some of the initiatives experimented in various countries have proven to be worth replicating. In this document, we have made an effort to capture some of those successful pilot initiatives for ensured food and better life for older people; implemented by Gramin Vikas Vigyan Samiti (GRAVIS); and supported by HelpAge International in Western Rajasthan, India. The stories here have proved that small interventions towards food security can make big changes in the lives of the poor older people.

(B) WESTERN RAJASTHAN AND THE PEOPLE

Rajasthan invokes images of a colorful culture, heroic legends of its erstwhile princely rulers and of a desert climate. About 62% of Rajasthan's area is covered by the Great Indian Desert, known as the Thar Desert. This region is devoid of any major river basin, apart from the Luni (salty) River in the south-eastern corner. It relies mostly on the low and erratic rainfall to feed its seasonal rivers and ponds. However, human endurance is such that the Thar Desert is a heavily populated area by global standards, with over 22.5 million people calling this barren region their home. The Thar region occupies 12 districts out of 32 in Rajasthan and an area of 0.21 million square kilometers.

Rajasthan: Household profile ²			
	Total	Urban	Rural
Households by residence (%)	100	29.1	70.9
Mean household size	5.2	4.8	5.4
Population age 6+ literate (%)	57.4	77.3	49.9
Percentage of household that			
Have electricity	66.1	95.7	54.4
Use piped drinking water	45.4	85.1	29.1
Have access to a toilet facility	30.8	85.3	8.4
Live in a cemented house	45.0	80.3	30.5
Have a motorized vehicle	24.2	44.0	16.1
Have a television	37.0	75.3	21.3
Own agricultural land	63.4	23.5	79.7

² NHFS 3 ; Fact Sheet Rajasthan ; 2005 - 2006

The region suffers from high atmospheric aridity, scorching heat, sand storms and sparse vegetation. High sand dunes and sandy plains cover 70% of this region. The mean annual rainfall over the Thar varies from about 450 mm on the eastern margin to less than 100 mm on the west. About 90% of the rains that the Thar Desert gets are in the monsoonal months of July to September. These few spells are highly erratic and keep varying from year to year. There might be years of surplus rainfall, but then these are few and far in between years of high or moderate deficits.

The variability of rainfall, over the Thar, leads to greater incidence of drought over the arid zone than the other parts of the country. More than 70% of the people living in the Thar Desert are agriculturists, so every drought affects them. Shortages of food, fodder and drinking water are very common. The coping capacity of rural communities is limited due to acute shortages of food, water and fodder and consequently families migrate to other areas for 4-8 months every year. The intensity of drought is increasing along with its effect on humans. High population growth, poverty, illiteracy, less natural resources, minimum livelihood options and human interventions in environmental degradation are some of the main reason for increase in its effect on people.

(C) TARGET REGION

The project “Promoting older people-led community action to reduce poverty among vulnerable groups in rural Rajasthan” (POC) is being implemented by GRAVIS in 4 villages of Jaisalmer district (Fatehgarh Tehsil) and 8 villages of Jodhpur district (Baap Tehsil). The target villages are devoid of basic facilities like easy access to water, school, paved roads, health facilities and markets. The main livelihoods are agriculture and livestock rearing. The harsh living conditions, concurrent droughts, seasonal variations and difficult environmental settings threaten the sustainability of livelihoods of

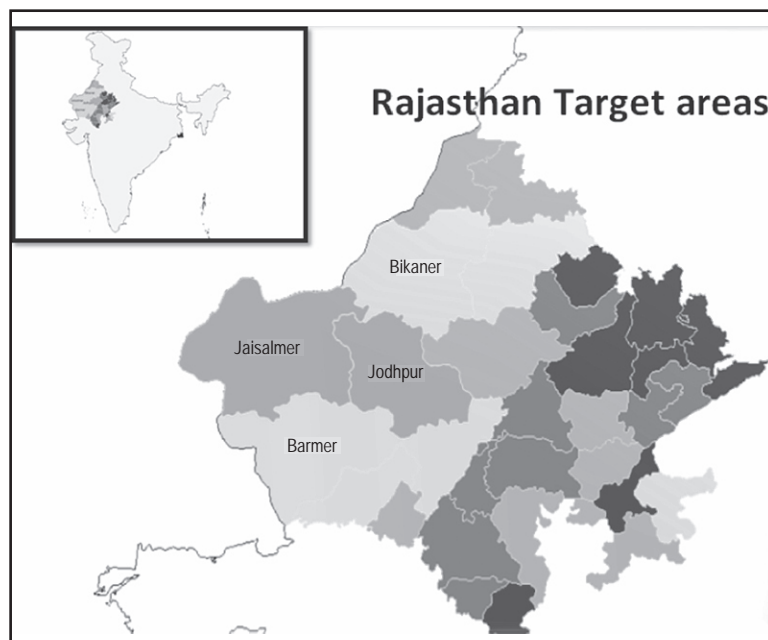
Rural Rajasthan: food security indicators (in %)³	
Rural population consuming less than 1890 Kcal/day	5.2
Rural households without access to safe drinking water	39.6
Rural women with Anemia (15-49 years)	54.9
Rural women with Chronic Energy Deficiency (15-49 years)	36.6
Rural children with Anemia (6-35 months)	80.1
Stunted children (6-35 months)	36.4
Average distance to water source in target villages	2.26 km
Percentage of older people in target villages without any productive land	39%

³ Report of the state of food insecurity in rural India ; MS Swaminathan Research Foundation; and world food programme; December 2008

vulnerable people. Water for daily use has to be hauled from a distance or purchased. Young migrate to earn outside leaving behind their children, women and older people.

(D) FOOD SECURITY AND OLDER PEOPLE

Broadly, food security exists when all people, at all times, have physical and economical access to sufficient, safe and nutritious food for a healthy and active life. Food security is generally evaluated through assessment of people's ability to feed themselves and the processes that generate food insecurity. Food security of older people in the target areas can be traced from food access/availability, dietary diversity, water access/availability,



destitution, displacement, civil security, coping strategies and livelihood assets. More than 3 percent of population (mostly vulnerable groups which includes older people) consumes food less than 1890 K Cal per capita per day. Variation in diet is very marginal. In terms of diet, coarse grains, local varieties of fruits and vegetables, and chillis are common food items consumed. As explained above, water is a scarce resource and is hauled from distances, which for older people is an even more daunting task as compared to other age groups. The habitations in desert regions are placed far from each other and people live in small hamlets of 5-6 families. They are far from any health services, market access and are almost without a formal economic system. Older people don't tend to move out and have to depend on extended family if they are still in villages. In terms of livelihoods, the small productive landholdings require lot of hardship with marginal rains and frequent crop failures. Poor household keep goats and only few can afford cows to provide them with nutrition from milk. Economic reforms, global warming, increasing migration, changing livelihood and agriculture pattern are also adversely affecting their lives. Regular analysis by GRAVIS has shown that most older people in these rural areas are moderate chronic food insecure. Overall life in these areas is very harsh and for older people situation becomes severely chronic food insecure with seasonal variations and recurrent droughts. To sum up, the reasons for food

insecurities of older people are:

- Lack of suitable livelihood options
- Reducing support from the younger in the family
- Minimal physical assets like draught animals
- Incomes much below the food and nonfood requirements
- Scarcely potable water availability
- Lack of linkages with social protection systems/policies
- Most poor belong to disadvantaged castes

(E) PILOT INITIATIVES ON FOOD SECURITY

Through POC, GRAVIS has tried to address the issue of food security of older people through:

- 1. Strengthening livelihoods for food security**
 - a. Improving soil moisture for agriculture
 - b. Horticulture plantation for fruits and vegetables
 - c. Nutritional security from cow milk
 - d. Livestock provision for milk and asset building
- 2. Improving access to water**
 - a. Water storage and harvesting at household level
 - b. Community level water source called Nadi
- 3. Drought preparedness**
 - a. Pasture land development
 - b. Fodder bank
 - c. Seed bank
- 4. Advocacy and linkages**
 - a. Creating linkages through awareness and organizing meetings

STRENGTHENING LIVELIHOODS

The right to adequate livelihood is the basic right of every individual. However this right is regularly challenged through exclusion of older people, lack of opportunities to participate and for strengthening capacities and assets. Although older age for poor in general results in reduced capacity to sustain a livelihood and challenges in accessing essential services, that doesn't reduce the requirement of older people to secured livelihoods for food and psychosocial needs. To strengthen the food security of older people in target villages, GRAVIS has worked on strengthening asset base through construction of farm bund for improving soil moisture for agriculture, distribution of livestock for milk and horticulture plantation for additional nutrition. GRAVIS has also worked on strengthening the capacity of older people through trainings which not only help them in improving their economic status but also helped in bringing them closer to other community members. Given below are given few case studies which show how small interventions for older people can help them in improving food security and live a better life.

(A) IMPROVING SOIL MOISTURE FOR AGRICULTURE

Introduction

Shere Khan is a very active old man. He lives with his four children and wife and manages his 35 bigha land in Andasar village of Jodhpur district. He is the youngest of three brothers and got his share of land which had a steep slope. The slope never allowed the land to have enough moisture for agriculture and he always had to struggle for minimum harvest. Even with good rainfall he couldn't get enough for his family. He has 25 shoats and his children are still young and not married. Two of them go to school and two help their father in farming and livestock rearing. Because of the continuing drought, it was becoming more difficult for him to manage his land and take care of his family's minimum needs. He said, "It isn't possible for me to migrate and do labor work anymore, now I am not young enough for that." Shere Kahn needed a way to support his family through minimal means.



The intervention

Shere Khan still recalls the day when his name was selected for construction of a khadin on the slope of his land to conserve water for farming. He was selected as a beneficiary by the Village Older People's Association (VOPA) members of his village. He has received trainings on agriculture especially on maintenance of khadin, planting trees on its embankment, mixed cropping and vermin-compost pit.

The technology

Khadin is a traditional technique in which rainwater is collected on farm land and subsequently used for crop production. A khadin is a half round earthen embankment build across the general slope to conserve the maximum possible runoff of the rains within the agricultural field.

Three things are essential for khadins to function: Sufficient water harvesting area, embankment and a system for withdrawal of extra and unwanted water. During rainfall water gets collected in the khadin area which most times are sufficient for irrigating fields two times. This system has a sound scientific basis and an importance even in present day desert agriculture.

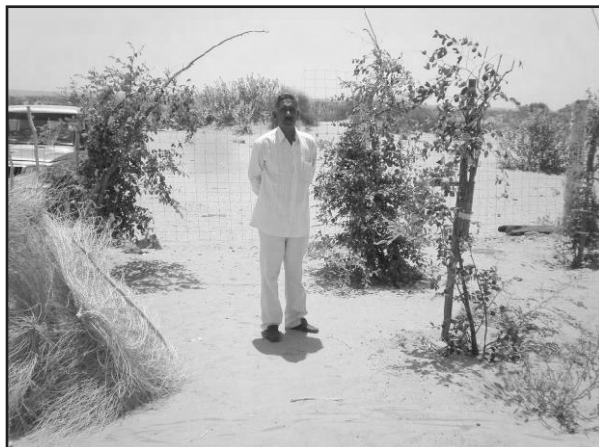
Impact

Before the construction of Khadin for continuously two years; all the seeds he had sown went to waste. He couldn't get anything from the land because of low rainfall and low moisture content. He was disappointed with the lack of rain and infertility of the land. In year 2010 when the khadin has been built, Kharif sowing provided him with good results. Last monsoon, there was good rain allowing moisture to be retained on the farm which gave an opportunity for the family to sow seeds. The barren land on the other side of the khadin was never used before; this year he even sowed seeds on the other side due to increased moisture retention. He could harvest during monsoon season: Bajra, moong, moth and til. People here normally depend on one harvest as second harvest is like a dream to them but Shere could sow wheat and mustard during the Rabi period. Although good rain was the prime

reason but khadin helped him in retaining that moisture for crop development and he could gain a good harvest.

The farm products provide him not only with minimum food security but also buffer to keep a stock in case next year is again a drought year. He no longer has to take loans to buy food. He has raised sufficient fodder for his livestock, for which previously he had to pay. It will now be easier for him to ask for a loan from a moneylender, as he possesses land with *Khadin*.



(B) HORTICULTURE PLANTATION**Introduction**

Bhikha Singh is a 62 year old man living alone with his wife in Bhadli village of Fatahgarh block (Jaisalmer district). He has three sons but all have migrated to other States for work and now settled there. Bhikha Singh says, “Its not their fault. Regular droughts have not allowed any of my sons to live here. Now they come to me once or twice a year and spend some time. Although, I wish that they live with me but as they are happy in their own world I am also happy for them”. Bhikha belongs to Rajput caste and owns 15 bigha land. A lot of his time goes in managing his livestock but still nothing else to do makes him feel lonely.

Intervention

Bhikha is very active in his society and is respected by all. He was instrumental in constitution of VOPA in their village and also helped GRAVIS in the establishment of the program. Looking at time available to him and his interest, he was selected for horticulture plantation in their village by VOPA. Horticulture plantation is not an easy task given the harsh climatic conditions. Dry and

hot weather, marginal water availability, high evaporation rates, termites and low productivity of the soil are common characteristics of the region here. People here have seen some traditional vegetable plants but finding fruits growing and eating is like a dream. Still there are few good examples of good horticulture units developed with hard work and commitment.

Bhikha Singh was provided with 6 Ber, 4 Goonda and 4 lemon plants along with material for fencing in 2009. The technical support to GRAVIS for horticulture is provided by Technical Advisory Committee (TAC) constituted for implementation of the project. The members of TAC are different specialists who have long term experience working on rural development and sector specific issues. He was also provided training by an agricultural specialist Mr. Champawat for the same. He was



told that he has to remove all the flowers in the first year and that will provide a better growth to plants for next year. He complied. He also received training on vermin-compost.

Results

Bhikha is happy that all his plants except for lemon have shown good growth. The plants are even taller than him. He and his wife give lot of time to these plants. He has also grown 4 Awla, 2 sisam and 1 anar in the area. To help Bhikha grow these plants, he was also provided some vermin-compost and medicine for termites. The fence also protected the plants from grazing by animals.

Bhikha proudly says, “these plants have not grown by itself. I and my wife have put lot of labour. We have grown these plants like our own children. Watering them regularly and protecting them from heat and cold by small bushes when they were small, is a tedious job.”

It took about two years for the plants to provide fruits of his hard work and patience



He could harvest 80 Kg of Ber. He says that they were really very sweat. He shared Ber with his neighbors and relatives. Now, he expects fruits from other plants and more ber next year.



(C) NUTRITIONAL SECURITY FROM COW MILK

Introduction

Godawari Devi lost her husband about 20 years ago when her son was just 4 years old. She has worked very hard to feed her family and take care of her children. Because of poverty she couldn't send her children to school. She has three daughters and one son. She lives in Bhadli village of Fatahgarh block (Jaisalmer district) with her family. She managed to get her two daughters married and now her son goes for labour work on a daily wage basis to support her mother. Although they have 60 bigha land consecutive droughts have not allowed them to harvest sufficiently. She said like a slogan that if there are no rains, one cannot think of any gains from the land. At the

age of 65 years, she had to go for labour work to support the family which made her life difficult.

Selection and intervention

There is a selection process defined by VOPA for selection of beneficiaries for interventions. When Godawari was selected for a cow, members looked at the availability of her land for fodder and also the availability of water with her family. They also discussed time with her and her willingness to keep a cow. After all required considerations, she was selected for distribution of a cow with calf in 2008.

Results

The cow provided to her had a female calf with it. That time, the cow was providing 5-6 liters of milk for two milking per day. This

provided her with sufficient milk, butter milk, butter, butter oil and curd for her family's requirement. Extra butter oil could be sold to cover the expenses of feed for the cow. Although milk got lesser with time but it provided them with something for her children. In 2011 February, the cow gave birth to male calf and is again providing them with good amount of milk.

The health status of all the family members including Godawari has improved. She doesn't go for labour work anymore and spends her time in taking care of the cow. Good rains in 2010 kharif season has also helped her in storing enough fodder for her cows. Godawari is happy that they now eat and live better.



(D) GOATS OF ARBI KHATUN

Introduction

Arbi Khatun is a happy woman blessed with four sons. She is a 62 year old Muslim woman. Her husband Ali Khan works on their small land of 8 bigha in Degawadi village of Jodhpur district. Her three sons are married and have children. She lives with her big family in a mud house on a small piece of agricultural land. Regular droughts have had a great impact on the family. They are very poor and land is not sufficient to give enough food for the family. Her two sons go for casual labour work in salt mines. Proper nutrition for her and her family was always a problem. She tried to keep goat many times for milk but she couldn't keep them alive. She blames it on the fate. She says, "In this era, it is not easy to keep your stomach full. My sons first take care of their children and with their labour work, they are normally left with nothing after that. My food was of chillis and chapattis. This had created problem of acidity. Without milk, I also consumed black tea and that reduced my appetite."

Intervention

Arbi is an active community person and has also attended meetings of VOPA. Her name was recommended by the sub-committee of the village for selecting her as the beneficiary for two goats in 2009. She was asked about the availability of land for fodder and water.

Fodder was not a big problem for goats as they don't require much. Also, she has a moderate size taanka with a capacity of 10,000 liters of water. She could provide water to her goats. 2009 year was a drought year and people were struggling to get minimum food for their family. The prospect of getting milch goats made her happy but she was horrified with the thoughts of ill-fortune. She always thought that goats may die. VOPA gave her two goats of which one was pregnant and other had just given a baby. During the visit in April 2011, she was happily telling that now she has four goats of which two are providing her with milk.

Impact

Arbi was very happy and thankful for the help the organization has provided her and her family. The goats have increased their nutritional status. They get milk and can feed their grand-children with better nutrition. Initially the goats used to give 1 liter of milk each per day. Now it gives 250 ml each. The productivity of goat keeps on changing with its pregnancy, age and feeding. Still, she doesn't have to drink black tea. Now Arbi doesn't have any acidity or low appetite problems and feels healthy.

Her husband was provided an orientation on how to keep goats better. Now having 4 goats of which two are providing milk, she isn't feared of the ill-fate anymore.

IMPROVING ACCESS TO WATER

The availability and access of adequate supplies of water for vulnerable people with reduced drudgery is an important indicator of ensuring food security. It is an important health and development issue at a national, regional and local level. Similarly, there are common practices of water management and handling which help in reducing the diseases further, hence strengthening the ability of these groups to get into any productive activity. In some regions, it has been shown that investments in drinking water can yield a net economic benefit, since the reductions in adverse health effects and health care costs outweigh the costs of undertaking the interventions. Experience has also shown that interventions in improving access to safe water favour the poor in particular, and can be an effective part of poverty alleviation strategies. Water is essential to sustain life, and a satisfactory (adequate, safe and accessible) supply must be available to all.

(A) KESARI DEVI'S TAANKA

Kesari Devi is a 60 year old women living with her family in Chopasna village of Fatahgarh block of Jaisalmer district. She belongs to Meghwal caste. (Other Backward Classes). She has three sons and four daughters. Except for one son, all her other children are married. She has a small piece of land of four Bigha and has 4 goats.

The problem

Kesari's husband is now too old to work. Her sons started working as mine-laborers about 10 years ago looking at the poor family's condition. This helped them in meeting basic needs of the household. Water was always a problem. Kesari's husband used to haul water on donkey from village Mandalia which is at a distance of eight kilometers. His whole day task was just to bring water for the family. In 2007, their only cow expired in a severe drought in the region which took away their milk nutrition. In 2008, his donkey also died and this was a big loss for the family. It was not possible to fetch water on hands and heads from a



distance of eight kilometers. Now Kesari's family had to pay about Rs 150 per camel tanker of 600 liters every 3-4 days. This was a big expenditure for the family. Their inability to store sufficient water also forced them to spend more money. Not being able to help the family always made the old couple guilty of being a burden on them.

The intervention

The taanka was constructed close to her house in 2008. The contribution of the family consisted of labour. The organization provided cement, stone slabs, mason charges, mud and

some other basic construction material. The old couple was trained in maintenance of taanka and safe water handling.

The technology

Taanka is recognized as a traditional structure with a capacity to improve the access of water to people and reduce drudgery of local people in Rajasthan. It is a water storage and rain water harvesting structure. Taanka is an underground tank that is usually round in shape. The hard soil of the tank is used to prepare a sloped platform around the tank. This sloped area is the catchments area to collect the rainwater in the Taanka. The catchments area of the Taanka can have up to three inlets to collect the rainwater. There is also one outlet in the Taanka to release excess water. There is small cap on the top of the Taanka to take water out of it using a bucket and rope. The catchment area is the means to collect the water into the Taanka and is usually naturally sloping land. In case the soil absorbs a lot of water, the catchments is made artificially.

Impact

Kesari is happy that now her family does not have to spend a lot of money for camel tankers for water. The ownership of taanka is in her name. This has obvious implications for raising

her status within the family. Her mental stress caused by water insecurity and the feeling of being a burden to the family is reduced.

Taanka has taken care of the family and their livestock water needs for 4 months after rains. The rainy period is also of 2 months when they don't purchase any water. The size of the taanka is 10x10 feet which can store about 20,000 liters of water. Now they spend Rs. 250 per tanker tractor of 4500-5000 liters, which lasts for about a month. So the improved storage capacity saves money.

The training on management of water and Taanka focused on purification of water through alum, filtration, covering etc; cleaning of taanka and catchment, maintenance of taanka and its catchment, avoiding livestock in the catchment and maintaining outlet and inlet. Kesari said, "I know how to keep my water clean for drinking. My taanka is clean and nobody in the family dares to stand on it with sleepers on. I also make sure that we filter water before drinking." The family is healthier with fewer diseases like diarrhea.

She used to take bath only once every ten or twelve days. Now she takes bath every three days. The water collected from the rain is non-saline and of good quality, which means improved health for the family.

(B) MANDLI NADI DESILTING

Villages : Mandli, Bap Block, Jodhpur District

Intervention : Desilting of Nadi

Year : 2009-2010

Introduction to Nadi in Mandli

There is only one Nadi in Hatitala which is in use by habitants since ages. The Nadi is big and has a large natural catchment area. About 150 families used to draw water from the Nadi but with time it has been silted and the water started getting less and less every year. The focus of the Pachayat was on road constructions and no attention was paid on the desilting of Nadi. People were not getting enough water and had to depend on stealing water from Indira Gandhi Lift Canal which is about 15-16 kms from the village.

Intervention

Discussions were held in VOPA on de-silting of Nadi and its sustainability. It was identified that this activity is to be taken on high priority because people are not getting enough water. Being 2009 the drought year, poor villagers were also looking forward to availability of some labour for them to have some food security. GRAVIS supported desilting of Nadi with 1600 man days work. It also supported improvement of catchment and its bund towards the checking water from habitations to seep towards Nadi.

Outcomes

The nadi was full during the visit of the team in April 2011.

It is the only reliable source of water and is providing water to people for drinking

Ground rules have been drafted for judicious use of water and management of Nadi for its cleanliness and maintenance. Nobody can come with tanker tractor to fill water without permission or for commercial purpose. Water from the Nadi cannot be used for agricultural purposes.

Rules are being followed and nobody was seen bathing in the Nadi and no one could be found defecating or urinating in the catchment area.

Traditionally and as the rules are laid, people volunteer to clean the catchment before the rainfall to get clean water in the Nadi

People from all caste and religion are allowed to draw water from this Nadi.



DROUGHT PREPAREDNESS

The marginalized groups in Western Rajasthan face recurrent drought and with limited access to resources, they are forced to live a vulnerable life. Coupled with their marginal coping capacities towards droughts, they face severe water, food and nutritional crisis. Their life is dependent on agriculture and livestock rearing. After sowing if seeds go waste it becomes difficult for them to sow it again even if rainfall supports. They have to borrow money at high rates of interest for seeds. Similarly, reduced availability of fodder many a times forces them to abandon their animals or to sell them at very cheap price. This not only reduces their asset base but impacts their food security heavily. Some preparedness at community level can help the marginalized to sustain their lives to an extent. Some of the interventions undertaken by GRAVIS for preparedness are given below.

(A) PASTURE LAND DEVELOPMENT

Pasture land for a desert area is a good drought mitigation intervention. Livelihood of the poor here depends on livestock primarily shoats. Sheep are kept for wool and meat; and goats are kept for milk and meat. Without assured pasture and water availability, people were migrating to other places with their animals for fodder and water but increased protection of personal land by people and settlements has restricted such grazing. In last few years the overall livestock population has reduced dramatically and people were left with no hope and livestock was abandoned at large. The rainfall in 2010 has now provided water and food to people and people are happy about it. Some fodder could also be secured at individual level but for poor peasants having secured pastures was still a dream.

Protected pastures provide fodder for livestock in the village during the hard periods. Village Bhadli in Fatahgarh block (Jaisalmer district) was selected for pasture land development. The selected land is owned by the Panchayat and was secured for pastures. For more than

the last two decades no development could be seen on the land and it was lying abandoned. Although, the selected land for pasture development had some trees and bushes but all could have vanished if one more rainfall had failed. VOPA in the village Bhadli had requested GRAVIS for support. The 60 Bigha land is fenced and 2500 plants of Bordi, Babul and Khejri are planted. As well, the grass varieties Sewarn and Dhamman are also planted on 36 bigha land.

Bhikha Singh (VOPA member) says that VOPA members visit the pasture every week to check if the fencing is okay or not and nobody has tried to take pasture without permission. He thinks that if next rain is normal, this pasture will benefit atleast 5000 livestock. Similarly this will promote other villages to get back to community management, ownership and will promote such activities. This will also keep the VOPA members busy for community's asset building.

VOPA members monitor the pasture land regularly and make sure that nobody is exploiting the available resource. They also ensure that it is watered regularly and seeds



don't burnout. This management responsibility has provided older people with great respect in the village and it also keeps them busy in ensuring better future for their families. Grazing in the area is strictly prohibited for five years. The rules formed by VOPA for protection on pasture land are as follows:

The responsibility of selection of the land for pasture is of VOPA in close collaboration with GRAVIS

The land for pasture must be common or community pasture land as registered with Panchayat. Community pasture should never be planned on personal land.

GRAVIS will be responsible for watering the plants for one season and fencing the pasture once.

Anybody who tries to harm the pasture land will have to pay fine of Rs 1000.

VOPA members are responsible for management of the pasture land

For first five years, nobody is allowed to use the pasture land so that it is developed fully before it is used. One can take fodder by cutting and that too only when the pasture is fully developed.

If anybody allows his/her animal in the pasture land will be fined for Rs 100, per animal.

The pasture is open only during drought periods or months when pastures are not available easily.

The quantity to be cut is also decided by the VOPA depending on the availability of pasture and on the number of families who need pasture.



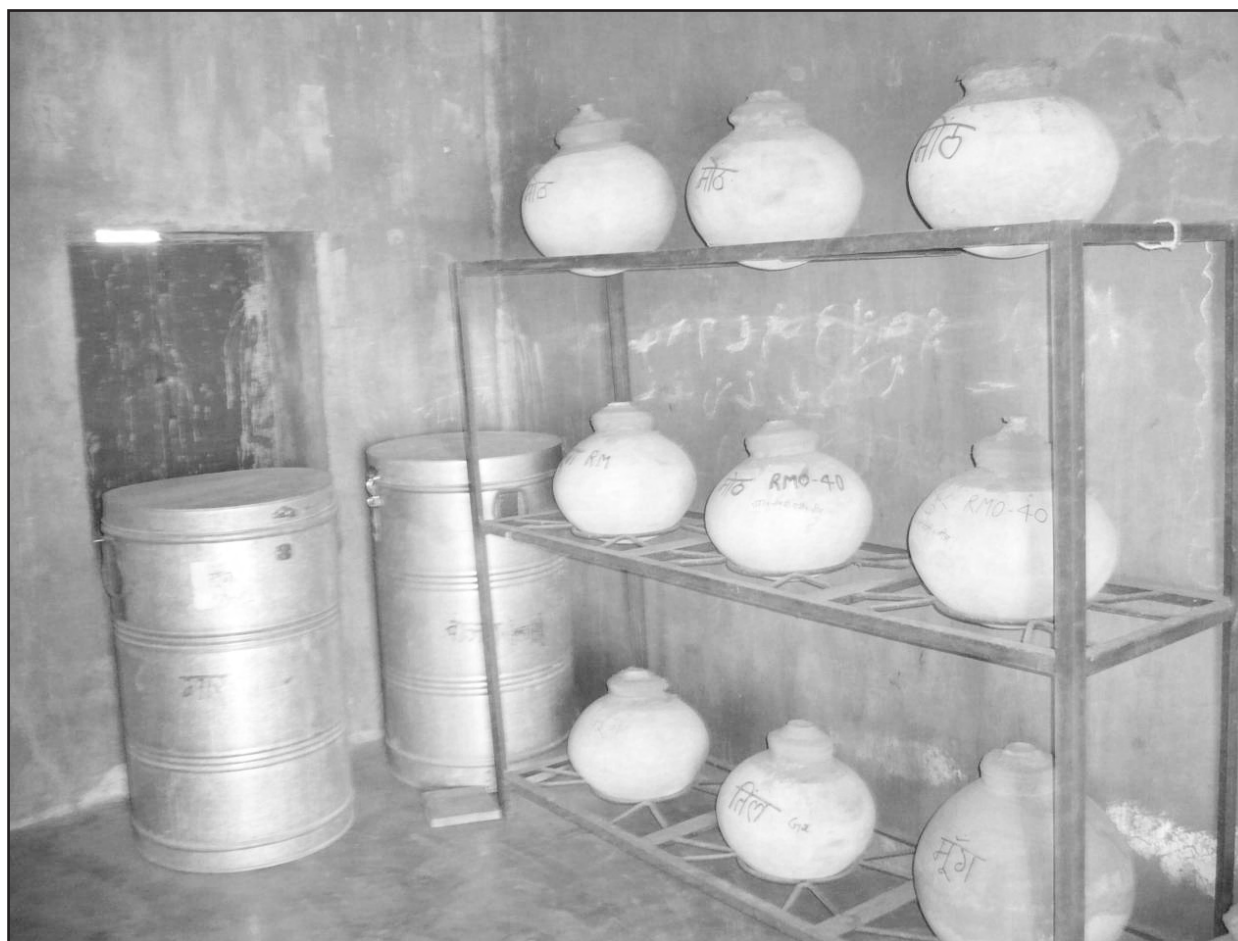
FODDER BANK

Intervention	: Development of fodder bank
Village	: Digawadi
Amount of fodder secured	: 300 quintal
Management responsibility and Ownership	: VOPA

Fodder bank is developed in the village as a preparedness measure for drought management. For villagers in desert livestock rearing is one of the most reliable sources of livelihood along with agriculture. For last many years it was becoming difficult for villagers to be able to manage livestock because of recurrent droughts and high price of fodder. The migration to other places with animals is also getting difficult with time. One of the most important ways in which livestock can be saved during droughts is having some fodder security. Looking at the growth of VOPA and its ability to manage village affairs, GRAVIS considered this village for opening of fodder bank.

The issue was discussed in VOPA meeting and

agreed. Before the intervention, some basic rules for its management were defined like, where to store the fodder, what kind of fodder to purchase, when it can be used, who should be its beneficiary, who will manage the money and what is the minimum amount of sale for a particular period. 300 quintal of fodder was purchased by GRAVIS and stored in the village. President of the VOPA has taken the responsibility of its security and management for VOPA. The fodder bank is to be used during drought period and fodder to be provided to vulnerable at nominal/subsidized rates so as to buy fodder again and make it available for villagers. The fodder bank is not used till now as last year rains were sufficient to provide fodder for animals this year.



SEED BANK

Village	: Gator, Bap Block, Jodhpur district
Intervention	: Seed bank
Year	: 2009

The seed bank was initiated in the village Gator in year 2009 as a drought mitigation intervention and to support preservation of local variety of seeds. Farmers get to sow seeds normally one time in a year during monsoon season in these desert areas but that gets very difficult with failure of rainfall. Many times, farmers have to sow seeds numerous times in one sowing season with the prospect of getting

something to eat from this dry land. The erratic rains or marginal rains **ditch** farmers and they are left with nothing but debts from the seeds for which they take loans. For farmers in such conditions, a community seed bank is needed so that they can loan when needed and return when they get good harvest. This saves them from unwanted loans and the burden of immediate repayment. This also saves

local varieties of seeds with the villagers.

VOPA was given the responsibility of managing a seed bank in the village Gator. VOPA members discussed the initiation of the seed bank and drafted basic rules for its management. The rules were simple; seeds can be taken by villagers after getting the permission from VOPA. The amount of seeds will be decided upon by the requirement and number of people demanding them. They will not be charged with any money but will have to return the seeds after the harvest. They will give more seeds in return than the seeds they initially received from the seed bank. VOPA will open the seeds to check from time to time if they are okay or not. They will seal the vessels and put required preservatives in the vessels to keep them safe. A closed community hall was required in the village for preservation of the seeds. VOPA

managed to get community hall constructed by Panchayat. GRAVIS supported the seed bank with the following seeds:

- 960 kg bajra
- 667 kg Gwar
- 160 kg Moong
- 100 kg moth
- 34 kg til

Year 2009 was a drought year and people who took seeds from the seed bank couldn't return it as nothing could be harvested. However, the 2010 harvest provided people with good grains, people gave back the seeds which they had procured from the seed bank. Now the seed bank is again filled with a good amount of seeds and people have something to rely on for next year sowing.

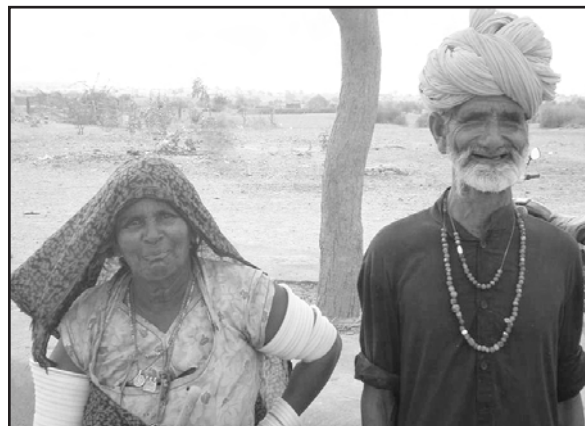
Advocacy and linkages

All efforts GRAVIS does is with a belief in democracy aiming for active citizenship and effective states. Effective citizenship means people know their rights and have the capacity to demand, secure and exercise them from the governance structure. Similarly, an effective state means the government structure recognizes the rights of the citizens and works towards fulfilling them. Through this project, GRAVIS has worked on making people aware of their rights (especially for older people as one of the most vulnerable groups) and supported them to demand for their rights. The activities for the advocacy include, awareness meetings, facilitating meetings between panchayat members and vulnerable groups, helping them in writing letters and filling forms, helping VOPAs in sending letters to the authorities and celebrating International Day for Older People (IDOP) and International Women's Day (IWD). This has helped many vulnerable groups including older people benefit from the welfare schemes announced by the Government. For example, 119 older people have started receiving Old Age pension through these efforts, until March 2011. Similarly, certification of the disabled was done which has helped the disabled in getting disability benefits from other government schemes. It has also helped in increasing the attendance of students and teachers in schools. Now in the target villages, people know the means to request/demand for their rights and have a platform called VOPA to raise their voice. It could also improve their food security, as shown in few examples.

(A) OLD AGE PENSION SCHEME

Introduction

Fakir Khan is 66 years old living with his wife in his small hut in Kohura village of Fatahgarh block (Jaisalmer district). He is blessed with three sons and three daughters, but with time all his sons got married and live separately. His daughters are also married. He is landless and belongs to a community which lives on singing at occasions. However, he is now too old to sing in his group. He was living a miserable life without any food security and livelihood and not even supported enough by his sons. He was dependent on the mercy of the villagers. Sometimes, he could get two meals a day and many times, he had to struggle for even one proper meal.



Intervention

Fakir was attending the VOPA meetings regularly. He said, "I was happy to note that here we talk about destitution and ways to overcome poverty and drudgery. This is not seen in today's world by me anywhere else. In

one of such meetings, I came to know about Old Age pension. Initially I thought that this is one of the schemes by government which is announced and finishes un-noticed. But after discussions, I understood that this is benefiting people in India at large and can be of benefit to me as well. I requested for more elaboration and procedures for applying for it." The GRAVIS team explained during a meeting about the Old Age Pension Scheme, criteria for selection, procedure and about concerned authorities. Members worked on the criteria and prepared a list of older people who fulfill the requirement of the scheme. The GRAVIS team came with forms and worked with VOPA members to fill the forms and collect required documents from the concerned older people. It took almost 3 months to fulfill the requirement and to submit the request to Panchayat. Fakir was also benefited by cow distribution by GRAVIS through POC project.

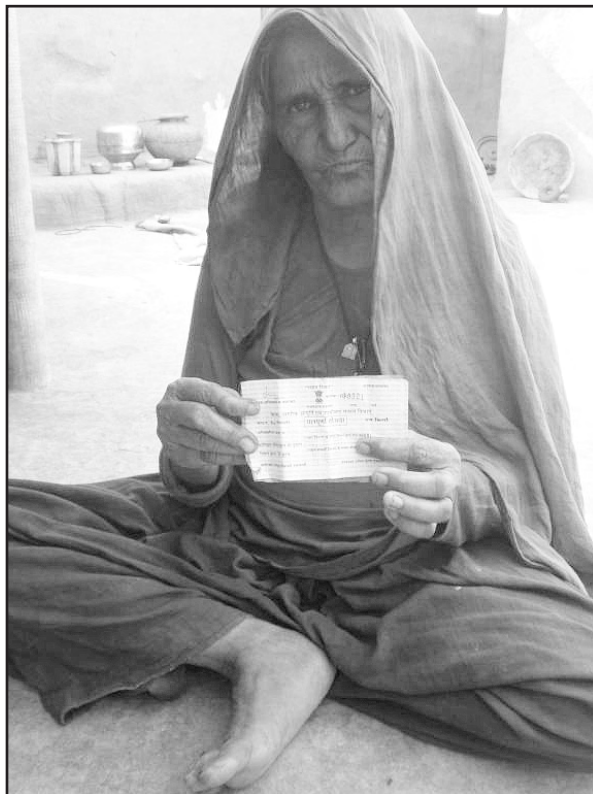
Impact

Fakir clearly remembers the month when his pension of Rs 500 (USD 11 approx) started. It

was in the month of March 2009. Since then, between the 5th and 7th of every month the postman comes with the money and gives it to Fakir. The cow with calf was given to him in February 2009 which provides sufficient milk for him and his wife. Although his sons didn't take any care of him before, now they all come to him and offer him and his wife some support. He couldn't hide his emotions while talking about it, "I am not happy because of the hardship my children have given us but I see their children who are my grand children without proper food also. I give cow milk to all my grand children so that they become healthy. This has helped in raising some emotions between us and our children and now they come to support us. The small money which pension provides is a big support. Now I have some cash and I can buy what I want, like medicine for me and my wife and also buy other things like salt or sugar when needed."

Then with a smile on his face Fakir says, "*I feel younger now*".

ANNAPURNA SCHEME



Introduction

Kasturba is a 65 years old muslim woman living in Khohra village of Fatahgrah block (Jodhpur district). Her husband passed away when she was just 25 years old. By then she already had 4 daughters. All her daughters are married and live with their families. She is left with one grand daughter whom her daughter left to be with her grand mother. She owns a big land measuring 60 bighas but it is barren land of which only a small part provides her with some harvest to depend upon. She has struggled all her life to take care of her children from that marginal income and now she was struggling to live on her own. Regular droughts have reduced the harvest and it has become difficult for her to work hard on the land. She said, “God never provides full, at times I have lintels and

sometimes I have millet to eat. For last few years, rain failed and didn't allow me to work and now when I am losing my capacity to work, the rain showers are providing moisture for agriculture. Also, I don't have anybody who can work on this land.”

Intervention

VOPA was aware of her situation and when GRAVIS team gave a presentation of Old Age pension scheme, they tried to fit her in the criteria. The problem was she owned a bigger land than stipulated in the criteria. VOPA members requested GRAVIS team to identify schemes which can take care of Kasturba's needs. A list of all effective schemes was prepared and the criteria were studied. A discussion was also held with Panchayat members. It was realized that she can be supported through Annapurna schemes but a lot of documentation work was required for enrolling her in the scheme. VOPA members with GRAVIS local team worked together and succeeded in enrolling her into the scheme.

Impact

Kasturba receives 10 Kg of wheat every month from the Public Distribution Scheme Shop. This helps her in getting wheat nutrition and rest is supported by community and her daughters. Although this is not enough for her to survive there is something on which she can depend on and hope for a better future.

Conclusion

Older people are often among the poorest and comprise a large and growing proportion of the most vulnerable in India. Isolation and physical weakness are significant factors exacerbating vulnerability in older people, along with food

insecurity, multiple health and mobility problems.

While to an extent vulnerabilities of older people are recognized, their capacities are often neglected. They play vital roles at household level as carers of children and women after young men in desert areas leave with their animals for water and food; or in search of labour work. They also act as income generator by managing the agriculture and livestock in rural areas. They also have the practical experience and knowledge which helps to preserve cultural and social identities. They are a part of our society and despite their physical barriers, play a vital role in the development of their families and communities. It is important that vulnerabilities of older people are seen in light of their capacities.

Gramin Vikas Vigyan Samiti (GRAVIS) has been working for the upliftment of downtrodden for more than last 25 years in Western Rajasthan and older people form an important part of their target group. The project POC has been one of the milestones in their effort to strengthen their food security and bring them back in the mainstream of development through different interventions.

The project is being implemented in 18 remote villages of Thar desert. The activities range from strengthening their livelihoods through improving soil moisture for agriculture, horticulture plantation and livestock provision. This has helped in improving their access to better food and nutrition. In the desert, they have very marginal access to potable water which has lot of bearing on their health and psychology. Through this project GRAVIS has

built water harvesting structures for them and their families. Similarly, community interventions like seed bank, fodder bank and pasture land development; have reduced their vulnerability to disasters like droughts. Through advocacy initiatives and linkages, older people have access to government schemes which are announced by government for their social protection. There are other interventions also implemented which indirectly support them in getting back to the mainstream like constitution of older people associations and enhancing their skills on agriculture, livestock management, health management and water management.

Meeting with the target beneficiaries demonstrate that they are better equipped to manage their own food with better food availability, access to potable water, nutrition from milk and also can contribute to their family's livelihoods. Access to resources have also ensured their own control over the resources also and enhanced their confidence. This has also helped them in reducing their loneliness by bringing them closer to their children and other community members as shown in the case studies. Their capacities and motivation have increased.

This project demonstrates clearly that most of the older people have the capacity to manage their food and livelihood. It also recognizes the fact that small interventions with older people can make big differences in their life. They have lived most of their life and want to live rest of their life easily and with respect. What they need is just small support which can bring them back to quality lives and better future for all.

Gramin Vikas Vigyan Samiti (GRAVIS) or Center of People's Science for Rural Development is a non-governmental, voluntary organization that takes a Gandhian approach to rural development by working with the poor of the Thar Desert to enable them to help themselves. Since its inception in 1983, GRAVIS has worked with over 50,000 desert families across 900 villages in Rajasthan reaching a population of over 1 million, and has established over 1,100 Community Based Organizations (CBOs). Through its dedicated field work, as well as its research and publications, GRAVIS has come to occupy a leading position amongst the voluntary organizations in the region.

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