



WASTELAND DEVELOPMENT THROUGH NATURAL RESOURCE MANAGEMENT



SOCIETY FOR HEALTH, AGRICULTURE AND RURAL PEOPLE (SHARP)



జల సంరక్షణ పనులు ఇలా...

MULTIPLE CROPPING IN BARREN LAND

Agriculture is a challenge and in a way, a gambling with nature. Also it is a testing time for farmers. That is why farmers in some places are preparing to sell off their lands instead of trusting agriculture. But the farmers of Kannala village are different, and their quest for cultivation is very unique.

Let's know more about them.

Kannala Grama Panchayat, that comes under Palakurthi mandal and located 12 km from Pedapalli in Telangana, is spread across 1500 acres. About 1236 families are living in that village, and the total population is 3690. Of them, 675 belong to scheduled castes and 421 are landless. Majority of people have

very small holding of land. Most families rely on daily wage works. Most of the farmers are small and marginal farmers, and their income is very meagre. While some fields are located along the slopes of the hillock, the remaining are around its base. As the cultivation is rain dependent, and as region doesn't get adequate rains, people had abandoned cultivation. Over a period they all have become barren lands. Except cattle grazing, those fields have become unfit for cultivation.

Against this backdrop, one day, the Society for Health, Agriculture and Rural People (SHARP), one of the leading NGOs, visited the village, studied the problem and suggested solutions for developing barren lands. As the farmers followed their advice, soon the face of the village changed. SHARP's representative Narsimhachari, together with his team, studied the conditions, and with a quest to improve economic status of the entire village, decided to turn the barren land into cultivable fields.

WEL COME

NABARD **एनटीपीसी**
NTPC

Wasteland Development Through Natural Resource Management

(సహజ వనరుల యోజనాస్వంతో చీడు భూముల అభివృద్ధి)

VIII: KANNALA. MAL: PALAKURTHI. DIST: PEDDAPALLY.

Project Area in acres.....: 121.25

Project Location.....: Nagulagutta (Kannala)

Outlay of the project.....: 21.35 Lacs

Project period.....: 2018-19

Financial support.....: NABARD & NTPC

Project Facilitating Agency: SHARP

Nagulagutta (Kannala)





For the proposed project SHARP could mobilise financial grants from NABARD's Barren Land Development Scheme and also from NTPC's Corporate Social Responsibility (CSR) funds. All the farmers of the village had lent their support by actively participating in the land development works.

SHARP formed a Committee for Barren Land Development with some of the active farmers of the village as its members. They educated them on water conservation and land development.

Along the slopes of Kakulagutta and Nagulagutta, trenches were dug to retain the rain water.

As a result of these efforts of the peasants, the barren soil turned into green fields. Trenches, stone bunds, check-dams, and farm ponds were constructed. Water pits dug at the fields provide moisture for the crops in the absence of rain. In this way, in Kannala panchayat, over 48 acres of barren land belonging to the poor farmers got transformed into arable fields.

With the project initiated by SHARP and financed by NABARD, NTPC Kannala has become an ideal village with self-sufficiency.



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SUSTAINABLE LIVING IMPROVED

“The Integrated Barren Land Development Scheme aims at developing barren lands into cultivable fields and thereby creating sustainable livelihood for farmers. By extending our support to SHARP, we could effectively implement this scheme at Kannala village. The population of that village is 3,690. Most of the families depend on daily wage works. Small farmers earn very meagre income. In such a place, with the land development work carried out by the people's participation, today farmers could cultivate in more than 96 acres. The cultivation area has also increased significantly than in the past, and this has led to sustainable development in the village.”

- **Patnana Anath**, DDM, NABARD, Karimnagar district.



IMPROVED CULTIVATION

“Industrial corporations typically spend corporate social responsibility funds on improving the infrastructure of the villages. For the first time in Telangana, the NTPC spent CSR funds for the development of barren lands in Kannala village and supported the sustainable farming of the peasants. Today, as a result of the successful implementation of land development and rainwater harvesting works with people's participation, those barren lands were transformed into cultivable fields giving good returns. Enthused with this success, our CSR wing is ready to take up some more activities.”

- **Rafical Islam**, AGM, NTPCC, Ramagundam



RAINWATER FLOWING FROM HILLS CONSERVED

“As the rainwater drains off from the hillocks, so as to conserve the water, on the advice and guidance of SHARP, we have made 920 meters long, one meter deep and one meter wide trenches around the hillocks. For collecting and absorbing rainwater into the soil four farm ponds were dug. A check-dam was also built. Orchards were grown there. In all these works the villagers volunteered their physical labour. As a result, now we are finding water in our lands at a depth of 10 meters. As water level in all the ten wells rose up, our farmers are growing two crops.”

- **Chandrakala**, Sarpanch, kannala



SUSTAINABLE INCOME

“The backyard of our house at Kannala village was never utilised for any purpose. However, as SHARP distributed different varieties of vegetables seeds and plants, under their scheme of encouraging backyard gardening, we started growing

kitchen garden. Now, we are growing 10 varieties of vegetables, and taking healthy food and earning good income. Like us, 100 more families here are earning regular income by growing vegetables at backyards of their homes.”

- **Lawanya**



BIODIVERSITY INCREASED

“All These actions have resulted in rise of groundwater levels, which in turn increased water in all the bores and wells in the area. Paddy, maize, vegetables, and orchards are cultivated in about 100 acres of land. Due to increase of groundwater table, besides farming, the biodiversity of the area is improving. Birds and cattle are finding enough water to quench their thirst.”

- **Kurella Narsimhaa Chari**, SHARP Staff

Once it was a barren land. But, now, it is cultivable and crops are grown there. As vegetables are grown in kitchen gardens, people could get nutritious food right at their backyards.

“In our area, as most of the farmers grow cotton and paddy, cultivation of vegetables is very less. As vegetables are not available locally, very few people go to Basantnagar or Peddapalli to get them. As vegetables intake is very low, people in the village often fall sick. Now that we all started growing kitchen gardens at the backyards of our houses, we are taking healthy food and earning money by selling some of the vegetables. All this was possible due the Barren Land Development scheme initiated by SHARP with the financial grant from NABARD and NTPC. As part of the scheme of developing barren lands through proper management of natural resources, every house that has vacant space, was given seeds free of cost for growing ten different varieties of

INCOME WITH BACKYARD GARDENING

vegetables. Villagers were taught the techniques of growing brinjal, ladies fingers, beans, tomato, bitter-guard, sorghum, leafy vegetables, etc., at their kitchen gardens. This has bettered our livelihood. We are not only eating fresh vegetables, but also earning sizeable income by selling vegetables.”

- Mrs. Puppala Padma, a woman farmer,
Kannala village, Palakurti Mandal, Peddapalli
district.



MULTIPLE CROPS CHANGED LIVES

He believed in his field and depended on only one crop. The input costs have grown more than the value of the crop yielding, and hence he ran into debts. But this hasn't deterred him. At this situation, he got right help at right time, and that has changed the course of his life. Instead single crop, he started cultivating three different crops, and this has fetched him good returns.

Kallavena Srinivas, a farmer from Kannala village, Palakurthi mandal, Peddapalli district, has three acres of land. Of that, in two acres he cultivates paddy. However, because of high investment towards inputs and wages for labour, and low crop yielding, he ran into debts. He got disgusted and developed a sort of aversion for farming.

At that situation, SHARP volunteers met him, and briefed him on the Integrated Barren Land Development scheme that was initiated with the financial grants from NTPC and NABARD. They

explained him the procedure for getting benefit under that scheme. They advised him to cultivate paddy in one acre and grow fruits and vegetable on the remaining area of the field, instead of going for a single crop.

As per their advice, he started papaya plantation on one acre, brinjal on the 2nd acre, and some vegetables on the third acre. SHARP provided pipes for drip irrigation and other equipment for cultivation under the scheme. "In two crops I got good yield of brinjal and sold 12 tonnes. It gave an income up to Rs.1,80,000. The expenditure was around Rs.66,000. My net profit was Rs.1,14,000," Srinivas said.

Srinivas and his family happily acknowledge that it all happened due to the scheme 'Barren Land Development through Management of Natural Resources'.



LUCRATIVE CULTIVATION



He decided not to go for cultivation on a barren land, and hence for livelihood became an auto driver. But, following the initiation of Barren Land Development programme in his village, he decided to go back for cultivation. As farming was profitable, his life changed. He earns additional revenue on auto.

This is the success story of Kannala Lakshmaiah, son of Chinamalliah of Kannala village. His story narrates how the Barren Land Development programme through conservation of natural resources dramatically changed the lives of peasants.

Lakshmaiah has three acres of land. But the only well existing in the farm completely dried up, and as there was no other irrigation sources, he had abandoned two acres, and carried out farming on only one acre. In spite of investing huge sums and toiling day and night, he never got more than Rs.10,000, as crop yielding was very low. Because of this, he stopped farming.

He decided to be an auto driver for livelihood, and bought an old auto by borrowing money. In the meantime, with the financial grants from NABARD

and NTPC,

SHARP under took the 'Barren Land Development' programme. The rainwater conservation efforts, such as implementation of rainwater harvesting trenches, digging farm ponds, recharging of wells by allowing the rainwater to soak into soil etc., improved water availability in an year. With this, Lakshmaiah started cultivating paddy on all three acres of land. On kharif and rabi crops he is now earning a net profit of Rs.1,20,000/-. He could clear the debt incurred for the purchase of auto.

Along with cultivation he continues to run the auto. On auto, he earns up to Rs.3000 per month as an additional income. "The land, which I had abandoned as it was not fit for cultivation, has been developed as a cultivable field. Due to water conservation and barren field development programme, our income increased and debts reduced. Our standard of living has improved," says Lakshmaiah.

SIGNIFICANT INCREASE IN FARM YIELD THROUGH WATER CONSERVATION

In spite of owing land, farming was never lucrative for them. But, the Integrated Barren Land Development Programme initiated by SHARP with the financial support of NABARD and NTPC, made farming profitable, and increased water resources. Thus, farmers' livelihood changed.

Pushpala Dayanand of Kannala village owns five acres of land and cultivates paddy using well water. But, as water level gradually receded in the well, due to lack of water for cultivation, he abandoned three acres and cultivated only on two acres. Even for that, water was not sufficient. His net profit was only Rs.30,000.

Under these circumstances, SHARP took up the scheme of developing barren land with the financial support of NABARD and NTPC. Under this project as a check-dam was built near Dayanand's field, groundwater level in the area increased. As a result,

the existing bore well in his farm got recharged. He started cultivating all the five acres of land. He cultivated paddy in four acres, and vegetables in the remaining area. On paddy cultivation he earns an Rs.1,20,000 and on vegetables Rs. 75,000. "After all expenses, I gain a net profit of up to Rs. 1,95,000, and this has improved my livelihood. Along with me, several other farmers could cultivate in their barren lands," Dayanand says happily. He conveys his gratefulness to SHARP, NABARD and NTPC.





WAGES HIGHER COMPARED TO THOSE OF EMPLOYMENT GUARANTEE SCHEME

The Integrated Barren land Development programme is multifaceted. It has several sections and many facets. Just as the optimum use of natural resources improved the livelihood of the farmers, the land development programme transformed the livelihood of agricultural labourers with no hardship. Migrations reduced as people could get works in their own villages. Employment opportunity improved.

The life of Mrs. Madaka Ruth, leader of women labour group is an example of this. Under barren land development scheme, conservation of natural resources and rainwater harvesting are very important. For this purpose, SHARP, with the support of NABARD and NTPC, took up works of constructing check dams, digging farm ponds and making trenches around the fields. Many people got employment in this project.

Mrs. Madaka Ruth, wife of Kanakayya from Kannala village is a labourer. She works as a labor group leader under Employment Guarantee scheme. Her



daily earning was not more than Rs.120. It was not at all sufficient to cover household expenses. Though the daily wage for farm labourers was Rs.150, that work was not regular. The same was the situation even if people were prepared to migrate to other villages. In such a situation, the barren land development project was undertaken.

“I work as a labour group leader for 20 labourers for constructing masonry bunds, contours across slopes, check-dam and farm ponds, etc., My daily wage was up to Rs. 400. From this, I spend for all our household expenses, children's education and farm investments. I deposit the remaining amount in self-help groups. Thus we are living without any problem. Saplings were given free of cost for planting on the ridges of our field,” says **Madonna Ruth**.

DRIED UP WELLS RECHARGED

Under the project of 'Integrated Barren Land Development through Optimal Management of Natural Resources', carried out with the grants from NABARD and NTPC in Kannala village, ten dried up wells have been scientifically recharged. As rainwater absorbed into the soil, water levels in the wells have increased. As a result, up to 70 acres are being cultivated.



RESULTS OF THE PROJECT

Previously farming was done only in Kharif. Net income per acre used to be between Rs.11,000 and 15,000. Today, after the implementation of 'Integrated Barren Land Development through Optimal Management of Natural Resources' project, net income on farming has increased. Now, it ranges between Rs.31,667 and 47,500. Farming is done in both kharif and rabi seasons.

Because of this project, the acreage of cultivation increased. Thus, 48 more acres have become cultivable.

Earlier ground water level was between 4.26 meters and 12.19 meters. Due to rain water conservation works, water level has risen, and now water is available at 3.04 m to 10.05 m deep.

Rainwater harvesting trenches of 1 meter depth were dug to a length of 920 meters, around all the hillocks in the vicinity of the village.

A check-dam and four farm ponds were dug for water conservation.

About 5000 saplings were given to 13 persons for plantation.

SHARP has supported vegetable cultivation on drip irrigation in six acres.

For growing kitchen gardens, six varieties of vegetable seeds were given free of cost to about 100 families.

Water level in ten wells has increased due to recharging.

Due to the project of 'Integrated Barren Land Development through Optimal Management of Natural Resources', which had a budget of Rs.19.5 lakhs, agricultural yields and net income increased considerably. About 10 percent of every work of this project was accomplished with the voluntary participation of the local people.

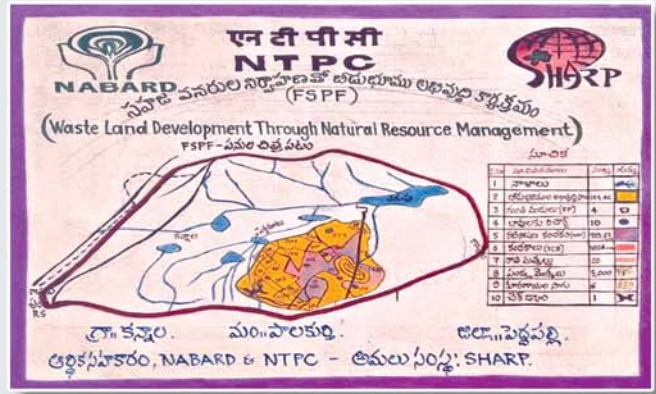


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