



Together For Communities

Sustainable Agriculture

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ACC LEISA

(Low External Input for Sustainable Agriculture)

The project focuses on providing 40-50% input reduction through environmental friendly and sustainable practices.

Mapped to:



Bucket Farming Pond, Chanda, Central India



Community Participation of Farmers

GAGAL

Agriculture has always been one of the leading sources of income for villagers of Barmana, DhounKothi, Beri and Panjgain panchayats. LEISA was introduced to increase awareness about the latest changes in the fields of agriculture, horticulture and veterinary sciences. The team initiated various programmes to attain the objective, namely,

- Farmers clubs were formed for encouraging community participation.

Thirteen farmer clubs were created across the four panchayats with more than 130 members. These members actively participated in the agri support programme and gave valuable inputs to make the programme more beneficial.

- Training camps are organized at regular intervals

The camps are attended by thematic experts for providing relevant and innovative knowledge. The participation of senior government officials from agriculture, horticulture and veterinary departments in these camps have helped farmers in gaining significant knowledge about different government schemes. The experts provided the participating farmers with valuable inputs related to healthcare of cattle, various irrigation schemes related to water conservation, use of fertilizers, manure and pesticides among others.

- Leveraging with government departments for providing quality seeds to farmers at subsidized rates at their doorstep.

This initiative has been very effective for small and marginal farmers as it saves them a lot of transportation cost.

The demand for seeds from farmers is on the rise with every passing season and coordinated efforts are being carried out in collaboration with agriculture department to meet them.

The initiative has been well received by the community members and their active participation has encouraged the team to scale up their efforts in days to come.





Towards 'System of Rice Intensification'

KYMORE

The host communities of Kymore are primarily dependent on agriculture for livelihood. Farmers with marginal land holdings cultivate paddy and wheat as their main crops. But due to consecutive years of drought and water scarcity, paddy cultivation has been almost negligible for the past two to three years and the wheat yield has also been considerably low.

Under the LEISA initiative, the team at Kymore encouraged farmers to practice sustainable agriculture and formed 17 farmer clubs with the support of ATMA (Agricultural Technology Management Agency) and Agriculture

and Horticulture Department to provide technical support on Low External Input for Sustainable Agriculture-LEISA.

In the month of July, the team distributed 180 kg of "Paddy Dhanya Seeds DRH-836" (2 kg each to 80 farmers and 1kg each to 20 farmers) to 100 farmers. They in turn used one acre of their land for the cultivation of their crop in accordance with the 'System of Rice Intensification' (SRI) technique. The farmers were not only supported during the preparation of paddy bed, but were also helped during the transplanting of saplings in their respective fields, using the SRI technique. Under the traditional

method of paddy cultivation, farmers require 10 to 15 kg of paddy to be able to harvest 10 to 15 quintals, per acre. But with the introduction of the SRI technique, it is envisaged that with 2 kg of paddy, the farmer would be able to yield 25 to 35 quintals of crop from one acre of land.

With adequate rainfall this year, ACC-CSR Kymore team has undertaken a number of activities to improve the agricultural practices. These include, pre-season meetings on cultivation of different crops, training on low input farming and other scientific techniques of agriculture.





Moreover, the team has initiated many more programmes to support the farmers-

- Sensitization on various government schemes.
- Support for preparation of farmyard manure and organic pesticides.
- External visits for farmers, introducing them to different farming techniques.
- Providing support for the procurement of seeds and agricultural equipment from the government at subsidized rates.
- Acting as a facilitator between the government and farmers under the “Pradhan Mantri Fasal Bima Yojana”.
- Promotion of nutritional kitchen gardens.
- Support to farmers for commercial production of cash crops.
- Water Conservation Measures- construction of checkdam and irrigation channels, pond deepening etc.

A farmer's delight:

Dinesh Patel from Kharkhari village has two acres of land, out of which he has used one acre of land for demonstration of SRI technique. He encourages his fellow farmers to adopt the new technique of farming to enhance productivity. He cites his own example to demonstrate the effectivity of the scheme.





Organic Farmers

LAKHERI

Agriculture plays an important role in the economy of the surrounding villages of Lakheri in Rajasthan, with more than two third of the population depending on farming and animal husbandry for their livelihood. However, farmers can only cultivate a single crop in a year due to less rainfall (<700MM per year) and lack of irrigation facilities. In addition, the average land holding for most farmers is 1.80 hectare or less and the cropping intensity is also very low. Farmers primarily grow Kharif crops and a very limited number cultivate Rabi crops like mustard, wheat, coriander and gram. Per hectare productivity & profitability is also very less due to a lack of knowledge and skills of improved agricultural practices, higher cost of agri - inputs , lack of value addition and proper marketing facilities, imbalance

and over use of fertilizers, micro nutrient deficiency and lack of organic content in the soil.

ACC's CSR team implemented the Low External Input for Sustainable Agriculture (LEISA) Project in Lakheri with an objective to enhance agricultural productivity and profitability in ten neighbouring villages.

A total of 350 farmers were targeted covering 490 hectare of land. Farmers were sensitised and farmers' clubs were organised in each village. This was then linked with NABARD, Department of Agriculture, Horticulture and Agriculture University in order to enable the farmers to avail the benefits offered by the government. ACC's Lakheri team also organised a number of training and

capacity building programs, visits to model farms, and facilitated the visit of agriculture scientists for demonstrating sustainable agricultural practices. Major emphasis was given on natural resource management, organic farming and suitable cropping plan.

Five to ten farmers from each village were identified and demonstration units of 0.25 hectare each were established. They were then taught improved agriculture practices like - field preparation, soil testing, seed treatment, selection of crop and varieties, right doses of fertilizers and manures and IPM practices, etc. As a result, farmers applying these techniques received returns higher by 25-40%. This encouraged other farmers to replicate these best practices.



90 farmers have also been trained as organic farmers under PMKVY certified by NSDC, 65 farmers have initiated organic farming at their fields and started using vermicompost in crops and vegetables, gradually replacing chemical fertilizers. This has reduced input cost by 50% and increased returns by 20-30%. As the next step, farmers will be registered for producing certified organic produce to develop Lakheri as a hub of organic produces.



Case Study

Iswari Prasad, a small farmer from Chamawali village, owns 2 hectare of land. After becoming a member of the village farmer club, he participated in a training program organized by ACC at Lakheri and initiated organic farming with the support of ACC's CSR team.

Initially he started making vermicompost manure on a pilot basis in three small pits and used it in his field for crop cultivation. After seeing the positive results he increased the number of pits and enhanced his production capacity from 2.0 quintals to 200 quintals per year. He received a 25% higher rate in the market for his produce and gradually replaced chemical fertilizers by vermicompost. He has now converted his field into a 100% organic farm. In addition, he developed a worm bank which fetches him an additional income of ₹ 40,000. In the last cropping season, he could save more than ₹ 1 Lakh by the sale and usage of vermicompost.

On August 05, 2016, NABARD Jaipur sent a team of 40 farmers from Sawai Madhopur district to Lakheri for training. Out of them, 35 farmers have established vermicompost units in their fields and procured worms from Iswari Prasad.





Transformation of Land and Lives

TIKARIA

For more than 80% families living around Tikaria plant, agriculture is the only way to transform their lives. But, due to lack of technological knowledge and financial aid, these families are unable to make it.

Believing that modern farming techniques and government support can change the lives of thousands of families, the CSR team at Tikaria introduced LEISA. The aim was to improve the livelihood of farmers and their families by adopting progressive ways of cultivation that decreases input costs, increases productivity, connects them with financial networks and takes full advantage of all government schemes.

The interventions have been primarily towards educating farmers about the improved agricultural practices and government programmes.

The farmers are provided with formal and informal training followed by on-farm demonstrations for improved cultivation of Paddy (SRI), wheat, Arhar, turmeric, mustard etc. Inter cropping, i.e., to grow a crop among plants of a different kind, has been introduced for vegetable cultivation. Additionally, scientific fisheries and orchard development are promoted. For cash crops, few species of medicinal plants are encouraged, for which Dabur India has extended its support for supplying raw materials as well as marketing the produce. Organic farming and use of green manure is also popularized. Government departments are equally involved in

the process and take necessary steps to ensure the implementation of this practice in the entire area. They are also supporting livestock development through veterinary support and artificial insemination among others. SHG members are promoting kitchen gardens. In order to attain sustainable and consistent agricultural advancements, 12 farmer forums and 48 women SHGs have been formed in the six intervention villages.

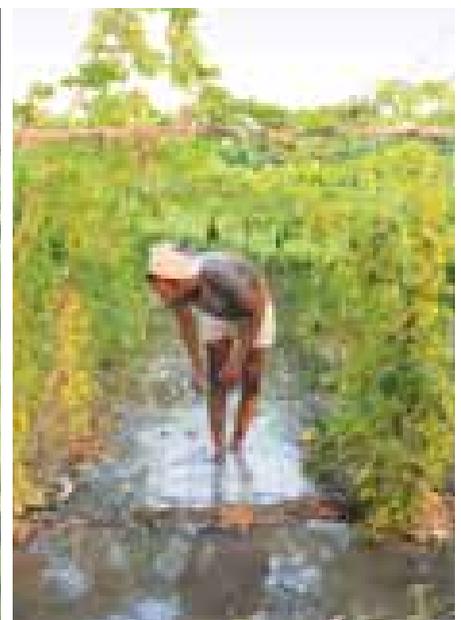
The small farmer's big win: Algu is a small scale BPL farmer who used to cultivate only two crops-wheat and paddy and followed only the traditional method of agriculture. The productivity of his crops was very low. Post the intervention, Algu learnt about the modernized and advanced agricultural techniques and started cultivating paddy under the SRI (System of Rice Intensification) technique on one acre of land. With this technique the productivity increased from 16-20 quintals to 30-35 quintals

per acre. His gross income after adopting this technique has risen to ₹ 43,750 and the net profit has gone up to ₹ 31,900.

Parvati Mahila SHG's sustainable model:

Parvati Mahila SHG consist of 10 women members. Almost all the members are landless and belong to BPL category. The CSR team provided them with training on goatry, vaccination support, and goats of improved species. Two goats per member were given out. Currently, the SHG has a capital of ₹ 2,25,000 for goats.

Community participation and the perseverance of the CSR team has helped many families transform their lives. ACC has consistently and actively piloted and participated in the projects which are aimed at helping the most crucial elements of human community – the farmers. Its CSR initiatives help the company significantly contribute in the development of our country.





The Village Activist

KUDITHINI

ACC's Kudithini plant in Bellary District of Karnataka offers sustainable livelihoods to more than 1200 people through direct and indirect employment. However, agriculture continues to be the biggest source of livelihood for the locals. 60% farmers depend on rains for cultivation and the remaining 40% depend on Thungabhadra Canal (High Level Canal) for irrigation.

To make matters worse, the lack of awareness has led to the excessive use of chemical fertilisers and pesticides that has reduced the soil fertility drastically, while increasing the input cost. As a result the gap between income generated and the farming expenditure has widened, prompting farmers to take loans from money lenders at interest rates as high as 36%.

ACC's CSR team at Kudithini, in association with local NGOs, encouraged farmers to practice sustainable agriculture under the 'Low External Inputs for Sustainable Agriculture' (LEISA) project. ACC's team spoke to nearly 2500 farmers and identified a number of issues plaguing the community, these include: lack of awareness on government schemes, lack of training with regards to new farming technology, lack of proper technical support, lack of timely financial support and the role of middlemen.

A number of initiatives were then designed to promote new agricultural practices for improving productivity and reducing costs. 20 farmer clubs have been formed with the support of the Krushi Vigyan Kendra and agricultural

department that train the farmers and bring them up to date with the latest farming technology that is affordable and sustainable. In addition, farmers have been introduced to bio-farming and non-pesticide management on 100 acres of land as part of a pilot program.

The CSR team has also set up facilities that conduct soil testing and advise the farmers over the composition of the crops and steps to increase the fertility of the soil. ACC Kudithini has also been organising farming workshops and acting as a mediator between farmers and government bodies and enable them to avail of schemes and subsidies.

The key objective was to reduce the cost of cultivation by adopting practices which involve low or no expenditure





to improve net incomes without yield reduction. A Decentralized Extension System has also been set up, which will make sure that resource persons provide regular technical support in the village. ACC's Kudithini team has decided to accord recognition to the farmer implementing all these initiatives, and term him 'the village activist'

ACC also designed a comprehensive package of drought adaptation measures for rain fed lands. The integral components of this initiative were improving the soil productivity, promotion of crop diversity and crop rotation, improving seed accessibility through seed banks, reducing the input cost by adopting NPM method, biomass development and organizing farmers into groups for providing a platform for services and linkages etc.

Vermi compost units were constructed in Siddamanahalli Village as part of the LEISA project and 10 farmers constructed a unit each that would produce quality organic manure. ACC sanctioned ₹ 70,000/- (Each ₹ 7,000/-) and farmers contributed ₹ 30,000/- (Each ₹ 3,000/-).

Several activities were implemented by the farmers that included jungle clearance, land leveling and controlling soil erosion, compost incorporation, intercropping, NPM practices, soil & water conservation practices, etc. 1022 farmers have benefitted from this project and received training on

organic farming and integrated farming practices. It was found that farmers using bio-fertilizers generated an additional income of nearly ₹ 6000-8000 per acre. These initiatives have also increased the income of 149 farmers through integrated farming practices such as dairy, goatry and poultry.





Makeover of the South Bed

MADUKKARAI

The Coimbatore District in Tamil Nadu has been receiving less rainfall due to which there has been a drastic reduction in ground water level by 30%. The Madukkarai Panchayat highly relies on the Nellithurai and Athikaduvu water line for drinking purposes. The failing monsoons, high degeneration of ground water has led to scarcity of water. The CSR department and the Environment department in association with District

Water Shed Development has come together to create a Madukkarai Panchayat is being mapped under Geographical Information System for water management. All the data is derived from the satellite system, thus being accurate and for overall planning. The process helps us in identifying the site selection and suitability for construction of water harvesting structures. Construction of

30 small check dams across Madukkarai Panchayat during a span of 5 years has been initiated, which would help to save 15 lakh cubic meter of rain water. As a pilot model on a local reservoir which was dry and empty, a small check dam was constructed to divert the rain water to local reservoir (South Bed). The project was successful and the reservoir was full up to 50% of its capacity.



Details: South Bed Reservoir

Storage Capacity	2.5 ha
Avg. Rainfall	500 mm
Avg. Dept	10 m
Volume Capacity	251000 m ³
Successfully harvested (Jan to Sept 2016)	163000 m ³



Credit Plan

THONDEBHAVI

Under the LEISA initiative, the CSR team of Thondebhavi, carried out various initiatives to increase the credit strength of the farmers. These initiatives also promoted team work and group approach.

Rythu Mithra Groups (Farmer Groups) were formed. The objective of the group was to develop unity, mutual support and equality among farmers

and create credit activities for income generation. The group also worked on creating market linkages for their agriculture products. The members were encouraged to adopt new technologies and methods to achieve higher yields and to sustainably utilize resources like water, land, etc. In all, 18 groups were formed with 282 farmers in all CSR operational villages. Every month, each group holds two meetings

and mobilizes savings. Moreover, these groups also hold bank accounts.

Another initiative is the RMG Members Training and Farmer Field School.

The objective of this program is to enhance functioning and also raise awareness about the schemes available from government agencies like Department of Agriculture and Horticulture. Employees of the



departments talk about sustainable agricultural practices and issues.

The members were also given training on the Miro Credit Plan (MCP). The primary objective of this plan is to effectively implement credit activities in Rythu Mithra Groups (RMG). Under MCP, the group members will have to regularly pay their share of instalments. Transparency

will be maintained through the exercise. Funds will be regularly rotated so as to avoid stagnation of funds in the bank. Members will also be encouraged to take loans only to fulfil their needs.

In addition to the credit scheme, farmers are also given qualitative seed support to improve crop yields and income levels through groups only.

ACC is also dedicated to the cause of improvement of the farmers' financial standing.

These initiatives have not only promoted credit strength among farmers but have also made them understand the power of unity and team work.





Restoring the canal

WADI

Global warming has been affecting everyone. Temperatures in North Karnataka have been soaring high, resulting in acute water shortages. River Kagina, a major source of water for Wadi and the villages nearby, was completely dry. In addition to the river, borewells around the vicinity too had dried. Wadi, Ingalgi, Kunoor villages have no other source of water.

The District Commissioner, MLA and government officials understood the water demand and decided to release

water from the nearest dam. However, there were sand barriers in the river, which did not allow the water to reach Kunoor village.

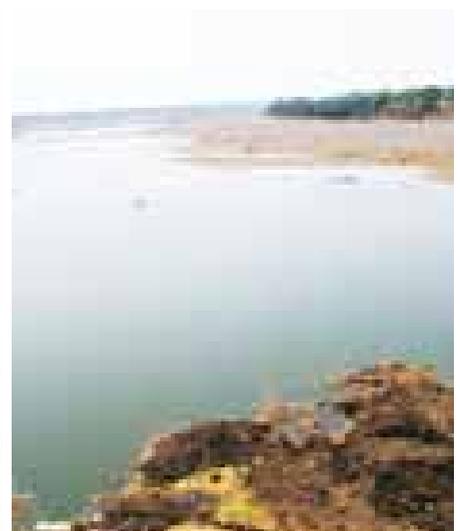
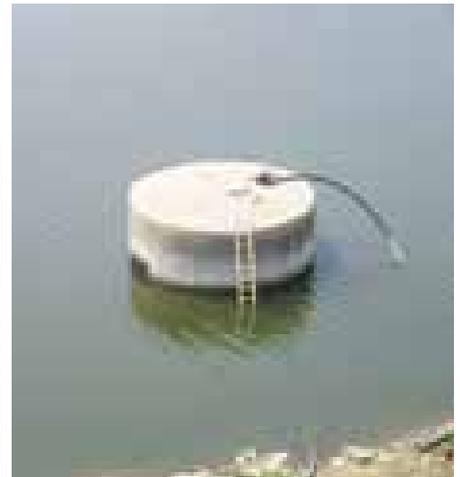
The CSR team at Wadi understood the situation and immediately started working on the de-silting of the sand barriers, which were blocking the water flow from Gola village to Kunoor village- a 7kms long stretch.

After persistent requests from the local community and the government

officials, ACC agreed to de-silt and clear the water canals of the Kagina River under the LEISA project.

With good efforts, the water canal was cleared, allowing the water of Kagina River to flow. Water supply was restored at Wadi, Kunoor, and Ingalgi.

The Wadi municipality, District Commissioner and local communities, appreciated the efforts and support of ACC towards its stakeholder communities.





Towards Watershed Development

CHANDA

Yenak, Sawangi, Sindoli, Usgaon and Gugghus villages in the Yavatmal and Chandrapur district, near ACC's Chanda plant and mines, in the state of Maharashtra, have been reeling under drought conditions. After due deliberations, the company has decided to undertake several watershed development techniques in order to lend self sufficiency to these villages with regards to their water needs. Watershed development refers to the conservation, regeneration and judicious use of resources within a watershed area. Simply put, these processes aim to mitigate the adverse effect of drought on crops and livestock to control desertification.

A number of projects were initiated under the LEISA (Low External Input for Sustainable Agriculture) program in all the villages as part of ACC's CSR initiative, which included rain water

harvesting, construction of check dams and reservoirs, deepening of ponds and de-silting operations.

Bucket farm pond facilities under the LEISA project has increased crop output and income by almost 40%. A farm pond is a large hole dug out in the earth, usually square or rectangular in shape, which harvests rainwater and stores it for future use. It has an inlet to regulate inflow and an outlet to discharge excess water. 35 Bucket Farm pond facilities were constructed. This resulted in an increase in the level of the water table, thereby increasing agricultural output by 10%. During summer, there was availability of water and the accumulated water was used for livestock, green belt development and spraying of pesticides.

In Yenak village, a pond was deepened with the extraction of 3500 cubic meter

of black cotton soil. This soil was then used by farmers as manure to improve the fertility of their land. The success of this exercise prompted similar operations at 4 other ponds.

Additionally, lift irrigation and drip irrigation was also carried out on 55 acres and 7 acres of land, respectively. This resulted in a 40% hike in crop output. Cement check dams were constructed and pond evacuation was carried out with the objective of rain water harvesting. The cement check dam is expected to meet the water needs for 200 acres of land and the pond evacuation is expected to irrigate 175 acres of land.

The fructification of these initiatives has ensured that water is now available at these villages 365 days a year. Government of Maharashtra and the villagers have welcomed ACC's program and embraced them with open arms.





Tackling Odisha's Agrarian Crisis

BARGARH

Bargarh district, recognised as the rice bowl of Odisha, yields approximately 6 million tonnes of paddy every year, making it one of the highest paddy producers in India and yet the district faces an agrarian crisis. Like, other parts of the state, Bargarh is characterised by low agriculture holding i.e., 80% of the landholders own less than 1 hectare of land. Further, it was discovered that the profitability has also declined significantly. Reduced soil fertility, outdated sowing techniques, intense use of fertilizers and pesticides and increased cost of manpower has raised the farming expenditure manifold, which cannot be met with the income generated from the produce.

Through the LEISA project, ACC CSR has started creating awareness about a wide range of cost-effective agricultural tools that will bridge the gap between income and expenditure. The objective is to arrive at a harmonious existence with nature, with practices that increase productivity without the excessive use of fertilisers and pesticides. This in turn will generate confidence among the farmers that regardless of the size of their land holding, the right farming techniques can lead to reasonable profits and savings.

Farmers in Bargarh are being trained under Integrate Nutrient Management, (INM) programme, which focuses on

improving soil fertility and boosting the nutrient level in plant by using organic, inorganic and biological components like,

Fish Amino Acid, which is a product prepared from the waste of fish and jaggery. This acts as a natural pesticide and pollination. The other components are, Vesicular Arbuscular Mycorrhiza (VAM), Vermin Cost and Vermin Wash.

Integrated pest management is another programme that aims to control crop pests in the long-term through biological restraints, habitat manipulation, modification of cultural practices and usage of deterrents such



as chilli garlic paste, tobacco extract, light trap, botanical pesticide, etc.

In addition, LEISA is also promoting crop diversification, by encouraging a shift from paddy to commercial crops and fruits. Currently, around 20 acres of land are being used for the cultivation of banana. SFAC (Small Farmers Agri

Consortium Farmers Federation) has been formed in order to boost unity and enable farmers to collectively implement these new agricultural practices.

At present there are around 215 farmers with 114 acres of land practicing IPM and INM techniques. On an average, the cost of cultivation has been reduced by

30% and there has been an increase in productivity by 30-50%

Social impact: The farmers are now able to earn ₹ 1.25 lakh (average) from one acre of land and the quality of vegetables in terms of its softness, shine, taste and colour has improved.



Case Studies:

I am practicing integrated pest management and Integrated Nutrient management techniques in my vegetable field. The output is very encouraging and the vegetables taste good. I am no longer afraid of feeding the waste to my cattle. I have increased my cultivation area under IPM & INM and my fellow farmers are also following suit.

-Santosh Pradhan, 24 yrs
Bardol Village





A Lifeline Project

CHAIBASA

ACC Chaibasa is very closely attached to eight vilages viz Kondwa, Kudahatu, Nimdih, Rajnaka, Jorapokhar, Dokatta, Chalgiand Daunduga having population of around 16000. More than 95% of the population belongs to the tribal community.

Kondwa is also one of the most critical vilages from business operation perspective. The community depends on farming, animal husbandry and casual labour for income. Decrease in rainfall, depletion of ground water and other environmental changes have raised a concern among the people.

The CSR team looked into the matter and came out with few solutions.

- Around 1000 meter long pipeline was laid down from the Mines to access point.
- From this access point, two earthen water channels were made to distribute the water for two locations in separate direction. These channels have a direct connectivity with two ponds. These ponds hold a command area of approximately 50 acres of land.
- Around 30-40 farmers now have the perennial source of irrigation

and hope to cultivate two crops in a year.

- The team has also placed a diesel pump set to pull out water from the mines pit.

This project has directly helped 40 families and now is in course to reach out to the rest of the vilage.

The project is just a beginning to help the community develop and grow.





The Boon of Multi-cropping

DAMODHAR

Purulia is one of the backward districts of West Bengal. 67.33% of the total workforce is engaged in agriculture and allied activities. The region is characterized by subsistence agriculture with marginal and landless farmers. There is also a lack of agricultural technology which leads to labour intensive method of agriculture. Low rainfall in this arid and semi arid region makes the rain-fed agriculture a risky enterprise. With limited number of water bodies, cultivation here is a struggle.

Keeping all the hurdles in view ACC Damodhar decided to bring in Low External Input for Sustainable Agriculture (LEISA) under its CSR intervention.

The team has re-excavated four of the existing silted ponds resulting in the creation of a storage capacity of 20400 cubic meters of water. This initiative is similar to the IWMP (Integrated Water Management Programme) model. The main objective is to restore the ecological balance and develop the soil and water in the impacted area.

This enables multi-cropping and diverse agro based activities which lead to a sustainable livelihood for people residing near the water body area. Eight members of the two Self Help Groups in the area have introduced multi-cropping pattern of agriculture.

Moreover, 10 acres of fallow land now come under the irrigation for seasonal

vegetable cultivation. Leguminous plants are now being cultivated to increase the nitrogen in the soil.

Beneficiaries speak- Kalpana Mandi, an SHG member of Rinamala SHG of Dumdumi village-“ACC has re-excavated and de-silted this pond (Bashpukur) and our SHG has the permission to use the pond for agriculture. During kharif season we cultivate various crops by using the water from this pond. I have earned ₹ 500-600 in one week by selling these vegetables”

Through the project, ACC has successfully helped the village community to regain its livelihood, thereby enabling each village member to be financially independent.





Deepening Ponds

JAMUL

The district of Durg experiences subtropical climate. The annual temperature varies from 44.9°C in summer to 11°C in winter. The ponds are the source of water for local people for their primary and domestic needs. It has been observed that the total area of the ponds is decreasing day by day, due to soil erosion in the rainy season. ACC Jamul as part of its commitment towards the protection of environment has assessed two areas to excavate the pond at Jamul. These two ponds are surrounded by vast areas of farming

land (approx. 50 acres) and houses. The excavation of two ponds with the total size of 35000 cubic meters will increase the water level upto 5 meters. With the deepening of these ponds, the water shortage in the village will be minimized. Moreover, the farmers will also have sufficient amount of water for their cultivation. The excavation has also improved wetland quality. The initiative of pond deepening has also provided the locals with an alternative livelihood for fishing





The Vermiculture Way

SINDRI

Vermiculture is a prominent source for increasing the agricultural productivity.

Smt. Bahamuni Devi, a woman farmer who is also the Vice President of “Jaherera Sayam Sahayata Samuh”, village Shyamalapur, district Dhanbad has set an example in practicing LEISA. She has a family strength of 5 members and belongs to Scheduled Tribe community. Her husband is a daily wage labourer earning nearly ₹ 6000 per month, which is not sufficient for her family since they also had debts to repay. Bahamuni Devi and other womenfolk of the Shyamalapur Adibasi Tola attended an awareness camp held in December. The camp was to introduce women to the ways of attaining financial independency and stability. The concept of Self Help Groups was initiated and

since then Bahamunidevi has been an active member of an SHG along with 11 other women.

Bahamunidevi has a small piece of land and uses it for the cultivation of kitchen garden vegetables. Earlier, she used to grow only one crop in a year, but now with kitchen garden technique, she has been able to cultivate various fresh vegetables.

In addition to multiple crops, she has also initiated the Vermiculture concept, which has become the prominent source for increasing the agricultural productivity.

Vermiculture is the process of using worms to decompose organic food waste, turning the waste into a nutrient-

rich material capable of supplying necessary nutrients to help sustain plant growth. This method is simple and effective. It also helps in rebuilding the soil and increases the water-holding capacity of the soil, which in turn promotes crop growth.

The CSR team has provided them agri seeds, saplings, etc. besides regular training on Vermi-compost and natural methods of pest control. Moreover, a small water sump in the kitchen garden was also provided.

The vermiculture and kitchen garden techniques have helped many women in the area to gain significant insight about agriculture. This has helped them by paving a way for financial stability.





Water Lifeline for Drought-hit Villages

BEED

Beed in Aurangabad, faced an acute water scarcity this summer, prompting the CSR team to come up with plans to help the farmers in need.

The economy of the Hivra village is based mainly on agriculture and milk production. Kharif and rabi crops are mostly grown in the area. Every year, around 25 to 40 families migrate in search of work to a sugar factory for sugarcane cutting and remain away from their village for 4 to 5 months.

Here are some initiatives the CSR team took to help the village mitigate the impact of the dire water shortage it faced.

Strengthening of sources through K.T. Weir Repair

As per the hydro-geological condition, when Kambli River flows, the water is available in the dug wells for at least

six months after the heavy rains. While the KT (Kolhapuri Type) Weir was constructed 30 years ago and still the foundation and other column structure are in good condition. The problem lies in the bushes of the KT Weir, which are corroded making it cumbersome for the farmers to function the gates. Hence, during the monsoon season they were unable to shut the gates to trap water. The problem was solved by constructing a permanent stone masonry wall of total height of 1.5 m instead of gates of KT. This will store the back water length of 800 m on its upstream side. The total storage of KT is 40 TCM which will recharge around 27 wells and 30 bore wells near the banks of Kambli River. The construction of the wall will not only benefit the Hivara village, but also its neighboring village, Pimparkhed. The villages are now prepared for the rainy day.

Ferrocement Tanks

A cluster of villages in Beed did not have access to water for almost eight months, during which they were heavily dependent on sourcing water in tankers. ACC decided to build tanks to enable storage of water. Accordingly Ferrocement tanks were constructed at 21 locations benefitting 500 households. These tanks provide a convenient source of distribution of water to meet the beneficiaries' day to day needs.

Cement nala bund

Three cement nala bunds or embankments were constructed in Hivra village, which will support 35 wells, helping 72 farmers along the bank. With this the families of the two villages of Hivra and Pimparkhed are now assured of adequate drinking water. Farmers have seen an increase in their income, due to a better irrigation system.





ABOUT US

ACC Limited is India's foremost cement manufacturer with a countrywide network of factories and marketing offices. Established in 1936, it has been a pioneer and trend-setter in cement and concrete technology. Among the first companies in India to include commitment to environment protection as a corporate objective, ACC continues to be recognized for environment friendly measures taken at its plants and mines. Its commitment to sustainable development, its fairness in business dealings and the considerable on-going efforts in community welfare have won the company acclaim as a responsible corporate citizen.

www.acclimited.com

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ACC



**एसीसी LEISA परियोजना के अन्तर्गत
सखियाँ का उत्पादन**

प्रदर्शन फार्म

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संघ का नाम : डारडी

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