

Development

August 2017

Monthly Development update from DHAN Collective

Matters

Study

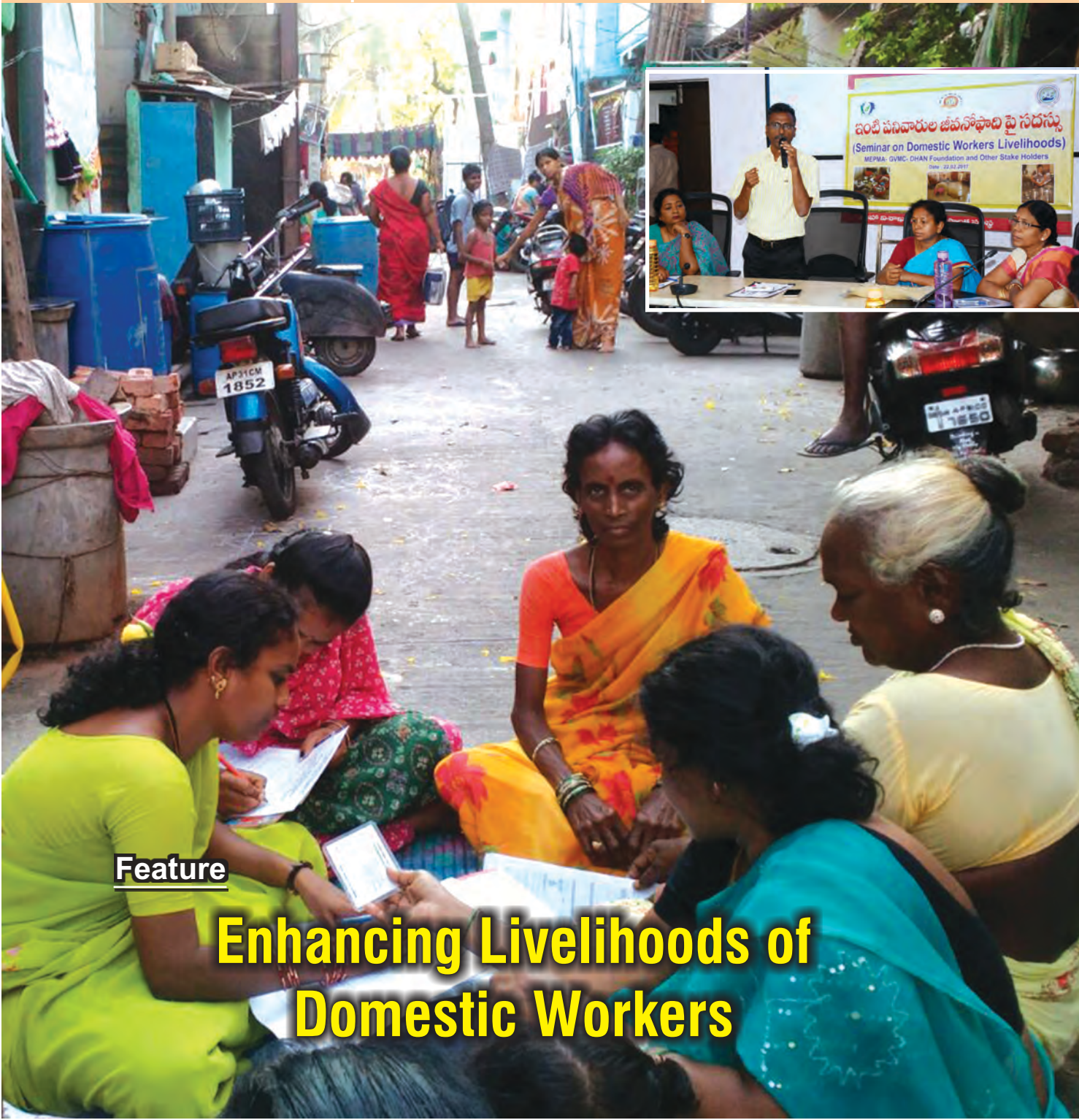
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Feature

Enhancing Livelihoods of Domestic Workers



Urban livelihoods of poor are complex and filled with vast opportunities and choices. The poverty scenario of the urban poor is also entirely different from that of their rural counterparts. The transformation in the urban economy has resulted in widening opportunities for the service sector. The sprout of domestic workers as a sect in the urban framework is fastly evolving as an indispensable workforce.

DHAN's urban initiative has over two decades of experience. The pilot initiative to intervene the livelihoods of the urban domestic workers of Vizag is an attempt to augment their livelihoods to overcome poverty through skill enhancement and ensuring entitlements.



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From the Editors' Desk

Dear Readers,

Greetings from DHAN Foundation.

The cover article on domestic workers narrates the initiate from Vizag region for enhancing livelihoods of the urban poor. The article on ahar - pyne is all about how to revive traditional water structures with community participation. Traditional water structures encompass the wisdom of our ancestors in mitigating droughts and floods by effective use of the water structures. The article on bridge loan shares how the absence of timely credit could lead the poor members of SHG's back into the informal lending and the space for a bridge loan to aid the poor in time. The article on promoting decentralised processing infrastructure for small millet seeks attention of the policymakers to bring out conducive policy changes to address the gaps. The article on heritage an event organized by Tata-Dhan Academy (TDA) describes the need to preserve the rich heritage and culture of this land and TDA's efforts to conserve the same through social engagement of youth. The article on addressing livelihood vulnerability through skill building shares the objective of mitigating disasters through skill enhancement. The community-driven tree plantation initiative in Gulbarga captures how the convergence of development actors could take forward the afforestation efforts to greater heights.

We welcome your suggestions and feedbacks on the articles featured in the development matters. Please write to us at ghancdc@ghan.org

Happy reading!

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Reviving Traditional Ahar & Pyne System Irrigation

Kirankumar M * & Jitendrakumar Roy **

The Munger district is located in Southern Bihar. The district headquarters is Munger city. It is located on the south banks of river Ganges. It is a traditional settlement having historical references. Five districts have been partitioned from its original administrative boundaries. Presently in this district, there are nine blocks, 100 Panchayats, and 858 villages. It lies within the seismic zone. Though the district does not lie in flood and drought-prone zones, it witnesses flood and drought situations frequently. The average rainfall in this district is 1231mm. In fact, the district is prone to multiple hazards.

Considering the situation in the field, DHAN's interventions were designed to facilitate community-led conservation, as the communities are the first to respond to any disaster. DHAN partnered with ITC, through its corporate social responsibility (CSR) with emphasis of community actions for local development. The project **“Water and Livelihoods Security: Reviving Traditional Ahar and Pyne System Irrigation in Munger Districts of South Bihar”** was launched with a mission of addressing poverty through water and agriculture interventions in poorly developed areas of Munger district.

What is Ahar and Pyne?

Ahar and Pyne is a 5000-year-old irrigation system in Bihar. The word Ahar–Pyne came from Magadhi language of Bihar. It was the traditional irrigation system well-managed by the Magadh Kingdom. Ahars are reservoirs with an embankment on three sides while Pynes are diversion channels laid from the river or the catchment area for impounding water in the Ahars and channels. Through this system, one Pyne can irrigate up to 400 acres. It helps controls flood and drought and acts as a protecting mechanism for the villages.

Ahar and Pyne assist in controlling floods by distributing surplus water into its system. Drought is also controlled as it makes water available in the reservoir for a year. Munger district receives 976mm of rainfall (almost 80% of the total average rainfall of 1231mm) between June and September. The balance 20% gets distributed in the remaining eight months. Hence, most of the agricultural activities depend on the rainwater harvesting systems.

“Ahar and Pyne is a 5,000-year-old irrigation system in Bihar. It helps control flood and drought. The article narrates DHAN's experience in reviving the traditional structures with community participation.”



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** Mr. Jitendrakumar Roy, Project Executive, DHAN Vayalagam (Tank) Foundation



Although Ahar–Pyne has been extremely effective in this district as a traditional system, most of the Ahar and Pyne systems were degraded due to the lack of community management. The community negligence in up keeping the system has resulted in manmade droughts and floods. Villages are severely affected by unsafe drinking water, flood and drought.

DHAN has worked on similar systems in Gaya, this experience made us apprehend the need to revive the traditional Ahar and Pyne system with community participation. DHAN undertook the renovation initiatives in Tarapur, H. Kharagpur and Asarganj blocks of Munger district. Through the renovation of the reservoir (Ahar) and channel (Pyne), both rain and river water was harvested, thereby ensuring water security. Availability of water, in turn, ensured food security and recharge of groundwater in the South Bihar region. The project provided a cost-effective method of irrigation for crops. By exploring new ideas and technologies, accessibility to water is made certain. Besides renovation works, training programmes on agriculture has facilitated an increase in productivity, thus addressing the food security-related issues.

Institution building

DHAN believes in organising communities first and building them as an institution. The community involvement brings in transparency and sustainability into the process. The farmers and agricultural labourers in a watershed are organised as Village Level Association (VLA), i.e. Vayalagam. The VLA is the core feature in identifying the Ahar and Pyne for renovation. The entire stake is with the VLA to own, manage and govern





the institution. 31 Vayalagams were promoted during 2016-17.

In the VLA, the general body consists of all the members of Ahar; and Pyne, the representative body or the executive committee consists of three members. They act as the office bearers in the capacity of president, secretary and treasurer. The executive committee plays the role of decision-making guided by the general body and is responsible for implementation of all types of structures in its beneficiary area.

The members of the VLA have also organised themselves into multiple Agriculture Finance Groups (AFGs) comprising 12-20 members. The AFGs does financial intermediation by pooling its member's resources. The members of the AFG are the direct beneficiary of financial intermediation. The AFG provides financial support to the VLA for ensuring its sustainability.

Sustainable assess to finance: Agriculture Finance Group

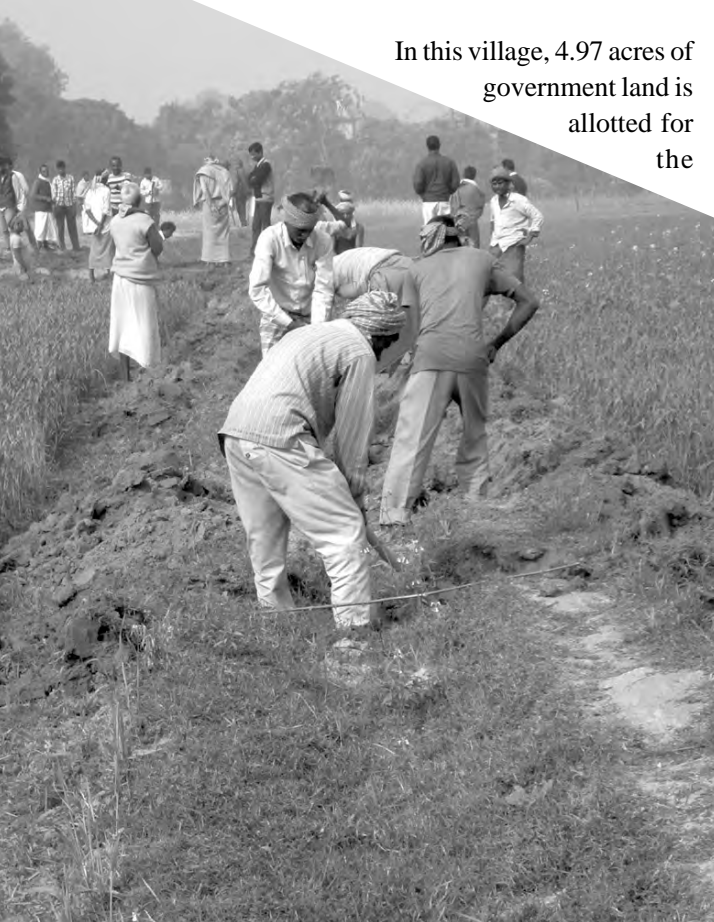
While the village level association works on water and agricultural development, the AFG facilitates access to finance. It is notable that most of the farmers in rural Bihar do not have access to banking services. The groups promoted in Munger district serve as a microbank. Members of the group save money depending upon their capacity and the amount of savings is decided considering the capacity of the members. The group uses the savings amount to lend to the members of the group. All the groups are expected to open a separate bank account for their groups. These AFGs are the link in a VLA. Each month, the members of the AFG have a group meeting compulsorily. This provides space for them to interact with VLA even after the completion of work.



Khaira VLA experience – an Illustration

Khaira village is predominantly an agriculture-based village, located 56 km away from Munger district. It lies 10 km away from Tarapur, the block headquarters. Khaira village lies in Khaira panchayat. The total number of households in this village is 472. The total population of the village is 2,248 which includes 1,140 men and 1,108 women. The total SC population in this village is 533, of which 262 are men and 271 are women. The total number of families living in this village is 285. About 23% of the population belongs to scheduled caste. There is one household belonging to ST community with a population of three members. The village has poor road facilities, therefore the public transportation facilities also not adequate. Private vehicles and autorickshaws are the main sources of transportation. Farmers are hardworking, but less mainstream support is not helping them to come out of poverty. Under this project, DHAN Foundation supported by ITC MSK has facilitated the promotion of “**Adarsh Gram Ahar Pyne Samiti**” in Khaira village. The association has 71 member households, who have a direct relationship with the water body. After the renovation of this pond, farmers were able to irrigate 295 acres of land and the VLA use the excess water for fish rearing. This has helped the members of the VLA increase income from this structure.

In this village, 4.97 acres of government land is allotted for the



pond. The local MLA had renovated 1.75 acres of the pond partly 15 years back. For the last 40 years, no stakeholders had given focus to keep the full structure alive. Rest of the pond remained untouched for years. Gradually, the farmers owning lands on the banks started grabbing the land. DHAN Foundation promoted one VLA in this village in January 2017. The members were motivated to recover the encroached land. Initially, the farmers were hesitant because there were chances of disputes arising in their village among them.

The professionals aided by DHAN have undertaken the levelling and prepared the estimates. They informed the VLA to act on time before the start of the monsoon to get the work done. This time, the members of the VLA gained confidence and unanimously took the decision to evict the encroached land.)

The VLA decided to recreate two new ponds on the evicted land. The estimates for both the ponds Chinta 1 and Chinta 2 were already prepared even before the eviction of the land. The estimates were approved by DHAN program office; the total estimate was for Rs. 6.35 lakhs; out of which ITC MSK's support was for Rs.5.08 lakhs (80%) and the community contribution was Rs.1.27 lakhs (20%). The VLA collected Rs. 63,000 excess over and above the community contribution to complete the work.

The reclamation of the new Ahar was planned for 1.5 acres of land. The VLA proposed to use 1.72 acres of the remaining land to grow horticultural crops. This was proposed to ensure the sustainability of the VLA and generate funds for future maintenance of the structure.

They applied silt on this barren land to grow plants on the land and on the bunds of the structures. They also have plans to rear fish in the ponds and generate





income under the supervision of the Vayalagam. The VLA has planned to engage a labourer for 365 man-days to look after the structures and plants on the bund.

They had similar plans to promote small businesses through the horticultural crops to provide employment to the landless VLA members and generate profit from it. The executed works have increased the additional water storage capacity of the pond to 7,073 Cu.M. Now, the renovated pond will provide sufficient water to agricultural land of the beneficiaries. With this total storage of the Chinta Ahar 1 and 2 the Khaira village could ensure water throughout the year.

The Chinta Ahar 2 work was proposed for 3,600 Cu.M of excavation works. The timeline for initiating the works was close to the monsoon. Fearing that the works could not be completed fully and anticipating the need to mobilise additional contribution, DHAN team proposed to abandon the work initiation in the financial year. However, the VLA is keen to mobilise the funds and start the work. They mobilised balance funds for fulfilling their community contribution to complete the work before the onset of the monsoon

Similar to Khaira, in Munger district, DHAN promoted 37 AFGs and 28 VLA's totally in 2016–17. A total of

636 members of the AFG mobilised total savings of Rs. 318,400/- and have a loan outstanding of Rs. 2,70,640/-. So far, 20 Ahars and 17 Pynes were renovated. Two check dams along with inlet and outlet were constructed. The total outlay for the check dams was Rs.96.71 lakhs including donor agency contribution of Rs. 75.82 lakhs and community contribution of Rs. 20.07 lakhs. Through renovation, 95,601 Cu.M of soil was excavated. The silt was applied in the farmlands, 392 farmers were benefitted through the silt application.

Other than renovation work, the farmers were also facilitated to attend training programmes on improved farm practices and technologies. Totally, 2,630 kg of paddy and wheat seeds were distributed to 81 farmers in collaboration with Krishi Vigyan Kendra (KVK) Munger for agricultural demonstration.

Of this, 31 farmers attempted SRI paddy cultivation through paddy transplanter; 130 kg of the paddy seed was sown in 7.28 ha. Further, 53 farmers have undertaken agricultural demonstration initiative; 2,500 kg of wheat was cultivated using zero tillage machines in 20.23 ha. In four ahars, the VLA has started fish rearing as there was abundant water because of the renovation work.□

Bridge Loan to Address Gaps in SHG-Linkage

Vijayakumar N R*

“SHG’s have evolved as a tool for empowerment and development. Timely credit to the SHG members by way of formal linkages is the key to sustaining the success. This article recites the need for bridge loans in the absence of formal linkages.”

Poverty overview

Poverty is often defined with reference to certain basic amenities such as food, cloth and shelter. Inadequacies in access to the basic amenities are considered as extreme poverty condition. Extreme poverty is the greatest injustice facing humanity in the 21st century. India’s vast majority of poor people are located in rural areas. Poverty reduction is a challenging task. While there are many theories on poverty alleviation, one important element commonly accepted as a tool for poverty alleviation is the need for access to credit.

Need for financial inclusion

The process of economic growth, especially when it is on high growth path, must strive to encompass participation from all sections of the society. Lack of access to credit for weaker sections of the society has been recognised as a serious threat to economic progress. Limited access to affordable financial services leads to high-cost credit from informal sources such as money lenders. So, credit is one of the critical inputs for economic development.

Timely credit availability at an affordable cost goes a long way in contributing to the economic development of the poor. Thus, access to affordable financial services, especially credit, may increase livelihood opportunities and empower the poor people to take charge of their lives.

Financial inclusion means extending basic banking services at affordable prices to the low income and disadvantaged groups. The purpose of financial inclusion is to connect the excluded with the formal banking system in order to help

* Mr. Vijayakumar N R, Manager, KDFS

them obtain an understanding of the financial services available and equipping them with the confidence to make informed financial decisions.

Financial inclusion in the form of having a bank account, save, invest and access formal credits, facilitates them to break the chain of poverty. The aim of financial Inclusion is drawing “unbanked” population into the formal financial system so that they have the opportunity to access formal financial services.

SHG as a tool for financial inclusion:

An SHG is a group of about 12-20 people from a homogenous class, who come together to address their common needs. They are encouraged to make voluntary thrift on a regular basis. They use these pooled resources to make small interest bearing loans to its members. The process helps them imbibe the essentials of intermediation, prioritisation of needs, setting conditions and accounts keeping. This gradually builds discipline and credit history for them, through their hard earned money. They learn to handle resources much beyond their capacities. Once the groups show the mature financial behaviour, banks are encouraged to give loans to the self-help groups (SHGs) in certain multiples of their accumulated savings. The bank loans are given without any collateral and at market interest rates.

SHGs acted as a fillip to promote financial inclusion, as they deliver banking services at an affordable cost to the vast section of disadvantaged and low-income groups. SHGs are being regarded as the world’s largest and fastest mechanisms to address poverty. Financial inclusion has acted as an umbrella to secure livelihoods, increase household income, and empower women through training and capacity building.

SHG bank linkage programme as a tool for financial inclusion

SHG–Bank Linkage Programme (SBLP) launched in 1992 by NABARD is an important strategy in promoting financial inclusion and inclusive growth. It is the main pillar of financial inclusion. The aim was to improve the rural poor’s access to formal credit system in a cost-effective and sustainable manner. With this, the formal institutions in India have ventured into microfinance

in a massive way. It is an outstanding example of an innovation leveraging on community-based structures and existing banking institutions. Moreover, it is the largest community-based microfinance programme in terms of outreach and also recognised as a part of priority sector lending and normal banking business by the RBI.

The programme had contributed towards women empowerment in the society through enhancing their contribution to household income and reduced dependency on informal money lenders and other non-institutional resources.

Need for bridge linkage

DHAN Foundation’s two and a half decades of Kalanjiam Community Banking Programme experience has successfully demonstrated a unique model of development finance in the country. It has established linkages between the people’s organisations and formal financial institutions. It has proved that banking with the poor is a viable business proposition.

Convincing the bankers for SHG–bank linkage was quite challenging in the early days. The Kalanjiam programme tried out a number of approaches and strategies to change the attitude of the bankers towards SHG–bank linkage. These efforts have made a significant impact among the bankers that could be seen in the growth of SHG linkages. Now, the number of banks and branches involved in SHG–bank linkage is increasing year after year.

Though the response was positive, there existed a huge gap between eligible groups and those actually linked with the bank. The core issue for SHG–bank linkage is the bankers’ unwillingness in the new provinces of SHG promotion. In order to bridge this gap, DHAN realised the need for a people-managed financial institution to demonstrate the viability of such linkages on a large scale.

The following are some of the reasons for the need of bridge linkage.

1. Branch network of commercial banks is weak and not accessible.
2. Banker is not convinced about the concept of SHG–bank linkage.

3. Sometimes, the process of acquiring loan by the groups is delayed due to the transfer of bank manager/loan officer. During the transfer process, the new managers usually take some time to gain confidence in the SHG linkage. So, it takes time to set the process rolling as before. When the SHGs are not in a position to avail loans in time, they are forced to access credit from informal sources.

KDFS Overview

There always exists a gap and would continue to exist till all the bankers consider micro credit as a viable and promising sector. To facilitate ongoing bank linkage, there arises the requirement for an institutional mechanism to demonstrate the linkage mechanisms and procedures to bankers. Thus, Kalanjiam Development Financial Services (KDFS) was formed and registered with the sole objective of facilitating bank linkage.

KDFS is a not-for-profit company incorporated under Sec. 25 of Companies Act 1956 (Sec.8 of Companies Act 2013) limited by share capital. It is promoted under the aegis of DHAN Foundation, combined with the efforts of the people's organisations to ensure timely and adequate credit for the Kalanjams (SHGs) and micro finance groups (MFGs). The motto of KDFS is to 'bridge the gap', that means to fill the gap in credit availability to the poor from the mainstream bankers. The objective is to provide financial assistance to SHGs through specific bridge financing.

KDFS – Bridging community needs

KDFS provides timely linkage (bridge loan) to SHGs, which are finding it difficult to secure mainstream linkage. KDFS linkages help the poor to fulfil their emergency credit needs through the groups and prevent them from accessing credit from informal sources at an exorbitant rate of interest.

KDFS focuses on enhancing benefits to members with the lowest interest rate and not operating on high-income margin. This objective has gained greater appreciation in the banking community. So far, it has reached out to serve 33,963 groups across 12 states for credit linkages and provided credit worth of more than Rs.236.93 crores.

Study outcome

A study on credit services accessibility and the scope for bridge financing was conducted among the SHG members of Vaigai Vattara Kalanjiam and Karumbalai Vattara Kalanjiam. The study took note of the existing credit options and the members' credit sources and gaps in addressing the credit demands. The synopsis of the study has brought out the ground realities in the need for timely bridge loans.

Findings and Observations

The poor access credit for their emergency needs. The Kalanjiam members avail credit for different purposes such as education, medical needs, livelihood activities, outside debt redemption, jewel redemption, social obligation, marriage/function, consumption, house up-gradation, house lease, asset creation, etc. They also prioritise the credit needs. Education, medical and livelihood activities credit needs occupy the top three ranks from the people's perspective.

1. Sources of credit

The SHG members availed credit from both formal and informal sources. The formal sources include SHG-bank linkage at an interest rate ranging from 11-12.25% p.a. while KDFS interest rate is 13%. The Kalanjiam offers its members these funds at an interest rate of 18-24% p.a. The members availed jewel mortgage loan from nationalised and cooperative banks at interest rates ranging from 7-12% p.a. Some of the members avail credit from other MFIs at an interest rate of 18-24% p.a.

The informal sources of credit include money lenders and jewel mortgage shops, where the interest rate ranges from 24-120% p.a.

2. Credit accessibility by the members

Every member has his/her own perspective to access credit from outside. Usually, members prefer credit access at a low-interest rate and easy repayable procedure. However, nowadays, members do not mind accessing high volume credit at higher interest rates if it is available on time.



The members of Vaigai Vattara Kalanjiam have accessed credit from different sources. At present, they have outstanding loans from different sources. The total debt of 52 members is Rs.54.45 lakhs. Out of 52 members, 62% of the members have debts from formal sources and remaining 38% of the members have debts from both formal and informal sources.

The members of Karumbalai Vattara Kalanjiam accessed credit from different sources. Presently, they have loan outstanding from different sources. The total debt of the 51 members is Rs. 55.42 lakhs. Out of 51 members, 65% of the members have debt with formal sources and remaining 35% of the members have debt with both formal and informal sources.

When compared to Kalanjiam and other sources, the loan outstanding from other sources is high to the tune of 1:4 among the Kalanjiam members of both Vaigai and Karumbalai Vattaram.

Issues/Reasons for loans from informal sources

- Dependency on informal credit source is a loss to members.
- Policy limitation in credit cap/Inadequacy of loan has resulted in income loss to the group.

- Delay in processing the needy bank loans for Kalanjiam
- Number of other MFIs interventions have cautioned for limited loan distribution.
- Non-availability of credit to well-functioning groups, because of few Non Performing Asset(NPA) groups.

Challenges

- Due to multiple sources – not able to consolidate the loan.
- Daily/Weekly repayment option is offered by the money lenders – priority to repay the money lenders.
- Possibility of loan overdue in Kalanjiam due to monthly repayment option.
- High dependency of jewel loan – threatening of decrease in gold rate

3. Efficiency in Credit Linkage

Best practices

- Assessment of credit requirement of a member at group level
- Evaluation of past repayment behaviour of the member at federation level

- All bank and KDFS loans are assessed by region
- Member loan above Rs.40,000/- is appraised and approved by the Region
- Proper monitoring system adopted for bank & KDFS linkage
- Regular steering committee meeting conducted with bankers

First linkage gap analysis

In Vaigai Vattaram, 16 groups were found to have a gap in the first linkage with the range of gaps from 10 to 37 months. In Karumbalai Vattaram, 12 groups were found to have a gap in the first linkage, ranging from 7 to 38 months.

Subsequent linkage gap analysis

When accessing subsequent linkages, in Vaigai Vattaram, out of 20 groups screened for the study, nine groups received timely linkages and the remaining 11 groups had gaps ranging from one to 12 months. In Karumbalai Vattaram, out of 20 groups, seven groups received timely linkages and the remaining 13 groups had linkage gaps ranging from three to 23 months.

4. Loss to group by linkage gap

The Kalanjiam members require credit continuously, so timely credit is very important in SHG. Otherwise, the members avail credit from other sources. While closing the bank or KDFS loan, the group has to access another credit from bank or KDFS immediately. Only then, the income from the interest may get accumulated in the

group itself. Otherwise, it will get leaked and benefit others. This is appropriate for the first linkage also.

5. Assessment of loan amount graduation

The graduation of the loan amount is satisfactory in Vaigai Vattara Kalanjiam, except in four groups where the volume of loan is high. At Karumbalai Vattara Kalanjiam, almost in the groups, the loan amount is high.

6. Repayment performance

The repayment performance of SHGs in Vaigai Vattaram is satisfactory; around 84% of loans were closed before the loan tenure period (pre-closure). The remaining 16% of the loans have defaults, the loans are closed after the tenure period, but they were not transformed into NPA. At Karumbalai Vattaram, SHGs are very good. Except two loans, all the other loans were closed within two years. The loans were closed before the tenure of the loan (pre-closure) and only a few groups have closed their loan close to its tenure.

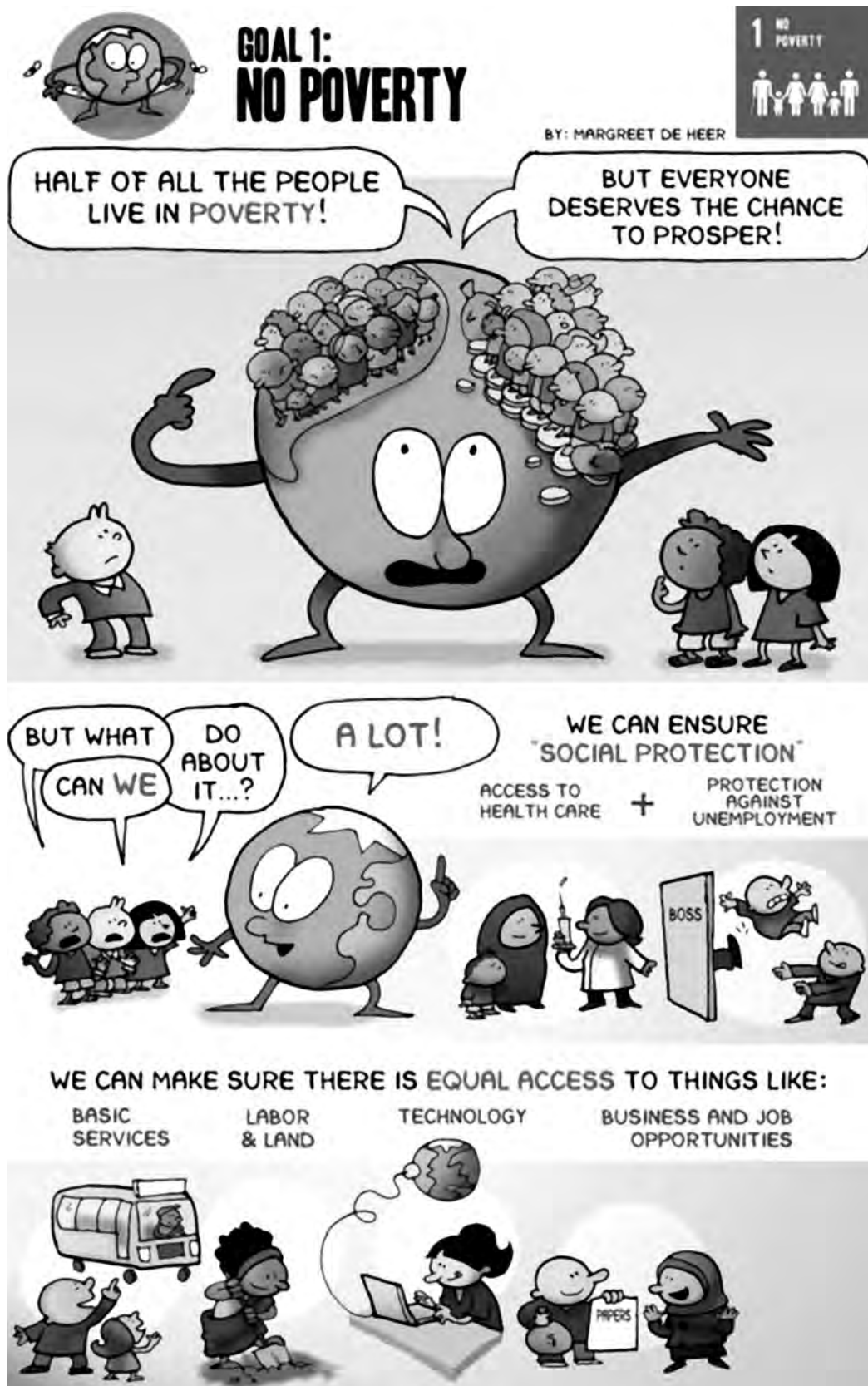
Suggestions to Federation

- Intensive credit need assessment is to be done
- Proper utilisation of KDFS for accessing bridge loan
- Offering daily/weekly repayment option to the members if it suits their livelihood
- To pay more attention to NPA recovery

Way forward

Through the study, it is found that lack of timely credit has led Kalanjiam members to access credit from various sources with the various rates of interest. Though they had accessed these loans mostly on short-term basis, it is found that the members are losing income by way of accessing credit from informal sources at an exorbitant rate of interest. Timely SHG–bank linkage would definitely restrict a member from accessing credit from informal sources. If there are issues in SHG–bank linkage; KDFS linkage could be arranged to meet the members' demand. Fulfilling the linkage gap by providing bridge linkages from KDFS will help the members of the SHGs to come out fully from the informal source of credit.□





Source: <http://worldslargestlessonindia.globalgoals.org/global-goals/no-poverty/>



Small millets in mainstream diets! Promoting Decentralised Processing Infrastructure

Karthikeyan M*

In India, declining cereal diversity in diets is one of the key factors behind malnutrition and the prevalence of non-communicable diseases such as diabetes. Bringing back or inclusion of small millets in the mainstream diets could contribute to an answer. Small millets perform well in marginal environments and have superior nutritional properties, including high micronutrient and dietary fibre content, and low glycemic index. However, there has been a drastic decline in production and consumption of small millets in the last few decades, mainly due to limited productivity, high drudgery involved in their processing, negative perceptions of small millets as a food for the poor and policy neglect when compared with other crops.

* **Mr. Karthikeyan M**, Programme Leader, DHAN Foundation

Did you know?

- Small millets include finger millet (*Eleusine coracana*), kodo millet (*Paspalum scrobiculatum*), little millet (*Panicum sumatrense*), foxtail millet (*Setaria italica*), proso millet (*Panicum miliaceum*), and barnyard millet (*Echinochloa colona*). Each of them has specific nutritional benefits.
- Small millets are good for addressing type 2 diabetes, heart problems, constipation, other stomach disorders and obesity.
- Small millet cropping systems include many nutritious food crops such as horsegram, field bean, niger, etc. and many nutritious uncultivated greens.
- Small millets are climate resilient crops and can be grown in the most marginal area and can adapt to a wide range of growing environments.
- Small millets also offer highly palatable fodder for cattle.



The limited quantum of production has resulted in limited private investment on processing and marketing, which in turn, resulted in a limited number of food products in the markets, poor availability and higher prices, leading to poor demand. Poor demand in turn, is exerting a negative feedback effect on the production, processing and marketing, leading to a vicious cycle. This vicious cycle can be broken only through comprehensive and integrated ecosystem level interventions aiming at demand stimulation by promoting household consumption, increasing production, developing decentralised processing infrastructure and local market development taken up simultaneously (See Figure) at local and regional food system levels. This paper deals with policy support needed for establishment of decentralised processing infrastructure, an important

Figure: Conceptual framework for revalorisation of small millets

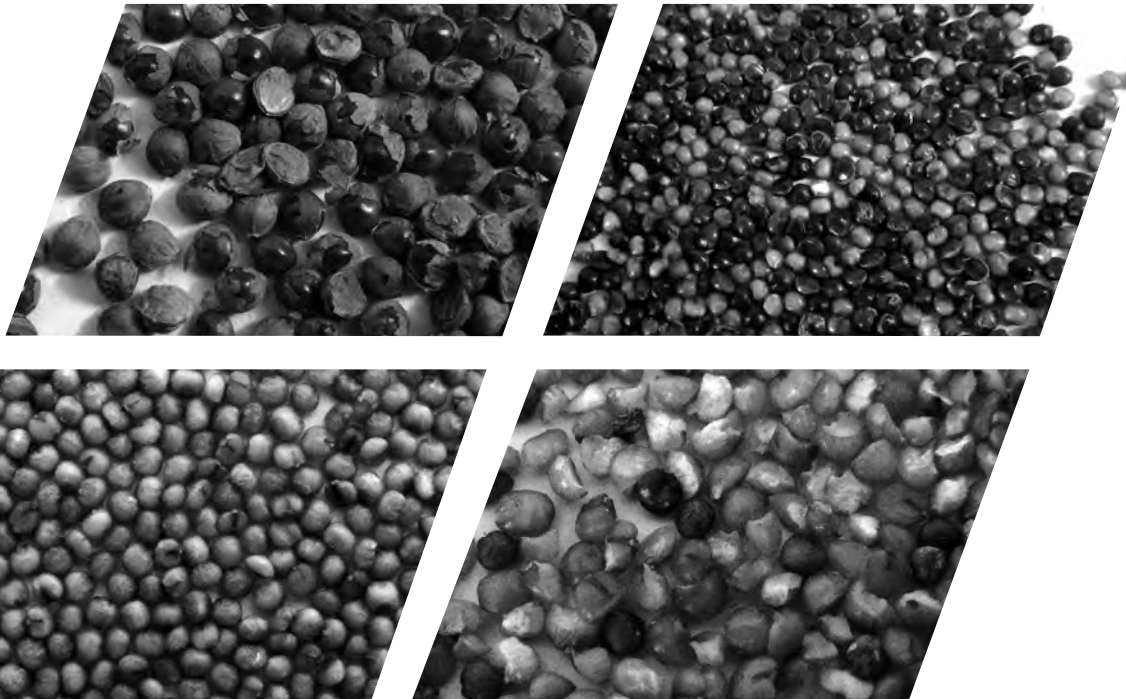


component in the overall framework for revalorisation of small millets.

Need for decentralised processing infrastructure

Hulling is the process of removing the outer husk from the grains. It is a vital process for obtaining grain-rice and further processing of grains for consumption. Traditionally, small millets were hulled manually by women in the production regions, and this process involves significant drudgery and time. Lack of village-level processing infrastructure and high drudgery related to manual processing have resulted in drastic decline in consumption of small millets other than finger millet in the production regions. Lack of regional level processing infrastructure resulted in moving out of the limited produce from the production regions to distant processing zones such as Nashik and Maharashtra, thereby crowding-out the local consumption. Thus, the price spread in the value chain is more and consequently, the price of small millet rice is more than paddy rice and wheat, making them less affordable to a large number of consumers. The emergence of regional processing units in southern India has shortened the value chain, thereby aiding local and regional consumption.

In these ways, development of local/ regional processing infrastructure development remains one of the important factors for enhancing the status of small millets in mainstream diets in the local and regional food systems.



Policy support needed for establishment of decentralised processing infrastructure

While there has been focused support in some parts of the country for increasing production and promoting consumption, there has been meagre support for establishing decentralised processing infrastructure and market development, the missing links. Specific support is needed from the government on the following aspects in an orchestrated manner:

- 1) Addressing the research gaps in primary processing
- 2) Supporting establishment of a thriving ecosystem for processing equipment
- 3) Supporting establishment of local/regional processing enterprises of various scales

1. Addressing the research gaps in primary processing

Research on small millet processing has been quite inadequate and has been mostly limited to value-added product development and hulling. For establishing small millets as a food category in the markets for wider consumption, there is need for **user-centred research with a focus on nutrition, food safety and viability of enterprises** for addressing the following research gaps:

a. Improving the primary processing equipment

Most of the equipment currently used for processing of small millets is the improvised version of paddy

processing machineries. Limited scientific research inputs have gone into their design through technology transfer. Limited formal research on standardising the processing equipment as a process line has been done. The hulling efficiency (calculated as share of millet rice kernel to total grain processed) and quality of output have been less than acceptable. On the processor side, the high cost of processing to achieve acceptable quality rice increases the price of small millet rice substantially, thereby hampering the volume of sales. Therefore, there is need for fine-tuning the existing processing equipment and develop new ones to (i) Improve the quantity and quality of output, (ii) Reduce drudgery in processing, (iii) Improve ease of use, maintenance, safety and stability, and (iv) reduce footprint and cost of the machinery.

b. Improving the shelf life of products

The development of appropriate technologies for increasing shelf life of rice, grits/semolina and flour and value-added products without compromising on quality and nutrition of the product will strengthen the small millet market significantly in the short and long term.

c. Research on product standards

Product standards have to be evolved with the focus on nutrition and food safety for ensuring quality and for product differentiation. Developing user-friendly product standards in a scientific way involving different

stakeholders can help in product improvement and product differentiation. This in turn will help to improve the consumer acceptability and product utilisation diversity.

d. Research on by-product utilisation

Some of the by-products of small millet processing are shattered millet rice kernel of inferior quality, immature grains, husk, and husk rich flour. Enhancing utilisation of by-products through an established market, as in the case of paddy processing, will help in reducing the cost of processing to an extent.

e. Managing kodo millet poisoning

Research is needed for developing effective and easy management methods to manage kodo millet poisoning that can be deployed in the pre-processing stage.

Modus operandi for research

Government needs to support research for addressing above mentioned research gaps by supporting a multi-stakeholder innovation platform involving research Institutions, equipment manufacturers, food industries/enterprises, end users, relevant state and central government bodies and NGOs.

2. Supporting establishment of a thriving ecosystem for processing equipment

Current situation

A thriving machinery industry needs an ecosystem of its own in the manufacturing and utilisation zones (crop production zones and areas where processing units are set up). However, manufacturing of small millet processing equipment is in its nascent stage and yet to develop as an ecosystem. This is a reflection of low market demand. Small millet processing equipment manufacturing suffers from all the typical problems of a small-scale unregulated industry. Most of them are located in southern India. The equipment is not standardised. There is limited investment on promotion of their products across India. Most of the manufacturers do not have institutional

arrangements for long distance sales on a scale and for after sales service. Inadequate competition, poor research input and lack of a system for enforcement of standards sustain this poor state of affairs. The following supports need to be given by the government to develop small millet processing equipment ecosystem:

a. Supporting existing and new equipment manufacturers

The equipment manufacturers need to be supported on the following aspects:

- 1) Support for product improvement
- 2) Support for product standardisation
- 3) Increasing volume of sales through
 - ⇒ Placing bulk orders from government schemes
 - ⇒ Facilitating linkage with potential buyers
 - ⇒ Increasing visibility of products
 - ⇒ Support in adopting different marketing strategies

- 4) Improving production capacity

b. Development of a business hub at each utilisation zone (at state or regional level) for demonstration of the products, linking potential buyers to the equipment manufacturers and providing spare parts and service.

- c. Development of a local cadre of mechanics
- d. Ensuring adherence to product standards and product services
- e. Supportive tax regime
- f. Empanelment of well-performing equipment manufacturers

3. Supporting establishment of local/regional processing enterprises of various scales

- a. Village-level Small Millet Processing Units (SMPUs)

Support needed for existing SMPUs

The following supports need to be given for reviving the existing SMPUs:

1. Servicing the existing machines

2. Installing the not yet installed or improperly installed equipment
3. Giving additional equipment
4. Structured capacity building for operators on machine operations as a process line and on maintenance to improve the quantum and quality of output

Support needed for new SMPUs

The new village-level SMPUs can be promoted by the government as an entrepreneurial venture where support can be given as a package involving structured training (such as a short time certificate course involving apprenticeship in processing unit and food enterprises along with classroom sessions), preparation of business plan, start-up funding support, and support for identification, purchase and installation of equipment.

b. Regional processing enterprises

The regional processing enterprises need to be supported on the following aspects:

- 1) Establishing/expanding production facility
- 2) Structured capacity building
- 3) Building market linkages: The government can promote small millet food products through its grocery chain (such as Karpagam in Tamil Nadu). It can also serve as a bulk buyer by introducing small millet in public food programmes. On the one hand, this will help the processors to improve viability of the enterprise; on the other hand, this will give enough leverage to enforce quality standards.
- 4) Access to funds for working capital
- 5) Creating enabling environment through

Modus operandi

Single-window support systems should be followed at the state level, to offer an integrated support to start up enterprises focusing on small millets, for effective implementation.

The designated agency will coordinate with other bodies to pool the necessary expertise and support services.

- ⇒ Reducing barriers to entry
- ⇒ Production incentives
- ⇒ Ensuring product quality standards

Other support needed at the production level from the government

Already, the primary processing of small millets is inherently challenging due to the size of the grains and variations in the raw materials. The presence of extraneous materials such as mud balls, stones and dust due to threshing in the mud floor and roads complicates it further. To address this issue, government support is needed on the following aspects:

- a) Establishment of appropriate harvesting and threshing infrastructure without compromising on use of straw (for fodder and other uses) and varietal diversity
- b) Establishing threshing yards in all villages
- c) Establishment of procurement standards: This would involve educating the farmers on produce quality, linking farm gate price with produce quality and supplying simple cleaning tools to the production villages

In summary

Inclusion of small millets in the mainstream diets could be one of the important ways of addressing malnutrition and non-communicable diseases such as diabetes. However, inadequate presence of local/regional processing infrastructure development remains the important limiting factor. Role of the government is critical in promoting decentralised processing infrastructure for small millets. Specific support is needed from the government in an orchestrated manner for (i) Addressing the research gaps in primary processing of small millets, (ii) Supporting establishment of a thriving ecosystem for processing equipment and (iii) Supporting establishment of local/regional processing enterprises of various scales.

Concerted efforts in this direction for a considerable period is expected to result in the development of a viable decentralised small millet processing infrastructure in the medium run and establishment of small millets as a nutritious food category in the long run. □



“Domestic Workers Livelihood Enhancement Forum is a pilot initiative attempted to intervene the livelihoods of the urban Domestic Workers of Vizag supported by Mission for Elimination of Poverty in Municipal Areas.”



Domestic Workers Livelihood Enhancement Forum

A pilot initiative of MEPMA by DHAN Foundation in Greater Visakhapatnam Municipal Corporation Visakhapatnam

Ramaprabha K*

DHAN Foundation in the Visakhapatnam region was initiated in 1998. Presently, the region consists of six federations with 1,617 SHGs covering 22,000 families in 122 slums and 33 wards of Visakhapatnam city. The objective of DHAN's initiative is to reduce poverty by involving various stakeholders. Vizag is one among DHAN's urban poverty reduction initiatives. Urban poverty is complex. The urban poor have many opportunities and choices when equated with their rural counterparts. The key to addressing urban poverty lies in matching the opportunities with better choices. DHAN attempted to address the poverty of the urban poor by organising the women in its Kalanjiam Community Banking Programme.

Through Kalanjiam, the community is organised and federated as registered autonomous bodies of people institutions and governed by the women leaders. These people institutions are sustainably being managed on their own. These federations together have community savings of Rs. 24.26 crores as on March 2017, and a bank loan outstanding of Rs. 12.82 crores. The total member loan outstanding is Rs. 34.74 crores. So far, the groups have issued 2.98 lakh loans to the members aggregating Rs. 4,689 crores. Most of the loans get used for augmenting their existing livelihoods.

Other than the micro finance interventions, two federations had initiated the anaemia reduction programme, considering the intensity of the issue.

* **Ms. Ramaprabha K**, Programme Leader, DHAN Foundation, Vizag



As a part of youth development, computer education and counselling centres have been promoted in the slums itself. All the people institutions together have jointly established SUHAM (Sustainable Healthcare Advancement) – Primary Health Care Clinic. This clinic ensures quality health care and reduces the health expenditure of the poor households in the city.

These federations are now enriching themselves to groom the leadership of women, thereby graduate them into the civil society organisation. It is at this juncture that the region started implementing development programmes such as health, education and skill building for empowering the women and ensuring sustainable development through Mission for Elimination of Poverty in Municipal Areas (MEPMA – A Government of AP Nodal Agency for Urban Poverty Alleviation). It envisages addressing urban poverty through the components of skill building and livelihoods advancement.

Overall Objective of the Project

Vizag is a greater city corporation with a population of 20 lakhs. Its service sector is growing at a very fast pace. Along with it grows the number of poor women engaged

as domestic workers. Domestic workers represent an important and growing segment of the labour force, with a great majority of them being women. Engaged in a variety of services ranging from cleaning, washing, cooking and childcare, they perform a huge chunk of household chores for middle and upper middle classes. Since domestic help had become an integral part of urban households, the society should be sensitive to their emotional needs. Domestic work is an important source of regular earnings for the poor families with unskilled and illiterate women.

The objective is to increase the income of the maidservants by the formation of Common Interest Groups (CIGs) to increase their skill and knowledge, thereby increasing the quality of service as well as ensuring good earnings. The project will focus on evolving a replicable model with systems and processes; and then at the end of the period, the model will be finalised for replication in all the urban areas promoted by MEPMA. The project has been defined for one year (February 2017 - January 2018). During this project period, the mechanism for sustaining the initiatives will be evolved and the DHAN Foundation's Vizag region will ensure the sustainability and continuity of the project with the involvement of the community.

Before getting into the collaboration for this project, we mapped the major livelihoods of our community in 2015 and found that 2,900 members have been leading their lives as domestic workers. A study on domestic workers (DM) also triggered the need for intervention in the livelihoods. Through this project, we make attempts to

- Provide identity to the servant maids by organising them in CIGs.
- Identify their health issues and work on it.
- Provide and ensure social security.

Activities under the project

Social Mobilisation

We organised a policy seminar for the stakeholders to create a positive orientation among them, especially among the domestic workers, Resident welfare associations, NGOs, other public representatives and associations on the objectives and outcomes of the project. This was followed by a survey and online updating of members. Analyses of the entire survey data lead to identifying opportunities for improving their livelihood prospects.

Through the initiative, identity cards were provided to the domestic workers. This promoted self-identity and assertiveness among them. It also brought dignity of labour through self-identity. The domestic workers were facilitated to form CIGs. One CIG was formed for every 50 domestic workers. So far, 50 CIGs have been promoted in all the federations. They select five office bearers as their representatives for each CIG. Capacity building training to office bearers of CIG was organised to strengthen their capabilities. Governance system was put in place in the CIG for sustaining the activity. The members made a voluntary contribution to continue and sustain this initiative. The CIG expectations of the house owners and the entitlements being offered by the government were deliberated.

As a part of the initiative, a survey was conducted for 2,500 domestic workers. Data analysis was completed for 2,275 members. Major observations of this survey outcome brought out many socio-economic dimensions of the domestic workers.

1. Domestic work of the women is classified into eight types; 43% of the domestic workers were engaged in cleaning work such as



cleaning utilities and floor washing, 17% were engaged in cleaning and washing clothes, another 8% were working in a hotel, 7% were doing cooking alone, 6% were doing both house work and cooking



and another 5% were washing clothes. As child care is not a permanent opportunity, only 3% of the respondents were doing this work.

2. In age-wise classification, 37% of the respondents were in the 31-40 years category, followed by 26% in the 41-50 years category, 24% were below 30 years, 11% were in the age group of 50-60 years and 2% were more than 60 years. The respondents below 30 years have a high potential for skill upgradation. About 63% of the respondents aged 31-50 years were in their most productive age. They can learn more skills in the existing work to increase their income.
3. About 68% of the respondents were illiterates and 14% had studied up to 5th standard. These together form 82% of the domestic workers. Only 8% had studied above 8th standard and can be imparted new skills. This also reveals the fact that illiteracy is one of the main reasons for the women to take up this occupation.
4. About 45% of the domestic workers were engaged in one house, followed by 21% working in two houses and 13% in three houses, 5% in four houses, and 1% working in 5 houses.
5. About 16% of the respondents were widows and another 4% were single women. They were the sole bread winners of their families.

6. About 88% were Hindus, followed by 9% Christians and the remaining 3% were Muslims.

7. About 46% reside in their own house, another 50% lived in rented houses and only 4% lived in leased houses. In the development aspect, housing or loan for a house is possible. Lease product can be developed to reduce rental expenditure.
8. About 60% formed a majority paying Rs.1,000-2,000 as rent, another 30% paid rent between Rs.2,000-3,000. These two categories together form 90% of the total respondents, 6% paid up to Rs.4,000 and another 4% up to Rs.5,000. This 10% of the workers had sent their children to work or had regular source of monthly income.
9. Among the 95% having ration cards, 99.5% of the respondents had Below Poverty Line ration cards and only 0.5% of the domestic workers had above poverty line ration card. As many as 5% did not have ration cards at all. They sought assistance to get ration cards.
10. On the aspect of wage for the domestic workers, 7% earned below Rs.1,000/-, 47% earned Rs. 1,000-2,000, 19% earned Rs.2,001 to Rs.3,000, 10.5% earned Rs.3,001-4,000, 7.5% earned Rs.4,001-5,000/-, 3% earned Rs.5,001-6,000/-, and 6% earned above Rs.6,000/-. As many as 40% expressed that they earned extra wages for extra work and 60% did not earn any extra wage for extra work.
11. About 78% of the domestic workers' family income was below Rs. 10,000/-; among them, 38% earned below Rs.5,000/-. 21% families earned Rs.10,000-20,000/- and 1% earned more than Rs.20,000/-.
12. Among the 78% of the families earning below Rs.10,000/-, 70% of them had their expenditure below Rs.10,000/-. It shows that whatever was earned was being spent. They have limited scope to afford any investment or quality education and health services.
13. About 35% of the respondents' monthly expenditure was below Rs.5,000 and 55% of the respondents' monthly expenditure was Rs.5,001-10,000/-. Rest of the 9% had monthly expenditure above Rs.10,000/-. In this, 49% led their life at less than Rs.6,000/- monthly expenditure.

14. Regarding their health, 20% of the respondents reported back pain as a major health problem, 52% suffered had a single health problem and another 35% had more than two health problems. This is really a disturbing factor. Only 13% have expressed that they do not face any health problems.
15. About 81% do not have health insurance coverage and only 19% have insurance coverage that too for
16. Majority of the maids (68%) told that they were taking food on time, while 32% were not taking food on time. Reasons stated for not taking food on time are work load or no time for eating.
17. The respondents sought training for the betterment of their work, cordial relationship with owners, technological upgradation, preventive healthcare awareness, etc.
18. On the formation of CIG, 94% of them were interested in it and only 6% expressed their unwillingness for the same. Reasons attributed for their disinterest were having small babies, problems in the house, age problem, etc.,
19. About 17% of the workers showed interest to take up new skills through skill upgradation. Another 60% were keen to improve their work skills, while rest of the 23% was not interested to learn new/additional skills.
20. Expectations from the government: 48% expected own house, 21% of the workers expected schemes such as welfare board enrollment for domestic workers, pension and access to all types of government schemes
21. About 67% (majority) of the domestic workers were happy with this work and 33% were unhappy. On work satisfaction front, 67% expressed happiness with this work, 16% were not happy and 17% were neutral.
22. About 21% insisted on identity cards issued to them as unorganised sector workers, another 17% demanded leave or holidays by the government, welfare boards enrollment and ID cards. Remaining people demanded a different combination of services from the government.
23. While taking up this project initiative, we started with an assumption that majority of the domestic workers would have had long years of experience. However, the data conveyed that 44% of the domestic workers have been in the service for the last five years. It showed that they had got into this work recently and 33% of the domestic workers were working from 6 to 10 years. This is one-third of the domestic workers. Both these groups together form 77%, a bulk of the total work force. This showed that majority of the workforce in the sector had got into this sector in the last 10 years, 11% had 11 to 15 years of experience and 10% had 16 to 20 years experience in this work and only 5% of the domestic workers had more than 20 years work experience. It was found that the workers who had below five years of experience had the potential for developing new skills and other interactions while 50% could not go for any other work as they were uneducated.
24. About 33% worked for about 1 to 3 hours, 13% worked for 2 hours per day, 54% for more than 3 hours to 12 hours, and 26% worked for 4 to 6 hours. This shows that one-fourth of them were working for more than six hours per day.
25. Regarding holidays/leave, 62% got leave based on their need, while the rest 38% expressed that they do not take leave fearing that they may lose their job.

Skill Enhancement

Skills upgradation training had to be organised providing additional skills to the identified target groups. Housekeeping training will be imparted to all the 2500 domestic workers to increase the quality, technical know-how, human relations, etc.. Each batch of 40 members will undergo 15 days training from August to December 2017. These training sessions will be conducted through training centres to be established, one each at the federations.

Domestic workers would be trained in maintaining personal hygiene, developing intrapersonal communication skills, understanding components of the urban meal, managing urban kitchens, serving cooked food in a formal environment, handling domestic pets, and handling kitchen gardens, electricity



This initiative has got wide presence in the state media

and electrical appliances and providing first-aid. This course is planned to be a comprehensive one aimed at enhancing household management skills, a sense of responsibility in the workplace, improved attention to details and time management and organisational skills. The learners will gain confidence and their competence will increase. It will assist household employers to find domestic help with the right skill sets, thus fostering a mutually beneficial relationship between the employer and the worker.

Ensuring Entitlements

The domestic workers were encouraged to open bank accounts. This in turn would help to ensure direct access to financial inclusion. Access to credit through banks was made for establishing self-employment. Through the project, we propose to organise health camps. These

camps will help to identify their health problems. General health screenings will be conducted for all the members to identify the health risks and to know the health status and identify and send them for referrals and health insurance ignition.

The Vizag region has made a small beginning to organise the domestic workers and empower them to access the entitlements. As the urban opportunities grow, this section of the working class grows in large numbers. They all deserve the need to be cared and served by the system. This initiative proposes to address the needs of the lower stratum of the working class by bringing in the stakeholders. Addressing their health issues will help them stay physically fit and contribute to their family and the nation. Hopefully, this will help address the issues faced by the domestic workers. □

HERITAGE 2017

Gurunathan A*

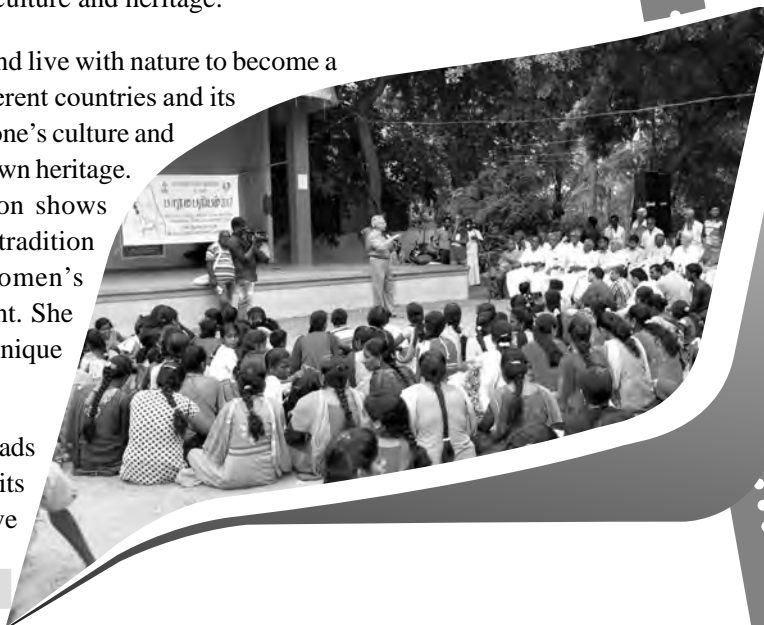
Tata-Dhan Academy (TDA) celebrated its 6th edition of 'Heritage - 2017'. The event focused on promoting the heritage and culture of the villages. Totally, 130 students from eight different colleges in and around Madurai took part in various events. On the first day, events were organised in Tata-Dhan Academy and the next day's event was organised at Thuvariman, a neighbouring village on the banks of Vaigai that hosted the programme. Frank Heckman, Founder, Embassy of the Earth, Netherlands, Lawrence De Bure, President, Waterrock Organization, USA and Leo, Netherlands, presided over the event. Rajapandiyan, Ex-President of Thuvariman village, Dr. R. Venkatraman, Retired Professor of History, Madurai Kamaraj University, and Dr. V. Vedhachalam, Epigraphist, graced the occasion. A small video documentary of the previous year's event was shown to the participants.

“ Heritage is an annual event organized by Tata Dhan Academy to emphasize the importance of heritage and culture of the villages. The event attracts college students taking part in traditional arts and games performed in a village. ”

Gurunathan, Director, Tata-Dhan Academy welcomed the participants and shared an overview of the past heritage events. He stressed on the idea of initiating Heritage Clubs at all the participant colleges to promote, preserve and create awareness among the students about our rich heritage. Dr. Venkatraman thanked TDA for arranging this unique event focusing on culture and heritage. He emphasised that real education is in the field and not in the books we read. This generation's education and their job are not related, what they learn is not useful when they go to a job in real life. This gap needs to be addressed to bring about a real change. He requested the students to take this event to their heart and preserve our culture and heritage.

Frank Heckman shared the need to learn and live with nature to become a sustainable nation. The mythology of different countries and its spiritual values are the ones that motivate one's culture and it is important that we need to protect our own heritage. He was happy that the young generation shows willingness to preserve and nurture its tradition and culture. Lawrence appreciated women's participation in large numbers in the event. She told that culture is very systematic and unique to every part of the country.

It is the culture and tradition of India that leads to its development and empowerment of its people. Leo mentioned that the cultures have



* Mr. Gurunathan A, Director, Tata-Dhan Academy

taught
us our moral values. Culture
is the one that helps us to lead a proper and sustainable life. We
need to share our resources and care for each and everyone around us. Vedachalam
appreciated the participant college students and their efforts and involvement in organising
this annual event. Vaigai River has been traditionally rich in culture and heritage. Vaigai
River has more references in ancient literature and songs than any other river and it is
our privilege to know about the history of the villages on its banks.

Traditional dances such as 'Kolattam, Silambattam and Oyilattam' were performed by
local village artists at Muniyandi Kovil, Thubariman. Students along with the villagers
took out a procession to create awareness on preserving heritage. Traditional games such as
'Kitipillai' and 'Illavatakal Thukuthal'. Then, the village women performed 'Kummi' along
with guests and students. Street plays and folk songs were performed by college students.

A booklet about the village "Thubariman" highlighting the heritage and archeological features
was released and shared with the villagers, followed by Dr. Venkatraman's special address on
the village. In the concluding ceremony at Tata-Dhan Academy, Meenakshi Shankar, Trustee,
Karunai Illam Trust, New Zealand addressed the students emphasising the need to protect and
preserve culture. Totally, 11 different events were conducted and Senthamarai College won the
rolling trophy as the overall winner.





Addressing Livelihood Vulnerability through Skill Building to Mitigate Disaster Impact

Subburaj P*

India as a country is highly vulnerable and exposed to natural calamities. About 80% of India's geographical area is vulnerable to cyclones, floods, landslides, drought, earthquakes and other hazards. About 60% of the land mass in India is prone to earthquakes, over 40 million hectares are prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought (Source: Disaster Management in India – Status Report prepared by the Government of India).

DHAN's Contribution to Tsunami Rehabilitation


When a tsunami struck the coastal regions of Southern India in 2004, DHAN swiftly entered into relief, rehabilitation and restoration of livelihood with a long-term sustainability focus. At that point of time, DHAN had no prior experience in carrying out relief operations. DHAN with its unique model of community organisation, assisted around 80,000 affected families along the Tamil Nadu coast, channelised relief materials to the needy and ensured equity. Followed by relief operations, DHAN

initiated rehabilitation and restoration of livelihoods of the affected communities. DHAN organised communities into groups and networked them to plan and implement sustainable livelihood interventions.

The following table shows the vulnerability of the states of India to disasters

Total number of Cyclonic Storms (CS) / Severe Cyclonic Storms (SCS) crossing different coasts (1891-2000)	Total No.
West Bengal	69
Odisha	98
Andhra Pradesh	79
Tamil Nadu	62
Karnataka	02
Maharashtra & Goa	18
Gujarat	28
Kerala	03

* Mr. Subburaj P, Programme Leader, DHAN Foundation



Post-Tsunami interventions and experiences led DHAN to envisage a development programme theme to aid the communities along the coast. **Coastal Conservation and Livelihoods Programme** works with disaster vulnerable communities in the coastal areas. DHAN Foundation promoted this programme, based on its experience in tsunami mitigation programmes. Presently, the programme has reached out to 1,25,000 members in the coastal areas of Tamil Nadu and Odisha.

The programme believes strongly in sustainable development through conservation and efficient management of natural resources. The programme found a need for comprehensive development framework as the coastal areas are prone to multiple hazards and relief work addresses only the temporary and emergency needs of the affected community. Hence, the programme devised a framework that addressed the short-term and long-term needs of the community. The development framework has four phases: Relief, Rehabilitation, Conservation and Community-led sustainable development.

DHAN promoted different people institutions such as SHGs, Cluster, Federation, Producer and Marketing Groups, and Disaster management committees and routed its development initiatives through them. The people's institutions were promoted to address

the diversified needs of the poor families such as livelihood, consumption, health, education, asset creation, disaster management and mitigation, etc. Enabling community through capacity building and to seed leadership qualities was the core agenda apart from the promotion of people's institutions.

Cuddalore Overview

Cuddalore District consists of seven taluks viz. Cuddalore, Panruti, Kurinjipadi, Chidambaram, Kattumannarkoil, Vridhachalam and Tittagudi. Among these, Cuddalore and Chidambaram are coastal taluks that lie in the heavy wind and cyclone zone while the other five taluks lie in the flood zone. Cuddalore has always been classified as a multi-hazard prone district. Heavy rains and showers during October, November and December inundates low lying areas, coastal areas and the areas near major irrigation sources. Cyclones are also a part of the North East monsoon. Due to floods, a sudden outbreak of several water-borne diseases was also experienced in the past.

The Cuddalore district also lies in the Zone-3 earthquakes seismic category. The district has a coastline of approximately 52.5 km. Therefore, the district is vulnerable to cyclonic depressions and the resultant rains which cause floods. The district, however, suffers from flooding when excess water flows down these local rivers and over the fields due to Northeast monsoon rains in the river basins and in the district itself. The problem owes its genesis to the location of the district. The recent disasters over the last fifty years are as follows.

- 1972 23 lives lost due to cyclone
- 1978 120 lives lost due to heavy rains
- 1991 100 lives lost due to heavy rains
- 1993 61 lives lost due to cyclone
- 2004 614 lives lost due to tsunami

- 2005 40 lives lost due to flood
- 2011 Huge asset loss due to Thane cyclone
- 2015 55 lives lost due to severe flood

When the coastal area of Tamil Nadu was severely affected by the tsunami in 2004, Cuddalore was the second worst affected district. Cuddalore district faced floods and cyclones again in 2008 and 2011. The poor depend on the relief and rehabilitation activities at times of disaster. Disaster risks are a regular phenomenon in the region. The poor socio-economic conditions of the majority of the people coupled with a recurrence of disasters forms a vicious circle of poverty.

Over 70% of the total population in the region belongs to Scheduled Caste, Scheduled Tribes and Most Backward Caste reflecting the low social acceptance and low Human Development Index (HDI) of the region. Cuddalore district is ranked 16th among the 29 districts of Tamil Nadu on HDI. The per capita income at constant price is Rs. 7,587 (1996-1997) and amongst the lowest in the state, 29 % of the total district population is living

below poverty line as per the HDR which is higher than the state average of 19% for Tamil Nadu. There is huge disguised underemployment in the rural areas of the district.

DHAN in Cuddalore

DHAN's post-tsunami interventions were focused on sectoral and sub sectoral areas to strengthen the livelihoods of the affected poor families. In the fishery sector, the poor and traditional fisher folk were identified and supported for purchasing nets, repairing boats and other fishing equipment. In the agricultural sector, the poor and marginal families were provided technical support for reviving the agriculture fields and for raising crops in their affected fields.

Coastal water bodies such as ponds and farm ponds were renovated to facilitate irrigation. In addition to individual livelihood strengthening, collective marketing was encouraged among the small and marginal farmers. The women in the SHGs were organised and supported to initiate small and petty trades and livestock activities.



experienced by the people due to the disaster would require long term and continuous support to restore their livelihood and habitats. Lack of skill-based livelihood has restricted their earning opportunities.

Only 5% of the Indian labour force aged 20-24 years has obtained vocational skills through formal means. In industrialised countries, this percentage varies between 60% and 96%. The skill development initiatives support the supply of trained workers who are adjustable dynamically to the changing demands of employment and technologies. The skill development initiatives will harness inclusivity and reduce divisions such as male/female, rural/urban, organised/unorganised employment and traditional/contemporary workplace. Though the government has provided a big impetus to skill enhancement, the rural poor are still neglected because of inaccessibility.

Bridging the Gap

DHAN partnered with Aditya Birla Financial Services to improve the livelihoods of the most marginalised through skill enhancement by establishing Skill Building Centres in three backward blocks – Kurinjipadi, Cuddalore, and Parangipettai. These centres act as one of the key components of resilience in this highly disaster-prone zone. A multipurpose cyclone cum flood safety shelter was proposed which will act as a shelter during flood/cyclone and as a school during non-disaster period. This will act as a specific intervention in disaster preparedness and as a platform for livelihood enhancement.

Each skill building centre is proposed to conduct vocational education programmes, events for the growth of youth, and awareness building for the



Cuddalore Floods

The floods in 2015 had actually put the community in distress. The people who are just getting back to their routine from the devastation caused by the Thane cyclone had to suffer severe damages to crops and lives. More than six lakh people were affected by the floods. Nearly a lakh houses were inundated. People lost their belongings and were forced to depend on relief supplies. DHAN Foundation team along with community leaders visited the villages affected by the flash floods to show their solidarity. Dry food items, medicines, milk, mats, blankets and groceries worth Rs.1.25 crores were sourced from various community sources and provided to the needy.

The federations facilitated recovery work such as removal of fallen trees on the roadsides and houses, supporting people to shift their belongings from damaged houses to a safe area, safeguarding old people, community cooking, supplying drinking water and assessing village level damages. During this flood, it was realised that there was need for shelters and community buildings at access points. Many in the flood-affected community lacked regular employment. The scale of the devastation





communities. They will serve indirectly 3,000-4,000 households. A community-based Disaster Risk Reduction Committee will be set up to manage the proposed multipurpose cyclone cum flood safe shelter.

The Kurinjipadi and Cuddalore skill building centres became operational in July 2017. So far, 233 persons have undergone training in tailoring, computer skill enhancement, beautician course, financial literacy, and vegetable and mushroom cultivation. Totally, 49 members of the SHG have undergone financial literacy training giving them a better understanding of financial literacy and wiser application of resources. The vegetable and mushroom cultivation training facilitates the farm communities to learn new skills and sustainable farm practices from the experts.

In skills such as tailoring, computer skill enhancement and beautician course, 119 young persons have undergone the life skills training. This training has made these young aspirants attain new skillsets. Once they complete the course/training, they could engage in small entrepreneurship activities

or get employed in the larger service sectors of their respective trade.

These skill centres surely will add value to their family economy and facilitate them to lead a decent life good enough to overcome the loss caused by the floods. Skill training translated into livelihood base, in the long run, would help create a cluster of activity. This will help them be resilient enough to face disasters. These skill centres and the cyclone/flood shelters

will act as a resource platform to promote desired skill enhancements in the highly backward disaster-prone area, thereby facilitating employment generation and will be accessible to communities at times of disaster to safeguard their lives.



Tree plantation – Member-driven initiative in Gulbarga region

About Gulbarga

Gulbarga was earlier known as 'Kalburgi', which means stony land in Kannada. Gulbarga district is situated in the northern part of Karnataka state. In the earlier days, Gulbarga was a district of Hyderabad province of Karnataka and became a part of Karnataka state after re-organisation of states. Gulbarga is 613 km north of Bangalore and well-connected by road to Bijapur, Hyderabad and Bidar. Train from the southern part of India to Mumbai and Delhi passes through Gulbarga. Shri Kshetra Gangapur, a well-known pilgrimage place of God Shri Sadguru Dattatreya is very close to Gulbarga. The climate of the district is generally dry with temperature ranging from 5°C to 45°C and an annual rainfall of about 750mm. The entire district is situated in Deccan Plateau and the general elevation ranges from 300 to 750 metres above mean sea level.

Krishna and Bhima, the two main rivers, flow in the district. The district predominantly consists of black soil and a large number of tanks. The rivers and the tanks were the major sources of irrigation. The Upper Krishna Project is a major irrigational venture in the district. Sorghum, groundnut, rice, and pulses are the main crops. Gulbarga is generally termed as a backward district due to its poor infrastructure and its backwardness in human development components.

Overview of the region

DHAN's regional boundary in Gulbarga has spread across two districts, i.e. Gulbarga and Yadgir districts of Karnataka. The project locations in the region are

situated in six blocks with 1,200 groups reaching out to 29,300 members. DHAN is working in seven locations in the six blocks. DHAN's Kalanjiam Community Banking programme and Vayalagam programme is being implemented in the region. In Yadgir and Gurumitkal blocks, DHAN is working with 56 tank associations.

Zilla Panchayat collaboration

Gulbarga and Yadgir districts have high potential for tree plantation. Since, the districts come under drought circumstances in most all the years, initiating the tree plantation is one of the activities which could contribute to regional development. DHAN initially envisaged planting five trees per member so that they could protect them with less difficulty. This idea was discussed in one of the annual general body meetings (AGBM) of Yadgir federation. All the members showed interest in growing the saplings and protecting and conserving the trees if it was supplied at their doorsteps. When DHAN explored the programme with the forest department, they sought permission from the Zilla Panchayat CEO to issue plants free of cost. They met Yadgir District, ZP CEO, Vikas Kishor, IAS. He immediately approved the proposal and ordered District Forest Officer (DFO) to issue 20,000 plants free of cost; this was distributed to the members.

* Mr. Gajanan Hegde, Regional Coordinator, Gulbarga Region



On the basis of members demand, additional 15,000 saplings were sanctioned and issued.

How the programme took shape under DHAN

After the order from ZP CEO, Vikas Kishor, IAS, Yadgir, the supply mechanism was discussed with the forest department and transportation of these plants from the government nursery to the villages in Yadgir village was arranged. The Gulbarga Zilla panchayat CEO, Anerudha Shravan, IAS was also interested in the initiative. He not only agreed to give plants but also assured to provide Rs. 50 for raising each plant from MGNREGA if the members had job cards. So, a team at the regional level was constituted and to collect details of members who are willing to grow trees and possessed job cards. .





These details were shared with the CEO. He was happy with the survey and ordered Gulbarga DFO to give the required number of plants to the concerned blocks. Subsequently, the location integrators had a discussion with the concerned RFO in the block and arranged for distribution of plants to the villages.

Location is very crucial in ensuring the delivery of the plants in Aland, Sedam, Afzalpura, Yadgir and Jewargi. The interest of location integrators and their efforts to synchronise their team facilitated a smooth start from the planning of distribution to plantation in the field and monitoring the progress at regular intervals. This is very crucial for the success of the initiative.

Implementation

Distribution of the plants from nursery to the concerned villages was planned. In the villages, DHAN leaders planned distribution of the plants to the members. The field staff monitored and ensured that distributed plants were planted in time. AA cost of two rupees per plant was incurred towards transportation. The transportation cost was met by the concerned federation. Photos and documents of the initiative were and shared with the officials.

Tangible and intangible benefits for the community

Each member received trees mainly Neem, Badam, Teak, and Drumstick. These plants help them economically in the long run once they conserve these plants. Drumstick will be helpful for nutrient enrichment. Neem trees are useful in agriculture as a supplement and application of its seeds and leaves is helpful for disease protection in farms.

Acknowledgement

We would like to express our sincere thanks to Anirudh Shravan IAS, Zilla Panchayat (ZP), Chief Executive Officer (CEO), Gulbarga District, and Vikas Kishor IAS, ZP, CEO, Yadgir district for their inspiration and support for the initiative. We also thank the forest department officials, the DFOs of Yadgir and Gulbarga District and RFOs of Yadgir, Aland, Jewargi and Sedam blocks for their full involvement and cooperation. We appreciate our regional team, location team, field staff and leaders Lakshmi Police Patil, Hanumanthappa, Archana Bengeri, Swarnalatha, Siddappa, Gundurao, Ramesh, Baganna and Santosh Hajari for their team spirit and dedication. We also thank to all the members who came forward to have the trees planted and their interest to conserve nature by raising the trees. □

Mullai



Mr. Paulraj, a Wood in-lay artist from Sivagangai, Tamil Nadu has made an artwork depicting Mullai Thinaai as part of a series on Ainthinaai of Tamil Culture he is preparing. Mullai is the land of the forest and resources rich with lakes, waterfalls, teak, bamboo, sandalwood and wild animals.

With the use of traditional hand-made cutting technique by applying cut-outs of a large number of wood collections in variety of colours and grain structures of the timbers, he has made this life-sized artwork depicting the Mullai Thinaai. This artwork has been displayed at Central Office of DHAN.

Photo Story of Ahar and Pyne



The revival of traditional water structures with community participation is the key to address climate change. Read article on reviving traditional Ahar and Pyne water structures in Bihar



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