

Development

March 2013

Monthly Development update from DHAN Collective

Matters

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Used Water and
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Event

Budget Watch and Dialogue 2013





Establishment of exclusive women bank, more focus on women through additional fund allocation to the ministry of women and child welfare and 46 % more fund allocation for rural development were some of the special features of the union budget- 2013. During the Budget watch event a healthy discussion went on the highlights of the budget between scholars, academicians, bankers, development workers, public and students.



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From the Editors' Desk

Dear Readers,

Greetings from DHAN Foundation.

DHAN foundation has been working in Gaya district of Bihar and the highlights of the intervention is presented in a article in this issue. An article on fish rearing activity initiative done in Punganur and how it supported the livelihood of farmers and issues and challenges ahead in expanding this activity is also featured in this issue. Tumkur region's effort to work along with people through Shrimadhan is worth mentioning. An article on the whole hearted effort of the team which stayed along with the villagers is presented here. Budget watch is an annual regular event held by Tata-DHAN academy and as usual this received an overwhelming response from the participants, a note on which is appears in this issue. Also highlights of the 2013-14 year budget is presented so that the development workers can get an idea of sectors in focus by the government. Water conservation through UPNRM in Kottampatti vayalagam federation shows how the new pipeline method of irrigation introduced supported the farmers to conserve water. The scope of DEWATS as an supportive waste water treatment mechanism in treating the waste water generated in Madurai city is discussed in the feature article by A.Gurunathan. Migration and development is the new theme launched during 14th Foundation day event and note on which also appears in this issue.

The readers are welcome to give their suggestions and feedbacks on the articles featured in the development matters. They can send their mails to dhancdc@dhan.org

Happy reading!

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DHAN Foundation Interventions in South Bihar

Gopikumar Verma*

DHAN Foundation in South Bihar

DHAN Foundation in collaboration with Sri Dorabji Tata Trust (SDTT), Mumbai has been working on both Vayalagam and Kalanjiam Programmes in Gaya district. DHAN Foundation process to initiate water resources conservation development in the region based on its decade long successful experience in rehabilitation of Tank system in South India and strengthening livelihoods sustaining Tank-fed agriculture to ensure food security for the small, marginal and landless communities including women.

The SDTT came forward to support renovation work of four Aahar- Pyne systems on pilot basis and introduce kalanjiam model of SHG microfinance, reaching the poor families in backward blocks of two districts in south Bihar namely Gaya and Aurangabad. The Organisation started its initial phase activities like preparing an inception 4 document, conducting exploratory study, potential identification and related primary and secondary data collection in the month of April-2009.

DHAN Foundation has a spread in 91 revenue villages of 19 Panachayts in Tankuppa and Fatehpur blocks of Gaya district. The organization is working with 570 SHGs, 22 village level Ahar-Pyne vayalagams in the area with the outreach of over 9,000 households. The organization has a presence in Madanpur block of Aurangabad and Raniganj block of Arariya district (North Bihar).

Kalanjiam Programme in Gaya district

The Kalanjiam programme has started its development interventions at Tankuppa block in Gaya district during November-2009. The programme gained a very high response among the community and within a short span of one year the programme was able to reach about 2000 poor families in the block. The approach to saturate the block has been taken in phase wise manner. The five northern panchayat of the block was covered under initial phase and then the rest of the panchayats were



covered. The good response among the community at Tankuppa led the team to initiate Fatehpur block of Gaya, adjacent to Tankuppa location

Financial Services

Savings Builds Equity with Ownership Rights

The factors which the poor keep in mind before accessing savings facility in SHGs are security, convenience, liquidity, and positive returns. Kalanjiam members express their confidence and trust on their groups with steadily increasing the quantum of savings. To tap the savings potential of the members, the working team along with the community leaders, have taken continuous efforts to make them increase savings. The groups in these areas have shown a remarkable progress in this regard. The average member savings in some of the poor packets have increased from ₹ -20 to ₹ -40. The groups have mobilized cumulative savings to ₹ 80.5 Lakh in the area.

Credit Expands Opportunities and Choices

Kalanjiams play a vital role creating and strengthening the livelihoods by providing timely credit to its members. The programme with its limited period of interventions has been successful discouraging the member's access to exploitative interest rates from various sources. Initially the credit was primarily availed

*Mr.Gopikumar Verma, Project Executive, DHAN Foundation, Bihar

by the members to meet their consumption needs but now the shift to support their livelihoods and income generating activities is fairly induced. Presently 30 per cent of the total loan is provided directly for livelihood initiatives; the remaining is for health, education, and debt redemption which in turn supports livelihoods. Loan repayment performance has significantly improved in all groups, due to rigorous monitoring and counseling at the member level.

SHG-Bank Linkages

Kalanjams have shown that banking with the poor is a viable business proposition though its interventions in 12 states of India working with over 300 branches and making some of the rural bank branches vibrant and viable. Mutual trust between SHGs and banks is a critical for a sustainable relationship. The efforts were taken to increase the volume of SHG-bank linkages in these blocks, about 60 groups were linked to Banks and 104 groups were linked to KDFS (Kalanjam Development Financial Services). The linkage so far has mobilized over ₹ 57 lakh to these groups to support their livelihoods activities.

Systems to Strengthen Implementation

The Growth Path

The intervention in the block has adopted the following phase, period and focus for achieving development milestones. The places where SHGs concept is in

Phase	Period	Focus
Formation	0-6 months	Initiating operational norms
Financial	6-12 months	Initiation of bank linkage process
Stabilisation	12-24 months	Establishing pucca systems, membership at cluster level etc.
Livelihood	24-36 month	Graduating the members w.r.t credit on consumption to credit on income generations.
Diversification	36 months and above	Cost coverages, business support, civic programmes, management of growth etc...

the very beginning stage, phase wise periodic focus helps the groups to grow in a systematic way meeting its credit needs to support livelihoods and income generating activities for their members and achieve self reliance. They can contribute to the cost coverage for the sustainability of the people organization promoted by nesting these primary units.

Books of accounts

The Kalanjiam follows a set of books to maintain their accounts and financial transactions at group and member level. The accounting system is developed in vernacular language to make them more familiar for understanding by the members and the movement workers. Cash book, minutes book, receipt and vouchers, loan vouchers, payment vouchers and member pass books were maintained properly by the members themselves with the support of field associates. The daily transactions in the group get entered in the DHANAM software which gives a quality MIS data for easy monitoring of the group activities at federation level. The MIS data is also used for decision making to strengthen the SHGs and come out with new services and possible development interventions.

Concept Seeding and Behaviour Change through Skill Building

More than 3,200 numbers including farmers, SHG/MFGs members, associates and leaders got training on livelihoods, organic manure cultivation, vermi-compost, technical training on SRI in paddy, wheat and mustered, bee keeping and mushroom cultivation. To support and strengthen the current livelihoods options was the prime focus so far. The initiatives on the path of scaling up after due training, skill building, piloting and demonstrations are taken in the following area.

Mushroom Cultivation: The mushroom cultivation is at an initial stage. The training in this respect has been provided to over 900 members and four exposure visits have been conducted. This has clicked among the groups and Kalanjiam at Dhibar village has become pioneer in adopting this technique to advance to their livelihood activities.

The members are getting benefits by selling the produce locally at ₹120/kg. SRI (Paddy, Wheat, mustered): The training on SRI and few demonstrations in this regard

have fetched a good result among the poor farmers. The yield has been better and comparative investment input costs to agriculture. Intensive training in this regard has been provided to members and about 300 member farmers in four Panchayats have adopted this technique. The bigger farmers are reluctant to adopt this but this becoming relevantly popular among small and marginal farmers in the area. This initiative needs greater concentration to make it popularize among farmers for its adoption for their increase yield and reduce vulnerability.

Zero Budget natural farming: ZBNF has been initiated in Bagiya village in Salaiya Kalan Panchayat in Fatehpur block and in Chobar Panchayat in Tankuppa Block. It was basically been done to reduce the dependency on fertilizers and use the natural products that are available within the village. It was applied on the vegetable cultivation and also on paddy. The development has brought good results for the in terms of their reduced cost and dependency on fertilizers and pesticides. A constant effort is being made through successful field demonstrations in this regard to change the behavior of the member farmers and make it more popular among them in the area.

Kitchen Garden: While analyzing the database of the group members. It shows that major part of the loan is being spent on addressing basic health related issues. The nutrition of the family members is a great concern in the area. The vegetable consumption among the poor people is low and results in nutrition deficiency. The initial initiative in this regard has been taken by providing seasonal vegetable seeds of high nutrient to members.

DHAN Vayalagam (Tank) Foundation in Gaya district

The Vayalagam programme has started its development interventions at Tankuppa block in Gaya district during August–2009. The programme in South Bihar shares the larger mandate of DVTF of promoting contextualized nested institutions model to sustain tankfed or Ahar-Pyne based agriculture as a prime source of livelihoods of under-privileged Small, Marginal farmers, landless and Women folks in the area.

The programme focuses on Ahar-Pyne renovation and rehabilitation work through organizing community, promoting people institutions at village and Pyne level and involving them in cost coverage. The programme

Status of Kalanjiam Community Banking Programme in Gaya

Particulars	Status as on December'2012		
	Tankuppa	Fatehpur	Total
<i>Spread of the Programme</i>			
No. of Blocks	1	1	2
No. of Panchayats	9	10	19
No. of revenue village	40	42	82
No. of CDAs	16	14	30
No. of SHGs	304	266	570
No. of members	3692	3224	6916
<i>Finance</i>			
Total own Funds	44.16 lakhs	36.31 lakhs	80.47 lakhs
Savings	36.64	29.46 lakhs	66.07 lakhs
Reserves & surplus	7.52 lakhs	6.85 lakhs	14.37 lakhs
<i>SHG Bank Linkage</i>			
No. of Branch involved in opening SHG A/C	3	5	8
No. of Branches involved in Bank linkages	1	2	3
No. of Loans. From Banks	12	48	60
Amount mobilized	5.00 lakhs	21.49 lakhs	26.49
Number of SHG linked with KDFS	66	38	104
Amount mobilized from KDFS	17.60 lakhs	13.05 lakhs	30.65

has a spread in 22 villages of Tankuppa and Fatehpur blocks at Gaya district and also has presence in two villages of Madanpur block at Aurangabad district of south Bihar. The interventions has renovated 4 Pyne and 9 branch pyne covering a physical channel work of 26 Km, 7 Ahars, construction of an aqueduct, construction of one Oorani and some pyne head works.

Ahar-Pyne System and Scope for Livelihoods

Water is essentially plays an important role as life sustaining resource, as a source of irrigation and for non agriculture usage. The main sources of water have generally been utilization of stream and river water, direct tapping of rain water (rain water harvesting) and ground water. The Indian subcontinent has a long history of human intervention in collection, storage, distribution and management of water for irrigation to support agriculture. The people in rural India have traditionally relied upon the local rainfall to meet their water requirements for agriculture and non agriculture purposes. Hence the country has witnessed many such early settlements that devised their own systems of rain water harvesting and management based on the country's distinctive climate and geographical diversity varying in temperature, elevation, rainfall, etc.

The characteristics of these traditional systems such its size, storage capacity, nature, uses, management and ownership is highly localized and varied from one place to another. These are embodied, for example Tank system in south India, Aahar-Pyne system in Bihar, Katta, Munda, Bandha or Sagar in Odisha and many indigenous devices used in Gujarat and Rajasthan. The Ahar-Pyne system consisting of an artificial earthen channel (locally named Pyne) led off from a river or stream, in case of a bigger Pyne, conveying the part of monsoon flows to feed a series of earthen bund reservoirs (locally called Ahar), constructed across the line of drainage to have a synergized hydrologic efficiency.

There exist more than 10,000 such structures in Gaya district alone. The irrigation systems are simple but fragile structures. They have to be constantly maintained, monitored and conserved.

Even more difficult is sharing the scarce water amongst its users, particularly farmers to meet their livelihood needs. Ahar-Pyne system primarily provides crucial

irrigation to crops and it has greater significance during the scarcity period. The system helps recharging groundwater, function as a source of multiple uses for the village community (water for livestock and wildlife, fish rearing, water for cultural and ritual, washing, bathing, etc), and play a role in the maintenance of a good natural environment.

DHAN Foundation has chosen to intervene and restore these multipurpose Ahar-Pyne systems to their designed standard and revive their local management by creating social capital through community investments and facilitating mainstream collaborations.

Ahar-Pyne Associations

Village Level Association

The farmers of the village getting benefit from any of the Ahar or Pyne of the village forms a village level Ahar-Pyne association. The association enrolls beneficiary farmers as member of the general body. The association forms an executive management committee and selects office bearers.

Pyne level Association (Cascade Ahar association)

The beneficiary village level Ahar-pyne associations promote a Pyne level association. The members of executive- management committee of each village level Ahar-Pyne association represents as general body member of the Pyne level association. The association forms an executive management committee and selects office bearers.

Pyne Level Association			
Gram Ahar-Pyne Association		Gram Ahar-Pyne Association	
Micro Finance	Micro Finance	Micro Finance	Micro Finance

Microfinance groups

The intensity of the farmers' collective action goes down after the rehabilitation works. So there is a need for intensifying the collectivism by the farmers through measures other than rehabilitation also. Hence, Micro Finance Groups (MFGs) are formed within the Vayalagams and credit linkage is arranged so that the farmers would meet at regular intervals with a meaningful purpose.

Sl. No.	Particulars	Number
1	Panchayats	9
2	Villages	23
3	Vayalagams (people institutions promoted around water bodies)	22
4	Pyne Level Associations (promoted above village level water user associations)	4
5	Micro Finance Groups (Sub set of Vayalagams)	36
6	Total Members in MFGs (Micro Finance Groups)	669
7	Families covered	2,625

Status as on Dec-2012

Oorani Pilot Project – An intervention for safe drinking water in fluoride affected village

The Oorani pilot project has been implemented with the support of DFID under SWASTH programme in Tetariya village of Tankuppa block. There were 37 water samples collected from 33 hand pumps and 4 wells in the village and the test results showed 24 out of them were contaminated by fluoride which figures out 65% of the households were using unsafe water for their drinking purpose.

The dental affects of fluorosis was also visible among the community. Hence the rehabilitation of drinking water / domestic ooranis with the provision of filtering mechanism is taken up with peoples' participation through their associations. The pilot project will fetch benefits to 87 households and 567 population of the village. The intervention will benefit the neighbouring villages or hamlets also.

Vayalagam Programme: Progress and Status

The programme has spread in 22 villages of Tankuppa and Fatehpur blocks at Gaya district and also has presence in two villages of Madanpur block at Aurangabad district of south Bihar.

Programme reach in Gaya: The achievements made during the reporting period are as under DHAN's integrated approach towards poverty alleviation through its Kalanjiam and Vayalagam program is providing good results and there is lot more works to do in coming here to bring a overall development in our work area. ▣

Field Notes - Climate Change

Goat rearing for sustaining livelihood



I own 50 goats and my experience says that goat rearing can give assured income to a family even if the crop fails.

All rainfed farmers can consider rearing goat, one of the family member completely involving in the activity. However one should remain dedicated, work hard and live with the goats to sense any change in their behavior. One cannot leave the goats unattended even for a single day.

This is must to take any precautionary measure to protect loss of goats from diseases. Also this is a livelihood which is in tune with nature. Goat dung and urine are excellent nutrient to soil.

-Karupannan S/o Chinathambi 42 years, *Kilagulam*

Trees to suit different needs

Sustaining livelihood in rainfed condition is very difficult. To cope up with insufficient rains which affect my family income, I have planted two tamarind and five neem trees in my rainfed land. I get



50 kg of tamarind every year, which I sell after retaining few kilos for family consumption. I also have planted many Subabul trees near the goat shed in my house. I use the leaves to feed the goats.

I have constructed a farm pond with a wish to cultivate paddy. But since there were no rains this year, I planted Agathi (*Sesbania grandiflora*) which can be used as fodder and also for consumption. I wish to plant more tamarind trees, since there is high market demand

-Subbulakshmi w/o Ponniah 45 years, *Kilangulam*

Experience of Punganur in Fish Rearing

M. Kiran Kumar & S.P.Madhan Mohan*

Chittoor district is located in the Southern end of the Andhra Pradesh. Anantapur and Kadapa districts bound it on the North, Nellore district on East, Vellore district (Tamil Nadu) on the South and Kolar district (Karnataka) on the West. This significant district of Andhra Pradesh covers an extent of 15152 Sq. Km. It is divided into three Revenue divisions viz., Chittoor, Tirupati and Madanapalle. It is situated between 12037" of Northern latitude and 78055" of the Eastern longitude and an altitude of 2386 feet (MSL). The district has high density of minor irrigation tanks numbering 8,814 with a total command area of 2.95 Lakh acres.

Punganur is located at 13.3667°N 78.5833°E. It has an average elevation of 730 meters (2398 feet). Punganur is an important junction for the arterial roads to Madanapalle (and onwards to Anantapur), Malur (and onwards to Kolar and Bangalore), Chittoor (and onwards to Tirupati & Katpadi), and also to Kuppam (and onwards to Dharmapuri, Salem). It is probably one of the oldest towns in this region and records indicate that this region indulged in trading with the Romans.

It has pilgrim centers surrounded and is considered as the junction between Karnataka and Andhra Pradesh. The famous Boyakonda Gangamma Temple is located near to this town. It is basically a market town, with a lot of motor ancillary mini-industries. It has a very nice and cool climate when compared to other places of Andhra Pradesh and Karnataka. However, it is still not developed when compared to other places of Chittoor District. The place was famous for its breed of cows. This breed of cows was very small in size, very tame and domesticated. The breed is almost extinct now. It was a Zamindari before independence. There is a fort with a palace inside. At present both are in ruins. There is a school "BASAVARAJA BOARD HIGH SCHOOL" which was established more than 100 years ago. One of the oldest high schools in the Chittoor district. The place was ruled by a benovelent zamindari family. Most of the employees in the palace were from (Mala and Madiga castes) Daliths, in those days when Untouchability was very prevalent. Children from the zamindari family were also studying the same school along with commoners

and were given no special treatment. Mr. Basava Raja the then Zamindar was elected as an MLA in 1959 or so on an independent ticket with maximum majority. It was very famous for its tamarind business, its have lot of tamarind trees round the city. In addition to Telugu people Tamil and Muslim people are also staying here in a large number. Punganur is also called as Temple town because of various old and fine temples in it.

Context and relevance of Vayalagam programme

Punganur is one of the more numbers of traditional water harvesting structures called tanks for irrigation and other domestic purposes in the Chittoor district. Because of poor maintenance and care, majority of the tanks are heavily silted up, the feeder channels are encroached by the farmers. Majority of the tanks did not having the tank accessories like surplus weir, structured sluice, surplus coarse and feeder channels.

Introduction on Fish rearing

Fish rearing is one of the prominent activities which farmers go during a particular period when rain comes. When we see the rainfall status from the last 11 years no tank in the block got filled and this questions the existence of tanks. However in punganur fish rearing is practiced generally in Farm ponds (this are the water harnessing structures which catches the drops of water that falls on ground). The major fingerlinks stocked from the inception are Common carp, Big head, Cat fish, Grass carp, Mrigal-Mrigal, Rohu-Rohu, katla-Katka

Although smallholders may not produce huge quantities of fish, yields are manageable and harvests are easy to process and store. However, smallholders rarely participate in formal markets and often exchange their fish for other household needs releases cash for other purchases. Improved production techniques and better management practice can increase the production of fish from Farm ponds and with higher yields, supply to local markets can become an income generating activity for the households. Raising fish is an observable use for a farm pond; fish adds value to the water. From a farming systems fish uses agricultural and household

waste into food when used as feed. The few experiences of fish rearing in punganur offer models in small-scale fish rearing practices for other regions. An important lesson from the Punganur models is that fish farming is effectively integrated with the small farming practices.

Conservation and development works

In the last financial year we are able to construct 367 farm ponds as part of IWMP watershed project. The main idea behind this is that the farmer will be able to catch the little drops of water that falls on ground and can provide him various additional source of income like irrigating a small piece of land, Water used by domestic animals and based on the land type can go for rearing of fish.

Reach of Inland fishery year wise

Since there are very little rains we are not able to stock fish from the last couple of years. The below details can show the status from 2007 to 2011. However the stocking was majorly done in Farm ponds and open wells.

S.No.	Financial year	No. of fingerlings stocked
1	2007-2008	43,400
2	2008-2009	28,000
3	2009-2010	75,000
4	2010-2011	37,600

Feasible water bodies for fish rearing

As already said Punganur is known for its drought the major sources for fish rearing are Farm ponds, Mini percolation tanks, Percolation tanks, Check dams and if there is rain fall we can even go for tanks, but there is a large scope for stocking fingerlings in small water structures like farm ponds.

No of water bodies' taken up fish rearing

The following are the financial year wise stocking details in punganur.

Water bodies	2007-2008	2008-2009	2009-2010	2010-2011
Farm ponds	3	22	35	18
MPTs	5	14	34	15
Check Dams	1	1	3	2
Open wells	2	3	1	1
Tanks	2	3	20	26

Integrated farm pond management and fish production systems

All farm ponds serve as water storage for the field. The pond site depends on a good water supply. Consideration needs to be taken on how the water enters the pond, how it is managed for fish production and used for maximum benefit to the farm. The advantages of multiple use have already been described. To benefit from these advantages, the pond system must be planned and built well. Pond systems generally have an inlet and an outlet structure including a spillway or overflow for excess water. These structures can be of various designs and materials. They can be made from materials available on the farm or locally and should require no or very minimal cash outlay. Ponds must be built from compacted soils with a proper design to avoid erosion, minimize maintenance and extend its life. The initial labour requirement to build is very less and it majorly depends on the size required and based on the water storage stocking can be done.

Issues and challenges

- Regular failure of monsoon is showing adverse effect on fish rearing
- Farmers adopted to particular variety (like cat fish) is also providing curse
- Improved understanding of the possible contributions of farm ponds
- Guidance for maximizing production from input of nutrients to the ponds;
- Strategies and techniques to optimize overall farm production;

Improvement measures in fish rearing

- The multiple use of water from farm ponds needs to be well understood in order that it can be optimally used to produce farm products and meet domestic needs.
- The benefits from the presence of water could exceed the benefits from fish production alone. Organizations should also try to collaborate and work with women farmers.
- The number of women who are involved in farming is increasing. Training can be developed to suit their needs and adjusted to their circumstances. Opportunities exist to promote the organization of farmers and strengthen their capacity to manage the

association and manage community development projects.

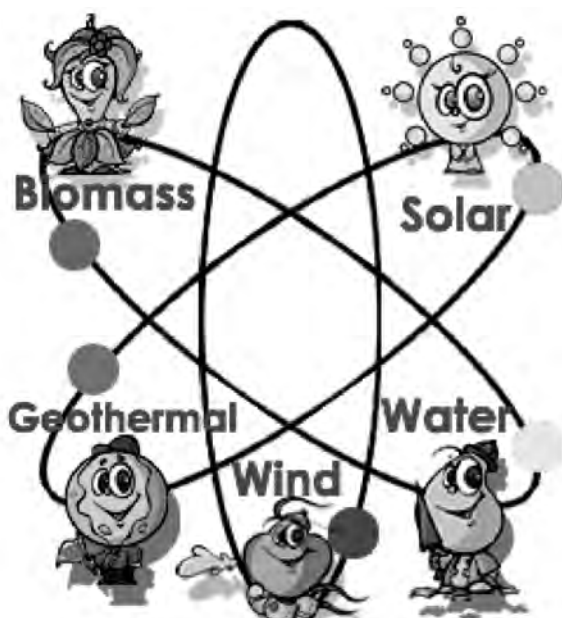
- All these would open further opportunities to the entire farming community such as attracting business investments and more government support.
- Farm ponds has the potential to improve economic growth in rural areas through increased on-farm employment, increased agricultural production, provision of quality food, generating more household income,

- Improved food security.
- Training programmes for both technical and management support;
- Training to improve the capacities of farmer organizations;
- Improving rural outreach;
- Improving institutional support services, access to inputs and to markets;
- Improving transport facilities.



Development News

Ten Key Sectors for a Green Economy



An investment of 2 per cent of global GDP across ten key sectors is necessary to prompt a shift to a low-carbon, resource-efficient and socially inclusive green economy. These sectors are:

1. Agriculture
2. Fisheries
3. Water
4. Forests
5. Renewable energy
6. Manufacturing
7. Waste
8. Building
9. Transport
10. Tourism

Renewable energy technologies to combat Climate change

1. Bioenergy can be produced from agricultural, forestry and livestock residues, energy crops, and other organic waste streams. A wide range of these technologies exists, and they vary greatly in their technical maturity.
2. Direct solar energy technologies harness the sun's energy to produce electricity and heat. Solar energy is variable and intermittent, producing different amounts of power on different days and at different times of the day. Relatively mature solar energy technologies exist.
3. Geothermal energy is produced from the thermal energy in the Earth's interior. Geothermal power plants, which extract energy from reservoirs that are sufficiently permeable and hot, are fairly mature technologies. Geothermal energy can also be used directly for heating. Hydropower is produced by harnessing the energy of water that moves between different elevations. Hydropower technologies are very mature. Reservoirs often have multiple uses in addition to electricity production, such as support for drinking water availability, drought and flood control, and irrigation.
4. Ocean energy harnesses the thermal, kinetic and chemical energy of seawater. Most ocean energy technologies are still in the research and development or pilot phases.
5. Wind energy is produced from the kinetic energy of moving air, using large on- and offshore wind turbines. Onshore technologies are widely manufactured and used, and further development of offshore technologies is promising. Wind energy is variable, and in some locations unpredictable, but research indicates that many technical barriers can be overcome.

Source: UNEP Year book, *Emerging issues in global environment 2012*.

Shramdhan in Tumkur

H.C.Gowda*

DHAN's regional team at Tumkur and Kalanjiam movement team planned for a stay for two days at Bettashambonahalli village, Kurramkote cluster of Katteganapathi Mahila Kalanjiam Okkuta, Koratagere on 26th and 27th of February 2013. The Kalanjiam and their federations are not merely a savings and credit institutions, but focus on overall development of a family, village and society. This stay was planned with a purpose of creating awareness regarding health, hygiene and sanitation to the village people and also to make them aware of the welfare schemes of the government. The seed for this stay started in the regular regional meeting of the team, in which the team members expressed to spend a full day with the community. The date and the place were finalized after mutual consent. The information about the regions team visit to Bettashambonahalli village was communicated to our Kalanjiam members and that they played a crucial role in creating a facilitating environment for the activities planned. As per the plan the regional team reached the village by 4pm on 26th February, 2013. A meeting was held during the same evening with our the village heads, Kalanjiam members families and other local villagers. We explained them about our purpose of visit and sought their cooperation.

Later the inauguration of this program was done by lighting of lamps by the dignitaries. Mr. Prasannakumar, ZP Member, Thovinakere who spoke during the event said that "Women play a crucial role in maintaining the health and hygiene of a family and they should understand the importance of constructing a toilet in every household and do the need for the same. Women face lot of problems when they do not have a toilet



in their house and are forced to go outside". He also assured the villagers that he will allot some portion of Zilla panchayat fund for toilet construction. Regional coordinator Mr. H C Gowda informed the villagers that the government is providing subsidy support for construction of toilets and in Kalanjiam too loan to a tune of ₹ 10,000 is given to construct toilet. People can very well use this facility to keep the village clean. He also expressed purpose of the village stay and sought the cooperation of the villagers for the same.

Later a street play depicting the importance of health, hygiene and sanitation was staged by Mr. Shashidhar and Koratagere team. The villagers participated actively and also performed some cultural activities and exhibited their talent. The street plays on ill effects of alcohol and on importance of educating women was also staged. The event went on even post mid night till 02.00 am next morning. More than 250 persons participated in the event and got benefited. On 27th February, 2013 by 7.30 am our team and the villagers were ready to start up the Shramdhan activity. The Kalanjiam members also joined hand with us to clean the village. The drainage in the village was in very bad shape and no cleaning up activity was done for the past five years. We cleaned the drainage and also the streets in the villages. The entire regional team and 150 other members actively participated in the shramadhan. The event was a big success, since the entire village was left very much clean. The villagers seeing the result assured that they themselves will take up this activity every month to keep their village clean.



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Budget Watch and Dialogue - 2013



The establishment of exclusive women bank, more focus on women through additional fund allocation of ₹ 200 crore to Women and Child Welfare ministry to address the issues of vulnerable women, 46 % more fund allocation for rural development than the earlier budget and more focus on water shed and dry-land agriculture announced in the 82nd union budget for the year 2013-14 was appreciated by academicians, development workers, Media professionals, bankers, students and public. They also appreciated the announcement of goods and services road map for uniform taxation and new comprehensive social security package.

However concerns were expressed for less focus on mitigating issues in power supply, exports, health and education apart from no revision in income tax ceiling limit which was widely expected by the middle class. Surprise was expressed over setting aside ₹ 10000 for incremental cost for National Food Security bill, while Kelkar committee recommended for phasing out of subsidies.

The Budget watch and Dialogue on the Union Budget 2013-14 with development perspective was organized by Tata-Dhan Academy today at DHAN Foundation, Madurai wherein people from different sectors and students were invited to reflect and discuss on the budget and its outcomes.

The event started with the retrospective inspection of fiscal behavior of the Indian economy in which concerns were expressed about growing inflation and fiscal deficit and its impacts on the poor people. Later the participants

watched the Union budget 2013-14 presented by the Honorable Finance Minister P.Chidambaram. He admitted that faced with huge fiscal deficit, he had no choice but to rationalize expenditure and that food inflation is worrying even though WPI inflation was bought down to 7 %. The planned expenditure in 12th five year plan was revised to ₹ 14,30,825 crore from ₹ 16,65,297 crores. ₹ 80,194 crore was allocated for Ministry of rural development of which ₹ 33,000 crores is for MGNREGA.

Making KYC norms sufficient for getting a insurance policy, “Nirbhaya fund” of ₹ 1000 crores to empower women and provide safety to them, reviewing the oil and gas exploration policy and policy on exploration of shale gas, concessional loans to weavers and setting up of Indian Institute for Agricultural Biotechnology etc., are the other highlights of the budget. The participants discussed over the important announcement made in the budget and this brainstorming event had an overwhelming response.

The event was coordinated by Mr. M.Kalayanasundram, Chief Executive officer, INAFI-India and Ms.A.Umarani, Tata-Dhan Academy. Dr.Parthiban, Professor of Agricultural economics, AC & RI, TNAU, Madurai, Dr.Muthuraja, Professor of Economics, American college, Madurai, Ms.Vidhya Suresh, Professor, Thiagaraja School of Management, Madurai, students from Tata-Dhan Academy, AC & RI, TNAU, Madurai, SVN college, American college and Thiagaraga school of management apart from bankers and other academicians participated in the event. □



Highlights of the Budget 2013-14

The economy and the challenges

- Getting back to potential growth rate of 8 percent is the challenge facing the country. Slowdown in Indian economy has to be seen in the context of slowing global economic growth from 3.9 per cent in 2011 to 3.2 per cent in 2012.
- However, no reason for gloom or pessimism. Of the large countries of the world only China and Indonesia growing faster than India in 2012-13. In 2013-14, only China projected to grow faster than India.
- Between 2004 and 2008, and again in 2009-10 and 2010-11 the growth rate was over 8 per cent and crossed 9 per cent in four of those six years. 11th Plan period had average growth rate of 8 percent, highest during any Plan period, entirely under the UPA Government.
- Higher growth leading to inclusive and sustainable development' to be the mool mantra. Government believes in inclusive development with emphasis on improving human development indicators specially of women, the scheduled castes, the scheduled tribes, the minorities and some backward classes. This Budget to be a testimony to that commitment.

Fiscal Deficit, Current Account Deficit and Inflation

- A new fiscal consolidation path with fiscal deficit at 5.3 per cent of GDP this year and 4.8 per cent of GDP in 2013-14 announced by the Government.
- Foreign investment in an imperative in view of the high current account deficit (CAD). FII, FDI and ECB three main source of CAD Financing. Foreign investment that is consistent with our economic objectives to be encouraged.
- Battle against inflation must be fought on all fronts. Efforts in the past few months have brought down headline WPI inflation to about 7 per cent and core inflation to about 4.2 percent. Food inflation is also causing worries
- Faced with huge fiscal deficit, Government expenditure rationalised in 2012-13. Some economic space retrieved. Space to be used to further Government's socio- economic objectives.

Source: Union Budget - 2013

The plan and budgetary allocations

Revised Estimates (RE) of the expenditure in 2012-13 at 96 per cent of the Budget Estimates (BE) due to slowdown and austerity measures. During 2013-14, BE of total expenditure of ₹ 16,65,297 crore and of Plan Expenditure at ₹ 5,55,322 crore. Plan Expenditure in 2013-14 to grow at 29.4 per cent over Revised Estimates for the current year. All flagship programmes fully and adequately funded and sufficient funds provided to each Ministry or Department consistent with their capacity to spend funds.

- **SC, ST, Women and Children:** Allocations for Scheduled Caste Sub Plan and Tribal Sub Plan increased substantially over the allocations of the current year. Funds allocated to these Sub Plans cannot be diverted. Ministry of Women and Child Development to design schemes that will address the concerns of women belonging to the most vulnerable groups, including single women and widows. An additional sum of ₹ 200 crore proposed to be provided to the Ministry to begin work. 97,134 crore allocated for programmes relating to women and ₹ 77,236 crore allocated for programmes relating to children.
- **Minorities:** An increase of 12 per cent over the BE and 60 per cent over the RE of 2012-13 to Ministry of Minority Affairs. Allocation of ₹ 160 crore to the corpus of Maulana Azad Education Foundation to raise its corpus to ₹ 1,500 crore during 12th Plan period.
- **Disabled Persons:** A sum of ₹ 110 crore to the Department of Disability Affairs for ADIP scheme in 2013-14 against RE 2012-13 of ₹ 75 crore.
- **Health and Education:** Health for all and education to all remains priority. 37,330 crore allocated to the Ministry of Health & Family Welfare. New National Health Mission will get an allocation of ₹ 21,239 crore. 4,727 crore for medical education, training and research. 150 crore provided for National Programme for the Health Care of Elderly. Ayurveda, Unani, Siddha and Homoeopathy are being mainstreamed. Allocation of ₹ 1,069 crore to Department of AYUSH. 1,650 crore allocated for six AIIMS-like institutions.
- Allocation of ₹ 65,867 crore to the Ministry of Human Resource Development, an increase of

17 per cent over the RE of the current year. 27,258 crore provided for Sarva Shiksha Abhiyaan (SSA). An increase of 25.6 per cent over RE of the current year for investments in Rashtriya Madhyamik Shiksha Abhiyan (RMSA). 5,284 crore allocated to Ministries/Departments in 2013-14 for scholarships to students belonging to SC, ST, OBC, Minorities and girl children. Mid Day Meal Scheme (MDM) to be provided ₹ 13,215 crore.

- **ICDS:** 17,700 crore allocated for ICDS in 2013-14 representing an increase of 11.7 per cent over 2012-13. Allocation of ₹ 300 crore in 2013-14 for a multi-sectoral programme aimed at overcoming maternal and child malnutrition. Programme to be implemented in 100 districts during 2013-14 to be scaled to cover 200 districts the year after.
- **Drinking Water:** 15,260 crore allocated to Ministry of Drinking Water and Sanitation. 1,400 crore provided for setting-up of water purification plants in 2000 arsenic and 12000 fluoride-affected rural habitations.
- **Rural Development:** Allocation of ₹ 80,194 crore in 2013-14 for Ministry of Rural Development marking an increase of 46% over RE 2012-13. Proposal to carve out PMGSY-II and allocate a portion of the funds to the new programme that will benefit States such as Andhra Pradesh, Haryana, Karnataka, Maharashtra, Punjab and Rajasthan.
- **JNNURM:** 14,873 crore for JNNURM in BE 13-14 as against RE of ₹ 7,383 crore. Out of this, a significant portion will be used to support the purchase of upto 10,000 buses, especially by the hill States.
- **Agriculture:** Average annual growth rate of agriculture and allied sector was 3.6% during XI Plan against 2.5% and 2.4% in IX and X plans respectively. In 2012-13, total food-grain production will be over 250 million tonnes. 27,049 crore allocated to Ministry of Agriculture, an increase of 22 per cent over the RE of current year. Agricultural research provided with 3,415 crore.
- **Agricultural Credit:** For 2013-14, target of agricultural credit kept at ₹ 7 lakh crore. Interest subvention scheme for short-term crop loans to be continued scheme extended for crop loans borrowed from private sector scheduled commercial banks. Bringing green revolution to eastern India a remarkable success. 1,000 crore allocated in 2013-

14. 500 crore allocated to start a programme of crop diversification that would promote technological innovation and encourage farmers to choose crop alternatives. Rashtriya Krishi Vikas Yojana and National Food Security Mission provided with 9,954 crore and ₹ 2,250 crore respectively.

- Allocation for integrated watershed programme increased from ₹ 3,050 crore in 2012-13 (BE) to ₹ 5,387 crore.
- Allocation made for pilots programme on Nutri-Farms for introducing new crop varieties that are rich in micro-nutrients.
- **Farmer Producer Organizations:** Matching equity grants to registered Farmer Producer Organization (FPO) upto a maximum of ₹ 10 lakhs per FPO to enable them to leverage working capital from financial institutions. Credit Guarantee Fund to be created in the Small Farmers' Agri Business Corporation with an initial corpus of ₹ 100 crore.
- **National Livestock Mission:** National Livestock Mission to be set up. A provision of ₹ 307 crore made for the Mission.
- **Food Security:** Additional provision of ₹ 10,000 crore for National Food Security Act.

Investment, infrastructure and industry

- Need of new and innovative instruments to mobilise funds for investment in infrastructure sector. Measures such as: Infrastructure Debt Funds (IDF), IIFCL to offer credit enhancement, Infrastructure tax-free bond of ₹ 50,000 crore in 2013-14,
- Build roads in North eastern states and connect them to Myanmar with assistance from WB & ADB, Raising corpus of Rural Infrastructure Development Fund (RIDF) to ₹ 20,000 crore and 5,000 crore to NABARD to finance construction for warehousing. Window to Panchayats to finance construction of godowns.
- Companies investing ₹ 100 crore or more in plant and machinery during the period 1.4.2013 to 31.3.2015 will be entitled to deduct an investment allowance of 15 per cent of the investment. Incentives to semiconductor wafer fab manufacturing facilities, including zero customs duty for plant and machinery.
- Following measures like liberalization of Rajiv Gandhi Equity Savings Scheme, Additional deduction of interest upto ₹ 1 lakh for a person taking

first home loan upto ₹ 25 lakh during period 1.4.2013 to 31.3.2014 and introduction of instruments protecting savings from inflation to be introduced to incentivize greater savings by household sector in financial instruments

- Government to construct a transmission system from Srinagar to Leh at a cost of 1,840 crore.
- Two new major ports will be established in Sagar, West Bengal and in Andhra Pradesh to add 100 million tonnes of capacity. A new outer harbour to be developed in the VOC port at Thoothukkudi, Tamil Nadu through PPP at an estimated cost of ₹ 7,500 crore.
- **National Waterways:** A bill to declare the Lakhimpur-Bhanga stretch of river Barak in Assam as the sixth national waterway to be moved in Parliament. Preparatory work underway to build a grid connecting waterways, roads and ports.
- **Oil and Gas :** A policy to encourage exploration and production of shale gas will be announced. The 5 MMTPA LNG terminal in Dabhol, Maharashtra will be fully operational in 2013-14.
- **Coal:** In the medium to long term need to reduce our dependence on imported coal. One way forward is to devise a PPP policy framework with Coal India Limited as one of the partners.
- **Power:** Guidelines regarding financial restructuring of DISCOMS have been announced. State Government urged to prepare the financial restructuring plan, quickly sign MoU and take advantage of the scheme.

Micro, Small and Medium Enterprises

- Benefits or preferences enjoyed by MSME to continue upto three years after they grow out of this category.
- Refinancing capacity of SIDBI raised to ₹ 10,000 crore. Another sum of ₹ 100 crore provided to India Microfinance Equity Fund.
- A corpus of ₹ 500 crore to SIDBI to set up a Credit Guarantee Fund for factoring. A sum of ₹ 2,200 crore during the 12th Plan period to set up 15 additional Tool Rooms and Technology Development Centres with World Bank assistance.

Financial sector

- A standing Council of Experts to be constituted in the Ministry of Finance to analyse the international competitiveness of the Indian financial sector.

- **Banking:** Compliance of public sector banks with Basel III regulations to be ensured. 14,000 crore provided in BE 2013-14 for infusing capital. All branches of public sector banks to have ATM by 31.3.2014.
- Proposal to set up India's first Women's Bank as a public sector bank. Provision of ₹ 1,000 crore as initial capital.
- 6,000 crore to Rural Housing Fund in 2013-14. National Housing Bank to set up Urban Housing Fund. ₹ 2,000 crore to be provided to the fund in 2013-14.
- **Insurance:** Number of proposals finalised, in consultation with IRDA such as empowering insurance companies to open branches in Tier-II cities and below without prior approval of IRDA, KYC of banks to be sufficient to acquire insurance policies, banks to be permitted to act as insurance brokers, banking correspondent allowed to sell micro-insurance products and achieving the goal of having an office of LIC and an office of at least one public sector general insurance company in towns with population of 10,000 or more.
- Rashtriya Swasthya Bima Yojana to be extended to other categories such as rickshaw, auto-rickshaw and taxi drivers, sanitation workers, rag pickers and mine workers.
- A comprehensive social security package to be evolved for unorganised sector by facilitating convergence among different schemes.
- **Capital Market:** Proposal to amend the SEBI Act, to strengthen the regulator, under consideration. SEBI will simplify the procedures and prescribe uniform registration and other norms for entry for foreign portfolio investors.
- Small and medium enterprises, to be permitted to list on the SME exchange without being required to make an initial public offer (IPO). Stock exchanges to be allowed to introduce a dedicated debt segment on the exchange.
- **Environment:** Support to municipalities that will implement waste-to-energy projects. Government to provide low interest bearing fund from the National Clean Energy Fund (NCEF) to IREDA to on-lend to viable renewable energy projects. Generation-based incentive' reintroduced for wind energy projects and ₹ 800 crore allocated for this purpose.

- **Skill Development:** Target of skilling 50 million people in the 12th Plan period, including 9 million in 2013-14.
- **Defence:** Allocation for Defence increased to ₹ 2,03,672 crore including ₹ 86,741 crore for capital expenditure.
- **Science and Technology:** Despite constraints substantial enhancements given to Science and Technology, Space and Atomic Energy. 200 crore to be set apart to fund organisations that will scale up S&T innovations and make these products available to the people.
- **Institutions of Excellence:** A grant of 100 crore each made to 4 institution of excellence.
- **Sports:** National Institute of Sports Coaching to be set up at Patiala at a cost of ₹ 250 crore over a period of three years.
- **Broadcasting:** All cities having a population of more than 1,00,000 will be covered by private FM radio services.
- **Panchayati Raj:** Augmentation in the Budget allocation of Rajiv Gandhi Panchayat Sashaktikaran Abhiyan (RGPSA) to ₹ 455 crore in 2013-14. An additional ₹ 200 crore proposed to be provided.
- **Post Offices:** An ambitious IT driven project to modernise the postal network at a cost of ₹ 4,909 crore. Post offices to become part of the core banking solution and offer real time banking services.

Three promises

Promises made to woman, youth and poor

- We stand in solidarity with our girl children and women. And we pledge to do everything possible to empower them and to keep them safe and secure. A fund - "Nirbhaya Fund" - to be setup with Government contribution of ₹ 1,000 crore.
- Youth to be motivated to voluntarily join skill development programmes. National Skill Development Corporation to set the curriculum and standards for training in different skills. 1000 crore set apart for this scheme.
- To the poor of India direct benefit transfer scheme will be rolled out throughout the country during the term of the UPA Government with the motive "Aapka paisa aapke haath".

Budget Estimates

- Plan expenditure is placed at ₹ 5,55,322 crore. Non Plan Expenditure is estimated at ₹ 11,09,975 crore. Fiscal deficit for the current year contained at 5.2 per cent and for the year 2013-14 at 4.8 per cent.
- Revenue deficit for the current year at 3.9 percent and for the year 2013-14 at 3.3 per cent. By 2016-17 fiscal deficit to be brought down to 3 per cent, revenue deficit to 1.5 per cent and effective revenue deficit to zero per cent.

Tax proposals

- **Direct taxes:** Little room to give away tax revenues or raise tax rates in a constrained economy. No case to revise either the slabs or the rates of Personal Income Tax. Even a moderate increase in the threshold exemption will put hundreds of thousands of Tax Payers outside Tax Net. However, relief for Tax Payers in the first bracket of ₹ 2 lakhs to ₹ 5 lakhs. A tax credit of ₹ 2000 to every person with total income upto ₹ 5 lakhs.
- Surcharge of 10 percent on persons (other than companies) whose taxable income exceed ₹ 1 crore to augment revenues. Increase surcharge from 5 to 10 percent on domestic companies whose taxable income exceed ₹ 10 crore.
- In case of foreign companies who pay a higher rate of corporate tax, surcharge to increase from 2 to 5 percent, if the taxable income exceeds ₹ 10 crore. In all other cases such as dividend distribution tax or tax on distributed income, current surcharge increased from 5 to 10 percent. Additional surcharges to be in force for only one year.
- Education cess to continue at 3 percent.
- Permissible premium rate increased from 10 percent to 15 percent of the sum assured by relaxing eligibility conditions of life insurance policies for persons suffering from disability and certain ailments.
- Contributions made to schemes of Central and State Governments similar to Central Government Health Scheme, eligible for section 80D of the Income tax Act. Donations made to National Children Fund eligible for 100 percent deduction.
- Securitisation Trust to be exempted from Income Tax. Tax to be levied at specified rates only at the

time of distribution of income for companies, individual or HUF etc. No further tax on income received by investors from the Trust.

- TDS at the rate of 1 percent on the value of the transfer of immovable properties where consideration exceeds 50 lakhs. Agricultural land to be exempted.
- Proposal to introduce Commodity Transaction Tax (CTT) in a limited way. Agricultural commodities will be exempted.
- A number of administrative measures such as extension of refund banker system to refund more than ₹ 50,000, technology based processing, extension of e-payment through more banks and expansion in the scope of annual information returns by Income-tax Department.
- **Indirect Taxes:** No change in the normal rates of 12 percent for excise duty and service tax. No change in the peak rate of basic customs duty of 10 percent for non-agricultural products.
- **Customs:** Export duty on de-oiled rice bran oil cake withdrawn. Duty of 10 percent on export of unprocessed ilmenite and 5 percent on export on ungraded ilmenite. Concessions to air craft maintenance, repair and overhaul (MRO) industry.
- Duty on Set Top Boxes increased from 5 to 10 percent. Duty on raw silk increased from 5 to 15 percent. Duties on Steam Coal and Bituminous Coal equalised and 2 percent custom duty and 2 percent CVD levied on both kinds coal.
- Duty on imported luxury goods such as high end motor vehicles, motor cycles, yachts and similar vessels increased. Duty free gold limit increased to ₹ 50,000 in case of male passenger and ₹ 1,00,000 in case of a female passenger subject to conditions.
- **Excise duty:** Relief to readymade garment industry. In case of cotton, zero excise duty at fibre stage also. In case of spun yarn made of man made fibre, duty of 12 percent at the fibre stage. Handmade carpets and textile floor coverings of coir and jute totally exempted from excise duty.
- To provide relief to ship building industry, ships and vessels exempted from excise duty. No CVD on imported ships and vessels. Specific excise duty on cigarettes increased by about 18 percent. Similar increase on cigars, cheroots and cigarillos.
- Excise duty on SUVs increased from 27 to 30 percent. Not applicable for SUVs registered as taxies. Excise duty on marble increased from ₹ 30 per square meter to ₹ 60 per square meter. Proposals to levy 4 percent excise duty on silver manufactured from smelting zinc or lead.
- Duty on mobile phones priced at more than ₹ 2000 raised to 6 percent.
- MRP based assessment in respect of branded medicaments of Ayurveda, Unani, Siddha, Homeopathy and bio-chemic systems of medicine to reduce valuation disputes.
- **Service Tax:** Vocational courses offered by institutes affiliated to the State Council of Vocational Training and testing activities in relation to agricultural produce also included in the negative list for service tax. Exemption of Service Tax on copyright on cinematography limited to films exhibited in cinema halls.
- Proposals to levy Service Tax on all air conditioned restaurant.
- For homes and flats with a carpet area of 2,000 sq.ft. or more or of a value of ₹ 1 crore or more, which are high-end constructions, where the component of services is greater, rate of abatement reduced from 75 to 70 percent.
- Out of nearly 17 lakh registered assesses under Service Tax only 7 lakhs file returns regularly. Need to motivate them to file returns and pay tax dues. A onetime scheme called 'Voluntary Compliance Encouragement Scheme' proposed to be introduced. Defaulter may avail of the scheme on condition that he files truthful declaration of Service Tax dues since 1st October 2007.
- Tax proposals on Direct Taxes side estimated to yield to ₹ 13,300 crore and on the Indirect Tax side ₹ 4,700 crore.
- **Good and Services Tax:** A sum of ₹ 9,000 crore towards the first instalment of the balance of CST compensation provided in the budget. Work on draft GST Constitutional amendment bill and GST law expected to be taken forward. □

The Kottampatti Experience

Water conservation through UPNRM

J.Mohan*

Introduction

Water is becoming one of the scarce natural resource everywhere. In our country major amount of water is being used for irrigation. Normally the farmers adapting traditional irrigation method like flood irrigation through the open channel which is consuming more water. There are heavy percolation and evaporation losses in the traditional methods. The Farmers in Kottampatti block conserved the water by carrying through newly laid under ground pipe line system instead of carrying the flow in the open channel.

Brief about Kottampatti

Kottampatti is situated in the south western direction of the Madurai district. During 1960's it was called as Melur I after that it was changed to Kottampatti block. In 1992, Kottampatti block was organized. This block is benefited by canal and tank irrigation mostly by rain fed tanks. There are 961 irrigation tanks mostly small in size providing irrigation to less than 40 Ha and located in 27

village Panchayats grouped into 32 revenue villages and there are about 198 small villages. Kottampatti a remote block which is neither fed with any perennial river nor supported with any such water sources for the peoples' mainstay agriculture. The farmers solely depend on rainwater, which is stored in irrigation bodies called tanks made of mud bunds thrown across land slope. As a whole Madurai has 2450 tanks in which 961 tanks are there in Kottampatti block itself. The tank rehabilitation programme with people participation was initiated in the year 1994 in this block with the objective of enabling the people towards tank restoration and for sustainable management. The annual rainfall for Kottampatti is around 860 mm. Though farmers cultivate paddy as a main crop in wet land and have mixed crop such as coconut, mango, pulses, ground nut etc. in dry land, these dry land and dry land crops are also the main sources of livelihood.

NABARD – UPNRM Project

The NABARD has sanctioned ₹ 20.0lakhs to the Kottampatti Vattara Vayalagam under the UPNRM

S. No.	Group Name	Village Name	No. of Member	Amount
1	Sanipatti VVV club	Sanipatti	8	1,60,000
2	Palkulam MFG	Kadumeetanpatti	4	1,00,000
3	Periyaruruvi neradi neer pasanam	Kadumeetanpatti	5	1,00,000
4	Alagarmalaiyan MFG	Kesampatti	6	1,20,000
5	Pattaliyin pasumai purachi	Alangampatti	3	60,000
6	Moongilgalin munnetram	Alangampatti	2	40,000
7	Kilavan kanmoi vayalagam	Velayuthampatti	1	20,000
8	Alagikulam	Kadumeetanpatti	3	50,000
9	Thiranikaruppu	Periyakarpurampatti	1	20,000
10	Alangulam, Mangulam	Kesampatti	3	57,000
11	Aindunilai nattar	Vellanipatti	1	20,000
12	Arulmigu vinayagar	Ottakovilpatti	1	20,000
13	Vadakkura selvi	Ottakovilpatti	1	20,000
14	Manthaiyamman	Alangampatti	2	40,000
15	Pattaliyin pasumai purachi	Alangampatti	2	40,000
Total			43	8,67,000

*Mr.J.Mohan, Team Leader, DHAN Vayalagam (Tank) Foundation, Kottampatti.

S.No.	Particulars	Traditional Method	Pipe line Method
1	Loss of water	Percolation and Evaporation losses are high	No percolation and evaporation loss
2	Time for irrigation per acre	5.0 hrs	3.0 hrs
3	Oil and Power requirement	High	Low
4	Labour	Careful watch to avoid breaches, burden for frequent cleaning and diverting water is required.	Easy operation and saving the time and cost for labor. Even the women can irrigate.
5	Area for irrigation	Limited area	Additional 2.0 acres can be irrigated when compare with traditional method
6	Number of irrigation	Two times per month	Four times per month
7	Yield	Average	Due to the increase of irrigation the yield also increase.

project. The farmers of this federation has utilized the loan effectively for laying pipe line in their land. Totally 43 number of members benefited through this project and ₹ 8,67,000/- amount of loan was distributed to the members. The list of the Micro Finance Group(MFG) and the beneficiary numbers are given in the above table.

Irrigation through pipe line system

Due to the absence of Perennial River in Kottampatti block the farmers depends on Rainfed tanks and Ground water. In the tank command also the farmers having well and using the water conjunctively. Before five decades the farmers lift the well water manually and also by using animals. The name of the irrigation method is called Kamalai or Etram. Now a days the farmers are not creating well because of its cost. Recent years most of the farmers are digging borewell to lift the ground water. They are using oil and Electrical motors for pumping the water. Usually the lifted water falls near the location of the motor and the open channel carries the water to some distance for irrigation. While carrying the water in the channel the water is percolating and evaporating. When the soil is sandy the percolation loss is very high. The time taken to reach the field to irrigate, the power requirement for pumping the water and the labour work for cleaning the channel and closing the opening for diverting the water to next part of land to irrigate was high.

To avoid the above said problems the farmers are laying PVC pipe line in the ground to carry the water through the pipe line system. The UPNRM supported the farmers to meet the initial expenditure for laying the pipe line system from the pump. ₹ 20,000/ amount of loan was

given to the farmers for laying the PVC pipe line system. The below table gives the comparative of traditional irrigation system and Pipe line irrigation system.

Conclusion

The UPNRM project supported the small and marginal farmers for improving the status of the farmers. The farmers could utilize the loan effectively for the conservation of land and water. Ultimately the production in the agriculture and income of the farmers were increased with the support of the UPNRM project. □

Field Notes - Climate Change

Keep trying and adapting



The climate has changed very much, rains got reduced, and temperature is high at present than two decades ago. Tanks, in our village and surrounding villages remain dry for most of the years. Tree planting is not suited for my land since

I have a bitter experience of planting mango trees, which got dried at the time of fruit bearing, due to hard rock surface below the soil. This year, I cultivated Cumbu (pearl millet) in this land this year, which was able to tolerate drought and grow well. I also have constructed a farm pond in the rainfed lands. I will cultivate gingelly or cumbu as a summer crops, if there are rains in summer.

- Rathinam w/o Muthukaaman, 47 years, K.Chattirapatti

“Used Water” and Scope of DEWATS in Madurai, India

A.Gurunathan*

1. Introduction

In twenty first century, the issues related to water and wastewater, otherwise “used water” (newly coined term to overcome mental blocks of humanity) get more attention of governmental and non-governmental organizations. Especially the quality and quantity of water bodies in Indian sub-continent is the most precarious and are in an alarming condition.

In 2000 the world signed up to the UN Millennium Development Goal (MDG) target to halve the proportion of people (in 1990) without access to safe drinking water by 2015 (MDG 7 – Target 10 – Indicator 30). In 2002 another target was added: to halve the proportion of people without access to improved sanitation (Indicator 31). At the current rate the sanitation target will be missed in both Africa and Asia. Also India is currently not on track with 400 million people to be covered with improved sanitation within the next years.

The Centre for Urban Water Resources (CURE) initiated by DHAN during the International Year of Sanitation 2008 has its focus on renovation and sustainable use of water resources. CURE’s activities concentrate on following activities to address people needs.

- Renovation of Urban Water Resources,
- Provision of Safe Drinking Water,
- Wastewater and Sanitation Management.

2. Madurai city – Waste water and issues

Under the centrally sponsored Scheme of Jawaharlal Nehru National Urban Renewal Mission (JnNURM),

efforts have been taken to improve water usage by increasingly providing underground wastewater drainage and adequate treatment in the wards within Madurai City, Tamilnadu India. However, planned improvements through augmentation of the wastewater collection system are restricted to certain areas and the planned centralized treatment systems are limited to wastewater generated in core areas. Therefore, planned improvements are – despite all health, environmental, economical and cultural benefits – not sufficient as significantly huge parts of the population are omitted. Overlooked persons are generally the urban poor living in slums, in the periphery and unauthorized settlements.

For those areas, decentralized wastewater treatment offers a cost effective, environmentally sound, fair, efficient and sustainable answer. Those technologies provide a number of advantages besides the fact that they are easily applicable in areas where centralized treatment is not feasible for technical, political or economic reasons (e.g. remote or sparsely populated areas, areas where local reuse of the water is applicable, areas where freshwater is in short supply, areas where centralized collection is economically not feasible, etc). Benefits of decentralized wastewater management include cost efficient investments, minimal O&M needs and costs, water and energy savings, local reuse of resources (water, nutrients and energy), reduced groundwater pollution, reduced pollution of open water bodies, efficient pathogen removal, easy storm water separation, high variety of technologies, easy

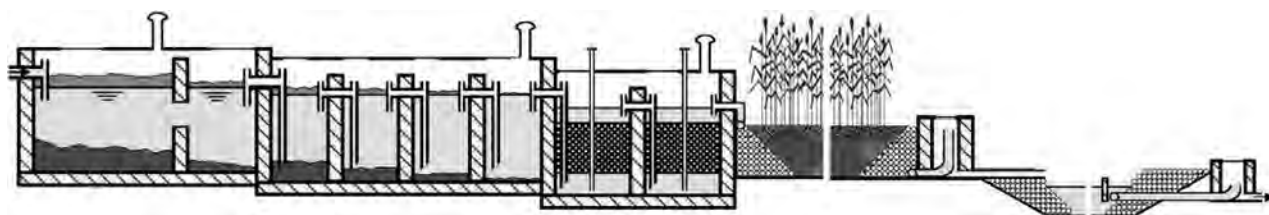


Figure 1. DEWATS consisting of settler – ABR – AF – PGF (not true to scale)

*Mr.A.Gurunathan, Chief Executive, DHAN Vayalagam (Tank) Foundation, Madurai.



user involvement, easy and quick applicability in so far unconnected areas, easy applicability as bridge-solution until a centralized system is provided, as well as applicability on household, cluster and community level.

Appropriate areas for decentralized systems are settlements in the periphery, new settlement, villages in the outskirts, areas with low population density, single households, unauthorized settlements (temporary solution), areas with high groundwater tables, schools, training centers, hospitals, hostels, and all areas which are not connected to a centralized underground sewer system.

Hence, the coexistence of conventional centralized treatment systems for core areas, combined with decentralized systems for appropriate locations is the most beneficial solution. Centralized and decentralized management strategies have to go hand-in-hand (hybrid solution).

2.1 Scope for DEWATS

- DEWATS is a socio-technical sanitation approach developed and continuously improved by the Bremen Overseas Research and Development Association (BORDA), an international development

organization headquartered in Germany. The Consortium for DEWATS Dissemination (CDD) Society represents and coordinates BORDA activities in South Asia and represents as an umbrella organisation several relevant government, public and private stakeholders.

- DEWATS systems are effective, reliable, cost efficient and custom-made wastewater treatment systems, which are perfectly suited for small to medium-size systems (5-1000m³/d) on community level and for individual users like e.g. schools, hospitals, or enterprises (SME). On community level, DEWATS can be integrated into a sanitation complex, which is operated on pay-and-use basis, creating income opportunities for local personal (Community Based Sanitation, CBS). DEWATS solutions are not intended to replace but rather to complement centralised systems in applicable areas.
- The technical options within DEWATS are based on a modular and partly standardized design. DEWATS is based on basic technical treatment processes: mechanical treatment (sedimentation and flotation) and biological (anaerobic and aerobic) treatment. The most common DEWATS modules are settlers, biogas settlers, anaerobic baffled reactors (ABR),

Table 1. Present Condition of the existing WWTS within Corporation Limits

Description	Unit	Present Status	
WWTS	-	Avaniapuram	Sakkimangalam
Drainage zone	-	South	North
Connected blocks	No.	15	5
Year of commissioning	-	1924	1990
Total area	ha	156	55
Design Capacity of WWTS	MLD	13	13
Effective inflow	MLD	17	10
Stabilisation ponds	No.	2	3
Operational ponds	No.	1	1 (26)
Size of ponds	m	95 x 95 x 2.5	90 x 38.5 x 2.5
Total volume	m ³	45,125 (22,563 effect.)	25,988 (8,663 effect.)
Theoretical HRT (design inflow)	days	3.5 (1.7 effect.)	2.0 (0.67 effect.)
Theoretical HRT (real inflow)	days	2.7 (1.3 effect.)	2.6 (0.87 effect.)
Effluent disposal	discharge into agricultural fields or water channels for irrigation (via French Drain Systems)		
Remarks	Effluent of lagoons is routed to French Drain System for further treatment		

anaerobic filters (AF), planted gravel filters (PGF), and (if needed) polishing ponds. The systems can be designed for individual needs.

2.2 Areas of Application for DEWATS

- Where individual onsite systems fail and the community cannot afford the cost of a conventional wastewater management system
- Where the community or facility is remote from existing sewers,
- Where local water reuse options are available,
- Where existing wastewater treatment plant capacity is limited,
- Where the expansion of the existing wastewater collection and treatment facilities would involve unnecessary disruption of the community,
- Where residential density is spare,
- Where specific wastewater constituents are treated or altered more appropriately at the point of generation.

2.3 Benefits of DEWATS

- Cost efficient as no or only simplified underground sewer system needed,
- Low running costs and energy savings as no electrical devices needed,

- Minimal O&M needs and costs as lower human resources capacity levels needed,
- Reliable, long lasting and tolerant towards inflow fluctuation
- High variety of local water, energy and nutrient reuse options,
- No groundwater pollution,
- Easy and efficient user involvement and participation; and high user acceptance,
- Applicable on household, cluster and community level.

2.4 Existing Wastewater Treatment

The two exiting WWTS in Avaniapuram and Sakkimangalam consist of wastewater stabilization lagoons. Both WWTS are currently in dilapidated condition and in need of urgent capacity augmentation and refurbishment. Especially since the commissioning of the augmented UGSS under NRCP Phase I, the capacities of both WWTS – originally designed for 13 MLD each are insufficient. Avaniapuram WWTS is currently nearly dysfunctional.

All proposed improvements (UGSS and WWTS) under the NRCP are limited to Madurai Municipal

Design quantity in Cu.m/day	Buildup Area in Sq,m	Total project cost in Lakh	Inlet in mg/l		Outlet in mg/l		No of users	Operation status
			COD	BOD	COD	BOD		
15	210	9.00	300	150	28	10	100	6 months before started
8	150						200	

Corporation areas. Madurai city as a whole, with settlements excluded from MC's responsibilities, is not covered under this programme. For example, Madurai residents living in uncovered outskirts need to continue dealing with improper sanitation, such as people living in uncovered unauthorized settlements, villagers, etc.

2.5 Pilot projects in Madurai

Case1: Tata-Dhan Academy is a development school located in Mellakal, Madurai. The academy offers two years post-graduation in development management, creating multi-disciplinary knowledge including applied technologies relevant to the context.

The academy consists of an administrative block (including classrooms and offices), a library block, and a hostel complex (including kitchen and canteen) for students and permanent staff. The complete campus is covered by two DEWATS units. One DEWATS is constructed at the admin cluster to treat the wastewater generated at the school and the library. Another DEWATS serves the hostel block.

Case 2: Panaiyur village is located in the South-East of Madurai, 4 km outside of Municipal Corporation limits. 674 families live in the village. The total population is about 3,150 residents. Only 200 houses are equipped with individual toilets; however about 50% of them are not in use to keep O&M costs for the attached septic tank low. One 9-seater community toilet is provided by the local Panchayat; however it is partly dysfunctional and only for women. Hence, before project implementation, open defecation was practiced for above reasons excessively along the main road, leading to disgusting sceneries, smell and community health problems. So, community toilet and DEWATS unit is constructed.

2.6 CURE offers the following services within the sanitation management component

- Preparation of Feasibility Studies (FS) for CBS-DEWATS and SME-DEWATS, including pre-design and approximate cost estimation.
- Preparation of Detailed Project Reports (DPR) for CBS-DEWATS and SME-DEWATS, including detailed design, technical drawings and detailed cost estimation.
- Design of DEWATS for different areas of application (SME, CBS).
- Construction of DEWATS, including tendering process, construction supervision and commissioning.
- Organization of Half-Day Introduction Sessions or One-Day Introduction Workshops on Decentralised Wastewater Treatment.
- Organization of one to three Days DEWATS Training Workshops.
- Lectures about Decentralised Wastewater Management at Colleges and Universities.
- Dissemination of awareness creating booklets, technical manuals and training materials.

3. Conclusion

Decentralised sanitation management (through DEWATS or ecosan) is beyond doubt a feasible, or better, an imperatively necessary wastewater management strategy to complement the centralized urban sewerage system for Madurai and comparable cities, especially with focus on poverty reduction and environmental conservation.

Design quantity in Cu.m/day	Buildup Area in Sq,m	Total project cost in ₹	Inlet in mg/l		Outlet in mg/l		No of users	Operation status
			COD	BOD	COD	BOD		
12	300	14.95	3000	1500	65	20	1700 Nos	Construction is in final stage

Migration and Development

P. Rajan*

Migration – a new theme: It was proposed in the 23rd Consultative Forum Meeting of DHAN Foundation held in Kerala Institute for Local Administration to explore opportunities for initiating a new theme on Migration. A three member working group was constituted to explore the theme of Migration with the following objectives

- To identify and analyze various causes, and effects of migration and its links with poverty
- To identify the means of addressing the issues
- To explore the feasibility of developing a theme of migration in DHAN.

Based on the desk research done to understand the phenomenon of migration and possible ways and means to intervene on the issues related to migration, and subsequent internal consultation, the working group has come out with a report on the theme of Migration.

Migration in India: Migration in India is not new and historical accounts show that people have moved in search of work, in response to environmental shocks and stresses, to escape religious persecution and political conflict. However improved communications, transport networks, conflicts over natural resources and new economic opportunities have created unprecedented levels of mobility. But as we discuss in following sections, the increase in mobility is not fully captured in larger surveys often leading to erroneous conclusions about mobility levels in India.

Although significant in recent years, growth has been unequal in India (Balisacan and Ducanes 2005), characterized by industry in developed states such as Gujarat, Maharashtra and Punjab drawing labour from agriculturally backward and poor regions such as eastern Uttar Pradesh, Bihar, southern Madhya Pradesh, western Orissa and southern Rajasthan. High productivity agricultural areas (“green revolution areas”) continue to be important destinations, but rural to urban migration is the fastest growing type of migration as more migrants choose to work in better paying non-farm occupations in urban areas and industrial zones. Delhi and the states



of Gujarat and Maharashtra are top destinations for inter-state migrant labour. Labour mobility has grown and will probably continue to grow once the economy recovers from the current crisis.

Migrant labour makes enormous contributions to the Indian economy through major sectors such as construction, textiles, small industries, brick-making, stone quarries, mines, fish and prawn processing and hospitality services. But migrants remain on the periphery of society, with few citizen rights and no political voice in shaping decisions that impact their lives (Kabeer 2005). Unlike countries in Southeast Asia and East Asia, the bulk of the migrant workforce in India has little or no education (Srivastava 2003).

In fact migrants are poorly endowed all-round: they come from poor families where access to physical, financial and human capital is limited and where prospects for improving living standards are constrained by their inferior social and political status. Historically disadvantaged communities such as the Scheduled Castes, Scheduled Tribes and Other Backward Castes are heavily represented in migration. Poor migrants are absorbed in informal sector jobs, much maligned for being insecure, poorly paid and unproductive but offering the only option for labourers to improve their capabilities.

There are different types of migration, with overlapping definitions, and that different members of a family

may engage in different migration types either simultaneously or sequentially during their personal lifecycles. The main migration types are:

Internal migration (migration within national borders)

- Enforced movement and resettlement (e.g. for dams and other public works)
- Displacement due to complex civil emergencies and violent conflict (refugees)
- Seasonal migration (mostly rural-rural, but may also be rural-urban or urban-rural)
- Circular migration (typically rural-urban and return, varying time periods)
- Step migration (a term used to describe sequential movements by individuals that start with a nearby town and progress over time to larger and more distant urban destinations)
- Rural-urban migration (with residence taken up in the town)

International migration (migration across national borders)

- Displacement due to ethnic conflict and war (refugees and asylum seekers)
- Movement to adjacent countries

Understanding the issues of Migration: In the recent economic trends, rural-urban migration is considered socially and economically beneficial, since it permits human resources to shift from locations in search of better livelihoods. Internal migration is in fact considered a natural process in which the surplus labor is withdrawn from the rural sector for supplying the manpower needed for urban industrial growth. The process in fact constituted the cornerstone of celebrated development theories of Lewis and Fei-Ranis, which significantly influenced policy making in many countries with “unlimited supplies” of labor.

The result was that the policies undertaken in most developing countries heavily concentrated on developing the urban sector, with the belief that the release of labor from the rural sector will increase productivity in that sector, and also that remittances, acquired knowledge, and skill transfer by the migrants will contribute to development in the rural areas. Rural-urban migration was thus considered an instrument for poverty alleviation in a labor surplus economy.

At the same time negative consequences of migration are many on the individuals as well as the families and the native resources. The migrant workers are generally exploited. They are made to work for long hours and the wages paid to them are lower than the local labourers, in fact, below the level of prescribed minimum wage.

Taking advantage of their illiteracy and poverty, middlemen practice exploitative recruitment practices and in many cases, retain a major portion of their wages as their own commission. Moreover, wages are adjusted only at the end of the season and workers are paid some advances, which are not at all sufficient to meet even the basic requirements.

The conditions of women labourers are far more unsatisfactory. Women migrant labourers are invariably paid lesser wages as compared to their male counterparts in many sectors. Sexual exploitation of the women migrant labourers especially the tribals is also a matter of deep concern. Most of the migrant workers reportedly live in conditions below the minimum accepted standards without adequate shelter and sanitation facilities. In most places, migrants stay in make shift shacks or in the open and have no access to safe drinking water. In the urban areas, shortage of open space and harassment by local musclemen add to their misery. In addition, migrant workers do not have access to the public distribution system or other municipal services.

Considering the positive and negative outcomes of migration, it is necessary to intervene on the issues of migration both at the source as well as the destination. As the issue of migration is found to be one of the important causes of poverty, working on this theme is within the ultimate mission of DHAN. Migration has been noted as an important development issue wherever DHAN is already working. Different types of migrations could be observed in the locations where DHAN has already been working. The working group suggests a three step strategy to intervene in Migration.

Migration as a new theme in dhan collective: There are two possible streams of piloting the theme of migration in DHAN Collective. The Migration theme could be taken for piloting in DHAN Collective both as a standalone as well as a cross-cutting theme.

As a cross-cutting theme, the theme would be piloted using the existing network of people institutions, manpower, and infrastructure and to some extend

the funds. This will help deepen the existing themes of Kalanjiam Community Banking, Vayalagam Tankfed Agriculture Development, Rainfed Farming development as well as Coastal Conservation and Livelihoods programmes. This will, in fact bring additional service to the existing member households and will give a face lift to the development face of the People Institutions.

As an exclusive theme, the theme of migration would be given an exclusive focus. A development model of

interventions on the issues of migration would evolve and it would be piloted in select locations.

This would work on issues of all migrants irrespective of the existing members of DHAN collective. Appropriate partners would be identified and resources would be mobilized both nationally and internationally from organizations focusing on the issue. DHAN would emerge as a leading player in addressing migrants issue by Government policy making bodies.

Interventions at the Source	Interventions at the Destination
Prevention Strategies <ul style="list-style-type: none"> • Creating awareness on the Opportunities, Potentials and Threats in Migration • Strengthening natural resources • Building employable skills and enhance employability 	Reversal Strategies <ul style="list-style-type: none"> • Facilitating remittances and investments on the resources at the source • Facilitating communication and exchanges with the source
Support Strategies <ul style="list-style-type: none"> • Facilitating investments on the resources at the source through remittances • Care for the aged and children left by the migrants • Facilitating communication and exchanges 	Support Strategies <ul style="list-style-type: none"> • Access to financial security: promoting savings, credit and insurance • Promoting good health practices and facilitating access to health care • Access to basic services: water, sanitation, shelter and social security • Child care and education • Building livelihood skills to enhance employability

Based on the context and intensity, interventions could be designed. As said earlier, there could be a three pronged strategy such as prevention, reversal and support according to the spatial and temporal factors.

Updates of Migration and Development

It was proposed in the 23rd Consultative Forum Meeting of DHAN Foundation held in Kerala Institute for Local Administration on Oct 2008 to explore opportunities for initiating a new theme on Migration and the CFM constituted a working group (WG) to work on this theme. In the Special CFM organised on June 7th, 2010 for defining the new themes, the WG members presented the objectives and programme components, programme management and budget for the migration theme.

New theme on migration and development has been launched in the Foundation day event held on 2nd Oct 2010 by Mr. Gerard Frank Sollman, ACHMEA, Netherlands; Mr. P. Krishnamoorthy shared about the important aspects of the theme. The Migration and Development theme was anchored by Ms. S. Gayathri from Oct 2011 and Mr. P. Rajan took charge of the new theme Migration from April 2012.

Presently this theme has been taken as action research pilot in two locations – one in Tirupur, Tamilnadu where it is focusing on destination based migrants esp. with other state migrants and second in Beed district, Maharashtra where it is focusing on sugar cane cutting migrants. In these two pilots, initial study has been completed, working strategy has been finalised, and setting up of implementation team in these two locations are initiated.

Calcium content in Small millets

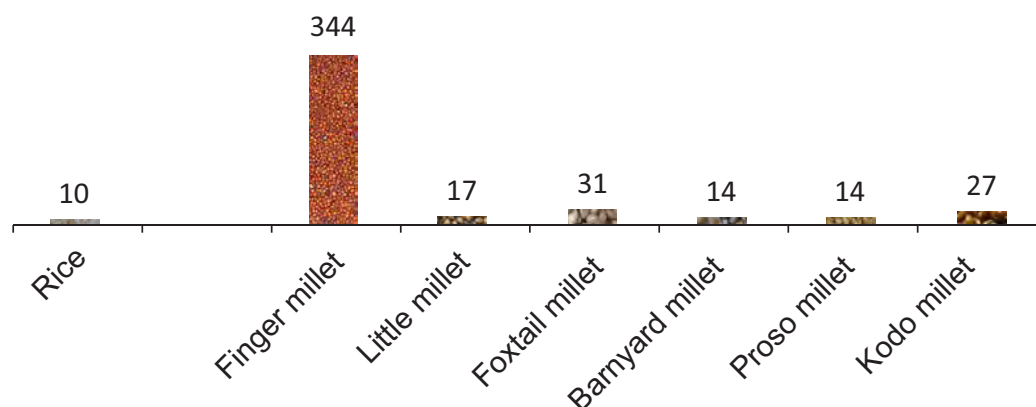


Calcium is very important for stronger bones and teeth. If the Calcium content in the daily dietary intake is less in the case of pregnant women and lactating women, the bone growth in the child will be affected. The mother will also have health problems as the calcium gets transferred to the child and also the mother may not be able to feed the child with breast milk.

Apart from this mother will suffer from improper blood flow and high blood pressure. Taking Calcium supplements during the second phase of pregnancy can control high blood pressure and prevent wastage of protein through urine.

Small millets are rich in calcium and fiber and can serve as an excellent food during pregnancy

Calcium content in 100 gm of small millets





Food and Nutrition Security for Children

One in three of the world's malnourished children live in India. Malnutrition in early childhood has serious, long-term consequences because it hinders motor, sensory, cognitive, social and emotional development. In addition to poor dietary intake it is also influenced by access to health services, quality of care for the child and pregnant mother as well as good hygiene practices. Critical interventions needed for addressing childhood malnutrition are ensuring birth weight, providing nutritional supplements, bringing desired changes in behaviours related to feeding, sanitation and hygiene practices.

DHAN's Reproductive and Child Health programme has achieved significantly on the pre and post natal care of mothers, exclusive breastfeeding, initiating supplementary feeding from 4th month, adhering vaccination schedule, administering de-worming tablets and vitamin A solution, sanitation and personal hygiene to prevent chronic infections that lead to underweight.



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