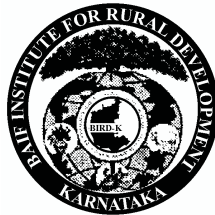


ANNUAL REPORT

2007-2008



BAIF Institute for Rural Development-Karnataka

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FOREWORD

We are very happy to present the Progress Report of BAIF Institute for Rural Development – Karnataka (BIRD-K) for the year 2007-2008. Over the last 27 years, BIRD-K and BAIF have become popular among over one lakh rural households spread over 3596 villages in 22 districts through our reliable and dedicated services at the doorsteps of the rural poor. We started with the cattle development programme with the support of the Government of Karnataka. As the programme was new, the farmers not only received free services but also an incentive of Rs. 2/- for availing of our services. Soon, they were able to realise the difference in the quality of BAIF's services. Now, based on the good response of the families and willingness to pay for services, we are in the process of operating self-financed centres to provide better quality services at cost, without depending on the donors. This will surely lead to the emergence of a business model on sustainable development.

We are also very pleased to report on the success of various innovative watershed development programmes, initiated recently. Our programme for providing potable clean drinking water particularly in fluorine-affected areas has made a significant impact on the health status of the local people. The *Sachetana* Project funded by German Agro Action in drought prone Gadag district has demonstrated a positive impact of watershed development in not only raising the ground water table but also in improving the quality of water by significant reduction in the level of fluorine to 30% in three years. The programme has also adopted the simplest method of rooftop water harvesting as the most economic and dependable model to solve the problem of drinking water. In the *Sachetana* Project, funded by the Government of Karnataka, BAIF has successfully developed an approach to work closely with the village Gram Panchayat for implementing the programme transparently. Various designs of storage tanks have been developed to store rainwater collected from the roof top inside the house and drawing water directly in the kitchen using mini hand pumps. With over 100 sq. m of roof space per family of 5-6 persons, the problem of drinking water could be solved even in areas receiving 500 mm of rainfall. The programme has brought great relief to the people affected by fluorine toxicity.

Our *Suvarna Sankalpa* programme to rehabilitate tribals was taken up last year and the response from the tribal families has been very encouraging. The programme is not only promoting agri-horti-forestry but also empowering women and organising livestock husbandry to ensure higher economic returns while protecting the environment. The *Jala Jeevani* project funded by Shri. K.K. Malhotra Trust in Tumkur district has demonstrated the impact of soil and water conservation on the crop improvement, rise in ground water table and biodiversity.

Under the BERI project, 500 KW wood-based gasifier has been commissioned and the farmers are able to sell their surplus biomass at an assured price while getting assured power supply.

We have also initiated several innovative research and development projects to tackle the local problems such as providing veterinary health care, controlling insect attack on coconut trees and developing drought proofing in North Karnataka. Our campus at Lakkiahalli and the training centre managed by *Sarvodaya Mahasangh* at Sureshettikoppa are providing training to officers and farmer leaders from Karnataka and neighbouring states to share our rich experience in conservation of natural resource management while ensuring sustainable livelihood to the local communities.

Today, our programmes are holistic and multidisciplinary aiming at addressing specific problems of the rural families rather than implementing any isolated programme. Thus, we are not only able to help the families to earn their livelihood but also improve their quality of life and enable them to shape the future of their children. This is possible because of the generous donors who have shown trust in us.

We are grateful to all our donors for their sustained support.

Dr. N. G. Hegde
Chairman

1. INTRODUCTION

The year, on completion of 28 years of its operation in Karnataka, witnessed major changes in the organization. While on the one side, a separate society has been formed to continue the implementation of the activities in Andhrapradesh, on the other side, the organization is all set to enter the neighboring state of Kerala with multi-disciplinary development programmes.

More than a decade ago, BAIF Institute for Rural Development –Karnataka extended its activities to the neighboring Andhrapradesh through cattle development programmes. That was in collaboration with agencies like the Andhrapradesh Dairy Development Co-operative Federation, Milk Unions and Nalgonda Rangareddy Milk Producers Multi -aided Cooperative Union Limited (NARMAC). Soon the activities covered natural resource management and promotion of livelihood opportunities as part of the Andhra-pradesh Rural Livelihood Programmes and Drought Prone Area Development Programmes. With increased coverage in geographical areas as well as activities, the organization has decided to decentralize the administration through formation of a state level society called BAIF Institute for Rural Development –Andhra pradesh that was registered under the Andhrapradesh Society Registration Act, on 20th February 2007.

Activities in Karnataka also witnessed major expansion, both programme wise and geographical coverage wise, new projects like 'Suvarna Sankalpa' – a multidisciplinary programme for the welfare of the tribal community, distressed district development programme and expansion in geographical area under organic farming project. 'Grama Jnana Vahini', began early this year, is an ambitious initiative to accelerate the process of development through effective knowledge and information management. Association with the banking sector through an agreement with State Bank of India and State Bank of Mysore for micro finance support for development assistance has been yet another step ahead in adoption of alternative development strategies.

The institutional campus situated at Lakkihalli, near Tiptur has also witnessed a year that was marked with initiating new demonstrations and research activities. However, the major activities taken up by the organization continued to be under the following broad categories:

- Designing, formulation and implementation of multi-disciplinary projects,
- Establishment and strengthening community based organizations to ensure sustainable management of development processes and common properties,
- Issue based research activities, both at the campus as well as farmers fields,
- Training and awareness generation,
- Consultation services for technical and management aspects, and
- Documentation and publications

Given in the following pages are brief descriptions of various development projects and other institutional activities that were carried out during 2007-2008.



Planning starts from the grass roots



Kitchen Garden

Fodder on bunds in 'wadi'

Ensuring food security-always in the primary focus

2. FIELD EXTENSION PROJECTS

A multi disciplinary, integrated approach that touches up on all aspects of rural lives is a salient feature of all the projects formulated and implemented by the organisation. The projects implemented in farmer's fields during the current year focused up on:

- Poverty alleviation through creating livelihood opportunities, both land and live stock based and rural non-farm sector based.
- Development of ground water resources based on principles of watershed development and natural resources
- Ensuring safe drinking water through roof top rain water harvesting and ground water recharge
- Promotion of bio mass based energy through production and management of biomass through community based systems

The programmes cover areas such as dairy development, integrated development of degraded watersheds, promotion of tree based farming systems and afforestation, rainfed sericulture, rainwater harvesting, promotion of primary health care with locally cultivable medicinal herbs etc. Land based programmes are implemented in dry land conditions and special emphasis is given to socio-economically-weaker sections of the society. A brief account of projects implemented in these areas with various sponsorships are given in the following pages:

Approaches

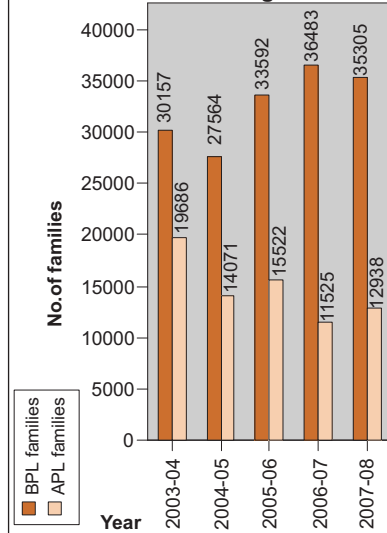
- Research based planning process
- Emphasis on appropriate indigenous technologies
- Promotion of participatory technology development
- Emphasis on farmer to farmer training and extension
- Creation of sustainable livelihood systems
- Optimum and effective utilization of locally available and natural resources
- Strengthening of women and other socially challenged sections
- Promotion of self-help through capacity building
- Promotion of community based organizations

2.1 Dairy Husbandry

The organization started its services in the state with cattle development programme. Initially, the regular employees of the organisation managed the services that were provided at the farmer's doorsteps. However, methodologies for ensuring efficient and better livestock development services have been evolving ever since. This included centers managed with grant from the government, centers managed on a commercial basis, those managed by the breeders association and the ones managed by employees on an incentive basis etc. Local youths are identified by the peoples' organisations and intensively trained by experts at the institutional training centre. These trained youths now manages 57 cattle breeding centers. Participants of training in livestock also include officials from various development agencies as well as farmers.

Integration of breeding services with fodder development, health care, emphasis on use of locally available medicinal herbs (ethno veterinary practices), close monitoring, transfer of

Year-wise Coverage of BPL & APL Families during 2003-2008

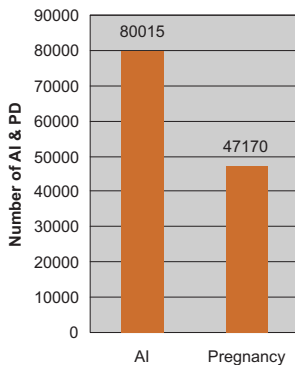


technology and training the participant families in management aspects etc are also given due attention. The unique models of dairy cattle development programmes evolved over the years in the organisation have successfully supported over one-lakh poor families to earn their livelihoods. Currently, in Karnataka, there are 104 centers which cover 1354 villages that are spread over 20 districts.

Districts covered under various Cattle Development Programmes

Belgaum, Uttara Kannada, Bagalkot, Bellary, Bijapur, Bidar, Chamarajnaragar, Chikkamanglore, Chitradurga, Davangere, Dharwad, Gadag, Gulbarga, Haveri, Hassan, Koppal, Mandya, Mysore, Raichur, Tumkur

Performance of AI & Pregnancy During 2007-2008



Extension Activities Conducted at Cattle Development Project Areas (2005 - 2008)

Particulars

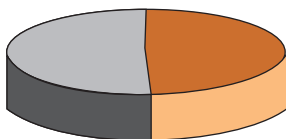
- Vaccination camps
- Animals vaccinated in camps
- AI & PD camps
- Infertility check camps
- Families cultivated fodder
- Deworming camps
- Calves underwent deworming
- Mineral mixture supplemented
- Animal health camps

Progress

331 nos.
42242 nos.
690 nos.
142 nos.
851 nos.
476 nos.
14988 nos.
5624 kgs.
84 nos.

Participants Trained in Fodder & Livestock Management (2007 - 2008)

Female participants
973 nos.



Male participants
948 nos.

Krishna Valley Breed Conservation Project

This initiative started in October 2007 intends to identify, conserve and upgrade the local breed in areas of its origin through artificial insemination of quality semen. Currently it is under implementation in selected villages spread over

Bagalkot, Bijapur and Belgaum Districts. ICAR (Indian Counsel for Agriculture Research) extends financial support to this project.



Land-less-ness does not limit Manjunath...

Manjunath, Hundimala village, Hunsur taluk is landless. He stays in a small hut in a government owned land. In 1999, he sold 2 local cows that he owned and instead purchased 2 HF heifers. Thanks to the AI services, in 2001, they gave births to one calf each.

In 2002 and 2003 Manjunath earned Rs.30000/-per annum from sale of milk. Thanks to the increase in Turmeric cultivation in near by Kodagu District and Kerala, there was a lot of demand for FYM in those years and he earned a total of Rs. 10000/- in 2 years from sale of FYM. He sold one cow and got Rs.10000 too. For the first time in life he invested in insurance and also on children' education. In 2006, Manjunath built a new house utilising the savings.

Manjunath has now taken 3 acres of land on lease and started share cropping of turmeric, cotton and paddy. As per the understanding half the yield is s given to the landowner and the other half is for self-consumption.



Sponsors of cattle development programmes (2007 - 2008)

- SGSY programme, Dept. of RDPR, GoK
- Special SGSY programme, Dept. of RDPR, GoK
- Thotagar's Sales Society, Sirsi
- Intervet, Pune
- K.K. Malhotra Foundation
- Directorate of scheduled Tribes Welfare, GoK
- National Bank for Agriculture and Rural Development
- BAIF Institute for Rural Development –Karnataka

2.2 'Suvarna Sankalpa'

A Holistic Development Programme For The Tribal Communities

BIRD-K designed this project which is supported by the tribal welfare department of government of Karnataka for implementation. Started in 2007, the project aims to cover 8000 tribal families, spread over 121 villages in 8 districts. This includes 1600 land less families who would be covered under interventions in rural non-farm sector.

Specific Objectives

- Food security and poverty alleviation
- Improved health status
- Increased asset base
- Women's empowerment

Interventions

- Agro horti-forestry
- Rain water harvesting and soil and water conservation for enhancement of productivity
- Improved health status
- Up-gradation of local non-descript cattle and cross breeding
- Promotion of non-farm enterprises
- Promotion of forward and backward linkages for micro-credit and marketing
- Formation of people's organization for empowerment and capacity building
- Training and awareness generation

Basic Information

(coverage as on 31/03/2008)

Project Title: 'Suvarna Sankalpa' - tribal development programmes through promotion of tree based farming systems

- Families covered under land based component: 1924 nos.
- Families covered under livestock interventions: 122 nos.
- Landless families covered under RNFS: 11 nos.
- Area covered: 9 00 Acres
- Village covered: 66 Nos.
- **Taluku:** Molakalmur, Gokak, Surapur, Hunsur, Devadurga, Madhugiri, Somavarpeta, Harappanahalli
- **Districts:** Chitradurga, Belgaum, Gulbarga, Raichur, Tumkur, Davangere, Mysore, Kodagu
- **Sponsor:** Directorate of Scheduled Tribes' Welfare, GoK.

Every year during summer, the tribal families, who are traditionally not involved in agriculture, used to regularly lease out their government allotted land and migrate to other places.

In the 1st year of the project the tribal families in Belgaum, Chitradurga, Mysore, Tumkur and Davangere districts started vegetable cultivation for subsidiary income generation. Floriculture is proven to be remunerative activity in Tumkur Dist.

Number of migrating families in Mangalurumala village in Mysore district has reduced thanks to the prospects that they see in land based activities. In the first year of the project these families produced a total of 24 tons of maize and 1.5 tons of cowpea. They sold the surplus food grain after keeping for home consumption and got a total of Rs.92, 000 out of this. Seven families produced 2450 kgs of vermi compost this year that was utilized for their plantation.

Women's participation in the project activities is on the increase thanks to interventions for drudgery reduction and also constant training and motivation.

Progress (as on 31/03/2008)	
Particulars	Progress
Land shaping and bunding:	25119.11 cmt
• Fencing:	537 acres
• Plantation (Horticulture):	47865 nos.
• Plantation (Forestry):	342171 nos.
• Composting units:	552 nos.
• Farm ponds:	482 nos.
• Families supported for RNFS enterprises:	11 nos.
• Animals covered under health care:	5380 no.
• Nutritional cum herbal gardens:	339 no.
• Camps for nutritional education:	22 nos.
• Vermi compost units:	552 nos.
• Improved chulah:	499 no.
• Human health camps:	13 nos.
• Demonstration plots in schools	5 no.
• Farmers participated in exposure visits and training:	2729 nos.
• Staff trained:	99 person days :

Gainful inter crops

S.K.Karihoni of Bogiramanagunda in Raichur District used to grow rainfed Bajra. He used to get 4 quintals / acre. In 2007, supported by the project, he planted horticulture seedlings. He also planted watermelon and leafy vegetables at the basin of every plant as inter crops. During July 2007 - November 2007 Karihoni harvested watermelons and earned Rs.1800/- from its sale. He also sold leafy vegetables and earned Rs.925/-. The family had enough for home consumption also. The only investment he made in cash was Rs.50/- for seeds.

Similarly, D.Ningappa of Arasikere village in Davangere District, cultivated one rainfed crop of Ragi and Maze in the 4 acres of family land. The yield was sufficient for home consumption only. Thanks to the project interventions in 2007, he cultivated hybrid Tomato in one acre as inter crop by investing Rs.100/- on 250 gms. of seeds. He worked himself manually for pitting, mulching and watering etc. During October 2007 to February 2008, he earned Rs.250/- every week from sale of Tomato.



Tribal families - hopeful of a better future

2.3 'Samrudhi'

Started in June 2007, the objective is to enhance the livelihood opportunities through promotion of integrated farming systems in farmers' land. The activities include promotion of horticulture, fodder, forestry plantation, kitchen gardens, vermi-composting, interventions for drudgery reduction like clean kitchens, smoke less chulah, training and awareness generation etc. Land less participants are supported with small ruminants like goat and sheep.



Pitcherirrigation

The participants have carried out after care activities such as preparation of basins, mulching and fencing etc in the first year of plantation. Pitcher irrigation is practiced for watering the horticulture plants. The entire plantation has a variety of horticulture and forest species.

Linkages were made with Dept. of Agriculture (GoK), Kalghatagi that supplied sprinkler sets on subsidized rates to self-help groups. Fifteen farmers currently benefit from this. Maintenance is taken care of by the SHGs. The income earned out of lending the sprinklers to needy farmers is utilised for maintenance.

Basic Information (coverage as on 31/03/2008)

- Families covered: 32
- Villages covered: 4
- **Taluk:** Kalghatgi & Hubli
- **District:** Dharwad
- **Sponsor:** Deshpande Foundation

Progress of Activities (as on 31/03/2008)

Particulars	Progress
• Plantation of horticulture plants:	1574nos.
• Plantation of forest plants:	11150 nos.
• Fodder seeds directly sown:	70 kgs.
• Fodder root slips planted:	83000 nos.
• Fencing:	3823 rm.
• Trench cum bunds:	1521 cmt.

2.4 'Janauthan' - Participatory Management of Natural Resources for Poverty Alleviation and Sustainable Development

The project started in 2007, assist the participants to come out of poverty in 3 years through promotion of land based and off farm micro enterprises. The assistance is both in the form of loans and grant depending on the family requirement and type of enterprise. There is an in-built sustainability plan to ensure continuation of the project initiatives during the post project period. Self helps groups and apex bodies have been formed since beginning of the project to build people's capacity.

Basic Information (Coverage as on 31/03/2008)

- Villages covered: 14
- Families covered under land based component: 809 nos.
- Families covered under livestock interventions: 259 nos.
- Land less family covered under RNFS: 37 nos
- **Taluk:** Kalghatagi
- **District:** Dharwad
- **Sponsor:** Dept. of RDPR (Special SGSY programme), GoK

Selection of participants in Gramasabha has helped the identification of deserving families. Each of the participant family contributes a minimum of 10% of the total cost in cash and also through labour for pit digging, fencing and after care of plantation etc. The cash contribution is saved toward ensuring sustainability in the post project period, which is maintained by the apex bodies.

Promotion of decentralised nurseries has ensured employment to 29 participants who predominantly consist of land less, widow and destitute women. Participants could earn about Rs. 10000/- each from this activity.

Linkages have been established with various line departments that have helped the participants to benefit from the existing development schemes set up by the government.

Pucca kotis having constructed by the participants as part of the 'Save Grain Campaign' initiated by the Department of Food and Civil supply and Department of Agriculture (GoK), a subsidized cost. The Indian Grass and Fodder Research Institute supplied fodder seeds and grass roots and associated with exposure and training.

Exposure to the existing demonstrations combined with the inspiration and voluntarism developed among the local youths through 'Yuvachetana' training played a crucial role in speeding up the implementation this year.

Progress of Activities (as on 31/03/2008)	
Particulars	Progress
• Area covered under land based activities:	976 ha.
• 'Wadi' established:	798 nos.
• Trench / bund:	20772 cmt.
• Farm ponds:	457 nos.
• Horticulture seedlings planted:	14564 nos.
• Forestry seedlings planted:	152033 nos.
• Nursery seedlings raised:	270000 nos.
• Animals' health camps:	7 nos.
• Participants trained in various skills :	1443 nos.
• Pucca koti promoted:	35 nos.

2.5 Tree Based Farming

Systems for Productivity Improvement of Rain Fed Farming

This 3 years project has an objective of improving the productivity of agriculture. Land based interventions for conserving water and enhancement of productivity have resulted in an average increase of 10 to 15 % in cropping intensity and 5 to 10% in yield.



Decentralized nurseries by local farmers have been able to supply 75 % of the requirement for forestry seedlings. Self-sufficiency has been achieved in production of fuelwood and biomass.

Linkages established with other development agencies have benefitted the participants. Two farmers at Hosavaranchi and Choudikatte utilised the financial assistance extended by the local Grama panchayath for digging farm ponds.

Basic Information (coverage as on 31/03/2008)
• Year of commencement: 2006
• Families covered: 363
• Villages covered: 8
• Taluk: Hunsur
• District: Mysore
• Sponsor: ITC Ltd.

Farm Pond Water for Raising Nurseries

Venkatesh Chennaiah, a farmer in Hosapenjalli village at Hunsur taluk in Mysore district owns 2.2 acres of land. Yet, he used to raise Tobacco nurseries in hired land with a yearly investment of Rs.4000/- for want of sufficient water. In 2008 the project assisted him to dig farm ponds and trench cum bund in his land. Cashing in on the rainwater that was harvested in these ponds he raised nurseries in 3 guntas of his land this year. Besides quality seedlings his net profit from nursery this year was Rs.900. He also saved on the time and energy on walking or cycling to the hired land. Similarly, Shashi Chikke gowda of Hosavaranchi also raised nurseries in his land this year. Shashi made a net profit of Rs. 3280. The net profit earned by Arunkumar Puttegowda of Hosavaranchi village amounted to Rs. 2030.



Venkatesh Chennaiah's Nursery

Progress of Activities (as on 31/03/2008)

Particulars	Progress
• Forestry plantation :	562 acres
• Forestry seedlings planted:	1,25,250 nos.
• Seedlings raised:	105000 nos.
• Trench cum bund:	15,605 cmt.
• Farm ponds:	91 nos.
• Waste weirs:	37 nos.
• Vermi-compost units:	70 nos.
• Kitchens modified:	145 nos.
• Home herbal gardens:	20 nos.
• Smokeless chulahs:	45 nos.
• Human health camps:	3 nos.
• Animal health camps:	2 nos.
• Participants trained:	675 nos.

Benefitting Linkages

*Venkatesh Thimmaiah of K.Hosahalli benefitted from free supply of 500 finger-lings from Department of Fisheries (GoK) in December 2007. As on June 2008, he got 75kgs. of fish from his farm pond of 10*10*10ft. size that was used for family consumption. At K.Hosahalli, 5 more farmers benefitted from the scheme.*

Mani is Happier with an Improved Kitchen...

The interventions to improve the quality of life, especially that of the women, brought a lot of difference in the living condition of Mani, a 29 year old home maker at the scheduled caste colony at Hosavaranchi village. Mani has 2 young children aged 8 and 3. Project assisted her household with a smokeless chulah and to ventilate and construct a shelf for the kitchen, which has brought a lot of light, space and hygiene to her kitchen. There is a saving of 25 % in the use of fuel-wood, no more burning eyes while in the kitchen. Utensils no more go black that was difficult to clean. Mani is happier and proud of her kitchen now.

2.6 'Parimochana'

The project focuses on creating alternative livelihood opportunities for the socio-economically backward families in villages that surround the Shri Chitrapur Mutt. The challenges in these coastal villages include highly fragmented land holdings and poor productivity and lack of vegetation. The intervention package includes the following:

- Water resource development
- Building soil fertility through organic methods
- Promotion of agro-horti-forestry, floriculture, spices and fodder cultivation etc.
- Promotion of non-farm enterprise
- Training and capacity building



'Batha Utsav' - to promote germplasm conservation of paddy

The activities supported for generating additional income included purchase of boat for small-scale fishing, dairy enterprises and establishing local restaurants and condiments etc. Interventions to promote integrated farming systems have helped generating additional income and year round employment to the participant families.

Erayya Naik, a farmer in Shirali village, owns 6 guntas of land. The 3 members - family have been cultivating Jasmine for long. Up to 2004 the yield of flowers was 4 kgs / day that earned him an income of Rs.200/- day. The flowers were smaller too. In 2005 the project assisted him to purchase 60 quality cuttings and also to deepen the existing open well. Apart from ensuring regular watering they also applied farmyard manure, red soil and vermi-compost. In 2008, the family is harvesting 12 kgs of flowers every day which earns Rs.700/- day.

2.7 Biomass Energy for Rural India

The focus in this project has been to provide high quality rural energy services through a bio energy package. The activity package includes promotion of agro-forestry plots and afforestation in private land, establishment of gasifier systems, power distribution systems, community biogas plants and leaf litter based biogas plants etc.

The people's organisations established and strengthened under the project have now taken over the ownership and management of the community assets created under the project. This includes operation and maintenance of 3 biomass based energy generation plants, biogas plants and the community irrigation systems etc. Presently, 30% to 50 % of the biomass requirement for the biomass-based gasifier is meted out locally.

Basic Information

- Commencement: 2005
- Families covered: 300
- Villages covered: 3
- **Taluk:** Bhatkal
- **District:** Utharakannada
- **Sponsor:** Shri Chitrapur Mutt

BASIC INFORMATION (coverage as on 31/03/2008)

- Commencement: 2003
- Villages covered: 10 nos.
- Total families covered: 985 nos.
- Families covered under land based interventions: 582 nos.
- **District:** Tumkur
- **Talukuks:** Koratagere, Madhugiri
- **Sponsors:** GoK, GoI, United Nations Development Programme & India Canada Environment Facility



The biomass based gasifier unit managed by the CBOs

Progress of Activities (as on 31/03/2008)	
Particulars	Progress
• Area covered under land based interventions:	413.4 ha.
• 'Wadi' established:	338 nos.
• Forestry plantation:	56840 nos.
• Home herbal gardens:	599 nos.
• Horticulture plantation:	8564 nos.
• Trench cum bund:	42054 cmt.
• Farm ponds:	177 nos.
• Modified kitchens:	47 nos.
• Smokeless chulah:	47 nos.
• Participants trained:	5075 nos.
• Gasifier plants:	3nos.
• Biogas plants:	24 nos.
• Human health camps:	15 nos.
• Animal health camps:	5 nos.

The set up of various community based organisations in the project are as follows:

Type of CBOs	Responsibilities
Biomass users groups	Operation & maintenance of respective bio gas unit
Village bio-mass energy management committees	Overall management of the village level bio-energy systems and procurement of bio-mass inputs for gasifier plant
Biogas users groups	Operation and maintenance of biogas units
Village forest committee	Sustainable generation, and supply and management of forest resources
Water users associations	Operation and management of community irrigation system
Self help groups	Support to participants for additional income generation through saving and micro credit activities, conflict resolution



Biogas units managed by the CBOs

*The **GP sub committee** is representative of the village level stakeholders in the project. GP President and GP secretary are the President and Secretary to the GP sub committee. The GP members representing the project villages are the members of GP sub committee and there is one representative from all the other CBOs established under the project. During the implementation period there is a member representative from the implementation agency and the project management unit of the government of Karnataka.*

Many Ways to Generate Additional Income

In 2004, K.C.Nagaraju of Kabbigere village, planted 2000 seedlings on his hitherto uncultivated 2 acres of land. In 2007 he sold 16 tons of biomass for the use of biomass based gasifier that earned him Rs.14400/-.

Rangappa of Nandihalli sold 2 tons of pruned cuttings from his 'wadi' for the plant and earned Rs.2000/-. He also used the leaves as green manure for cultivation. Rangappa's 'wadi' would ensure year round food security to the family. In another 2 to 3 years, it would also yield an average of Rs. 25000/- to Rs.30000/- from sale of fruits and Rs.3000/- from sale of surplus food grains and legumes such as Ragi, Cow pea and Redgram etc.

The 35 years old Basavaraj of Chikkarasanahalli village at Koratagere Taluk used to migrate during summer to places that are at 150 to 200 kms distance, for want of employment. This was also in search of sufficient fodder for the sheep. This kept him away from the village during January to June every year. Supported by the project, in 2006 Basavaraj started flower cultivation in ½ an acre of his land. Since the last 10 months he has been earning an average of Rs.200/- per day from sale of flowers. He has also cultivated fodder species like Subabul, Susbania grandiflora and Bahumia etc. on the boundaries that ensures sufficient fodder. With year round employment available in his land Basavaraj no more migrates.



Vegetable cultivation made viable through shared water management systems



Biomass Based Energy Generation Plant Generates Employment too..

Till a year ago, Devarau, a 21 years old youth in Ajjenhalli in Koratugere Taluk worked in a private garment factory in Bangalore. He earned about Rs. 3000/- per month. He could save little as considerable part of his earning was spent on accommodation and food in a city like Bangalore. He now stays with his family in his village and works in the biomass based gasifier plant and earns the same. This has been true for about 15 youths in the locality.

About 30 women in the village earlier used to do cooli work for Rs.35/- day, which was seasonal. They now works for cutting biomass into small pieces for the plant that earn them a minimum of Rs.80/- day.

Lakshman, of Chikkarasanahalli had to undergo a major surgery in 2006. Rangamma, his wife, single handedly bears the burden of earning livelihood for the 4-member family. She had to also borrow Rs.6000/- from SHG for Lakshman's treatment. Every month she repays Rs.800/- toward this. "In these kind of adversities, we would have had to leave this village being unable to repay the debt, but for this newly found employment in the gasifier plant." says Rathamma.



Ratnamma at work in the biomass cutting unit

New Enterprises with Quality Supply of Energy...

Thanks to the ensured supply of electricity, in March 2008, Jagadish, a resident of Chikkarasanahalli village, started of manufacturing unit of plastic bags, at Kabbigere village. This is now supplied to a cement sheet factory located at Tumkur, a town located at 25 kms distance.

2.8 Organic Farming

The project was started in 2005 covering 400 acres of land spread over 4 locations. Encouraged by the results, in 2007, the project got expanded to another 17 blocks. Each block consists of 100 hectares. The project aims to create viable demonstrations of organic farming.

This is achieved through promotion efficient nutrient management practices and in situ production of organic composts such as vermi compost and NADEPP etc. Organic pesticides like 'Jeevamritha', Neem 'Kashaya' etc are also produced in situ. Farmers now cultivate kharif crops such as Green gram, Black gram, Red gram, Groundnut, Mustard etc with application of organic compost.

Increased biomass generation is ensured through tree plantation. Thanks to the encouraging results, farmers now voluntarily celebrate 'Hasiruhabba' wherein mass plantation takes place. In Chithaganahalli village in Pavagada Taluk alone, 6000 seedlings were planted in private land during the 'Hasiruhabba' in June 2008. One hundred and fifty farmers practice cultivation of Azola, which in addition to adding soil fertility is also, used as fodder and feed for poultry and dairy animals. Mono-cropping practices that existed in this area have been now replaced with diverse crops.

With reduced initial investments on fertilizers and pesticides participants' farmers now save an average of Rs.2500/- per acre. Convinced about the benefits 50 % of the non-participant families in the project areas have now adopted organic farming practices. From the 4 blocks that were started earlier 225 participants have now applied for organic certification.

The farmers sell the surplus agriculture produces such as different types of millets, red gram and other pulses, vegetables, banana etc. 'Gramasiri', the sales outlet started in Tiptur and Tumkur towns by BIRD-K in association with the people's organisations have been supportive in marketing these produces.



Mixed cropping on the increase



In-situ cultivation of Azola



In-situ preparation of 'Jeevamritha'

Basic Information

- Families covered: 1575 nos.
- Villages covered: 21 nos.
- **Taluks:** Ramadurga, Kudligi, Gundlpet, Hubli, Moolakalmur, Manvi, Mundargi, Nargund, Gulberga, Savanur, Pavagada, Haliyal, C.R.Patna, Bageppalii, Gangavathi, Hunsur, Sindhanur
- **Districts:** Belgaum, Bellary, Chamarajanagar, Gadag, Chitradurga, Dharward, Gulberga, Hassan, Haveri, Kolar, Mysore, Raichur, Tumkur, Utharakannada
- **Sponsor:** Organic Farming Cell, Commissionarate of Agriculture, GoK.

Progress of Activities

Particulars	Progress
• Area covered under organic farming:	2100 ha.
• Families practicing IFS:	426 nos.
• Families involved in dairy management:	175 nos.
• Forestry seedlings planted:	163751 nos.
• Horticulture plants:	8538 nos.
• Farm ponds:	131 nos.
• Trench cum bund:	7202 cmt.
• Seedlings raised by participants:	28000 nos.
• Vermi-compost units:	533 nos.
• NADEPP compost units:	421 nos.
• Azola cultivation units:	219 nos.
• Biogas plants:	71 nos.
• Farmers trained:	2176 nos.

The Encouraging Benefits of Organic Farming...

Basavalinga murthy of Thakkalpalaya village in Tumkur district is involved in organic farming for the last 3 years. Since then he has been cultivating tomatoes organically. He gets an average yield of 30 kg per gunta. In 2007, he got 600 kg of tomato from in 20 guntas of land. The family worked themselves on the land. His investment was Rs. 50 towards seeds as against Rs.6000/- the normal investment required in case of cultivation with chemical fertilizers. "With organic cultivation the tomatoes has good colour and lasts for more than a month while it lasts hardly a couple of weeks with chemical fertisers", says Basavalinga murthy.

He also planted 70 Banana plants in between coconuts in 20 guntas of land. Though the number of fruits per bench was the same the size of the fruits was bigger. Taste, colour, keeping quality etc was better too. Excluding the labour it was zero investment. As a side effect the yield of coconut increased and the trees became greener and healthier in 2 years. Initially started in one-acre land with project support and the entire 5 acres owned by him has become organic now, thanks to the encouraging results.

Sidharamajja of Takkalpalaya cultivated Greengram in kharif 2008. There was continuous drought after seed sowing. In usual conditions, it would have dried up. It withstood the drought and healthy crops continue, thanks to the application of 4 tons of vermi-compost per acre. In addition to building fertility this also helped better retention of moisture on soil.



2.9 Optimizing Productivity in Coconut Gardens through Soil Nutrient Management

The project optimizes the productivity in coconut gardens through efficient management of nutrients, conservation of soil and water and integrated pest management.

Banana has been introduced as an inter crop. Floriculture has been newly introduced in 4-acre that belong to 12 families. The newly introduced fodder crops include sun hemp, guinea and cowpea. This has resulted in increased milk production in the participant families. Vermicompost produced by participants in situ was applied to coconuts, banana and vegetable cultivation.

Results

- Reduction in infestation of mites.
- Increase in yield of cowpea cultivated as inter crop in the coconut garden by 20%.



BASIC INFORMATION

(coverage as on 31/03/2008)

- Commencement: April 2006
- Families covered: 239
- Villages covered: 3
- **Taluks:** Kadur, Arasikere
- **Districts:** Chikkamagalore & Hassan
- **Sponsor:** Coconut Development Board, Gol.

Progress (as on 31/03/2008)

Particulars	Progress
Biomass filling:	165 ha.
Basins with mulching :	165 ha.
Live hedge fencing :	8380 cmt.
Banana cultivation :	5 ha.
Vegetable cultivation :	4 ha.
Fodder crops:	15 ha.
Vermicompost produced:	172 kgs.
Farmers trained in productivity enhancement:	178 no.

2.10 Sarvangina Vikasa Yojana for Development of Distressed Districts

This project, started in early 2008, aims to improve the socio- economic conditions of participant families through creation of alternative livelihood opportunities with optimum utilization of locally available resources. Conservation of natural resources for improved productivity in agriculture and introduction of new technologies in selected non-farm sector are in the agenda. Apart from up grading the existing skills of the local community through training, over all capacity of the people will be enhanced through promoting community-based systems to ensure that the project initiatives are sustained beyond the project period. Special emphasis is given to families who are below poverty line.

Very good foundation for future interventions have been made through formation of peoples' organisations such as self-help groups and its federations called Grama Vikasa Samithis. Registration of an apex body under the Society Act 1960, within 3 months of starting the project has been an achievement of the project during the year. Three hundred and twenty three participants have under gone intensive training in various aspects of development.

Self Help in Many Ways...

A few farmers in Bilenahalli village in Arasikere taluk in Hassan District have formed a joint liability group of those who mortgaged gold to money lenders and are under debt. A Farmer's Club called *Anjaneya Swami Raitha Koota*, that has been formed under the project, assisted them to get a loan from the local branch of the Kaveri Kalpatharu Grameena Bank. The loan helped the liability group to get relieved from the clutches of the moneylenders. The members of the joint liability group also benefits from the reduced rate of interest.

The club associated with KVK and organised a Trainer's Training Course to its members in distress management. They also organised general health camp in association with Department of Health, (GoK).

BASIC INFORMATION

- Families covered:10
- Villages covered: 10
- Taluks: Ramdurga, Arasikere
- Districts: Belgaum, Hassan
- Sponsor: NABARD

Major Components

- Promotion o integrated farming systems
- Soil and water conservation
- Organic farming
- Livestock development
- Promotion of micro enterprises
- Demonstrations of clean kitchens, vermi compost, soak pits, organic farming, composting, smokeless chulahs, nutritional gardens etc
- Organising health camps
- Capacity building through exposure and training



Learning through exposure and training

2.11 Developing Degraded Watersheds

The project focuses upon restoration of ecological balance through harnessing, conserving and developing natural resources. It emphasizes up on participatory planning and implementation of watershed for sustainable management of natural resources by the community.

Interventions under the project has resulted in the following:

- Increased ground water table and base flow
- Improved crop productivity
- Shift from mono cropping to diverse cropping pattern.

For example, prior to 2002, farmers in Navile watershed area in Hassan District used to grow only rain fed Ragi and Redgram. In 2007-2008 many farmers also cultivated Cowpea and Castor.

Similar, most farmers in Hirehalla watershed in Ramadurga Taluk in Belgaum District used to cultivate rainfed Bajra only. In 2007-08, they adopted mixed cropping of Garlic, Onion, and vegetables like Chilly, Capsicum, Brinjal, Tomato and Coriander etc for both commercial and domestic purposes. They now sell the vegetables in the nearby towns. After 10 years of gap farmers have started growing wheat under irrigated condition during rabi season. In Hirehalla all the 130 open wells that have been dried for the last 30 years have now been recharged. During the year 11 of these wells over flew. Ten percent of the area that was under rainfed cultivation of Sugar cane is now under irrigated cultivation of the crop.

BASIC INFORMATION

Year of commencement: 2002

Families covered: 5700

Treated area: 10150 hectares

Villages covered: 22

Taluks: Hagarigudenhalli, Bendalgette, Marikatte, Bagogikoppa, Navilehalla, Halagenahalli, Ramaghatta, Malligere, Karpenhalli

Districts: Tumkur, Davangere, Gadag, Dharwad, Belgaum,

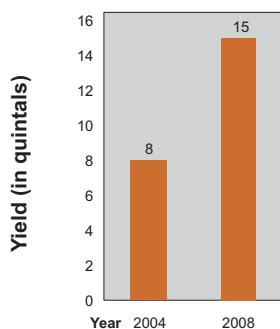
Sponsor: Watershed Development Fund, NABARD & Govt. of Karnataka

Progress of Activities (as on 31/03/2008)

Particulars	Progress
• Trench cum bund:	164659 cmt.
• Waste weir:	56799 nos.
• Farm ponds / percolation ponds:	596 nos.
• Gully plugs:	1778 cmt.
• Tanks desilted:	14 nos.
• In situ recharged bore wells:	12 nos.
• Horticulture plantation:	21358 nos
• Forestry plantation:	247468 nos.
• Vermi-compost units:	104841 nos.
• Nurseries raised:	2 nos.
• Fodder seeds sown:	52586 kgs.
• Home herbal gardens:	773 nos.
• Modified kitchens:	105 nos.
• Community parks through 'Shramadan':	2 nos.
• Animal health camps:	8 nos.
• Human health camps:	7 nos.
• Farmers trained in watershed mgt.:	168

Changes in Yield of Paddy / Acre

(Bandalkatte Village, Kalghatgi Taluk, Dharwad District)



Farm pond



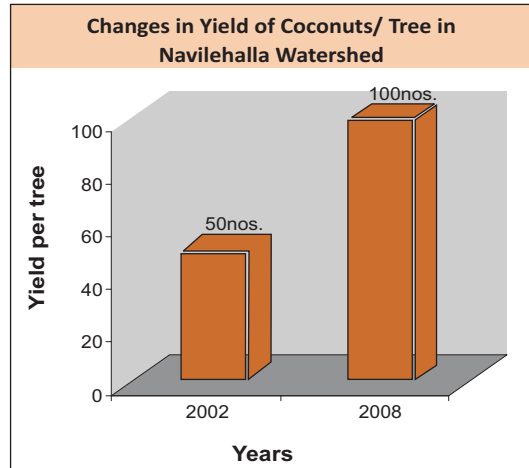
Trench cum bund



Earlier, in Marikatte watershed area there was base flow in nala during the rainy season only. In 2007-08, it continued to summer too.

In Navile halla watershed, 13 open wells were dried in 2002. In 2007-08 these wells are recharged and the water level has gone up to 12 to 13 meters in 2 of them. The water table that was 300-400 feet earlier has now gone up to 150 to 200 feet. In Rampura and Chikkonahalli villages, 2 bore wells have been recharged thanks to the in-situ recharging.

Thanks to the increased availability of fodder supported with quality breeding services and frequent health camps, livestock population in Navilehalla watershed has increased from 800 in the baseline to 1500-1600 in 2008. There are many crossbred cows in these villages. On an every day basis 600 to 700 liter's of milk is produced. **During the last 4 years, 7 milk procurement centers have been started in the area.**



Changing Agricultural Scenario...

Tottagi, a farmer in Hirekoppa village has 21 acres of land. Earlier he used to irrigate only 5 acres out of this. In 2007-08, he irrigated the entire 21 acres.

Prior to the project interventions Tottagi used to cultivate maze and cotton only. Today there are diverse crops such as Sugar cane, Garlic, Onion, Suppota, Mango, Guava and fodder grasses on bund. The livestock population in his house has gone up from 5 to 10.

Sharing the Benefits....

Prior to project intervention Parvatamma at Timmalapura village in Tumkur District used to under take only one rain fed crop of Jowar and Ragi. In 2006, she started a demonstration plot of Integrated Pest Management in Redgram (NIRMAL 2) and hybrid Cow-pea in one acre in the treated watershed area. She got 250 kg of Redgram and 100 kg of Cowpea/acre. In 2007, she distributed the seeds to another 20 farmers and they adopted similar cultivation methods

2.12 'Jalajeevani' - Enhancing Natural Resources

Aiming at improving the natural resources of the area, this project is under implementation in the watershed area around Haldodderi tank.

In addition to treating the farmers' fields with integrated technology package a mini - live demonstration of watershed development is set up in the school premises in the project area. In addition to the water conservation measures a herbal and floriculture garden has also been set up here. A committee that consists of students and teachers maintains the demonstration.

BASIC INFORMATION

Commencement: April 2006
 Area covered: 2869.5 ha.
 Families covered: 1180 nos.
 Villages covered: 12 nos.
Taluk: Koratagere
District: Tumkur
Sponsor: K.K. Malhotra Foundation, Mumbai

Overall results and impacts includes the following:

- Increase in average yield of tamarind from 400 kg / acre to 1100 kg / acre in all the project villages.
- Increased availability of drinking water for livestock, especially in off-season.
- Shift from mono cropping practices to diversified cropping. Earlier there was either Ragi or Tamarind alone, which now includes inter-crops of Redgram, Cowpea and a variety of vgetables.

One of the achievements of the project management in this project includes that the targets initially set up for a period of 2 years could be achieved in one year. The rapport that was already developed with the local community through interventions under earlier projects in the near by areas played a crucial role in this.

Progress of Activities	
Particulars	Progress
Trench cum bund:	71374 cmt.
Waste weirs:	714 nos.
Percolation pond:	297 nos.
Tanks de-silted:	17 nos.
Check dams:	1 no.
Bore wells recharged in situ:	18 nos.
Horticulture plantation:	2000 nos.
Vermi-compost units:	17 nos.
Seedlings raised locally:	30000 nos.
Participants trained in watershed mgt.:	340nos.

2.13 'Sachetana' - Natural Resource Management for Addressing the Poverty Situation in Mundargi

The project adopted a novel approach of conserving and effectively managing the natural resources for poverty alleviation and to mitigate the flurosis related health issues. In a short period this has been proven to be a path breaking and replicable model to address the issue of flurosis.

Regular monitoring in selected bore wells and open wells in the project area have been carried out to study the changes in the water level.

The average water table in the bore wells in these villages has been 150 feet in the base line. This has now raised to 52 feet. Besides, 62 bore wells that were dried in the base line now over flow.

BASIC INFORMATION
Commencement: 2002
No. of villages covered: 9
Taluk: Mundargi
District: Gadag
Sponsor: German Agro Action



In-situ recharge of borewells

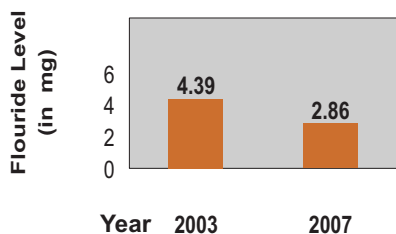
Progress of Activities (as on 31/03/2008)	
Particulars	Progress
• Trench cum bund:	2610 ha.
• Forestry & fodder plantation:	691.7 ha.
• Farm ponds:	579 nos.
• Bore wells artificially recharged:	32 nos.
• Diversion channels:	8449.32 cmt.
• RWH structures:	29 nos.
• Wadi established:	1528 nos.
• Forestry plantation:	822614 nos.
• Plantation of fruit trees :	37652 nos.
• Vermi-compost:	21.9 tons

Project Components
• Promotion of roof water harvesting measures
• Measures for soil and water conservation
• Measures for direct aquifer recharging
• Measures for disinfecting water sources
• Promotion of agro-horti-forestry
• Promotion of sustainable agriculture technologies
• Provision for good nutrition through nutrition supplement programmes and promotion of perennial kitchen garden
• Training and awareness

Comparative Level of Water in Open Wells – Then and Now

Villages	No. of open wells	Average depth (in ft)	Status in 2002			Status in 2007			Increase in water level
			No. of open well with water	Average water level (in ft)	No. of dried open wells	Open well with water	Average water level (in ft)	No. of dried open well	
Virupapura	24	37.08	12	2.23	12	24	11.35	0	9.12
Kalkeri	34	34.38	62	4.21	13	34	12.04	0	7.83
Mushtikoppa	19	29.47	11	2.23	8	19	15	0	12.77
Tippapura	10	27.9	6	7.75	4	10	10.45	0	2.7
Budihall	69	32.22	27	2.83	42	69	11.01	0	8.18
Total	156	32.21	77	3.85	79	156	11.97	0	8.12

Changes in Flouride in Bore Well Water



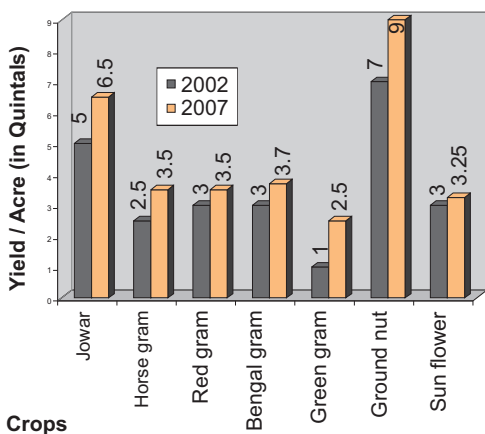
Harvesting rain water is possible on thatched and sheeted roofs, too

Promotion of nutritional gardens and 'wadi' has helped curbing new occurrence of fluosis related cases. Experiencing these benefits the local community now volunteer to create rainwater-harvesting structures.

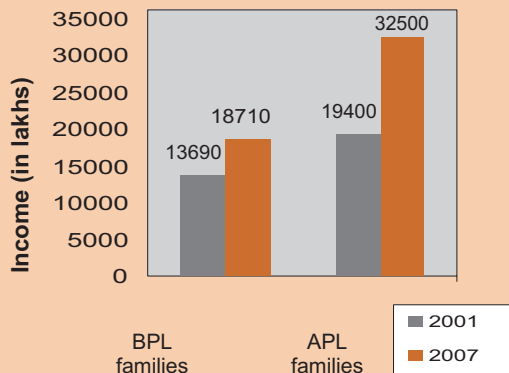


Incidence and severity of dental fluosis have now come down.

Changes in Yield of Different Crops Prior to and After Project Interventions



Average Annual Income / Family Prior to and After Project Intervention



2.14 'Sachetana'-Safe Drinking Water through Innovative Technologies for Rain Water Harvesting

This is an innovative project designed to address the issue of flurosia on a sustainable basis without need for defouriding plants. The activities carried out includes:

- Training and exposure visit to the existing demonstrations
- Conducting 'Gramasabha' with a minimum interval of once in a month
- Formation of people's organisations such as Grama Vikasa Samiti (GVS), Stayee Samiti and Self help groups
- Door to door visit by GVS members and the implementation team
- Programmes for development of spirituality and community ownership
- Street plays and other cultural programmes with relevant messages
- Celebration of 'Maleneeru Habba' (a festival to celebrate rain water) etc.

BIRD-K worked with the Grama Panchayath (GR) in this project as a technical consultant cum resource support agency. Innovative systems that have very successfully worked out in associating with the Grama Panchayath have been set up. This has ensured curbing corruption, in project implementation at various stages.

Addressing Felt Needs Promotes Participation...

Nagappa of Thimmanaikana betta village in Pavagada taluk wanted to construct a storage tank of 12540 litters capacity. The estimated cost of this was Rs.25110/-. The project support was limited to constructing a tank of 5000 liters capacity at the cost of Rs.10500/-. Convinced about the benefits of rainwater Nagappa contributed the remaining amount and constructed a surface tank of 12540 liters capacity.

BASIC INFORMATION

- Commencement: 2004
- Families covered: 1291
- Villages covered: 60 nos.
- **Taluks:** Sira, Pavagada, Bageppalli, Mundargi
- **Districts:** Tumkur, Gadag, Chikkaballapur
- **Sponsor:** Dept. of RDPR, GoK

Progress of Activities

Particulars	Progress
Surface tanks:	128 nos.
Under ground tanks:	721 nos.
Farm ponds:	641 nos.
Bore wells recharged in situ:	24 nos.
Aquifers recharged:	3 nos.
Water quality tests:	459 nos.



Worship rain water for it is precious-scene from the 'Maleneeru Habba' celebrated in the project area



Storage tank inside the house

'Miracle' of Rain Water

The 45 years old Mahalingappa, C.K.Pura, Pavagada is a travel agent. He has been suffering from stomachache, gastric related problems, lack of appetite etc since 12 years. Even his 10 years old son suffered from lack of appetite. However, in 2006, when the project started in his village, Mahalingappa was averse to drinking rainwater. The fact that the villagers selected him as President of the GVS forced him to visit the villages in Mundargi taluk where similar project was started 7 years back.

Mahalingappa's perceptions changed when the villagers narrated their experience and impacts. He even collected the rainwater on the way and drank it as an experiment. He felt good and different. Soon he constructed a tank and the family started regularly drinking rainwater. He no more suffers from stomachache, has good appetite and no more gastric troubles. The son felt better too.

Rishabhendrappa, Killaralahalli, a neighboring village also had many apprehensions initially for using the 'dirty' rainwater. Thanks to the effects that his neighbors experienced he now considers it as sacred so much so that he has constructed the underground tank with a hand pump in the 'pooja room' with an intention of maintaining it with utmost cleanliness and sacredness.

The case of 65 years Giriappa, a temple Poojari in a village in Pavagada Taluk is similar too. He suffered from severe pain in the knee and other joints. Giriappa mocked at it when he was advised to drink rainwater. " Even the medicines could not cure my ailments and how can the dirty rain water that is collected in the tank and kept through out the year could help" he wondered! He refused to construct the tank in the limited space that is available in his premises. Thanks to the exposure visit to Virupapur at Munadargi and follow up consumption of rainwater for 2 months, Giriappa felt relieved of the pain. Soon Giriappa voluntarily constructed a storage tank.

All of them now have become messengers to spread the need for rainwater harvesting and volunteers who initiate actions. They played a crucial role in organizing the 'Male Neeru Habba' and ensured that the messages reach a wider scale! Giriappa, took leave for a day from the temple duty and took pain to cycle 6 kms distance to Devarabatta to participate in the 'Male Neeru Habba.' He narrated his experience to the gathering and the way he benefitted from drinking rainwater which motivated many others to opt for it. He also made an appeal to the authorities to construct a tank on the temple premises for the benefit of the devotees.

2.15 'Suvarna Jala'-Aiming at a Fluorosis Free Future through Awareness Generation

This initiative focuses on generating wide spread awareness and promotes voluntary actions to promote rainwater harvesting especially in the future generation. This is achieved through activating cultural forums and initiating school based rainwater harvesting. Competitions for students in drawing, essay writing, quiz, songs water and environment related themes have been organized to promote awareness. Writing on the school walls with appropriate messages is another method adopted to promote awareness.

BASIC INFORMATION

Commencement: 2006

Schools covered: 9

Taluks: Sira, Pavagada, Koratagere, Madhugiri, Hubli, Kalghatagi, Mundargi, Gadag

Districts: Tumkur, Gadag, Dharwad

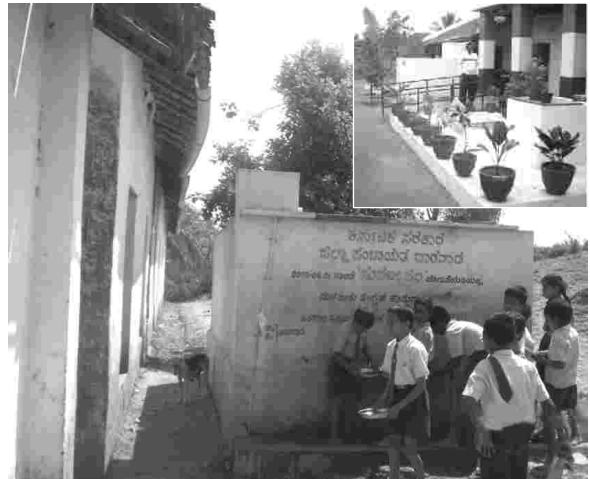
Sponsor: Arghyam Trust

The committee that has been set up to maintain the systems consists of the representatives of the students, teachers and the school authorities has been founded to ensure operation and maintenance of these structures. The local communities and other voluntary associations did actively participate in these initiatives. For example, in Mundargi, the 'Sachatana Natural Resource Management Society registered as part of an earlier project played a crucial role in constructing rain water harvesting structures in 2 local schools, one each in Tippannur village in Mundargi taluk and Binkadakatti village in Gadag Taluk.

Promotion of volunteers to implement planned course of actions to set up demonstrations and promote awareness has been emphasized up on.

Acceptance Comes with Demonstrated Benefits...

The water in the bore well located in the Thippapura primary school has fluoride level of 4.55 ppm, which was much higher than the permissible limit. In September 2006, the project assisted the primary school at Thippapura village in Mundargi constructed tank of 9500 liters capacity with a metal hand pump. The head master here observes that the children feel healthier since they have been drinking the roof top harvested rainwater. Thanks to the encouraging results, in Jan 2008, the school authority at their cost replaced the rusted hand pump.



Model systems for water supply and environmental sanitation in schools

2.16 Endogenous Rural Tourism

This project that started in 2004 promotes rural tourism through promotion of local enterprises and improved services by the local community. This is under implementation at Banavasi, a tourist centre in Sirsi taluk in Utharakannada district.

Active participation of the local community has been ensured through formation of a people's organisation called 'Vishvodaya Grameena Prvasodyama Samasthe (VGPS)'. It is registered under the society Act, 1960. This 13 members committee includes President of the Grama Panchayath, President of the local temple trust, representatives of the residents of the village, local self help groups and local enterprises. The members select the office bearers once in every 5 years. Every year the society is to make an annual plan for promoting tourism and monitor the progress time to time.

BASIC INFORMATION

No of village: 1
Taluk: Sirisi
District: Utharakannada
Sponsor: UNDP through Department of Tourism Development, Gol

Major enterprises promoted

- Local crafts and art works such as pottery, wood carving, painting, textiles and bag making with locally available materials etc.
- Restaurants by the local community that serve the native delicacies
- Processing and value addition to locally available fruits
- Home stay providers
- Development of local guides through training in history, archeology, traditions, agriculture and environment etc

The VGPS members have been intensively trained in preparation of local delicacies and effective management of hospitality to promote tourism. The training also included productive management of waste, which was organised in association with 'Thanal' a Kerala based NGO. Exposure trips were made during the year wherein they participated in crafts exhibition cum 'mela' in Orissa.

The initiatives made by VGPS during the year include construction and maintenance of sanitary latrine and bathing complex for the tourists. Construction of a commercial complex is in progress with financial assistance from the government.



Villagers at Banavasi involved in cleaning their village



Local youths are trained as tourist guides



The taste of local delicacies - a 'Food Mela' organised by the community

In 2007, with financial support from the project 'Vyjayanthi' SHG of Banavasi village started a group enterprise in promoting bags made of Ilkal cotton cloth, a indigenous design brand of the nearby area. The members in share the labour. They made a profit of Rs. 35,000 The group now plans to further invest it for up-scaling the volume of production and sale.



Members of the self help groups involved in bag making and its sale

2.17 Industrial Waste Management at Gokak

The Gokak Mills produces 18-20 lakh liters of effluent treated water one ton of sludge and 5-6 tons of ash on an every day basis. The project effectively manage these waste in such a way that it positively contribute to the environment. It has also generated opportunities for income and livelihood opportunities of the socio-economically poor families who live in near by through appropriate interventions.

Tree based farming systems have been promoted in this industrial land that was once considered barren and hence wasted. The land has generated an income of Rs. 543000/- this year from sale of fuelwood, food grain, seeds, fruits and Subabul for pulp making etc. Since last 12 years the land has generated a cumulative income of Rs. 5500000.

Natural regeneration has taken place in 50 hectares of land wherein 15,000 of trees have been newly established. There are about 200 species that includes shrubs, creepers, herbal plants and trees in this area. Benefits to the local community in surrounding villages includes the following:

- During November - December every year, 200 cattle and 5000 sheep and 500 goats are allowed to graze in the industrial plantation.
- Farmers from nearby villages are allowed to cut 200 tons of green and dry fodder grass free of cost.
- This year 150 tons of fuel wood was sold to poor families on a subsidized rate.
- When the farmers faced shortage of fodder due to flood the project supplied fodder for crisis management.
- Food grains were sold to poor farmers at 50% subsidized rate.

Major Activities

- Nursery raising
- Plantation of forestry seedlings
- Plantation of horticulture
- Promotion of agriculture
- Fencing



The project location

Prior to interventions

and, now



2.18 'Grama Jnana Vahini'... Promoting Rural Entrepreneurship through Information Dissemination

'Grama jnana vahini' started in 2007 with an objective of providing relevant information on technologies, best practices, development schemes, information related to the market, agriculture, health and education. This is achieved through setting up information kiosk that utilises the Internet facilities for transfer of information.

Currently 6 such centers have been started covering 30 villages in Tumkur villages. A facilitation centre is established at the district level that screens and uploads the information.

Selected village youths are intensively trained in necessary operational and management skills. Financial assistance is extended to them for purchase of necessary equipment such as a computer with scanner and color printer, UPS, camera and furniture etc. The villagers subscribe to utilize the service of the kiosk on a monthly or yearly basis. Apart from information dissemination services such as scanning, printing, photography and DTP etc are also provided at nominal cost. This has saved a lot of time, money and energy for the villagers who used to earlier depend on the nearby towns for such services. Youths and students especially have been utilizing the internet services for exploring job opportunities and examination results etc and making travel arrangements etc.

PARTNERS

NABARD: Sponsor & margin money support for entrepreneurs
 State Bank of Mysore: Financial support to Entrepreneurs
 CDAC, Bangalore for technical support
 KVIB: Margin money support for entrepreneurs
 Cauveri-Kalpatharu Grameena Bank: Loan service to entrepreneurs

Ashok, a graduate from Tiptur, was an unemployed youth until 3 years ago. Utilising the loan and margin money support under the project Ashok started a computer based service center at Konehalli village in Tiptur taluk. Apart from imparting training in computer applications and typing skills, the centre provide varied services such as agriculture and weather related information service to farmers, DTP, Xerox, photography, computer prints etc. About 20 villages situated in and around Konehalli now travelling to the nearby town that is located at about 11 kms distance. Ashok now earns an average of Rs.6000/- a month out of this enterprise.



Scenes from the information kiosk set up by the entrepreneur

2.19 The 'Navachetana' Initiatives

The 'Navachetana' programme, an in house initiative of the organisation in Karnataka was started in 2004-2005. The programme aims at setting up model villages that are capable of creating prosperity through self-governance with judicial, executive, financial, socio-cultural and democratic responsibilities. The activities, in a given area, are initiated through setting nodal points called Village Prosperity Centre (VPCs). Currently, there are 17 such VPCs operational.

The VPCs conceptualize, formulate and implement locally appropriate programmes to establish demonstrations of prosperous villages. 'Kalpa' is one of such programmes initiated during the year, which are under implementation in sub urban areas of Tiptur town.

'Kalpa' Programme

It is a programme designed to create awareness among school children and the public in general to build sensitivity on development issues. Tools such as quiz programmes on development related themes, demonstration of setting up herbal gardens in schools has been set up involving teachers and students. The demonstration camps organised to promote awareness on affordable primary health care with herbal extractions have been highly appreciated by school authorities and parents alike. The school authorities in neighboring villages now approach the project implementation team to replicate similar programmes in their respective schools.

Awareness generation programmes have been organized in health and environment related themes for the members of the self help groups in and around Tiptur town.

Training and health camps organized in alternative medicines for interested public has been welcomed by many. People from near by villages and towns also attend the weekly camps organised at Tiptur and Tumkur towns thanks to its affordability.

Other activities implemented as part of the 'Kalpa' programme includes training and demonstration in preparation of Jackfruit based products, baked food items and nutritional food etc. Training programmes were also conducted in options for generating subsidiary income such as soap making, tooth powder and bee-keeping etc.

Nine self help groups have been promoted in the sub urban area of Tiptur town, during the year. Members of these groups have been taken on exposure visits on themes such as natural resource management and health care.

BASIC INFORMATION

(as on 31/03/2008)

Villages covered: 105

Taluku: Tiptur, Koratage, Arasikere, Chicknayakanahalli, Cennarayapatna, Kadur, Madhugiri, Mundargi, Harppanahalli, Sirsi, Banavara, Kalghatagi, Sira, Pavagada, Bageppalli

Districts: Tumkur, Dharwad, Hassan Utharakannada, Chikaballapur, Chikkamagalur, Gadag, Davangere,

Sponsor: Institutional and public contribution



Meditation programme for school children

'Yuvachetana' ... Promoting Youthful Leadership

'Yuvachetana' is a programme that exclusively focuses on building local leadership. This is achieved through intensive training to local youths to sphere head all round development of their villages based on the principles of 'trusteeship' and 'sarvodaya'. The training curriculum designed to be very holistic that integrates technical, spiritual, socio-cultural and all aspects that goes into building personalities with character and leadership qualities.

So far 1557 youth have been trained under this programmes. Many of these youths trained under 'Yuvachetana' play a key role as volunteers and motivators that ensure active involvement of the communities in project activities.



A 'Yuvachetana' training session in progress

Self reliance through micro finance

The development assistance through micro finance is an important part of the 'Navachetana' initiatives that aims at promoting self-reliance through utilisation of micro credit services. The Small Industries Development Bank of India and State Bank of Mysore and State Bank of India has joined hands with the organisation in this initiative. The development assistance package includes guidance to select appropriate small-scale enterprises, necessary training, linkages and support in the form of micro-credit.

Mechanism to assess the technical and socio-economic feasibility and capacity for repayment and scope for proper utilisation of loans is in place. A six-member committee called Development Assistance Management Committee scrutinizes each and every application prior to sanctioning it.

So far Rs. 26658850/- has been disbursed as micro credit that has benefited over 1000 families. The major enterprises thus set up includes dairy farming, non-farm activities like grocery shop, petty shops, restaurants and brick making etc. BIRD-K is in the process of making an agreement with the ICICI Lombard General Insurance Company to support those farmers who purchase the animals with micro credit support.

With promotion of local enterprises and alternate opportunities for self-employment there is a considerable reduction in the project area in migration to Bangalore and other cities for want of employment.



A village level provision store started with micro finance support

"I am married for 49 years and have never seen what a bank looks like. Today, I handle banking for myself and also for my self help group. I never imagined that I have the capacity to do that."

Chandamma

Member,

Shridevi Vanitha Women's SHG,

B.Hosahalli, Tiptur Taluk.

Relieved from the Clutches of Traditional Money Lenders...

Lakshamma and Mallappa, a couple of Kuriarapalaya village, Tiptur taluk, have 10 dependents. They earned Rs. 2400/- per month from agricultural labour. They leased out the 2.5 acres of family land as they had no capacity to invest.

In 2005, Lakshamma borrowed Rs.25000/- from SHG and purchased a crossbred cow. Within a year and a half she was able to repay the loan and today, earns Rs.4080/- month from sale of milk.

No more they lease the land out. With project assistance, they dug a bore well and with the profit from dairy, purchased a motor pump. With this, they started cultivating Banana, Gurkin, vegetables and fodder. The dairy dung is applied back on the land, which help them save on fertilizers. The family gets a net profit of Rs. 25000/- year.

"The development interventions have helped us repay all the earlier debts especially that with money lenders with higher interest rates. Today, we depend only on SHGs where we get financial support on low rate of interest. We are able to save a bit for our elder daughter's marriage. Moreover, we are proud to be part of the SHG that gives us a social recognition." said Lakshamma.

New Opportunities for Self- Employment...

Mallamma Mallikarjuna of Annigere in Chikkamagalure, is a land less woman. She entirely depended on her husband's meager income earned out of lorry driving. In 2003, she took a loan of Rs.20000/- with which she started a petty- shop in her house itself. Currently, spending time at home Mallamma earns Rs.150/- a day out which Rs.40/- is a net profit. Similar is the case of Shivalingamma at Eradikere village in Kadur taluk. With 7 dependents life was difficult with an annual income of Rs.30000/-. Shivalingamma took a loan of Rs.40000 and started a 'Shamiana; business. Today, she supplies 'Shamiana' to 25 to 30 villages around and earn a net profit of Rs.5000- 6000 /month.

2.20 Promoting Self-Help... People's Organisations in the Fore Front

Building community based organisations for various purposes have been crucial in ensuring sustainability of development processes. Intensive training to the members have resulted in many of them become trainers to others of the community in subject areas such as primary health care, book keeping and accounting etc.

Apart from community initiatives like organising 'Shramadan' 'Hasiru Habba', 'Maleneeru Habba' and 'Satsangha' etc, the accomplishments of the self help groups and its federations include setting up of farmer to farmer training centers, seed banks, community halls and parks and operation and management of biomass based gasifier etc.



The regular meetings of the POs are platforms for issue based discussions and decision making

In K.Hosur, Maruthi and Lakshmi Women's SHGs grow vegetables in the premises of the community hall. Every week they contribute part of it to the 'mid day meal' scheme in the nearby school. They also purchased steel plates and cups to the school children out of their profit in the SHG. The members use herbs grown in their back yards to prepare herbal drinks for primary health care. They organise camps for preparing 'Kashaya' in the local schools every week and share the same with the school children too.



School children drink the 'Kashaya' prepared and supplied by members of the women's SHGs



Mass plantation in progress as part of the 'Hasiru Habba'

The 'Shramadan' that are organised now and then have no doubt greatly contributed to maintaining the village sanitation through cleaning the streets and drainage.

In some villages, for example, the federation of people's organisations in association with the local unit of Karnataka Milk Federation and project implementation team organised exhibition for crossbreed and local cows and calves. Small recognition instituted by the organizers has motivated the farmers to maintain quality herd.

The Community Park established by the women's SHG at K.Hosur provides a space for rejoicing and relaxation for the children and elders alike.

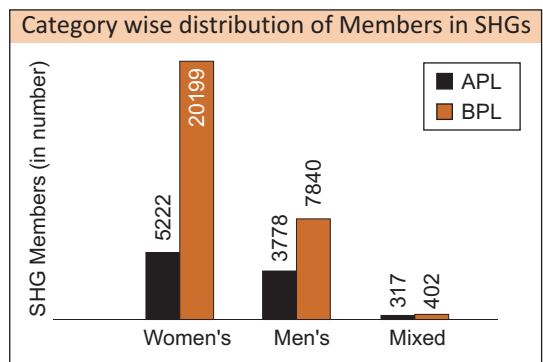
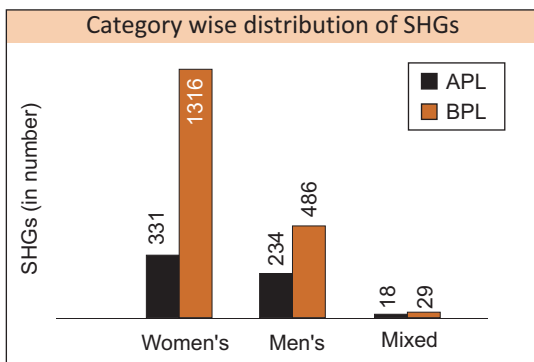
In villages like K.Hosur, Hulihalli, Vitalapura, Balavaneralu, Surgontanahalli and B.hosahalli the self-help groups organise 'Annapoorneshwari Vrata' wherein they pool a handful of food grains once every week. Once in a year they conduct 'Satsanga' where in this is used to provide free food for the community. Common food is cooked for the participants on the occasion of these weekly gathering and distributed to the members as 'prasada'.

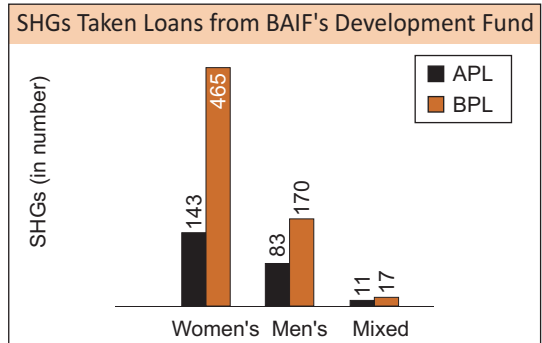
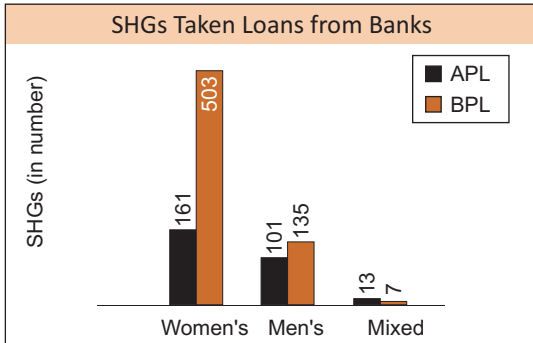
In Hulihalli village, the 7 SHGs joined hands on the occasion of a traditional festival wherein they voluntarily cooked and served food for the whole villagers and visitors.



Eating together breaks many socio-cultural barriers

In another SHG in K.Hosur, 2 members at a time, take a turn to cook for the mid day meal in the local school. The honorarium given by the school authority for the voluntary contribution goes to their SHGs directly. The vegetables raised by the group in the community land also are contributed to school. Each member family contributes a coconut to the school on turns. On special days of national significance like the Independence Day and Kannada Rajyotsava etc, they prepare special food items and distribute to the children.





Germplasm Conservation & Seed Banks

Germplasm is conserved through volunteering farmers who kept a small area of their land specifically for growing endangered crop varieties. The SHGs collect seeds from various sources. Individual farmers can borrow these seeds, which is returned in double the quantity of what they borrowed. The federations have also organised 'Beejamela' to promote awareness and practices for germplasm conservation. With setting up the first seed bank by the people's organisations at Balehalli in Hassan District in early 2000 it has been replicated in many villages, thanks to these campaigns.

Vasantha and Jayanthi Hosmane of Hullekere village of Arasikere Taluk are experts in seed bank management and train many other women in setting up and managing seed banks. This has further accelerated the process of setting up seed banks in new areas like Balehalli, Belavaneralu, Hullekere, Hanthanakere village etc.

Savings and Credit (as on 31/03/2008)

Total savings : Rs. 54555573/-
 Total credit given : Rs. 150966957/-
 Amount repaid : Rs. 57208020/-

In 2005, the Karnataka Vikas Grameena Bank extended Rs. 164300/- as loan to 18 SHGs in 5 villages in Mundargi. Thanks to the prompt repayment, the bank extended repeated loans to 46 SHGs in the project area that amounts to Rs. 1626700 as on now.

The support by the POs for common procurement and distribution of agricultural instruments and seeds has been highly appreciated by many. In Sursottikoppa the Mahasangha purchased seeds of Soya bean, Maize, Jowar and Cotton etc, worth Rs. 1.25 lakhs and distributed to 86 farmers. Apart from ensured quality and timely availability bulk purchase saved time, energy and cost of transportation.

United, we gain - scenes from the seed bank maintained by the SHG



The 7 SHGs of Hulihalli village contributed Rs.500/- each and got note books for the school children from the BPL families.

Vidya nidhi'- a separate fund set up by the federations in Surashettikoppa and surrounding villages, provides interest free loan valid for one year, to the children of member families for higher education. A total of 135 Students that includes 29 girls and 106 boys, have utilised 'vidyanidhi' since inception educational courses like BBM, BA, B.E, Bom, B.Sc and computer education etc.

Other such schemes includes 'Argyanidhi' fund for health care and 'Griha lakshmi' scheme to assist construction of houses in 'wadi'.

Chandregwoda, in Parsapur village in Kalghatgi Taluk is the first student to utilise the 'Vidyanidhi' fund. He availed it 3 times since 2003 and completed his professional graduation in agricultural sciences from Agricultural University, Dharwad. His parents feel that Chandregwoda could become a graduate but for the support extended by the 'Vidyanidhi' scheme.

At Balavaneralu, daughter of Sarojamma Narayanappa got a interest free loan under the educational fund to support her education in teaching.

Groups that strengthens the weak...

Lolakshamma of Belavaneralu village is a land-less widow with 3 children. Her aged mother also depends on her for livelihood. She did agricultural labour that was available for about 5 months a year and earned Rs. 50-60 day. It was tough, especially, with her daughter suffering from a chronic skin disease that needed constant medical treatment. In 2006, Lakshamma started a restaurant in their village thanks to the micro credit support. She has already repaid the loan and currently, earns a net profit of Rs. 150 to Rs.200/- per day, on an average.

The SHG also helped Lolakshamma to get a work in the mid day meal scheme in the local school that earns her an additional Rs.600/- month. In 2007, she got a grant of Rs.30000 from the 'Nava Grama Yojane' of the Grama Panchayath for constructing house. The SHG also supported her with loan of Rs.20000 with which she constructed a new house.

The increased income was a great support in getting her eldest daughter married, last year.

The Departments / Organisations that the CBOs Associated for Various Purposes Included the Below Mentioned:

- Mahaveer Jain Hospital, Bangalore
- State Bank of India
- State Bank of Mysore
- Dept. of Police, GoK
- Dept. of Animal Husbandry, GoK
- Dept of agriculture, GoK
- Dept. of Horticulture, GoK
- Dept of Food and Civil supply, Go K
- Dept. of Health, GoK
- Integrated Child Development Prgramme, GoK
- Dept. of Forests, GoK
- Karnataka Milk Federation
- Indian Grass and Fodder Research Institute, and
- Individual practitioners of medicines and law in various project areas



Thanks to the support systems established through POs, women are now in the forefront of development initiatives

3. RESEARCH PROJECTS

Participatory research activities that are carried out in farmers' plots are part of most of the field extension projects. In addition to this many research activities are carried out on a regular basis in the institutional campus located at Lakkiahalli near Tiptur. A brief description of such initiatives are mentioned below.

3.1 Comparative Efficacy of Arvin Milk Detention Test with Proven Sub-clinical Mastitis Diagnostic Test

Commencement: June 2007, **Sponsor:** L-Ramp and Rural Innovation Net work

It is conducted in 2 sample locations in Mudhol Taluk in Bijapur District and Tiptur Taluk in Tumkur District. The sample animals proportionately include different species such as HF, Jersey and buffaloes, based on stages and number of lactation and season.

Major Findings

- California Mastitis Test (CMT) shows 54.74% of the animals are positive whereas Arvin Milk Test (AMT) shows 55.17% of the animals are positive in the population. This indicates that on the animal basis the efficacy of these tests are at par.
- Effectiveness of the test on the basis of the quarter shows that there is a difference of 7.7 % between the CMT and AMT. In CMT 33.4% of the quarter have been found positive and that in AMC diagnosed has been 41.10%.
- In season wise comparison, both the tests have found more animals as positive (74.23% in AMT and 72.2 in CMT) during July to September. Incidence of Sub-clinical Mastitis is found less during October to December.
- Sub-clinical Mastitis is found to be more prevalent in HF crossbred (61.41) followed by jersey (58.57) and buffaloes (22.58).
- Prevalence of Sub-clinical Mastitis is found more during 4th lactation (70.4 %) compared to 48.88 % during 2nd lactation.

3.1.1. Comparative Efficacy of Arvin Udder Care Kit with Proven Antibiotic Treatment to Control Sub-Clinical Mastitis

Those animals that have been found positive for both CMT and AMT have been treated with Arvin Udder Care Kit and proven antibiotic treatment to see the efficacy of the treatment. It is noticed that 70% of the animals got cured with the antibiotic treatment wherein Arvin Udder Care Kit cured 40% of the animals that was found positive of sub-clinical mastitis.

3.2 Research Trials on Application of Herbal Formulation Developed by Immt, Bhubaneshwar, for Mite Control in Coconut

Commencement: May: 2007, **Sponsor:** Institute of Minerals and Materials Technology

The objective is to study the effect of biocides formulated from herbal sources through spray, fumigation and soil incorporation to control mites in coconuts.

Major observations:

- In cases of those plants that were treated with biocides 85.4% of the nuts found mite free whereas in controlled plants it was 43.2%.
- A new unidentified mite was found during the study.

3.3 Comparative Study of Extracts of Different Leaves on Radish

Commencement: July: 2007, **Sponsor:** In house initiative

The objective is to study the efficacy of different spray on control of pests and diseases, on growth of the plants and the yield. The extracts of leaves used include that of Pongamia pinnata, Adathoda and Vishamdhari against the controlled plantation of Radish.

Findings:

- There has been a reduction in **pests and diseases** by 86% with extract of Neem leaves, after the 5th spray, followed by that of Adathoda (76.47), Vishamdhari 74.62%, Pongamia (71.62) and 54% in the plants under controlled condition.
- The **rate of growth** was 17.85 cm with application of extract of Neem leaves, 15.25 cm with that of Adathoda, 14.25 cms with Vishamdhari, 14.7 cm with Pongamia and 16 cm in controlled plants.
- **Yield** was observed to be highest (by 10%) with application of extract of Neem leaves followed by that with Adathoda (6%), Vishamdhari (5%), Pongamia (3%) over the plants under the controlled conditions.

NOTE: Application of adlib quantity of organic compost has taken place in the area around the plants under controlled condition and this must have influenced the yield and incidence of pests an Radish under controlled condition.

3.4 Comparative Study of Pongamia Plantation Developed through Seedlings, Rooted Cuttings and Grafts

Commencement: July 2005, **Sponsor:** In house initiative

This long-term study focuses on performance of Pongamia in terms of survival rate, growth, height, disease and pest infestation and yield. In the 4th year, the observations are as follows:

- The highest rate of mortality was observed in rooted cuttings (58.33%), followed by grafts (10.5%) and seedlings (6.48%) respectively.
- At the age of 18 months, higher growth rate is observed in seedlings (13.9cm) followed by 12.28 cms in grafts and 6.5 cms in cuttings. Lower growth rate is noticed in cuttings due to high mortality and frequent replacements.
- Average number of leaves (of survived plants) per plant at the age of 1 month and 18 months.

Particulars	At one month	At 18 month	Variation
Seedlings	18.72	39.19	20.47
Rooted cuttings	25.06	22.47	-10.4
Grafts	35.66	60.68	25.02

3.5 Comparative Study of Yield in Pongamia Raised through Grafts Versus Seedlings

Commencement: July: 2003, **Sponsor:** In house initiative

- In the 5th year there has been 245 pods and 4 pods in grafted plants and seedlings respectively.
- The trend in percentage of plants that was fruited as follows:

Particulars	Plants Fruited (in %)		
	4th year	5th year	6th year
Grafts	15	43	47
Seedlings	1	11	3

3.6 Comparative Study on The Yield of Simauraba Raised through Grafts Versus Seedlings

The major indications are as mentioned below:

Commencement: October 2003, **Sponsor:** In house initiative

- The survival rate of seedlings is 89% and that of grafts is 85%.
- In the 5th year 62% of the grafted plants fruited whereas it was 21 % in seedlings. Yield (in Kg) per plant is observed as below

Particulars	4th year	5th year
Seedlings	0	0.274
Grafts	0.444	.674

3.7 Intra-generic Compatibility of Grafting in Madhuca Indica

Commencement: April: 2003, **Sponsor:** In house initiative

This 5 months study was carried out with an objective of assessing the success rate in grafting the scion of Madhuca indica and Madhuca longifolia root stick. Two different species of the same genera were used for grafting with two different scion materials, one with leaves and the other one is naturally defoliated. Findings are as mentioned below:

- In **hydro pits**, 56.26% of those with leaves **sprouted** whereas 60% of the naturally defoliated ones were sprouted. Overall 57.14% of the scions were sprouted up to 50 days in hydro pits.
- In **shade nets**, 89% of those with leaves were **survived** whereas 33% of the naturally defoliated ones were survived.

Overall it indicates that grafting can be done successfully on the rootstock of Madhuca longifolia by using scion material of Madhuca indica.

3.8 Performance of Ragi under Treatment with Different Nutrient Levels

Commencement: 2001, **Sponsor:** In house initiative

The objective is to study the effect of applying different levels of nutrients on the yield of grain and fodder in Ragi.

Performance (average of last 7 years)

Treatment	Yield of grain / acre (in kg.)	Yield of fodder / acre (in kg.)
Controlled	214.80	594.4
Recommended FYM application	571.16	1478.7
Recommended FYM (100%) + NPK (50%)	520.55	1514.2
Recommended dose of NPK (100%)	576.08	1517.1
Recommended FYM + NPK (100%)	613.88	1710.8

- Highest yield is observed in FYM + recommended dose of NPK.
- Stable grain production is observed when pure FYM is applied.

3.9 Growth and Yield Response of Brinjal to Application of Effective Micro Organism (em) and Vermi Wash

Commencement: April 2007, **Sponsor:** BAIF Development Research Foundation

It is part of the coordinated research programme initiated by the organisation which are simultaneously under implementation across in different states. The indications at the end of the first year are as follows:

- Yield was higher by 10.8% with application of EM at 10% concentration.
- Highest control of pest was noticed with application of vermi wash at 10% concentration. Pests were less by 15.7% compared to that under controlled condition.

4. BUILDING HUMAN RESOURCES

Creating wide spread awareness and building people's capacity for actions through multi-fold activities have been an important focus area both at project level and institutional level.

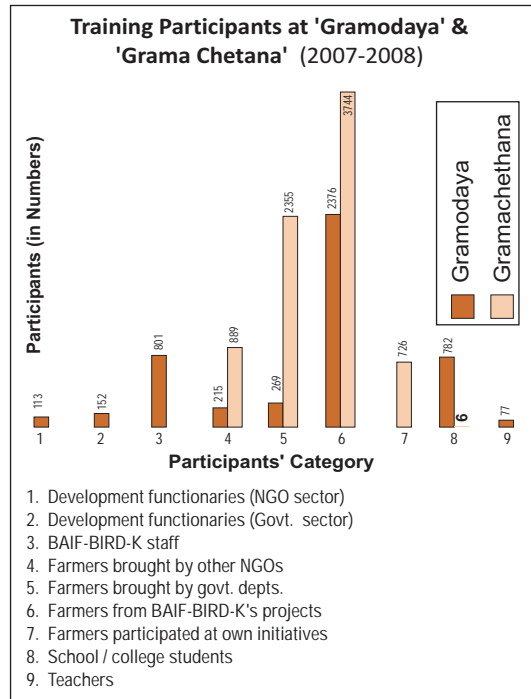
Training takes place at various levels, both through formally designed and organised courses and through informal ways such as plot and home visits. Training also takes place at multi levels such as the family, village, cluster and at the training centers managed by the institution. The institutional campus at Lakkihalli houses a well equipped training center called 'Gramodaya'. Live demonstrations have been established here that makes it a complete learning complex. Demonstrations in the campus include the following:

- A mini biomass based gasifier unit 11 kv capacity.
- Demonstration of Bio diesel run pump set
- Plantation of bio fuel species in 20 acres of land.
- Mother orchard of quality scion materials for production of grafts.
- Nursery raising and grafting unit of horticulture, forestry, medicinal and biofuel species.
- Ethno medicinal forest of ver 650 ethnic medicinal species.
- Livestock complex that houses many crossbreed and local breed cows, buffaloes, sheep, poultry and guinea fowls.
- Demonstration of varieties of fodder cultivation
- Sericulture unit that consists of cultivation of mulberry under rainfed as well as irrigated conditions, center for production, supply, rearing and reeling of silk worms.
- Live watershed development model
- In-situ recharge of bore wells
- Roof top rainwater harvesting structures
- Productive management of waste water
- Herbarium of herbal medicines
- Organic farming plots
- Technologies for organic composting
- Arboretum of bamboo species
- Drip irrigation system, using solar pumps

The institution in association with the community-based organisations have set up another training centre namely, 'Gramachetana' at Surashettikoppa village near Hubli.

These training programmes are supported with many live demonstrations that have been established in farmer's fields across the state. Participants often visit these fields and benefits from exposure and interactive learning with the participant farmers.

The visitors to these demonstrations also included many representatives of various development agencies, both from the government and non-government sectors and the policy makers.



Major Disciplines Covered under Training (2007 - 2008)

- Livestock development
- Water resources development
- Organic farming
- Cultivation and use of medicinal plants
- Rainfed sericulture
- Rural non-farm enterprises
- Management of self help groups
- Development of leadership among youths (Yuvachetana)
- Promotion of spirituality

Those who visited various demonstrations during the year included the below mentioned:

Name of the visitor	Project location visited	Date
Shri. H.D.Kumaraswamy, Hon.C.M, Govt. of Karnataka	Bullasandra village, Tumkur	04/06/2008
Shri. H.K.Kumaraswami, Minister for Women & Child welfare	Bullasandra village, Tumkur	04/06/2008
Shri. Ramachandra Gowda, Minister for Science & Technology, GoK	Gramodaya Training, Demonstration & Research & Centre, Lakkiahalli, Tiptur	
Shri. C.M.Udasi, Minister of RDPR, Govt. of Karnataka	Project villages in Mundargi taluk, Gadag Dist.	22/05/2007
Shri. P.G.R.Sindhya, former Minister for State for Industries, Housing & sitting MLA, Kanakapura, Bangalore	Gramodaya Training, Demonstration & Research & Centre, , Lakkiahalli, Tiptur	06/06/2007
Shri. Govind Karjol, Minister of Food & Civil Supply, GoK.	Project villages in Mundargi taluk, Gadag Dist.	22/05/2007
Shri. SS.Patil, MLA, Mundargi	Project villages in Mundargi taluk, Gadag Dist.	22/05/2007
Shri. Shivashylam, Secretary, RDPR, Govt. of Karnataka	Project villages in Mundargi taluk, Gadag Dist.	22/05/2007
Chief Executive Officer, Zilla Panchayath, Gadag	Project villages in Mundargi taluk, Gadag Dist.	22/05/2007
Shree Tottada Siddalinga Mahaswamiji, Dambal Mutt, Gadag	Project villages in Mundargi taluk, Gadag Dist.	22/05/2007
Mr. Ghore, DGM, NABARD, Bangalore	Bio energy project villages, Tumkur	01/10/2007
Mr. Manoj kumar Meena, CEO, ZP, Tumkur	Bio energy project villages, Tumkur	27/10/2007
Shri. K.S.Rajendra kumar, IAS, Principal Secretary, PHE, Govt. of West Bengal & A.K.Banerjee, Chief Engineer, Govt. of West Bengal	Safe drinking water project villages, Tumkur	17/12/2007
Dr. Hamal Janiche, Director, ICUC, Srilanka	BIRD-K's campus, Lakkiahalli, Tiptur	10/06/2007
Shri. K.N.Rajanna, MLA, Tumkur	Project villages, Tumkur	04/06/2007
Shri. B.Shivappa Project Director, Dept of Tribal Welfare, GoK	Bullasandra villages, Tumkur	04/06/2007
Shri. N.Ravi & N.Rajashekhar, Scientists, ISRO, Bangalore	Badvanahalli village, Tumkur	27/03/2008
Shri. M.Chandrashekar Ex Minister, Bangalore	'Gramachertana' Training complex, Sursottikoppa village, Dharwad	19.4.2007
Shri. J.S.Doraiswami Freedom fighter	'Gramachertana' training complex	12.5.2007
Dr. V.B. Nadagaoudar, President, IDS, Dharwad	'Gramachertana' training complex	10.6.2007
Shri. R.K. Singh, IAS, Deputy Commissioner, Karwar	'Gramachertana' training complex	14.6.2007
Derigny Jeromine & Marie Christine Bayard-78015 Paris	'Gramachertana' training complex	15.8.2007
Smt. Vanaja Ramaprasad, Director, Green Foundation, Bangalore	'Gramachertana' training complex	4.11.2007
Shri. Abhiyu Singh, IFS, C.E.O, ZP, Dharwad	'Gramachertana' training complex	20.12.07
Wim Spierings, Lindehol, & Barled Kogtiha The Netherlands	'Gramachertana' training complex	8.2.2008



*The then Hon. Chief Minister
Shri. H.D. Kumaraswamy
on a visit to the project
area*

Students from local schools and colleges keep visiting the field level and campus demonstrations for environmental education and reference. Placement of students and interns from both Indian and foreign institutes for research and work experience have not only brought

opportunities for cross cultural learning but also helped develop a broader outlook on many development issues.

4.1 Development Communication

The project implementation teams have constantly been on the look out for new and innovative strategies for generating awareness and initiate relevant actions by the rural community. Events like celebrating 'Hasiruhabba Habba (celebration of rain water), Hasiru Habba (Celebration of the Green)' and intensive issue based campaigns etc are initiatives in this direction. The print and audio-visual media such as AIR and television channels made considerable coverage of these events, which, during the year included initiatives in organic farming, safe drinking water, water resource development and low cost building technologies etc. This has helped taking the development messages to a larger community.

Reaching out to a larger community on development issues through publications and other mediums of communication has been an important agenda too. This includes a monthly journal titled '*Susthira Swavalambi Krushiyaa Hadiyalli Sirisamrudhi*' that aims to promote sustainable agriculture practices.

Initiatives in this direction have been fruitful in generating wide spread awareness and ensuring replication and adoption of relevant technologies by farmers as well as development agencies both in the government and non-government sector.

4.2 Staffing

Building in house human resource has been an area that is much emphasized up on. Apart from training in multi disciplinary skills, the retreat programmes organised in house on regular intervals in selected locations have been helpful in breaking barriers and rejuvenate the work force. Major part of the current work force are drawn from academic backgrounds such as agriculture engineering, forest management, finance and business management, general sciences and social sciences etc. Multi-disciplinary learning through constant exposure and training is encouraged up on. BIRD-K tie up with various organisations for this purpose.

Learning and sharing takes place through activities such as:

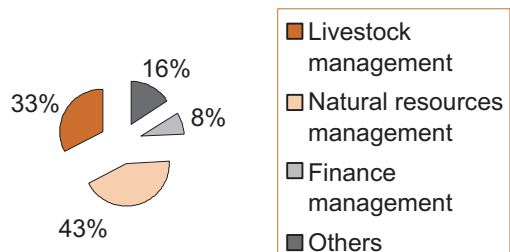
- Organised, theme based, campaigns in the field level
- Establishing live, replicable demonstrations
- Formal and informal orientation and training in multi disciplinary areas
- Publications
- Broad casting / telecasting in association with the existing communication media

PUBLICATIONS (2007 - 2008)

- Savayava grama yajana¹- Nandipura raithara anubhavagalu' 'Surakshita Kudiyuva Neeru (Kannada)
- Savayava sirige Mara Adharitha Krushi (in Kannada)
- 'Suvarna Sankalpa' -Budakattu janangada abhibrudhige
- Hasanada badukige hainukarige
- 'Mishra thali Samvardhane' (revised edition)
- 'Pashuvaidyadalli oushadhi sasyagala belake' (revised edition)
- 'Vanasanjeevani' (revised edition)
- 'Nelajala' (revised edition)
- Thottagarige
- 'Nursery Sasigalu Naduva Krama Mahithi Kaipidi'
- Manual of operation & maintenance for safe drinking water systems (English)

NOTE: In addition to this the publication this year includes folders, display and training materials for various purposes.

Expertisewise position of BIRD-K staff



Subjects Covered For Staff Training (2007-08)

- Application of geo hydrology in watershed
- Waste land development through agro forestry
- Promotion of modern biomass technologies
- Organic certification
- SRI method of paddy cultivation
- Cultivation, processing and disease management of Mango
- Trichodama production
- Recent trends in policy initiatives and technological interventions for small scale livestock production systems
- Mastitis control
- Participatory learning and action
- Market research for managers
- Community radio programme
- Micro finance and women's empowerment
- Gender sensitivity analysis
- Attitudes and managerial leadership
- Secretarial training for NGOs

SPONSORS / ASSOCIATES AGENCIES FOR STAFF TRAINING (2007-2008)

- IRMA , Anand
- Karnataka Milk Federation
- UAS, Dharwad
- UAS, Bangalore
- College f Veterinary Sciences, Tirupathi
- CAPART
- NIRD, Hyderabad
- ANSIRD, Mysore
- MGRIRD, Bangalore
- AME, Bangalore
- CISTHI, Lcknow
- NBCI, Bangalore
- KKID,Coimbatore
- Dhan Foundation, Madurai

5. QUALITY A COMMITMENT

Since 2004 BIRD-K remains certified under the ISO 9001-2000 for quality management systems. The internal and external audits conducted time to time ensures adherence to the systems and continuous improvement. Specific areas where these systems have been useful includes meeting specified targets in projects, developing procedures for implementing every projects, systems for record keeping and quality control. Practice of three tier monitoring systems supported with rolling budget ensured intensive reviews at various levels such as activity, results and impacts. This has also ensured concurrent corrections and necessary modification in resource utilization and implementation strategies. Such administrative systems have facilitated appropriate decision making and added to the efficiency of project management.

Quality Policy

To create opportunities of gainful self-employment for the

rural poor families, especially disadvantaged sections, ensuring sustainable livelihood, enriched environment, improved quality of life and good human values.

This will be achieved through development research, effective use of local resources, extension of appropriate technologies and up gradation of skills and capabilities with community participation.

BAIF Institute for Rural Development-Karnataka will be a non-political, secular and professionally managed organization.

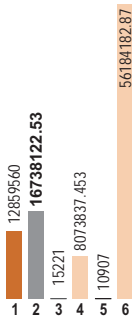
BAIF Institute for Rural Development is committed to achieve satisfaction of all its partners-in-development through continual quality improvement in all its endeavors.

QUALITY OBJECTIVES

- To provide development inputs and services directly or indirectly for rural families in the operational areas for sustainable management of natural resources
- To mobilise resources from the community, government and donors to achieve socio economic equity and sustainable improvement of livelihoods of rural families.
- To take up training and institution building activities for promoting people's participation in development programmes.
- Extension of appropriate technologies for improved quality of life and enriched environment through effective use of local resources.
- Taking up development research for continual quality improvement.

6. FINANCIAL PERFORMANCE

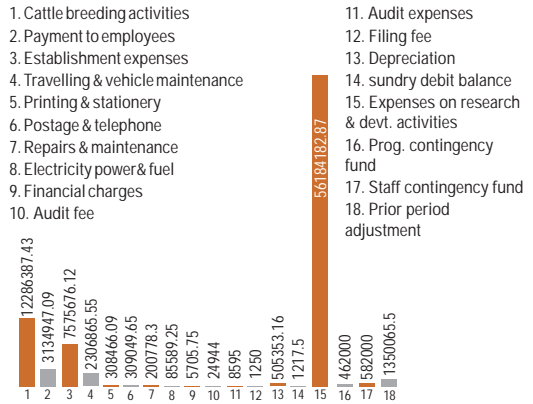
INCOME FROM VARIOUS SOURCES (in Rs.)



1. Cattle breeding service charges
2. Farming and campus activities
3. Surplus on disposal of assets
4. Interest on deposits
5. Sundry credit
6. Miscellaneous

Total Rs. 93881830.85

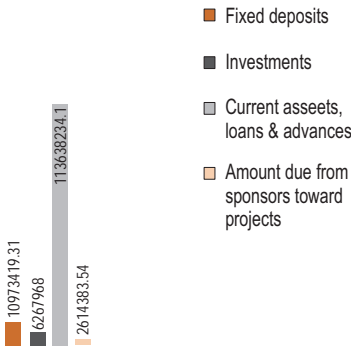
STATEMENT OF EXPENDITURE (in Rs.)



Total Rs. 85333073.26

Balance Sheet

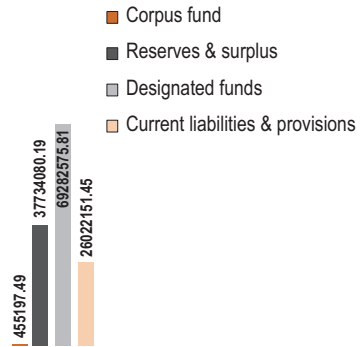
ASSETS AND PROPERTIES (in %)



- Fixed deposits
- Investments
- Current assets, loans & advances
- Amount due from sponsors toward projects

Total Amount: Rs.130936735.09

FUNDS AND LIABILITIES



- Corpus fund
- Reserves & surplus
- Designated funds
- Current liabilities & provisions

Total Amount: Rs.130936735.09

Abbreviations Used and its Expansions

GoK	- Government of Karnataka
Gol	- Government of India
Govt.	- Government
Dept.	- Department
RDPR	- Rural Development and Panchayath Raj
AI	- Artificial Insemination
CBO	- Community based Organisation
PO	- People's Organisation
SHG	- Self Help Groups
ha.	- Hectares
nos.	- Numbers
Cmt	- Cubic Meter

rm	- Running Meter
Prog.	- Programme
Mgt.	- Management
IRMA	- Institute of Rural Management, Anand
UAS	- University of Agriculture Sciences
CAP ART	- Council for Advancement of People's Action & Rural Technology
NIRD	- National Institute of Rural Development
ANSIRD	- Abdul Nazeeb State Institute for Rural Development
MGRI RED	- Mahatma Gandhi Regional Institute of Renewable Energy & Development