

5th Annual Report

JANAKALYAN

A Team Committed for People's Empowerment

in

2002

Mass Mobilisation Year



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Preface

The year 2001-02 is termed as *Mass Mobilisation Year* of Janakalyan wherein a strategic step was initiated through the community leadership to obtain their deserved rights and facilities through agitation. The right to food, shelter, clothes, education and health are the basic fundamental human rights, yet, they remained unfulfilled and sometimes grossly violated. The families who have lost all their possessions including land and homes in the freedom fight of India become refugees in India after partition of the country. They are now now living in the thatched huts for the last three decades.

The Organisation changed its approach from Development to Empowerment; it has now initiated the phasing out process from the Rehabilitation Project. Its present approach of working with these refugees is to make them aware about their rights, priviledges, duties and responsibilites and showing them the way to get them at their disposal. A cadre of leader would be created who will take initiative for the cause of the community. Our role would be to guide this cadre in taking necessary step and help analyse the development.

The organisation's another major activity has been Human Resource Development through various training and higher studies. The second tier leader has been trained for a one year Post Graduate Diploma in Management of NGOs while the Chief Functionary himself attended a 3 months Certificate course on Small & rural Business Consultants. Financial Management & Accounting System for NGOs is another training given to the accountant of the Organisation.

The year has seen change of suffix with the name of the organisation from *A Society for Integrated Rural Development* to *A Team Committed for People's Empowerment* as the organisation has changed its strategy from Development to Empowerment. Accordingly the work culture of the organisation has also being modified as a team work. Starting from conceiving the idea till evaluation of the impact including design of the plan, implementation, monitoring and supervision is done participatorily. A Service Regulation for the employees of Janakalyan has been adopted keeping the future of the employees in mind. A Finance Management and Accounting System for the organisation has been designed and adopted by the employees. More importantly, Sunday and other national holidays are now condered as the holidays for the organisation, which were earlier considered as working days and also there was no working hours for the employee. In one sentence, *the organisation tending towards professionalisation.*

JANAKALYAN

A Team Committed for People's Empowerment

An Introduction

It may be said that the drawing of partition line between India and Pakistan, though it was dominated by political considerations based on long-standing communal tensions, resulted almost instantaneously in hundreds of thousands of persons finding themselves forced-off their land and seeking new abode. Great many of them suffered a lot and

VISION

Creation of an enabling healthy environment where all individual has equal access to and control over the Social, cultural, Educational and Political Institutions with an economically secured

education to the community, which was then registered in 1989. It created a wave in the mind of parents and started sending their children to this school. It could see the increase in education level of the colonies.

As mentioned in earlier paragraph, Agriculture is the

MISSION

Janakalyan exists to empower the four holy mothers so that an economically secured healthy atmosphere is developed where all individual identity has their deserved status through institution

Many Rehabilitation Projects were established during these days in the country to accommodate the families fled from Pakistan. Government of India provided the accommodation to 1000 such families at Sindhanur Rehabilitation Project of Raichur District in Karnataka. Government has provided 4-5 acres of land to each family at the tail end of the Tungabhadra Irrigation Project (TBP). They were happy adopting agriculture as their livelihood option, inspite of many constraints like road, postal & telecom facilities, hospital, and other basic minimum facilities.

A Primary School in their Mother Tongue was started in each Colony where the children could complete their Primary Education. Hardly any student could continue their education after primary level due to language constraints. During 1983, when this Project was handed over to State Government, all the local Schools were transformed to State Language. Children started leaving schools as they felt it extremely difficult to continue their education in a language other than their mother tongue. Illiteracy increased.

The Vivekananda Education Society evolved, as a result, to start school in Hindi (similar to Bengali) Medium by the effort of Sri Shanti Ranjan Das and colleagues during 1986. Their belief was that **"Education is the Backbone of the Society and base for people's empowerment"** and thus the education society came into existence to provide

started declining year after year 1989 onward. Farmers become the victims of debt. It was found extremely difficult to continue their children's education in a fee-based school like this. Managing group found it difficult to run the school.

The group tried to find the reasons for such difficulties and finally evolved with a new belief. **Education with economic stability can make a community healthier and happier.** How the financial status can be improved was the question before this group. Improvement over Agriculture System may improve the economic conditions. What other options can be adopted to achieve the goal of economic security?

Janakalyan was the answer and thus it took the formal identity in 1997. The sole objective of the Organization is to serve for 4 holy mothers- **Women, Soil, Cow & Water**, which have inter-relationship with each other. These 4 mothers have an unique dependency relationship among them. It started its developmental interventions in these refugee colonies and then extended to various places keeping four mothers as the focal point. It believes in empowerment strategies and the programs are designed keeping the Sustainability concept in mind. Janakalyan never considers itself an alternative to Government but a watchdog for the community. It does believe itself as an assisting agency for the Government in developing the nation and its citizens.

PROJECT AREA OF JANAKALYAN
Where does Janakalyan work

Janakalyan is presently working in two Districts of North Karnataka viz. Raichur & Dharwad. The location of the Districts in India are shown in the following map. Raichur district is situated in the north-eastern sector of Karnataka State encompassing geographical area of 8386 Sq. Kms. The District consists of five revenue blocks situated between major rivers, Krishna on north side and Tungabhadra on South side. The District falls under North dry agro-climatic zone. The predominant soils of the District are black cotton soil followed by red loamy soil. The left bank canal of Tungabhadra Irrigation Project provides irrigation for 1,27,296 Ha in Raichur, Manvi and Sindhanur blocks. Dharwad is also a northern district in Karnataka having very good rainfall. Very few villages in Dharwad block of Dharwad district have been identified to work with the needy communities. The District-wise statistics of the villages has been furnished in the table below.

Table.1: Cluster-wise villages where Janakalyan intervened with its activities.

Sl.No	District	Blocks	Clusters	Villages
1	RAICHUR	Sindhanur	3	11
2	DHARWAD	Dharwad	1	7
TOTAL		2	4	18

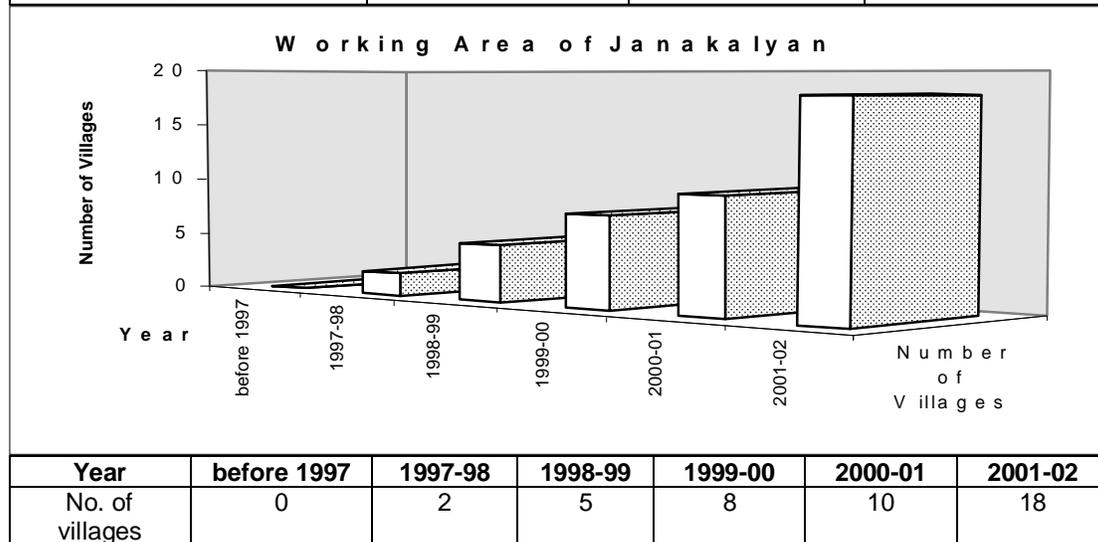


Fig.1: Graphical Representation of the operational area of Janakalyan over period.

CHAPTER I

WOMEN DEVELOPMENT & EMPOWERMENT PROGRAM

SHGs Beyond Savings & Credit to set up Micro-Enterprises

What is WDEP?

It has been a major development strategy for women's empowerment and poverty alleviation across the countries. Promoting Savings & Credit Groups, popularly known as Self Help Groups (SHGs), has emerged as a fine strategy, courtesy the non-government sector, which has inspired several State Governments to launch programmes to promote SHGs. Janakalyan is also not away from this strategy and formed about 100 SHGs with its own innovative model under the program called Women Development & Empowerment Program (WDEP). The program is introduced to facilitate a change from the passive, receiver character of the community, in particular women, to that of aware, able and proactive individuals participating responsibly in the development of the self, family and community in a sustainable manner.

Why WDEP?

The WDEP is introduced by Janakalyan with the following objectives in consonance with its vision and mission-

- Empowerment of rural women by mobilising, organising and training them to improve their socio- economical status in the family and community.
- Fostering confidence in rural women by organising them into strong, cohesive and self-supporting groups.
- Improve their economic position by enhancing their income-earning potential by integrating them into regular delivery system for credit and support services, so as to ultimately make them economically independent by setting up their own micro-enterprises.

Who Supports WDEP ?

It being the major program of Janakalyan, more share of the expenses goes to the WDEP. But, interestingly the WDEP at Janakalyan is a self supported program and no donor is supporting except the community with whom Janakalyan works. Total expenditure of the program is borne by the participants themselves. This has inspired Janakalyan to mobilise the local resources with due care towards the fact that the target groups should not be exploited.

How does Janakalyan manage WDEP ?

It was already 2¹/₂ years when Oxfam withdrew its support from the Network and the SHGs formed were strengthened to an extent through various training and exposures. Before the expiry date of the Oxfam budget Janakalyan anticipated that this meager support is going to be over by the end of another 3 months. It took a strategic decision and asked the SHG to appoint a volunteer for each SHG who will attend their meeting weekly. This was due to the shortage of Staff to take care of these SHGs which began the withdrawal process by phasing out from the responsibility keeping the sustainability concept in mind. By the time when the Oxfam budget expired we had one volunteer trained for each group to manage the

affairs of the group. Different groups fixed different amount for the volunteer ranging from Rs.5-15 per meeting per group. The staff appointed under various other programs of Janakalyan takes care of the supervision part of WDEP.

What is achieved ?

The present status of the SHGs formed in different clusters of two districts are given in the table 1.1 with details of the groups formed, closed and continued. The main achievement of WDEP is qualitative which cannot be quantified in numerical data. The major changes that has been seen in the life and livelihood of the community, especially the women folk, are stated below.

Table.1.1: Cluster-wise data on SHGs formed under WDEP of Janakalyan in two districts.

Sl. No	Name of the Village	Number of SHGs in different Clusters									
		Old		New		Total		Defunct		Active	
		G	M	G	M	G	M	G	M	G	M
RAICHUR DISTRICT											
1.	Rehabilitation Cluster	63	598	-	-	63	598	31	332	32	266
2.	Jawalgera Cluster	8	85	-	-	8	85	-	-	8	85
3.	Diddigi Cluster	-	-	3	36	3	36	-	-	3	36
Sub total		71	683	3	36	74	719	31	332	43	387
DHARWAD DISTRICT											
1.	Kotur Cluster	2	20	7	72	9	92	-	-	9	92
Sub total		2	20	7	72	9	92	-	-	9	92
TOTAL		73	703	10	108	83	811	31	332	52	479

G – Groups M- Members

Table.1.2: Growth rate of SHG formation in the last five years with intervention of Janakalyan.

Year	1997-98	1998-99	1999-00	2000-01	2001-02
No. of SHGs	21	57	63	68	75

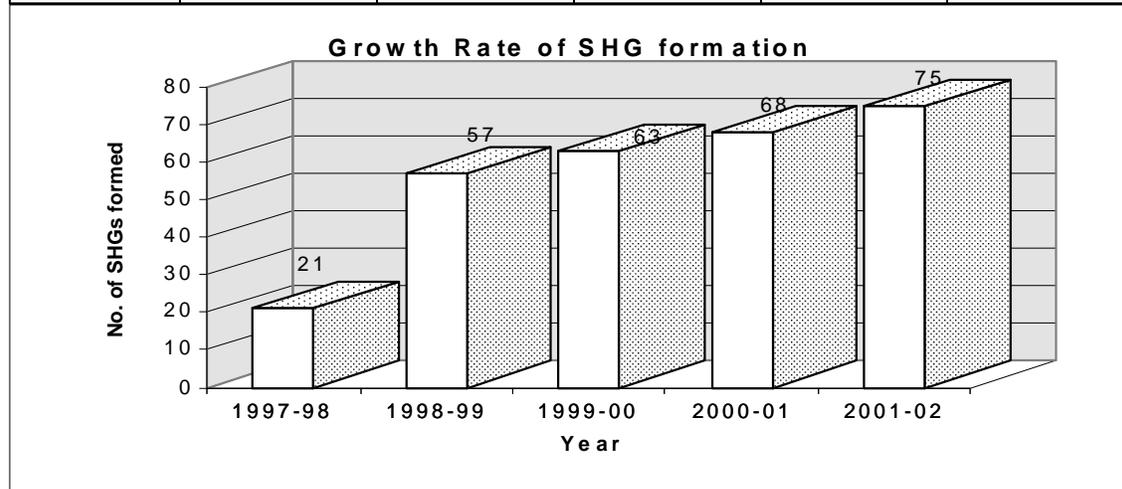
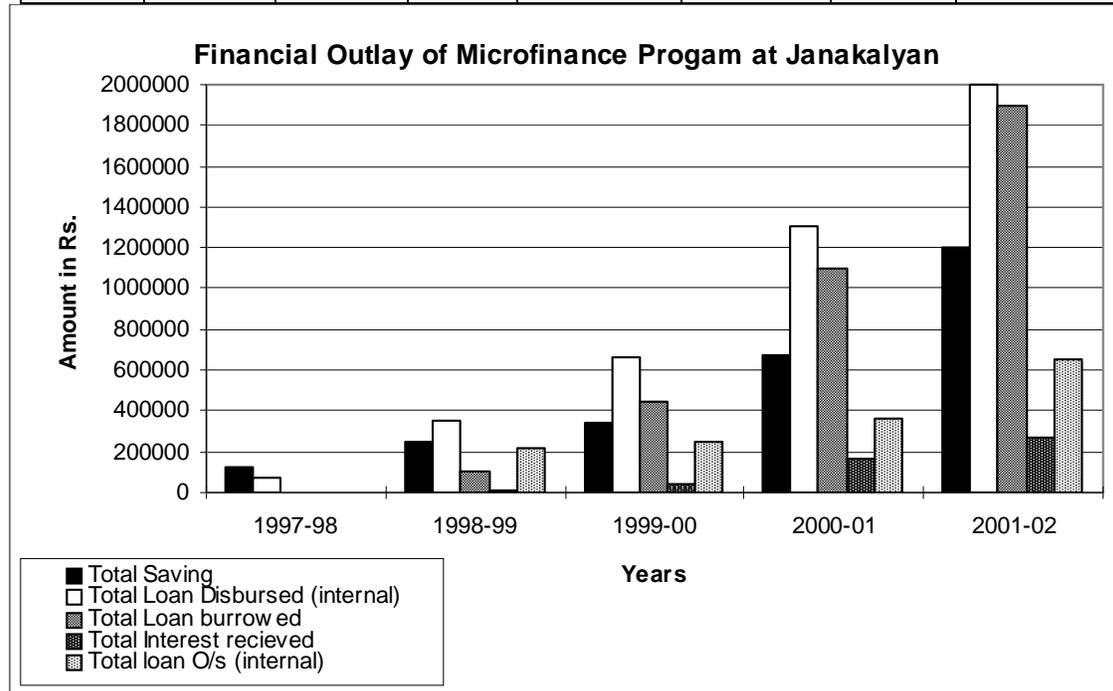


Table.1.2: Financial Outlay of the micro-finance program at Janakalyan.

Year	Number of Villages	Number of SHGs	Total Saving	Total Loan Disbursed (internal)	Total Loan burrowed	Total Interest recieved	Total loan O/s (internal)
1997-98	2	21	121300	67530	--	--	--
1998-99	5	57	246789	348690	100000	12560	215650
1999-00	8	63	342077	661240	450000	46289	247302
2000-01	10	68	677755	1300910	1097000	164530	367284
2001-02	18						



What are the Impacts ?

The statistical achievement shown above is not the objective of WDEP. It aims at qualitative changes within the women folk of the area through organising, motivating and training them about their rights and responsibilities. The major changes, as expressed by the stakeholders other than women, are listed below-

- The women realised the importance & need of SHG and none of the member is ready to leave SHGs. They feel that all others should also form into SHGs.
- All the SHG members are literate and none of them put their thumb on the paper.
- They have acquired better communication skills and can now talk to any outsiders including officers for their needs.
- Almost 85% of the SHG members have learnt bank transaction and official procedures.
- The emphasis on children's education is few times more than ever before.
- The women got exposure to the outer world and now have linkage with few outsiders.
- Necessary care is being taken by the women and their family members about their women health.

- Moreover, the women have now realised that the social status is as equivalent to as that of men and they demand for the same.
- Today, the women at least have a say in the family decision making process which they never had ever before.

How did it happen so ?

Janakalyan begun its interventions in the mid 1997 with Self Help Groups formation as the entry point activities. The groups formation was in an accelerated speed with an anticipation that the poverty would completely be eliminated with these approach. Janakalyan adopted *learning by doing* strategy to learn the ceoncept of Self Help and importance was given to the capacity building of the staff in the first 2-3 years. Therefore, many mistakes were seen in the way of promoting & maintaining the SHGs. Many difficulties were faced in the post-formation stage of these SHGs. However, such difficulties were solved using participatory decision making process among the staff and sometimes in consultation with the members of the SHGs, as per the complexity of the issues.

Janakalyan has its own innovative way of promoting SHGs. The detailed discussion on the different phases of SHG promotion is done in Annexure I. The second phase of SHG promotion ended well in time and the third phase was started. But before completion of the third phase, the team started forming a Federation of SHGs called Milan Teertha SHGs' Federation. Within six months after the formation, Janakalyan felt that the Federation is capable enough to take of the SHG program. Janakalyan started phasing out from the SHG activity from early September' 2000 believing that the SHGs are now capable enough to take care of their functioning. The great mistake made here was the improper assessment of the capacity of the SHGs. By the end of September 2001, the team realised that most of the SHGs have become defunct due to various reasons. The major among the factors contributing to such condition of SHGs are -

- The Milan Teertha was unable to manage its own affairs; where does the question of managing the SHG comes?
- The volunteers selected by the SHGs were not capable enough to write the books of accounts and other records of SHGs. Also they had their own list of works and were thus not available during the time of the meeting of the SHG.
- The staff of Janakalyan has lost complete relation with the SHG and their members.
- The SHG members used call for a meeting only when they required credit from the SHG or Banks. Therefore, the regular contact between the members were almost lost.
- Those, who had already availed credit, never used to attend meeting even if they were requested.

SHG Revitalisation Workshop

The need for the SHG Revitalisation Workshop at Organisational level was felt and therefore it was conducted in the month of October 2001. The reasons for the failure of SHG program were identified and the strategy to intervene with the SHG revitalisation was designed after discussion and study of the SHG over a period of three days. Accordingly the implementation started from the month of November

2001 and almost all the SHGs have become functional by the end of March 2002 with the innovative strategy. However, no effort was made to form new SHGs in the existing areas while in the new areas such efforts have been made and succeeded in achieving the target.

Milan Teertha & Milk Marketing Center at Sindhanur

Janakalyan has promoted about 65 women SHGs in the Sindhanur Rehabilitation Project of Raichur District covering about 719 members in 8 colonies and camps. The total saving with these SHGs is about Rs.14,51,723 and total loan given to the members out of this saving is Rs.19,56,850. The amount outstanding with the members for recovery is about Rs.9,65,590 only. About Rs.11,87,500 is borrowed from the FFIs and about Rs.14,50,000 from BASIX for these SHGs. The scheduled recovery % is almost 100%. There are many events when the SHGs had sanctioned second loan in cases where the recovery of first loan was delayed due to genuine reasons. Most of these loans are utilized only for productive purposes with few exceptional cases¹.

Janakalyan is in its fifth year of developmental intervention in the Sindhanur Rehabilitation Project. Its special emphasis was and still is on Women issues and thus has a separate program to address the issues related to women in particular.

Women Development & Empowerment Program (WDEP) of Janakalyan is to protect the rights of women and to bring this isolated group to the mainstream. This emphasizes the socio-cultural, economic and educational status of the forgotten sector. The program targets the married women of different age groups and brings them under the banner of Self Help Groups aiming at bringing one-ness among the community and thereby increasing their fallback position. Janakalyan team realized lately that women issue is the neglected sector and still remained unaddressed, because of following factors.

- * Patriarchal society gives least value to women.
- * Women themselves are accustomed to this patriarchal set up and have no will to challenge it.
- * They have no say in the family decisions as their fallback position is weak.
- * Patriarchal society believes that the women play only reproductive and unproductive roles.
- * They don't have any stake in the maternal home or asset after marriage.
- * Child marriage is in practice, where they are incompetent as their mental development is not complete.

Mahila Arthika Swavalambane Yojana (MASY) is a scheme of Karnataka State Women Development Corporation (KSWDC), Bangalore to improve the economic conditions of the rural women. This was introduced as a 5 year scheme to improve the economic status of all the women covered in the scheme, within the period with all kind of technical and financial assistance. Its main emphasis was skill development of the women so that they can take up Income Generation Activities to improve their family economic condition. Also they may then have a say

¹ The data given above are as on 31 March 2001

in their family decisions. Janakalyan also implemented this program in collaboration with Prerana, Raichur as it fits into the frame of reference of WDEP of Janakalyan.

Janakalyan is known for its own innovative model of SHG and achieved a lot in this field. Despite having such an experience the field report for this year has been saddest as many of the SHGs promoted by Janakalyan have closed their functioning.

Why the Groups are Closed?

It is seen from the field that some of the groups are closed during the year. The reasons for which these groups are closed are -

- these were formed with certain expectations of getting loans from government and non-governmental agencies.
- MASY is the most important factor behind closure of SHGs. Frequent change of policies from Subsidy to Revolving Fund to Nothing has made Janakalyan a liar. The community lost faith on Janakalyan and are not ready to listen to Janakalyan.
- Stree-Shakti program launched by the State Government offering grants lured away potential clients as well as few existing groups.
- Irregularity in saving and pressure of repayments resulted into closure of few groups.
- Family problems and internal fights between two families and also the political reasons caused few groups to be closed.

Why less SHGs are formed?

The field report also gives us a impression that a negative growth was seen during the year in SHG formation. This is because very less number of SHGs are formed than the number of groups that are closed during the year. The reason for closing of the groups are already mentioned above while the reasons for not forming new groups are given below-

- **The Demonstration Effect:** The demonstration effect of the groups already formed on the general public was negative in terms of getting benefits from government or non-governmental agencies which was very meager, according to the general public. This has created a negative impact on the mind of people around them and thus they were less willing to form into new SHGs.
- **Routine Activities:** All these groups (SHGs formed under both the program-WDEP and MASY) attend the regular meeting on weekly basis. Saving is a must in every meeting. Discuss on various issues. Plans for their development. Helps each other to solve their personal and community problems. Puts their efforts for village developmental programs. The Group Organizers organize various awareness/ training programs for SHG members and Volunteers, if found necessary. Also invites the experts to deal with necessary topics. But how long the routine activities can attract the community?
- **Lack of Resources:** Janakalyan never had a program fund for its main program of Women Development. A small amount of fund was channelised through Prerana, Raichur by Ekata NGOs Network to meet the staff costs in terms of

honorarium. Also under the MASY scheme a small amount of fund was channelised again through Prerana, Raichur to meet staff and training costs. These was stopped from March 2000 and then it became extremely difficult to manage this program. Both financial as well as Human Resource become the obstacles for Janakalyan to carry out its planned activities under WDEP.

What is the way out ?

Janakalyan then realized the fact and adopted an innovative strategy for coming out of the complex context. It had a concept of withdrawal from the beginning after making the members capable of managing their affairs or in other words after achieving the set targets. Due to lack of resources and other constraints, it had to apply the same strategy at this stage.

In each colonies about 10-20 SHGs were formed. To bring one-ness among these SHGs it had an apex body at village level called *Sangha Darshini Samitee* (Steering Committee) where two members from each SHG are nominated members. It was introduced after 1¹/₂ years of formation of these groups. Now Janakalyan felt the need for introducing the concept of Federation at the cluster level to get the whole mass under the single banner. Finally formed a cluster level federation of women SHGs named “**Milan Teertha Federation**”.

Why Milan Teertha Federation?

The agenda behind forming the Milan Teertha (Pilgrims for Meeting each other) was to bring all the members under the same banner. Also at the present context of various constraints it can be a way out to keep the SHGs alive. The concept of volunteer was then introduced through the Milan Teertha that each group must select a volunteer to maintain its affairs. The cost must be born by the respective SHGs while training the volunteers will be done by Janakalyan. Thus both the financial as well as staff constraints was resolved. The group activities were going on smoothly without the aid of any external agencies. Thus it can be termed as an community run program with 100% participation.

Acting to the Opportunities

Animal Husbandry is taken as the IGA of this region since from the beginning as it is feasible considering the socio-climatic condition of the region. Almost all the credit availed by the members are usually used for purchasing cows. It has also promoted 4 Milk Producers Cooperative Societies (MPCS) in 4 colonies by these SHG members and farmers. Two among these MPCS are exclusively run by women while other 2 are by mixed group. These are affiliated to the Karnataka Milk Federation's (KMF) existing marketing network. About 793 milched cows are available with these SHG members purchased out of saving as well as loan availed from different sources. More than 2000 liters of milk is sold daily by the villagers in these MPCS as well as the private Milk Collection Centers.

The prevailing price for milk in these MPCS is Rs.7.40 per liter while the market rate is more than Rs.12.00 per liter. The farmers, who produces the milk with his/her all efforts and labour gets such a low price while those who are no where involved in the process get a margin of Rs.4.60/- per liter. The members of the Milan Teertha

responded to the opportunity and formulated a policy to intervene in this area with an altogether different strategy.

Conceiving the idea of Milk Marketing Center

Milan Teertha came up with a proposal of starting a Milk Marketing Center at nearby town so that they can give reasonable price of milk to their women. Also to meet the expenses of Milan Teertha it can generate a small fund with the margin in marketing the milk. Again the people of the cities do not get pure milk which they can make them available at reasonable price.

If it sales at least 500 liters of milk out of 2000 liters at Rs.12.00 per liter purchasing @ Rs.9.00 per liter, it can generate a surplus of about Rs. 45,000 a month (Rs.3 per liter x 500 liters per day x 30 days). If the transportation and other costs is about Rs.1.50/- per liter, even then about Rs.22,500/- will be the net profit per month. The community will get higher and reasonable price while the ultimate buyer will get pure and fresh milk. The Milan Teertha will be able to manage its affairs without any external support.

Starting a Milk Marketing Center

Janakalyan found the idea economically viable and decided to support it with the assumption that Milan Teertha will be able to manage it effectively. It was too soon to arrange the finance and other necessary equipment when Prerana, Raichur agreed to give a soft loan of Rs.50,000/- to the Milan Teertha Federation for the holy approach. The loan was released on 9.7.2001 and the works started the next day onward. The rest amount was managed by Milan Teertha itself collecting Rs.1000 per SHG as membership fees to the Federation. A freeze of 400 liters capacity was built in a rented room at Sindhanur. The Milk Marketing Center was inaugurated on 20.09.2001 by the Sri K. Suryanarayan, KAS, Tahasildar, Sindhanur in presence of the Social Welfare Officer, the CDPO, the Bank Managers, Taluka Industries Officer and other distinguished guests. The Social Welfare Officer announced that the milk for his departmental hostels will be purchased from this center while CDPO for the Angan Wadies. Bank Manager expressed the willingness to finance it while Tahasildar announced all kind of cooperation from his side. The marketing started the next day onward.

The Lessons Learnt

Business is not everybody's cup of tea and in the business marketing is the toughest phase. The business Milan Teertha started is nothing but pure marketing. We would have considered the following factors before starting the Milk Marketing Center at Sindhanur that -

- Every family of Sindhanur town presently consumes milk of their choice from one or the other sources at whatever prices; we will have to find some attractive attribute (Unique Selling Point - USP) to attract them towards our milk, which is itself is a tough job.
- KMF and other well established marketing networks are already in existence in the town with ultra-modern and sophisticated technologies; we are with no technology and will have to compete with these networks.
- Local farmers from nearby villages (especially Andhra Farmers) supplies milk to the identified households at their door step; Door Delivery is always preferred by

the city people at whatever price and quality than purchasing from the Milk Marketing Center, especially at the morning hours.

However, Janakalyan has learnt the following from this experiment -

- The very first assumption that the Milan Teertha will be able to manage the affairs itself was a very big mistake on the part of Janakalyan. Its inner strength needs to be strengthened still. Also the managerial and marketing ability of the members need to be developed.
- The technological factors were completely overlooked from the scene and were not considered at all before launching such a big scheme where huge amount of money is involved. The packed milk on boiling after removing from the freeze gets spoiled and become useless for any purpose.

Otherwise, there is a great demand of milk even if we do not give door delivery. The hotels, certain individuals, few officials are interested in purchasing milk in bulk apart from the individual customers. More than 500 liters of milk can be sold daily without any efforts for marketing.

The Present Position of Milan Teertha

At present the marketing is stopped after continuous supply of about 17 days. The Milan Teertha is under a sever loss as more than 600 liters of milk become unsalable while the Milan Teertha had to pay for it to the producers @ Rs.8 per liter. It has to meet the recurrence costs towards the rent, electricity, etc. Again the marketing will be started only after training the members about the procedure to keep the milk salable with the present equipment.

CHAPTER II

PARTICIPATORY TECHNOLOGY DEVELOPMENT IN AGRICULTURE

Making Agriculture Profit Making with Self Developed Technology

Bird Eye View

To sustain the productivity of agriculture, Sustainable Agriculture Program with LEISA concept is being implemented in our project area since last 3 years. The strategies are modified from year to year according to the needs of the people and time. This year both, the program as well as the strategies of the SAP is being modified and a new technique called Farmers' Field School (FFS) is introduced along with the LEISA concept for Participatory Technology Development in Agriculture (PTDA). But the strategies of PTDA farming is also being changed in order to simplify the process of PTDA. Only one component of PTDA i.e. either the Botanical aspects or the Organic aspect or the Crops Recycling aspects of PTDA will be experimented with individual farmers and not the integrated approach was the plan in the initial phase. Also different crops are selected for experimentation as under -

Sl. No	Crop	No. of farmers selected under different crops & methods				
		Hybrid			Comp-act	Herba-cium
		Crop Recycling	Botanical	Organic		
1.	PTDA on Cotton	2	6	5	2	2
2.	PTDA on Bengal gram	5			-	-
3.	FFS on cotton	27			-	-
4.	PTDA on Paddy	4			-	-

All these activities are being implemented in 3 villages of Sindhanur taluka situated at the tail end of the Tungabhadra Irrigation Project. All of them are waiting for monsoon to commence or water in the canal and finally could go for sowing only in the month of September.

However, due to drought and various other reasons, the planned activities could not be translated into practice and whole program became a hapazard task, despite all the attempts. Germination was as low as 62% and gap filling was also almost impossible due to non-availability of water for irrigation and least soil moisture content. Few training were conducted in this period while one exposure trip was also arranged for the farmers. Farmers Field School continued well in R.H. Colony No.3 with very good participation. Necessary critical inputs were arranged in time which otherwise is a major factor for failure of agriculture in Indian condition.

The various activities undertaken during the year is furnished in the table below.

No. of farmers			No. of Field Class		Trainin g attende d	Training organized for farmers	Exposure organized	Field Day
PTDA	FFS	Total	PTDA	FFS				
26	27	53				5	2	1

What is PTDA?

Central to the concept of Low External Input Sustainable Agriculture (LEISA) is the shared vision of empowered resource-poor farmers as the need to constantly improve the agricultural technology components to suit the changing socio-economic, ecological and environmental needs and concerns is termed as Participatory Technology Development in Agriculture (PTDA).

What is LEISA?

LEISA is a means and a path to remain “competitive” in spite of the onslaught of impoverishing “hi-tech” solutions from various quarters of the system. The goals of the farmers pursuing LEISA thus extend far beyond the simple mindset of quick profits, into the hard issues of ecological soundness, Sustainability, self-reliance, etc.

Why PTDA at Janakalyan?

Janakalyan took birth for the farming communities of tail end of Tungabhadra Irrigation Project (TBP) in 1997. The rehabilitated farming community of East Pakistan started their journey without destination in late 1960s and reached the tail end of TBP in early 1970s with an obscure hope in their eyes. Most of the dreams dried out when they reached dry Raichur. However, the Tungabhadra River blessed them with her neat, clean and pure water both for irrigation as well as drinking purposes by extending one of her arms. It irrigated the dried up dreams and encouraged the despaired refugees by showing way for their livelihood. With new area, new climate, new soil new technology and new methods they started their livelihood by growing new crops. They challenged all the difficulties and learnt by practice and finally adapted to the new environment experiencing many crest and troughs in their lives.

Water, the life of any living creatures, was available in plenty for irrigation as well as drinking purposes. The peasant community resettled here were from a country of river and therefore never knew the concept of irrigation and never faced water scarcity. Therefore, applied water like anything to their field with the hope that more water application will result into better yield. The similar concept was true for the fertilizers and pesticides too. Resultantly, the soil turned to be saline and alkaline and also the ground water table risen to the root zones. The yield of cotton started declining. The farmers are caught into the trap of Debt.

In such condition, Janakalyan realized the need for its intervention to restore farmers in agriculture and thus the PTDA was introduced.

2. Activities Performed

Several activities are performed under PTDA throughout the year. The important among them are described in this section.

2.1 Technology Followed

Land Preparation : The peasant community of the region used to use the draft animals for land preparation. They didn't have the reasons behind land preparation and hence used to do it just before the sowing. Proper training and exposure made them understand the benefits of land preparation in advance and the farmers now prepare the land well in advance. Importance of soil dressing was also discussed with the farmers and thus they follow it to some extent.

Seed and its treatment : To select the cotton seed, a meeting of all the farmers and consultant was organized and NHH 44 and Banni was selected unanimously for this year. How to select the seed, what attributes are to be taken into consideration while selecting seeds, etc. were discussed in this meeting. Seed treatment methodologies, its importance and chemicals to be used with doses is explained to the farmers in this occasion.

Sowing & Gap Filling: Sowing was done between July 28 to August 5 which can be considered as the late sowing. This was so because the monsoon failed and the tail end farmers did not get canal water. Germination % was seen as poor as 62%. Therefore, the farmers were advised to go for gap filling. Most of the seeds used for gap filling did not germinate as the soil moisture content was very low and water was not available for irrigation.

Intercropping & Pests Control: Farmers were then suggested to go for intercropping with various crops so as to control the pests as well to fill the gap remained even after the gap filling was done. Different crops suggested were ladies finger, marigold, sun flowers, etc. The farmers realized the importance of intercropping and now they themselves learnt how intercropping can control the pests.

Weeding & Harrowing: As the soil moisture content was very low the weeds growth was almost nil and therefore the weeding was rarely done. However, the harrowing was advised frequently to open the soil so that the plants survives for some time.

Pests and Disease Management: Lately few pests and diseases were found such as heliothis, drying up of plants and colours of the leaves becoming brownish, etc. Accordingly the advises were given and followed. Although, botanical measures were advised to control the pests & diseases, deviation were found in practice. However, at the end of the experiment the farmers realized the importance of these botanical measures. But the reasons why they deviate from the suggested measures is non-availability of the ready-made products.

Agricultural inputs arrangement: Timely arrangement of inputs in agriculture plays the important role. This year we could arrange the following

inputs while we failed to provide the required inputs as AMER, i.e. the resource providing organization, did not supply them as per the agreement.

Table.2.1.1: List of the inputs arranged for the farmers during the experiment.

SI. No	PARTICULARS	Quantity	Source	Arrangement by
1	Cotton seeds NHH -44	2 packet	--	AME - R
2	Cruiser	1 Packet	--	AME - R
3	Tricoderma	5 gm	--	AME - R
4	Abosporilium	10 packet	Agriculture Office	Janakalyan
5	Hybrid Jowar seeds	1 packet	Agriculture Office	Janakalyan
6	Hybrid Maize seeds	2 packet	Agriculture Office	Janakalyan
7	Cotton seeds	5 packet	Agriculture Office	Janakalyan
8	Castor seeds	3 packets	Agriculture Office	Janakalyan
9	Tricoderma	5 bottle	Agriculture Office	Janakalyan
10	Cotton seeds RAHH -1	2 Kg	--	AME - R
11	Compact cotton seeds	17 Kg	--	AME - R
12	Herbarium	10 kg	--	AME - R
13	Tricoderma	1 Packet	--	AME - R
14	Posphobacteria	1 packet	--	AME - R
15	Neemseeds	4 trolley	Timmapur	Janakalyan

As the Revolving Fund is meant for the identified Critical Inputs to the farmers who are taking the risk to experiment the technology in their field, the same cannot be extended to any kind of inputs. But in normal condition the inputs, which are identified as the critical inputs, may not hold good in the adverse condition. And the farmers of this area were passing through such an adverse condition of drought followed by heavy rain. In such condition the inputs which the land organizer has suggested in consultation with farmers could be treated as Critical Inputs. Because survival of the crop was the major issue during those period than experiment to evolve a technology for the farmers. Therefore, few inputs were requested from the resource agency well in advance. The agency asked one of its employee to evaluate the need for such inputs and according to his report, the inputs were not supplied. Thus, the standing crop suffered its growth and accordingly the yield.

Why farmers deviate from suggested technology?

It was an unknown area for Janakalyan till this year. An workshop with experienced farmers, consultants, subject matter specialists and field worker were organized to know the exact reasons for such deviation. The outcome is as under -

Late sowing due to non-availability of irrigation water and prevailing drought resulted into very less germination rate. Gap filling was again a waste of resources as it maintained the germination rate at 62%. This affected the psyche of the farmers. Again the heavy rain in a short span of 15 days inundated the crops and reduced the plants per plot still lower. It also hindered the growth rate of plants. The total vegetative growth affected the psyche of the farmers like anything. Therefore, almost all the farmers tried to deviate from the agreed package and used their own measures to ensure that they get optimum yield from their plots.

The plan of experimenting each aspect of PTDA with different sets of farmers failed and few of the farmers dropped out from the practice. Janakalyan failed to convince them with all attempts. Finally, the attempt to experiment the Botanical, Crop recycling and organic aspects of PTDA with different farmers failed. The other reasons for such failure is the concept the previous years' farmers developed out of their experience that PTDA is a *wholesome approach* and therefore, they *find it difficult to make it into pieces*.

Deviation from the agreed package of practice was very high in this year due to the above stated reasons and also the following-

- **No Specific achievement in the past** - Janakalyan is experimenting PTDA in this area for the previous 4 years; but it failed to exhibit any specific change or achievement from a layman's perspectives, although there are various reasons for such failure like,
 - ⇒ Every year a new set of farmers were selected for PTDA process thus starting from zero. The farmers knowledge and skill need enhancement again from nil.
 - ⇒ New pieces of land are used for experiment, even by the old farmers, to experiment the PTDA process. Therefore, continuation of the process breaks and thus the yield reduces as that of the first year.

Therefore, most of the farmers lost their faith in the process.

- **No faith in the PTDA system** - Farmers do not believe in the LEISA concept as it does not give immediate result.
- **Non-availability of ready-made materials** - The measures advised in LEISA concept are usually botanical as well as organic. Such materials are not readily available and also requires lot of time and labor to make them usable. The farmers are influenced by the modern technologies and are reluctant to the age-old practices. The demand ready-made materials for use.
- **Practical problems** - There are certain practical issues like collection of cow urine, parthenium, ipioma, etc. which become psychologically unacceptable for few farmers (usually male farmers).
- **Demonstration problems** - We recommend various measures for various pests & diseases; none of them is available in ready-made form. Preparation of such measures requires certain skills and formula. The farmers need to be trained practically with all ingredients.
- **Investment for Equipment** - To prepare the recommended measures, the farmers require certain equipment like grinder, gloves, etc. It become

uneconomical and impracticable to invest such amount for these equipment by each farmer.

- **Technical Problems** - The farmers do not know about the ingredients require for preparation of different mixtures like Kamadhenu. The literature with detailed procedure to prepare different mixtures should be available with the grass-root organization so that it can be provided as and when requested by the farmers.

2.2 Social Mobilization :

PTDA demands participation of the community in evolving suitable technology for growing particular crop in particular climate and region. Ensuring community participation is of greater importance for such a process. The following has been done in this direction in the last two quarters.

2.2.1. Participation of the women in the *Satyagraha* for Refugee Issues:

It is discussed with the women in an one day training about the role of woman in the social development of the refugees. A week long *satyagraha* was lunched in front of the Tahasildar and about 3000 women from all the colonies actively participated in all the 8 days. The last day was the hunger strike wherein also the women involved. About 6000 men also took part in this strike. Finally the Deputy Commissioner agreed to solve the issues at the earliest. The *satyagraha* was withdrawn only after a written agreement between the District Administration and us.

2.2.2. Weekly Meeting & Sustainable Agriculture :

The women Organizer attend the weekly meeting of the Self Help Groups to discuss about the processes to be followed in the succeeding week. It is one of the advantages of involving the women in agriculture program. They meet every week and we can discuss about the steps/activities that are to be followed in the following week, which is not possible with the men. They never attend the meeting, regularly, even if we remind them to do so.

2.2.3. Independence Day Celebration

It was celebrated in the Janakalyan Office wherein all the farmers and women SHG members participated actively in large numbers. The refugees were reminded about this Freedom which they have got by loosing their ancestral properties, friends and relatives.

2.2.4. Inauguration of Pousthik Milk Marketing Center at Sindhanur.

Milan Teertha Women SHGs' Federation has inaugurated a milk marketing center at the Sindhanur city with an investment of about Rs.75,000/-. The Tahsildar Sri N.Suryanaryan Rao, The Child Development Project Officer, The Social Welfare Officer, The Bank Managers and other distinguished guests were present in the program. Pousthik is the brand name of the milk sold in this center produced by the women members of the SHGs.

2.2.5. Hyderabad Karnataka Vimochana Dinacharane.

September 17 was observed as the Hyderabad Karnataka Vimochana Dinacharana by the SHG members in the Organization. Many farmers were also participated in the program.

2.2.6. Mahanama Sankeertana

Blind Belief has become an area where NGOs have started preparing proposals. But we the team members of Janakalyan had to believe in the blind belief when it started raining in this severe drought conditions after celebrating the "Mahanama Sankeertana" by the villagers of R.H. Colony No.4. we all had no other option but to participate in the celebration with women and farmers of all the five colonies.

2.2.7. Gandhi Jayanti

The Birth Anniversary of Father of Nation was celebrated by the farmers / women of the area in the Janakalyan Office on 2.10.2001. A small discussion was arranged on ideology of Gandhiji and Gramswaraj. The role of agriculture in Indian economy and village reconstruction. Many women / farmer participated actively in the discussion.

2.2.8. Dasara - the Main Festival for Bengalis

Culture, the sign for distinguishing a community from the other, need to be preserved at any cost. Moreover, the communities which are living in the Sindhanur Rehabilitation Project for more than 3 decades, has little more concerned about their culture, religion and respect. Otherwise, they had all the possibilities of staying in Bangladesh at the cost of their religion and respect. They have preserved the same and still they celebrate all their festivals among which DASARA is the major. This year also they have celebrated in their own traditional way.

2.2.9. Karnataka Rajyotsava

1st November is celebrated as the Rajyotsava of Karnataka State when Mysore Kingdom was renamed as Karnataka. Even though the people with whom we are working are of Bengali mother tongue, they celebrated the DAY as a grand function with participation of men, women and children of both sex. Children were dressed like great leaders of Karnataka and then a procession was taken into the main streets of the village in the morning hours. Evening a grand function was organized in the presence of Sri M.S.Shrikar, IAS, Asst. Commissioner of Lingasugur, Tahasildar, CDPO, Bank Managers and other distinguished guests. Cultural programs were also arranged by the children on this occasion.

2.2.10 Deepavali - the fight against darkness

Deepavali is known as **Festival of Lights** while Janakalyan considers it as fight against darkness. It was celebrated by the women in an innovative and tradition-breaking way. A group of women took a big candle in their hand along with sweets. They visited from one door to the other of every SHG members and lightened a candle kept near their door. Distributed sweet to their families and took the lady with them and the process continued for each

and every members. The darkness of whole village was removed with a single candle.

2.2.11 Vivekananda Jayanti

It has now become a Festival for Child of the Rehabilitation Project which is actually the Annual Day of Vivekananda Hindi School celebrated on 12th day of January every year. Janakalyan participates actively in this festivals wherein they get lot of opportunities to motivate children in education. It gets opportunity to convey the message to different target groups through this program.

2.2.12 Netaji Jayanti

Netaji - the great leader of Nation; his 106th Birth Anniversary was celebrated in Ma Sharada Child Labour Special School on 23rd January. "If a child Labour like me can become an Officer like BEO, then there are possibilities that many of the Child Labors may become Netaji" was the statement of the Chief Guest of the Day.

2.3 Gender Involvement

It is an well established fact that women performs most of the activities in farming than men. Even then the word "farmer" usually refers to men. Why? Janakalyan realized it only after two years of experiment in PTDA. Thus changed the strategy and involved women also in the activity. Appointed an Women Organizer for the purpose. Information are directly passed onto the women also through training & exposures. They are involved in the training, exposure and workshops so that they get equal opportunities to share their views and gain from others. They are also involved in decision making process. Various inputs on gender role, leadership, family management, etc. are also given from time to time.

2.4 Participation of other actors and their involvement

Many other actors, who has direct relation with mankind, are also requested and made to participate in the process to facilitate the farmers. Such actors are -

Department of Agriculture: Any Policy must percolate down through its own structure therefore Agriculture related policies percolate down through Department of Agriculture. Since, ours is agriculture promoting activity we involved the Department from the very beginning. The Department organized few training for our staff and farmers. Also they participated in our field activity and programs. We did succeed to get their support in various other ways also.

Department of Health and Family Welfare: The Women, who work in the agriculture field, generally suffers from many diseases for which they hardly get opportunities to consult a physician due to various reasons. We mobilized the support of the Department of Health & Family Welfare and organized a series of Health Check up Camps in each of these colonies. About Rs.10,000/- worth medicine were distributed among the patients.

Block Administration: When symptom of Cholera was seen in one of the Colony, immediate step was taken and as precautionary measure, about 100000 halogen tablets were distributed in all the colonies. The support of the Department of Health and Family Welfare was sought for the same. The Block administration also responded immediately and ordered for necessary arrangement from the concerned dept.

3. Training Attended by the Organization

The Human Resource is the most important resource for the organization and Janakalyan always gives important to develop the capacity and skills of the employees. The employees of Janakalyan were trained in different aspects of agriculture from different resource institutes.

Table 3.1 Training attended by the staff at AME, Raichur during this quarter.

Sl. No	Date	Subjects Covered	Resource Person	Participants	Place
1	4.7.2001	Review of previous years program	SSKandagal	Shishir Meenakshi	AME-R
2	7.8.2001	Review of Works	SSKandagal	Meenakshi	AME-R
3	4.9.2001	Review of Works	SSKandagal	Meenakshi	AME-R
4	20.11.2001	Enhancement of training skills	SS Madiwaler G Swamy	SR Roy	AMER
5	30.11.2001	Total Yield Estimation	Robin, B.Ghosh, Dilip, Badiger	SR Roy	Tawar gera
6	16.1.2002	Gender	Sulagna Sen Gupta	SR Roy Meenakshi	AMER
7	5.3.2002	Documentation	SS Madiwaler G Swamy	S R Roy	AMER

4. Training Organized by the Organization

Not only the employees of Janakalyan but also the participants are trained by us to capacitate them to implement & translate the plan into practice. The following training programs were arranged during the year for the farmers.

Table 4.1 Training Organized by Janakalyan in this quarter for participants.

Sl. No	Date	Subjects Covered	Resource Person	Participation			Place
				Me	Women	Tota	

				n		l	
1	22.6.2002	Land Preparation & Soil Dressing	S R Das	20	17	37	Janakalyan
2	30.6.2001	Seeds Selection & Seed treatment	S R Das	22	19	41	Janakalyan
3	21.8.2001	Drought & Intercropping	S.R.Das	17	7	24	Janakalyan
4	16.1.2002	NSKE preparation	Prasen Meenakshi	-	19	19	Janakalyan
5	18.1.2001	Compost Making	Meenakshi Subhash	17	7	24	Janakalyan
6	23.3.2002	Role of Vermi - Compost in agril	Virupaksh appa	23	0	23	Diddigi

5. Activities Planned but could not complete

- Although the Neem seeds of 4 trolley were purchased from a farmer of Timmapur village, we failed to prepare Neem oil because the seeds were not clean and were rotten. This has added to our learning as we didn't have proper knowledge about the procedure and technique we have failed in the approach. However, the seeds have not gone into wastes but decided to crush and use for the paddy crops as fertilizers.
- Crop Recycling in PTDA failed as because the farmers waited for the rain till Late August and then decided not to go for cotton this year as it was already too late. However, they have sown cotton in other plots where they have not recycled the crop wastes. Therefore, we have decided and asked the farmers to put the inputs for an amount equal to the return that the farmers have received in the previous crop from the same piece of land.

6 Other Activities

There were few other activities which were conducted during the reporting period. They have relevance with the PTDA process.

6.1 Exposure to Upareal

Farmers Field School (FFS) was a new idea for both us and the farmers for the year. To gain a primary knowledge about the program by virtue of practical visit, an exposure trip was organized to the SPREAD's field area on 24.7.2001. Mr.Lingappa, a farmer of Upareal village has shared his knowledge gained through experience during the visit.

Participants	Male	Female	Total
Farmers	11	0	11
NGO staff	2	0	2
Total	13	0	13

6.2 Exposure for Diddigi Farmers

An internal Exposure Visit was organized for the farmers of Diddigi Village on 8-12-2001. About 15 participants are from the Diddigi village while rest are from R.H. Colony No.4 .

Participants	Male	Female	Total
Farmers	7	8	15
NGO staff	5	0	5
Total	12	8	20

Purpose of the Visit : PTDA is being implemented by Janakalyan for the last few years in Rehabilitation Project of Sindhanur. Extension of the same is equally important as that of demonstration. With this preamble, this exposure was organized for the farmers (men & women) of Diddigi village where Janakalyan has already intervened with few other programs. Also the achievement of the SHGs of Rehabilitation Project could be exposed to the newly formed SHGs of the Diddigi village. The ultimate objective of the exposure was to introduce the technologies of Janakalyan so that in near future the same can be extended to Diddigi and other nearby villages.

Field Observations : What is Control & Experiment Plot? How to manage these plots? What are the methods of botanical & other methods of pest control? etc. regarding the PTDA experiment was described by the farmers in detail. Also the plots were shown them to get a practical orientation of the program.

The process of SHG formation, starting of 2 Dairy Farms through SHGs, management of cows and use of cow excreta for crop management, etc. were discussed in detail. The waste management cycle was very impressive.

Learning from the Exposure Visit : Improvement land fertility & maintenance of soil health is possible through PTDA process of cultivation. Thus sustained yield could be anticipated and hence economic stability of the families. Also the intercropping and pest control method was also realized by them.

But few of the farmers raised the question that it is possible only because the area under PTDA is in the irrigated belt while the Diddigi are is dry. They were then convinced when it was discussed that how it is suitable in the dryland belt also.

6.3 Field Visits

Unlike other years the work load of Land & Women Organizers has increased as the number of farmers as well as the villages are increased along with a new program called FFS. Therefore the Organizers faced little time constraints to visit all the fields regularly. The another major reason for the same is mobility. Neither Janakalyan has vehicle to offer to the staff nor it has the budgetary provision for travel in the agreement.

Despite all these constraints the organizers visits the PTDA plots twice a month. However, if the organizes feel the necessary that any plot requires another visit the organizers definitely make another visit at appropriate time. Regular contact with the farmers are also made as when they are available. The Women Organizer also discusses about the filed observations in the SHG meeting.

6.4 Consultants visits

The frequency of visits of the Consultant has doubled this year to that of other years when he used to make only two visits a month. Further, the service of a second person accompanying the Consultant is also available every week.

No doubt the availability of Human Resources has been increased but the services to the PTDA process is reduced equally. The Consultants were usually busy in the FFS activity during their visit while they gave very little time for the PTDA process. This aided in the success of FFS while it also hampered the PTDA activity, we believe.

7. Farmers Field School

Farmers Field School (FFS) is a new and relevant technique for technology transfer to the illiterate farmers. It is equally interesting and effective according to the farmers.

In this program a class in the field of the farmers was conducted every week and the developments and field conditions were actually observed by the farmers in groups and then discussed for the measures to be taken for the pests or diseases that were observed in the field. Thus every thing is in practical and cent per cent participatory. Therefore the impact was better, we believe.

FFS has been an innovative participatory way to teach and learn together about management of pest, initiated this year with the farmers of tail end of TBP. About 25 interested farmers were selected for the school from R.H.Colony No.3 and Mr.Sudhanya Sikdar's field was selected as the experiment plot for weekly class. The objective of the program was to go through the every step of crop life. Every week the selected farmers assembled in the plot and then they were made into 4 groups. Then they were asked to study each aspect of at least 5 plants like leaves, stems, height of the plant, buds, flowers, different pests, diseases and so on. And then they were asked to analyze the observations. Ultimately they decide the next course of action for the next week and accordingly suggest the owner of

the plot. Likewise every Wednesday the farmers assembled and continued the process.

7.2 Awareness at Diddigi

A One-day Awareness Program was conducted Diddigi village of Sindhanur taluka. About 40 farmers of the village participated in the program. The consultant of AME, Raichur introduced the PTDA process to the present farmers in detail.

7.3 PTDA beyond Cotton

Janakalyan has moved beyond the cotton crop to develop a technology through PTDA process. It is experimented with various other crops like Paddy, the major crop of the area and also with Bengal gram.

7.4 Field Day on Integrated Pest Management for Cotton

Whatever has been done through FFS & PTDA must reach to the larger section of the farming community and field day is one such tool to communicate effectively the result to the rest. A grand field day was organized on Sudhanya's plot on 25.1.2002 wherein Mr.K.Virupakshappa was Chief Guest for the day. Many other distinguished guests like Asst. Director of Agriculture, Director of Instruction of College of Agriculture Engineering, Professor of College of Agricultural Engineering, Progressive farmers like Virupkshappa Gouda, Mudegouda, elected members like ZP, TP & GP members etc. were present on the occasion. Gram Panchayat President Smt.Vishalakshi presided over the function. Farmers from all the neighboring villages and also from Diddigi participated in the program.

8. Workshops

Janakalyan believes in participatory approach and hence often organizes workshops to find out the possible factors contributing to a particular activity. During PTDA experiment too, whenever faced any difficulties in implementation, the same tool was used to resolve it.

8.1 Why the participation is low in FFS program? - an one-day workshop

It was very difficult for Janakalyan to involve the farmers in the process towards end of the program. Therefore, felt necessity to know the factors contributing to it. An workshop with participants, experienced farmers, specialists and field workers was organized to know the possible reasons so that they could be rectified in future course of action. The following reasons were identified by the group present over the workshop:

- **Laziness (inactive) of farmers** - they seat gossiping in the tea hotels but do not go to the FFS class to learn new things for their livelihood.
- **Habit of the farmers** - the farmers are habituated with the existing system of work culture like expecting more with limited or least efforts. Therefore they are adopted with the ready-made chemicals.

- **Proud of being expert** - farmers feel they know better than Janakalyan or AME about farming. University knowledge does not hold good in the field.
- **No faith in the program** - farmers do not believe in the PTDA program i.e. organic farming. They expect immediate results.
- **Farmers being non-calculative** - no farmer keep the account of their income-expenditure. Thus they are not able to compare the cost-benefit of different systems like PTDA and others.
- **Existing Marketing Network and Credit availability** - the chemicals marketing networks have extended their arms in the village level too. Anything and everything for farming is available on credit at the doorstep without any efforts. Therefore, the farmers do not think even for any other alternative.
- **The Environment** - The chemical environment has influenced each and every farmers as it gives immediate return. But the farmers never realizes the long term impact on the soil, health and other aspects. Removing from the farmers from the system means removing them from the environment. Therefore it is a tough but necessary program.

8.2 Relevance of Sustainable Agriculture in Tail End of TBP - an one-day workshop

A need assessment exercise with the tail end farmers was conducted on 11.11.2001 at Janakalyan to decide the relevance of Sustainable Agriculture Program in the tail end as the participation was declining day by day. The participation was as under-

Sl. No	Name of the Colony	# of farmers present		
		Male	Female	Total
1	R.H. Colony No.3	3	-	3
2	R.H. Colony No.4	7	-	7
3	Janakalyan	3	-	1
4	AMER	1	-	1
	TOTAL	14	-	14

Is the Sustainable Agriculture Program (SAP) relevant in the present context of tail end? Or is it only Janakalyan feels its necessity and not the farmers? Any program which is need-based can see the participation of the community. As the participation of farmers in the SAP is almost nil, we can come to the conclusion that the program has no relevance in the present context and only for the sake of Janakalyan it is being implemented.

The workshop come to the conclusion that the SAP is very relevant at the present context and need to be continued. Otherwise, the future generation will have to suffer for the mistakes of the present generation.

Why the participation is as low as zero? Whether Janakalyan, AME or farmers themselves are responsible for the present condition of the program? Or whether the problem lies in the program itself?

What should be strategy to continue the program at the present condition to address the issues listed above so that we achieve the objectives of the program?

Though, the results do not match with our expectation level, the following came in the fore front with the participatory process-

- It should be a group activity.
- Unity is a must among the farmers.
- Politics and politician must be kept aloof.
- More and more involvement of Janakalyan as well as AMER is required.

It was also discussed with the participants that everytime new faces are seen in the FFS class which should not happen. By this the class (FFS program) will continue but the result will be nil as none of the farmer will complete the entire IPM course and thus will not qualify. The question of including new and the PTDA farmers was also raised by the participants. The decision was that they can voluntarily participate in the classes at their own interest.

The identification of the farmers in the beginning caused all these problems. The farmers enlisted their names in the list with an expectation that they will get certain benefits, subsidies, etc. The participants expressed that the program is in the present condition only because of fault beginning. However, they assured their participation and also to influence other colleagues to attend the program in future. Also they demanded a certificate at the end of the program that they have participated in the Farmers' Field School.

9 Janakalyan feels

The reasons for present condition of Sustainable Agriculture Program, besides the above factors, are -

- **The farmers selection:** Only big farmers are being selected for the program who has at least 5 acres of land or than that. Their major crop is paddy while cotton is being cultivated to avoid fallow condition so that the weeds do not covers the land. The irrigation water available on such areas of land can be used for paddy crop. The farmers are least bothered about the cotton crops. If anything comes out of it is additional.
- **Same measures for every pests/diseases:** In PTDA, we recommend same measures for each and every pests & diseases. While the farmers use different chemicals for different purposes. It generates a dilemma in their mind and reject our recommendation adopting chemical method.

How the program can be made a success?

- Only needy small & marginal farmers with limited resource should be selected independent of politicians.

- All the plots should be selected in a neighborhood. Otherwise, if farmer A follows the LEISA concept in the neighborhood of farmers B,C, D,....Z and if A's crop condition is not better than his neighbors, definitely it bears lots of impact on him and gets influenced by the neighbors. Also the neighboring farmers may also try to influence or criticize his activities. If all the farms are in the neighborhood, such problem will not arise.
- There should be different measures for different pests & diseases as there are different pesticides. Literature should be available with the grass-root NGO about the ingredients with quantity and market price, detailed procedures to prepare with the lists of equipment require, its functions and doses, frequency and application method, impact, duration for which it can be stored safely, alternatives available or can be prepared, etc.
- Individual approach should be followed. One-to-one contact should be made in the present condition with all the farmers to motivate them about the concept and its advantages.
- The Land & Women Organizers must go to the field regularly and make the farmers to follow the recommendation in front of them. They should also assist them in preparing the mixtures through practical training.
- It would be a great success only if the materials are available in a ready-made form. Therefore, if any individual or group can take up this as an IGA, the program will step towards the success.
- Regular training is very much essential for the farmers.

CHAPTER III

DAIRY DEVELOPMENT & CATTLE BREED IMPROVEMENT PROGRAM

A Better Hope for Sustainable Livelihood for Refugees

1 Introduction

- 1.1. Why DDCBIP ?** Dairy Development & Cattle Breed Improvement Program (DDCBIP) has been adopted as an Income Generation Activity (IGA) to improve the livelihood condition of the refugees in particular and the rural poor in general. The broad objectives of DDCBIP are given in the box 2.1.1.1.

Box 2.1.1.1: General Objectives of the DDCBIP at Janakalyan

- *To give a push to the family income of the rural poor who are below poverty line by adopting the Dairy as an income generation activity.*
- *To train and empower the woman and make her recognized by the society and enable her to feel that she is not inferior to man.*
- *To develop a climate-resisitant breed for the local agro-climatic conditions.*
- *To solve the common problems of poor Indians such as lack of medical service for their animals thereby ensuring the safety to their animals. This would make the IGA a profitable venture.*
- *To make the poor farmers enable to demand their rights from the concerned authorities.*
- *Disguised unemployed youths can earn gainful income adopting dairy as a subsidiary source of income along with agriculture.*
- *To make the people aware about the importance of vermi composting, composting, insurance, fodder, etc. in dairying.*
- *To help the farmers in effective utilisation of byproducts of dairy activity for productive purposes and also for crop & soil health management.*

- 1.2. Need for DDCBIP in the area:** These refugees have migrated from Bangladesh and they have been given five acres of land to cultivate and a thatched roof to live. Although land was fertile but did not have proper source of irrigation. It is in the irrigated belt for the name sake. They have very less income from their land by which they can't run their shows. The larger section of the community are now becoming wage labourers leaving cultivation of their own land. The table below gives a picture about the occupational profile of these refugees and repatriates.

It is clear from the table above that the refugees are left with no option of livelihood than agriculture and related activities. As the Rehabilitation Project is situated in an irrigation patch, no Industries have been set up so far. However, few rice mills have come up in the nearby towns. Thus, the refugees have neither an opportunity to find an alternative source of income generation nor are they competent enough to avail the existing facilities.

Whatever is their source of earning, as stated above, the income is insufficient for management of their family affairs.

Table-2.1.3.1: Number of families dependent on different occupation

Sl. No	Name of the Colony	SMF	LAL	Fisher men	Dairy	Business	Others	Total
1	R.H. Colony No.1	205	153	-	13	12	14	397
2	R.H. Colony No.2	268	253	53	17	13	23	627
3	R.H. Colony No.3	184	348	22	11	11	17	593
4	R.H. Colony No.4	168	257	14	19	12	19	489
5	R.H. Colony No.5	107	47	11	6	3	2	176
TOTAL		932	1058	100	66	51	75	2282
Per Cent age (%)		40.84	46.36	4.38	2.89	2.23	3.29	100.00

SMF : Small & Marginal Farmers

LAL : Landless Agricultural Labourers

Therefore, most of them have now adopted dairy as a subsidiary source of income after the intervention of Janakalyan. From the table above we find that only 2.89% (66 families) of the community are dependent on dairy. The figures furnished in the table above are of the families whose sole source of income is as specified in the table while almost all these families have 1-2 cattle as a subsidiary source of income.

These colonies are located in very remote and interior place and major portion of the habitants are from backward communities. These are not even connected with proper roads neither they have any communication means. No veterinarian is available in the area and if their animals fall ill or comes to heat they have to go to Sindhanur or Jawalgera which are around 10-15 Km from these colonies. Also, most of the farmers don't have knowledge about the management of cross breed animals. Although cross breed cows rearing is profitable venture, it can kick a family to the chronic stage of poverty. To cover this risk, Insurance plays a crucial role which the farmers of the region are ignorant about. Adopting dairy as an IGA the per capita income of the family could be increased reducing the disguised employment of the youths. This would also improve the productivity of the land. It is in this context, as stated in above paragraphs, Janakalyan felt the necessity of the Dairy Development & Cattle Breed Improvement Program (DDCIP).

- 1.4. What is DDCBIP:** Dairy Development & Cattle Breed Improvement Program (DDCBIP) at Janakalyan aims to see an economically secured life of rural poor, specially women, in Rehabilitation Project of Sindhanur block in Raichur District. It is an innovative program in the sense that it aims to develop a cross breed cow using the locally available breeds through crossing over a period of time. Dairy is taken as an Income Generation Activity (IGA) through the SHGs to generate an additional income for the families of these women. Micro Finance is another major component of DDCBIP which will enable them to purchase the cows, as these women have no access to the formal banking system. At the same time, Janakalyan does not believe in creating parallel structures for service but availing the same

from the suitable authority. But till such time, it can motivate the bureaucrats for their services, the people need to survive. This program is to provide such temporary services for the time being.

Another major component of the program is formation & strengthening a Federation of Women SHGs through training and exposures. As Janakalyan exists for people's empowerment, which is only possible through people's institutions, the DDCBIP is aimed at forming such an apex body of all the SHGs. The ultimate aim of the program is to develop the capacity of these women to demand for their rights (services) from the government and to develop a breed suitable for the climatic condition of the region. Its future plan is to hand over the responsibility of developmental intervention at Sindhanur Rehabilitation Project to this Federation, once they acquire the required skills.

- 1.5. Supporting Agency:** Janakalyan has plans for improvement of livelihood conditions of these refugees. But, to translate these plans into action, it did not and does not have the required resources. **Sir Ratan Tata Trust**, Mumbai is supporting Janakalyan to translate its plans of creating sustainable livelihood options for the refugees and repatriates. The Governing Board and the employees of Janakalyan are indebted to the Trust for its valuable support for the cause of these deprived communities.

The other areas of strength of Janakalyan is a cadre of committed and qualified employees who have dedicated themselves for the cause of the rural Indians. They are working with least remuneration to serve the needy communities. Without their valuable service the program would have a sheer failure.

2 Medical Service

Medical Service is provided to the cattle grazers as a back up service to promote the livestock rearing as an IGA and is the major component of the DDCBIP. Initially, if the farmers had to invest even a small amount for medicine, then the profit figure will reduce by equal amount. Then, the farmers would not like to adopt the dairy as an IGA. Also, since the service is not available in the area, even if the farmers have the capacity to invest for the treatment of his/her cattle, s/he may not be able to save the sick / injured animals due to lack of adequate facilities. This would again demotivate them to leave up the activity. To overcome these problems and many other issues, medical service is being made available for the cattle grazer for the time-being.

2.1. How do we Provide Medical Service ?

Centrally located Veterinary Clinic: This is located in the R.H. Colony No.4 and the Doctors reside in the Clinic throughout the day. Almost all the required medicines are stored in the clinic in a manner prescribed by the manufacturers. The clinic has got a refrigerator in which some of the medicines can be stored. Generally, the Doctors avoid giving medicines and

explains how to overcome the conditions by giving nutritious food. If the conditions are serious and really required the medicine, then they are either given or prescribed depending on the position of the stock and economic condition of the cattle owner. The Doctors are available here between 7.00 to 11.00 a.m. for the clinical service for the new and follow up cases.

Weekly Visits to each Colony: In the evening between 5.00 to 7.00 p.m. the Doctors with his staff visit any one of the Colonies every day. The most commonly used medicines and medicines of seasonal importance are carried during these visits. The animals are brought to a community place where the Doctors treat these animals and prescribe medicines.

Service Round the Clock: Doctors give the door service to the needy animals even in the midnight. If the animal is so serious that it can't be brought to the clinic then the doctor visit the door and gives the service. Doctors would be on toes to visit the doors of the cattle owners any time in the day, even if the calls come from any other villages than the village where the clinic is located. If a telephonic message is sent the doctor would be available at their doorstep to serve them. In other words, the entire Rehabilitation Project is the CLINIC for the doctors while R.H. Colony No.4 is the address for them to contact.

Follow up Services: The doctors follow up the cases properly. Otherwise they prescribe the tablets and advise the owner to give these to the animals in front of them. If it turns to be successful then the Doctors advise the medicines for the complete course and handover the medicines to the owner. Otherwise the farmers are asked to bring the animals to the clinic every day till the course completes or one of the Doctors visits the animals in his/her resident, if it is from other colonies.

2.2 Medicine Distribution: The Clinic has got almost all the types of medicines required generally to treat an animal. To begin with, the doctors advise the home-made medicines if the case is not so severe and if the Doctors feels it is curable by such practices. If it goes beyond that limit, the Doctors definitely go for the medicines and advise the owner complete the course. However, whatever the case may be, the owner is given some inputs about the disease identified, its causes, preventive measures, after-effects, etc. every time the animal is brought to the Clinic. This helps in developing the skills of managing a cross breed animals and also the knowledge-base of the owner widens up. A comprehensive list of all the medicines used during the reporting period is enclosed in Annexure I. About Rs.80923 has been spent to provide medical service to the cattle during this period and about 2816 cases have been treated by the Doctors. Therefore, the cost per case comes to about Rs.28.74. more than 925 families / women have benefited from the medical service component of DDCBIP. Some of the families have more than 1 animals also therefore the number of animal is more than the number of the families benefited. Moreover, in some cases the medicines were prescribed and the owners were requested to purchase them from the

market. In some cases it is found the owners to get back with the medicines while most of the cases they did not turned around.

To stop the concept of charity, the Doctors recovered the cost of the medicine from the cattle owners on no loss no profit basis from the non-SHG members. For the SHG members, Doctors have collected the medicine charge while for the non-SHG members both medicine cost as well as the service charge of Rs.10/- per animals. Thus, the total amount that the doctor could recover during this year from the cattle owners is about Rs.929.50 and the service charge of Rs.220.00. Most of the farmers are found to say that we didn't bring now, next time will pay and that's the end.

- 3. Common Ailments Observed:** The most commonly observed diseases for the cattle during the period are cattle enteritis, anorexia, worm infestation, weakness, anoestrus, etc. The total number of cases treated during the reporting period are furnished in the table-2.3.1. The table gives the disease-wise bifurcation of the data for 12 months commencing from July 2001. The month-wise bifurcation of the data are given in the graph below.

Table-2.3.1: The statement of table showing the disease-wise cases treated during the reporting period.

Disease	Calf Deworming	Sheep & Goat Deworming	Cattle Enteritis	Anoestrus	Metritis	Mastitis	Milk Fever	Calf external Parasites
1	2	3	4	5	6	7	8	9
No. of cases treated	257	908	388	37	9	12	5	26

Calf White score	cattle Surrah	Cattle anorexia	Corneal Opacity	Nasal scistomiasis	Poultry	Ducks	Sheep & Goat	Pneumonia	Others	Total
10	11	12	13	14	15	16	17	18	19	20
24	5	169	90	5	25	1	35	16	804	2816

It is observed from the table that Cattle enteritis disease was most commonly seen during the period and more number of animals were affected by it. While weakness of the cattle is a general phenomenon in this area next to the infertility cases. Most of the cows become infertile and do not complete the cycle in the normal course due to lack of balanced nutrients.

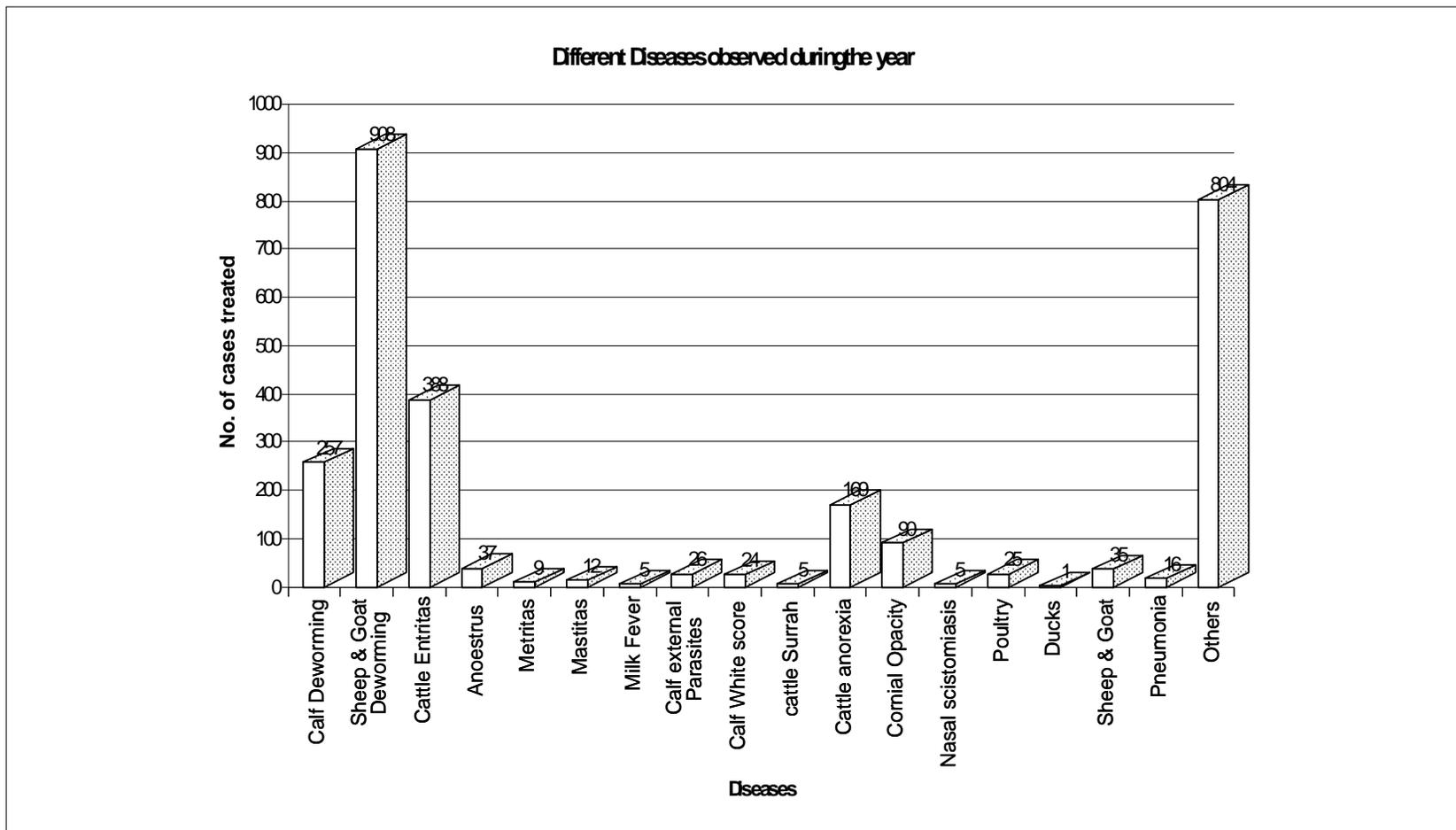


Fig-2.3.1: The total number of animals treated during the year for different diseases in Sindhanur Rehabilitation Project

In the onset of the program, we did not store much of the medicines except the general ones. We had to face lots of difficulties including death of an animals, of course some other factors like ignorance of the owner also contributed to that particular case, due to lack of medicines in time. Because the medical shop is at Sindhanur and to bring the medicines from Sindhanur, if prescribed, takes hours as there is no means of transportation between Sindhanur and these colonies. Later, we decided to store almost all the frequently used medicines as per our experience.

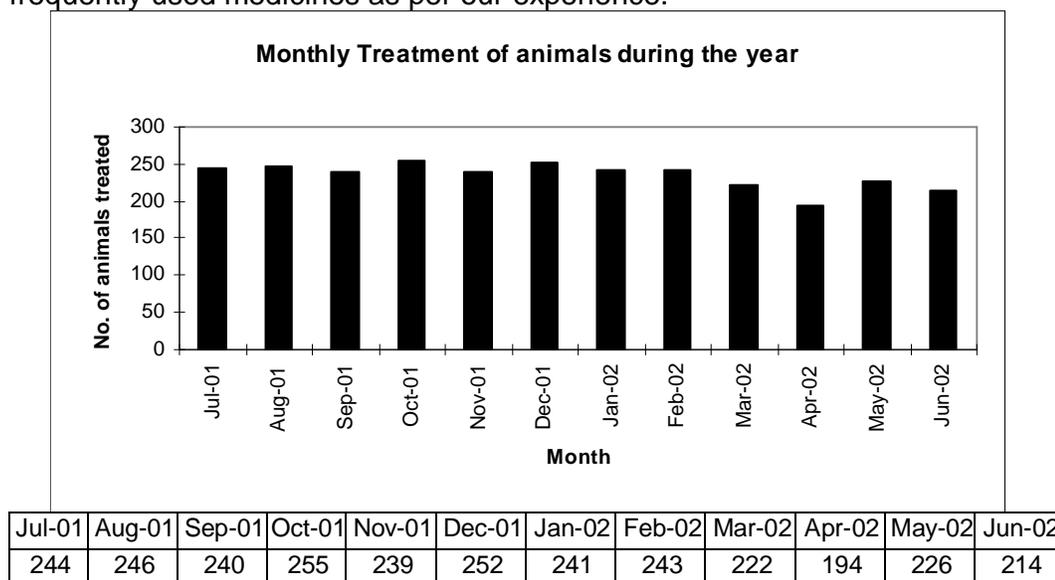


Fig.2.2.3.1: Monthly figures showing the animals treated during the period

It is observed from the figure above that the maximum (255) cases were seen in the month of October'2001. The doctor had to struggle hard during this month as the patients used to come in the midnight also.

Larger share of the Medical Service: Coloni-wise bifurcation of the data shows that the larger share of the medical component has gone to R.H. Colony No.2 while the lowest being in Eranna Camp. About 26% cases were treated in R.H. Colony No. 2 out of the total of 2816 cases and only 5% cases in Eranna Camp. The pictographic analysis of the data is shown in figure 2.3.2 while the data is furnished in the table 2.3.2.

Table-2.2.3.2: Village-wise figure giving the number of animals treated during the period.

Sl. No.	Name of the Village	No. of animals treated	Per Cent age (%)
1	R.H. Colony No.1	338	12
2	R.H. Colony No.2	732	26
3	R.H. Colony No.3	620	22
4	R.H. Colony No.4	591	21
5	R.H. Colony No.5	225	8
6	Basavarajeshwari Camp	169	6
7	Eranna Camp	141	5
TOTAL		2816	100

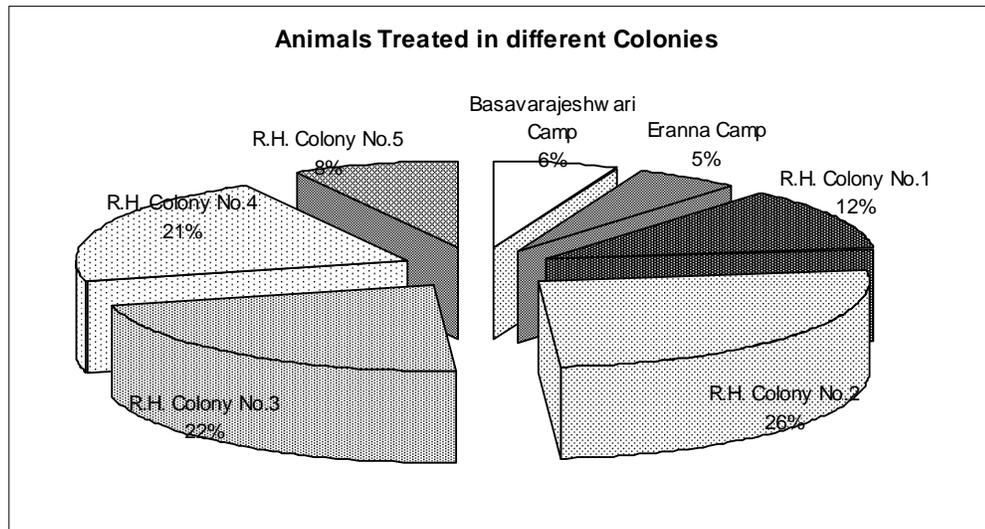


Fig.2.3.2: Village-wise data on the animals treated during the year

2.3.1 Worm Infestation - What is it? The calves and young stocks of any animals below the age of 6 months suffer from worm infestation. Deworming is done in the clinic to avoid the deaths. Calf deworming is a process of preventive measure taken periodically to avoid the death of young ones from the worm infestation.

What happens if not treated? The worms like Nematodes, trematodes and cestodes if grow in the intestine of the young animals below the age of 6 months, can easily suck the blood from the system and thus make the animals weaker which leads to improper growth of the calves. Some of the infestation like Nematodes causes death of the animals, if the population increases in large number in the stomach taking a shape of ball.

How does the worm get inside? The worms like Nematodes, Trematodes and Cestodes transmission is by ingestion of contaminated feed & water.

How the lay-person can understand about the worm infestation? The calf becomes weak and growth rate reduced even after proper diet. Potbelly is seen. Diarrhea, rough hair coat, depression, etc. are some of the symptoms exhibited by the worm infested calf. If these symptoms are seen then the excreta of such calf should be checked for the eggs of the worms.

Clinical Treatment: The Anthelmintics such as piperzine, tetramisole, levamisole, etc. are used in the clinic to overcome this condition and also sometime other therapy are also adopted in severe cases. Some of the

fluid therapy like 5% Dextrose, DNS, were administered @ 1-2 bottles I.V.

Is there a way to prevent Worm Infestation? Proper disposal of faces and regular follow up of the deworming schedule is the only way to prevent and control the worm infestation of young calves. Those who have dewormed their young ones at the age of 7 days, 1, 2, 3 & 4 month using any Anthelmintis could save their calves from this mortal disease.

The refugees of Rehabilitation Project are ignorant about the management practices of these cross breed animals. Most of them do not know about the process. Therefore, there were more number of worm infested cases. About 257 calves were treated using the above doses and about 241 were cured while about 16 cases died due to ignorance of the owner to follow the advise of the doctors. Also in some of the cases the animals were brought to the Doctor at the last stage.

Box-2.3.1.1: Laxmi and her Dream of making the calf to a cow.

Smt. Laxmi is one of the poor Bengali women living in R.H. Colony No.2. Her only H F cow is the source of the family income beside the daily wage. She gets a handfull of green grass every evening while returing from the days work. It gives 5-6 litres of milk every day and she fulfills her daily requirement with this limited income. She has three children in school. The expenses are also manged with this source of income. Her husband is a drunker and does nothing.

She has a dream and accordingly pray that her cow must give birth to a female calf and then she will be able to sale more milk within another 2-3 years when her children will be in college. But she became more worried when her dreamt calf was infested with round worm i.e. toxocarabovis. Its condition was very serious when it became dull, depressed, anarectic. Hypothermia was found. She was not only worried about the calf but also about the possibility of reduction in milk yield after the death of the calf.

She heard about the availablity of Veterinary Doctor with Janakalyan and immediately consulted. The Doctor advised the doses of piperzine powder 110mg / kg, Inj.DNS 450ml IV and Inj.Dexamethasone 0.5 mg / kg.

The calf started recovering gradually bringin happiness on Laxmi's face. She was extremely happy with the survival of the calf. She still ate

2.3.2 Sheep & Goat Deworming: Similar conditions as that of the calf is commonly seen in the sheep & goat also. About 908 cases were treated during this year of which about 98% were turned to be successful.

Box-2.2.3.2.1: Noor Shaheb and his sheeps

Noor Shaheb is a non-Bengali small farmer living in Basavarajeshwari Camp. He has a small piece of land but hardly goes for cultivation. Daily wage is the means of his survival. Last year he could save some money as a result of his hard work during the agricultural season and purchased two sheeps with that money. Wherever he goes for wages the sheeps are with him.

One day he found one of his sheep was suffering from diarrhea. Immediately he rushed to the Doctor. Loss of electrolyte and worm infestation was result of the diagnosis of the doctor. Advised albendazole tablets, DNS Injection IV and Dexamethasone Injection immediately. The sheep was seen to cure within few days.

The Doctor in his follow up visits explained to Noor Shaheb the reasons for such weakness, what preventive measures could be taken to avoid such conditions, etc. He thanked the Doctor and assured him that he would definitely follow the advises without fail.

2.3.3 Cattle Enteritis-what is it? Enteritis is the inflammation of the intestine. This leads to diarrhea which further leads to the loss of electrolytes from the body and drag the animals to the shock condition.

Causes of Enteritis:

Enteritis is caused by the bacterial or viral infections or by the worm infestation. These cases were the most common cases. This was due to the ingestion of the contaminated food and water. Since the colonies have got the water problem, the animals won't get pure water for drinking. Due to the ingestion of the contaminated water the animals suffers from the enteritis. We have treated the cases which have been recovered 100%.

Symptoms: The diarrhea is seen as the first step. The animal becomes dull, depressed and weak. It leads to the shock

Box-2.2.3.2.2: Hanumantha's death of farmer animals.

Hnaumantha is a small farmer living in Eranna Camp, a small hamlet. His is a joint family with his 2 brothers, all of them are marrried. His 4 children go to School. He has only two acres of land. Since, the land does not give sufficient income to maintain his big family, he has maintained two bullocks, which he used to earn money by working in others field.

Once, one of his bullock started suffering from cattle enteriritis of mixed type i.e due to the bacteria as well as worms. Hanumantha was so worried that he might loose the animal and then his whole family will have to starve. He also could not plow the land for sowing.

It was too late when the animal was brought tothe Doctor. Doctor succeed to diagnosis the case and treated with gentamicin, Metranidazole, Levamisole, DNS, etc. & recovered.

Clinical Treatment: Different treatments are adopted at different occasions to overcome the bacterial infection, viral infection and worm infestation. The enteric bacteria like E-coli, salmonella Shijella, etc. leads to the cattle enteritis. To overcome this condition the antibiotic such as gentamicin injection, Novalgin Injection, etc. should be administered. The viral diarrhea has no treatment but to control the secondary bacterial infection. We have used the treatment for bacterial infection. If the cattle is infected with helminthic i.e. worm infestation then it needs immediate attention. Otherwise it leads to the further complication like bacterial infection.

During this year about 388 animals were treated for cattle enteritis and about 99% cases have been recovered. The owners were explained about the diseases and the preventive measures to be taken.

2.3.4 Anoestrus: This is also a common condition seen in this area. This is due to improper nutrition to livestock. The animals should be given the nutritious food to avoid this condition. It also occurs due to hormonal imbalance in the animals which needs the hormonal therapy. About 37 cases have been treated during the reporting period and most of them have been recovered.

Box-2.2.3.4.1: Sunil Roy & his infertile local cow

Sunil Roy was about to sale his hieffer at the age of four years as it did not come to heat even for a single time. While the local hieffer comes to heat in the age of 1-1.5 years. Somehow, he consulted the doctor by the advise of his neighbour and the doctor prescribed the doses for recover. Within 2 months, it was brought to the Clinic for insemination and he is now waiting for a calf.

2.3.5 Metritis: About 9 cows are treated during the period Metritis. It is the inflammation of uterous which leads the cow to the infertile condition and its severity leads to toxemia and death of the animal. The reasons of the disease are like being mounted by the diseased male animal or due to damage to the uterous during parturition. All the cases were recovered. The medicine generally prescribed for the disease are Inj. Dicysticin, Liquid Oxytetracycline, etc.

2.3.6 Mastitis: Mastitis is the inflammation of the mammary glands caused by varieties of bacteria and fungi. It is characterised by physical, chemical and bacteriological changes in the milk and pathological changes in the glandular tissues. It causes sudden decline in milk production. About 12 cases were treated and almost all recovered from the clinical condition.

Box-2.2.3.6.1: Mohan and Livestock

Mohan belongs to R.H. Colony No.2 but resides in his field and rears varieties of animals like hens, ducks, cows, etc. and gets multidimensional income from all these sources. His income from the land doesn't satisfy the needs of his big family having 2 sons and 3 daughters. Livestocks including cows is his additional source of income.

Once his one of the 2 cows was suffering from Mastitis. He was worried about the family management. Immediately consulted the Doctor. It was too severe and doctor immediately applied medicines and took continuous follow up action to recover Mohan's livelihood option.

3.8 Milk Fever: It is a condition which occurs immediately after parturition due to deficiency of calcium which is characterised by dullness, depression and recumbency state of the animals. The animals can not get up and further complication leads to paralysis. These cases have been treated by giving calcium. About 5 cases were treated during the year and almost all were recovered. As preventive measures one need to give nutrient rich food to the cattle.

3.9 Calf External Parasites: The external parasites includes tigs, mites, lice and flees. These are the problem creating agents. These lead to retarded the growth of the calves and cause weakness in the animals by sucking the blood. It also causes dermatitis in the youngstocks.

3.10 Cattle Anorexia: Anorexia may be due to Pyrexia which is due to bacterial infection or non-specific anorexia which is due to improper physiological functions. The animals should be diagnosed properly for the conditions and should be treated. Anorexia cases have been almost recovered.

4. Vaccination Programs

Vaccination Programs is an important program which has to be conducted in time. Proper vaccination of the animals in time saves the animals from further diseases. We have conducted vaccination programs in time as the preventive measures.

4.1 Foot & Mouth Disease (FMD): FMD is one of the dangerous diseases which will decrease the production of milk yield, drought capacity of the animals and also pull the farmers towards the pond of loss. We have conducted the vaccination program during the year and have vaccinated around 57 animals.

Table-2.2.4.1: Vaccination Camps conducted during the year & cases treated for FMD

Sl. No.	Date	Name of Colony	No.of camps conducted	No. of animals treated
1	12.4.2002	R.H. Colony No.4	1	47
2	1.12.2001	R.H. Colony No.5	1	10
Total			2	57

2.4.2 Hemorrhage Septicemia & Black Quarter (HS & BQ): HS & BQ are the diseases which cause the economical loss to the cattle owners by death of the animals. So to avoid the conditions we have arranged the vaccination programs and vaccinated about 1842 in almost all the colonies throughout the years.

Table-2.2.4.2: Vaccination Camps conducted during the year & cases treated for HS & BQ

Sl. No.	Date	Name of Colony	No.of camps conducted	No. of animals treated
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1	2.7.2001	R.H. Colony No.4	1	303
2	4.7.2001	R.H. Colony No.5	1	200
3	6.7.2001	R.H. Colony No.2	1	353
4	8.7.2001	Eranna Camp	1	102
5	9.7.2001	Basavarajeshwari Camp	1	153
6	10.7.2001	R.H. Colony No.4 (Saath gate)	1	64
7	12.7.2001	R.H. Colony No.3	1	223
8	11.6.2002	R.H. Colony No.4	1	118
9	12.6.2002	R.H. Colony No.5	1	116
10	14.6.2002	Eranna Camp	1	83
11	19.6.2002	R.H. Colony No.2	1	77
12	25.6.2002	Koppala Camp	1	50
Total			12	1842

2.4.3 Enterotoxemia Vaccination Program: Enterotoxemia is a clinical condition mainly seen in sheep & goat. About 93 sheep & goats were vaccinated during the year.

Table-2.2.4.3: Vaccination Camps conducted during the year & cases treated for ET

Sl. No.	Date	Name of Colony	No.of camps conducted	No. of animals treated
1	2.8.2001	R.H. Colony No.4	1	47
2	7.8.2001	R.H. Colony No.5	1	31
4	10.8.2001	Eranna Camp	1	93
Total			3	171

2.5 Cattle Health Camps: Cattle Health Camps were arranged to give the medical treatment, deworm the young ones and conduct the infertility and pregnancy tests. We have conducted about 3 health camps during the year. About 693 farmers / women were benefited from the camps.

Table-2.2.5.1: Cattle Helath Camps conducted and cases treated in the camps

Sl. No	Place of the Camps	Number of cases treated				Date	Resource Persons
		PT	Vaccination	Deworming	Other Diseases		
1	R.H. Colony No.4	19	197	52	41	8.11.01	Department
2	R.H. Colony No.2	25	339	54	95	12.12.01	Department
3	R.H. Colony No.3	27	181	49	114	28.11.01	Department
TOTAL		71	717	155	250		

2.6 Cases: When the Doctors failed to Diagnose the Disease

The Doctor was once requested by an inhabitant of R.H. Colony No.5 to treat a cow, which was in very sever condition. He diagnosed it as Poisoning looking into the symptoms exhibited by the animal. The answers to the queries of the Doctor by the owner during the diagnosis lead him to decide that the cow was suffering from poisoning. He concluded that the cow might have taken the grass from the field where the pesticides have been sprayed recently. He administered the medicines like Inj. Atropine sulphate, Inj. DNS & Inj. Dexamethasone immediately on the basis of his diagnosis and the information given by the owner. But the cow did not recover even after many effort and finally died.

The Doctor was very much disturbed by this event and he went on digging out the reasons for this particular failure. Upon cross questioning the owner and the members of her family, he understood that it was a case of Lead Poisoning. Lead Poisoning is a condition in animals, occurs due to ingestion of the lead containing materials like paints, electric shells, etc. The cow ate the paint kept in her house yard and they did not give this information to the Doctor. But, then also the Doctor was helpless because the medicine required to treat a lead poisoned case like Inj. BAL (British Anti Levusinate) was not available with him. However, it could have been purchased from nearby city but only due to wrong information the animal could not be saved.

2.7 Cases: When Doctors had to Consult their Guru

2.7.1 “I was requested by Mr. Balappa of R.H. Colony No.4 to treat his cow in his house. When I saw the cow I was confused”, says Dr.Mallikarjun. He had never seen such cases earlier and hence he assumed that the cow might be giving birth as the water bag was coming out. But, after few hours also the animal did not give birth to a calf instead it was suffering from pain. Then he had no way but to consult Dr. Veeranayak, the Assistant Director, Department of Animal Husbandry & veterinary Sciences, Manvi. Mr.Veeranayak explained him over telephone after listening the case-history that the symptoms shown by the animal was not of delivery. The water bag, which confused the Doctor was not the water bag but was the genitalia. He also suggested the medicines like Inj.Progesterone & Inj.Mifex. Upon application of these the cow recovered within few hours.

2.7.2 When I was called by Mr. Prafulla Majumdar of R.H. Colony No.2, it was around 3 O'clock in the night, to treat a calf of 6 months. It was trembling and other nervous symptoms were seen. I assumed it to be listeriosis. I administered Inj.Dicristicin, Inj.Bivinolforte and Inj.Dexamethasone. immediately the calf recovered and I came back to the clinic. Early in the morning, again the owner was seen to knock my door and I had to go again to treat the same animal. As the same symptoms were shown, I gave the same doses of medicine. But, this time instead of recovering it continued to exhibit the same condition. And finally it died.

I was little disturbed why the calf died even after the proper doses of medicines? I consulted my Guru, Dr.Lakshmaiah, Professor of University of Agricultural Sciences, Dharwad and explained the symptoms. He guessed it could be Hypomagnesemic Tetany, a very similar disease to Listeriosis.

3 Breed Improvement

Another major component of the program is to develop a climate resistant breed which suits the local climate. Also to provide the AI service to the cattle grazers which is one of the major problems the people face in this area. Initially, i.e. before commencement of the program, the farmers had to take the animals to Sindhanur or Jawalgera which are around 10 Kms from the colonies for insemination. It was extremely difficult for the people to take the animals to these places and to get the cow inseminated in time. Otherwise

they had to request the doctors from other places bearing the travel and other expenses. As large as 65-75% of the so inseminated animals failed to conceive due to delay in the process. The service started February'2002 onward. Although, we had a plan to provide the service earlier but due to lack of infrastructures, we could not start the program. The major factors which have contributed in delay in the commencement of the AI service includes-

- Non-availability of assured source of LN₂ and regular supply of qualitative semen of different breeds.
- Lack of certain required infrastructure.
- Promise of the Zilla Panchayat to extend certain infrastructure facilities under Swarnajayanti Gram Swarojgar Yoiana (SGSY) and
- Looking forward for possible collaboration with BAIF Institute for Rural Development (BIRD-K), Karnataka.

3.1. Breed Improvement - when started?

Finally, when we realized in the month of January 2002 (after 7 months of continuous effort) the fact that the facilities from the Zilla Panchayat would be extremely difficult and the BAIF runs the Breed Improvement Centers with the grant from the Zilla Panchayat only. Also, by this time we could source the assured source of LN₂ and semen and its regular supply. Mobilized a AI container from KMF on rent and a Travis from the Department of Veterinary Science & Animal Husbandry. We had a small A I Container of 3.5 liter capacity and purchased another of 50 liters with other necessary accessories and instruments. We had the trained and qualified human resource and therefore we could extend the service to the people February'2002 onwards.

3.2 What has been achieved?

The AI service is extended for both cows and buffaloes. Only 3 types of semen i.e. Jersey, HF and Murrah are being stored in our Center considering the climatic condition of the area. Jersey and HF semen are being used for cows while Murrah for the buffaloes.

About 36 animals have been inseminated so far out of which 3 were Jersey, 16 were HF, 12 local breeds and 5 were buffaloes. About 3 Jersey cows were given the Jersey semen, 5 HF cows were given Jersey semen and 11 HF cows were given HF semen. Else, there were about 12 ND (non Descriptive) cows out of which about 1 was inseminated with HF semen and 11 were inseminated with Jersey semen. This is done by keeping research activity in mind. We are planning to do the Pregnancy test since it is suitable to do the PT after four months of AI.

Table-2.3.2.1: Artificial Insemination done during the year with different varieties of cattle

Sl. No	Sample Breed	Crossed With				Total
		Jersey	HF	Murrah	Local	
1	Jersey	3	0	0	0	3
2	H F	5	11	0	0	16
3	Murrah	0	0	5	0	5
4	N D (local)	11	1	0	0	12

TOTAL	19	12	5	0	36
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3.3 How the Experiment is Done?

As we do not have sophisticated instruments to calculate the blood % in the sample animals, we can not go for an experiment to develop a breed with accurate details. The internal features of the animals would not be of much importance for our experiment. Whether the breed that comes out of our experiment suits this particular environment and climate or not would be of our importance. If it suits the climate we would declare success of our experiment. Thus, the methodology that would adopted for the experiment would 'trial & error' method with different breeds and semen. Once, we get a climate-resistant breed, we would then find out its blood contents and other internal features using laboratory methods. However, so far we have done the AI randomly i.e. whichever animal was brought to the center were inseminated as stated in the above table adopting the following method.

- ⇒ Different types of cows like Jersey Cross, HF Cross and local breeds, which were brought to the Center, are considered as the sample animals.
- ⇒ Few H F cross animals are inseminated with H F semen.
- ⇒ Few H F cross animals are inseminated with Jersey semen.
- ⇒ Few Jersey cross animals are inseminated with Jersey semen.
- ⇒ Few Jersey cross animals are inseminated with HF semen.
- ⇒ Few local breeds are inseminated with Jersey semen and
- ⇒ Few local breeds are inseminated with HF semen.

3.4 How long will it take to Develop a Climate Resistant Breed?

For each inseminated cows the records are maintained at our level for follow up action. The inseminated cow is our sample animal till it gives birth to a calf i.e. F₁ generation. Once the cow gives birth to the F₁ generation, the calf becomes our target animal, if it is a female one. The heifer calf plays no role in our experiment. Therefore, at this stage only about 30% of the sample animals would be available with us as the F₁ generation. Because rest will be male calf and few will also die. This 30% would be our next sample animals whose health care would be greater importance. Regular attention towards the health of these calves would important, preferably without using drugs. If the F₁ generation suit climate and its milk production is optimum, the objective of the program will be achieved. The program ends there. If it does not, then the experiment will continue with F₁ generation as sample animals. The research activity will continue till a suitable breed which adjust to the environment and gives optimum milk production is obtained.

3.5 A I Cost Recovery

Instead of giving everything free of cost Rs.15 per insemination from SHG members and Rs.25 from non-SHG members are being collected to develop ownership in the process. About 36 animals are inseminated so far out of 27 were from SHG and collected an amount of Rs.405/- from them while rest 9 animals were from non-SHG members and collected about Rs.225/- from them. We are planning to build a corpus for medical service considering the Sustainability of the program in long run.

3.6 Constraints and Solutions

The Breed Improvement Component of Janakalyan's proposal to Sir Ratan Tata Trust had a budget of Rs.2.0 lacks for one year (October 2000 to September 2001). When we were asked to revise the budget in the month of February-March'2001 keeping the ceiling limit for total budget to Rs.3.0 lacks, we assumed that the sanction would be given from October'2000 and therefore reduced the budget to Rs.75,000/- for the remaining 6 months. But the actual approval was given from July'2001 for 12 months. It was then extremely difficult for us to manage the component with such a small budget. Because it requires lot of infrastructure facilities and recurring costs. Therefore, we could not start Breed Improvement Component till February'2002. Because we had to source certain infrastructure facilities from some other corners.

3.6.1. Breed Improvement & Line Department

With this financial constraints, Janakalyan had no other go but to approach the Line Department for the possible support. The Assistant Director at the Block level and the Deputy Director at the District level were requested to assist us in our endeavor. They expressed their willingness but finally they expressed their inability to assist us due to their power limitations. However, the Assistant Director of Department of Veterinary Science & Animal Husbandry, Sindhanur has supported with a Travis, which is pre-requisite for a Veterinary Clinic and A I Center. But this did not solve the problem.

3.6.2 Breed Improvement & KMF

Janakalyan has promoted about 4 Milk Producers Cooperative Societies (MPCS) and affiliated to the Karnataka Milk Federation (KMF) for marketing the milk through existing network. Since the KMF has established infrastructure facilities and it is suppose to provide certain facilities to the members of the MPCS, we approached the Managing Director of KMF for possible collaboration. Finally, we could arrived at an agreement that a Container (worth about Rs.25,000/-) of 20 liters capacity would be provided to Janakalyan on nominal rent. Also, the semen and liquid nitrogen would be supplied regularly by them for which Janakalyan has to bear the expenses and cost. The rest of the equipment we purchased by the grant support of Sir Ratan Tata Trust (the list of assets is enclosed in Annexure III). With this we could start the clinical AI service from February onward. The supply of semen and liquid nitrogen is quite regular but we might face difficulties in the rainy season as the connection with the Highway totally gets disturbed.

3.7 Breed Improvement & SGSY

Swarnajayanti Gram Swarojgar Yojana (SGSY) is a scheme for rural Indians financed by the Central Government aimed at poverty alleviation by raising the family income level. The emphasis is given on community development approach than individual beneficiary. Under this scheme two group

enterprises at the cost Rs.649,000/- has been started and 2 more are in the process.

SGSY scheme has a component of Village level infrastructure development for the benefit of the community. The Chief Executive Officer of Zilla Panchayat the is the Sanctioning Authority and had willingly expressed to support a AI center and asked for the quotations and some other information from Janakalyan. They also asked for the report from the Line Department which was sent favorable. Unfortunately, the CEO got transferred and when we approached the new CEO with the proposal, he advised to collaborate with BAIF as they already have signed an agreement with BAIF and can run A I center only through them.

3.8 Could we collaborate with BAIF?

BAIF Institute for Rural Development (BIRD-K), Karnataka runs Breed Improvement Centers with the grant from Zilla Panchayat. We approached them with a request to start such a center in Sindhanur Rehabilitation Project. They have expressed their willingness but the process has to be initiated at their end though we have complied with all the requirements.

4 Dairy Management Skill Development

How long shall we extend the medical and AI service to these needy groups is a question among the Janakalyan team members. As long as the community does not understand the management practices of these cross breed animals their animals will not be healthy and thus the milk yield will reduce. If the milk yield reduces the economic condition of the family would remain same and thus they won't be able to manage the cost of health management of the cows.

With this preamble effort has been put to develop the management skills of the community to make the Dairy a viable & profitable venture through propaganda meeting, training & seminars. The focus of these training were to make the community aware about different aspects of the dairy management.

Although, we didn't receive any financial support from any sources for this component of the project, we felt the necessity and also realized that without this component the program would be a mere service providing program and may not bring Sustainability ever. However, we could not succeed whatever we set as our target under this component of the program.

4.1 Propaganda Meetings

These meetings were conducted to make the people aware of different aspects. About 22 such meetings were arranged during the year and made aware of different aspects like composting, dry fodder urea treatment, etc. to the cattle owners.

4.2. Training classes to the SHG members and others

About 16 training to the SHG members and other interested members are being conducted on different topics like infertility, calf management, insurance policy and cattle management, maintenance of the pregnant cows, the management of the dairy i.e. cow shed, calf shed, vermi composting, fodder growth, etc. The SHG members and also few others have shown keen interest in attending the training classes and most of them follow the concept explained in the training classes.

4.3. Practical Demonstration

Practical Demonstrations of certain important aspects is one of the methods of making the farmers aware of some new things. About 19 practical demonstration were arranged for the farmers on different aspects during this year which includes compost making, dairy fodder urea treatment, casting of the animals, controlling the animals, drenching of the medicines to the animals, behavior of the animals during heat period, first aid (dressing small wounds, bandaging etc.)

Most of the farmers were benefited with the demonstration and are adopting them in the dairy activities. Nowadays they won't go to the doctors for simple wounds and other silly things as they were afraid of initially and consulted the doctors for its treatment. They follow the first aid in their houses. They have learnt the casting methods, drenching of medicines, compost making, dry fodder urea treatment, etc.

4.4. Insurance

Insurance is one of the securing policy which gives security to the cattle owners. As the animals which are brought from outside markets are susceptible diseases and do not suit the food, water and climate immediately, accident is very commonly seen in this area leading to a great loss to the farmers. Initially, awareness about insurance policies is generated by conducting seminar, propaganda meetings, etc. All the animals purchase through Bank loans are insured while purchasing while others which are self-financed or financed by the SHGs are also made a compulsory that the animals are to be insured while purchasing.

During this year 3 animals of Mata Manmohini Mahila Sangha and 1 animal of Bhagavati Mahila Sangha died due to improper care and imbalance nutrition. However, the SHG could recover the shock only because the animals were insured and the United Insurance Company indemnified the sum insured. They could purchase a new healthy animal.

4.5. Promotion of Fodder Cultivation

Since, fodder was available in plenty in all these Rehabilitation Colonies until now, the concept of fodder growing in their field sounds useless for the

farmers of this irrigated belt, although it is a fact that the fodder has become a scarce resource in the recent past due to significant increase of cattle population. Initially the farmers were made aware of different types of fodder, its importance in scientific cattle management during the seminars and propaganda meetings. Then, the fodder and fodder seeds were supplied to the farmers to grow in their field. The different supplied are -

4.5.1 CO-1 Fodder: About 11,000 CO-1 fodder slips were supplied to the farmers @ about 1000 slips per farmers to 11 farmers and were advised to grow in their field. The fodder slips were brought from a progressive farmer of the nearby village. This is a very nutritious food for the animals. All of them had cultivated them in a small plot each and 4 farmers could get some return while the rest failed due to improper care of the farmers. According to these farmers, the milk yield increased by 2 liters per day when the cows are provided this fodder twice a day.

4.5.2 Maize Fodder Seeds: About 25 farmers were given the maize fodder seeds to grow in their field. Maize fodder is also an important and nutritious food for the animals. Each farmer was given 1 bag containing 5 Kg maize seeds. This seed was mobilized from the Government Department free of cost. All of them had sown the seeds after land preparation. The germination was as high as 92% but due to lack of irrigation all the standing crops died out except in few farmers field who could manage 1-2 irrigation. Feeding maize fodder also significantly increases the milk production.

4.5.3 Horticultural Plants Supply: About 400 nursery (horticultural) plants were supplied to the farmers during the year for plantation in their field and residential plots. These were mobilized from the Department of Horticulture with no cost and distributed to the farmers to grow them in their field.

4.6 Training and employment Generation

Mr. Abhijit Sarkar is being trained about the medical service and Artificial Insemination by the Doctors employed under DDCBIP. He is from R.H. Colony No.4 and will be take care of the AI and medical service component upon withdrawal Janakalyan at the end of the project. He learns by observation as well as by practical demonstration by the doctors. Upon completion of his training he could practice himself in these colonies and thereby earn for his livelihood thus, creating an employment opportunity for him.

5 Dairy & Income Generation

The sole occupation of refugees of Rehabilitation Project is agriculture. Land is the only resource available at their disposal as the livelihood option. But, irrigation water is a scarce resource. The black cotton soil of the region is suitable for some particular crops like paddy, cotton, redgram, etc. Paddy has become obsolete for the region due to numerous pests and diseases attacks. Redgram is in the same line. For growing paddy, as it is a heavy irrigation crop, the water requirement is high and the canal water is not sufficient to

fulfill this need. The ground water is brackish and is of no use. Thus, the refugees fate is such that neither the surface water is available for them nor the water from the ground. The only source is from the top i.e. rain water. But, since the villages are listed under drought prone area, we can imagine the quantum of rain that they get annually. However, the rainfall data of last 10 years is furnished in the table 2.5.1 to see the rainwater availability.

Rainfall Analysis: The normal rainfall of the block is 581.7 mm per annum whereas from the table it is clear that out of 10 years, about 6 years the rainfall was less than the normal precipitation. And the occurrence of such an occasion is in every second year. During 1994, 1995, 1997, 2000 & 2001 the rainfall was below normal precipitation. It proves that in Sindhanur block the Drought occurs every second year. The least rainfall of 345.0 mm is observed in the year 1997 in the last 10 years while the rainfall during the current year (296.4 mm) is lesser than the least. In the 32 normal rainy days this quantum of water they get for in the form of rain. How much of them they can retain is a question. Black cotton soil has low percolation rate with Water Holding Capacity (WHC). But, what matters the farmers whether it percolates down or not as the ground water is brackish. If the same could be stored on the ground surface then it could possibly of some use for these refugees.

Table- 2.5.1: Statement showing the details of Rainfall received during last 10 years in Sindhanur block of Raichur District (Rainfall in mm)²

Year	Jan	Feb.	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Normal	0	0.9	1.5	18.3	40.4	67.3	77.1	112.7	135	84.4	35.6	8.5	581.7
1992	0.0	0.0	0.0	23.0	24.8	91.1	66.3	41.2	88.2	78.1	394.9	0.0	807.6
1993	0.0	0.0	2.8	3.7	6.4	35	321.8	235.7	131.7	240.6	5.2	67.4	1050.3
1994	0.0	0.0	0.0	28.9	12.0	19.5	71.1	61.5	12.3	288.2	5.5	0.0	499.0
1995	11.2	0.0	0.0	0.0	13.1	114.4	82.6	137.6	48.8	137.2	0.0	0.0	544.9
1996	0.0	0.0	0.0	52.3	34.3	143.7	12.5	182	226.5	159.4	4.8	11.0	826.5
1997	0.0	0.0	21.6	29.3	1.3	33.9	33.1	48.1	90.2	69.9	8.2	9.4	345.0
1998	0.0	0.0	0.0	32.8	16.4	38.3	32	132.6	336.2	301.3	22.4	0.0	912.0
1999	0.0	4.0	0.0	0.0	103.8	97.6	14.7	97.8	111	102.7	0.0	0.0	531.6
2000	0.0	0.0	0.0	0.0	14	84.1	107.6	208.1	73.2	76.3	0.0	0.0	563.3
2001	0.0	0.0	0.0	0.0	6.9	33.2	58.6	81.2	116.5	--	--	--	296.4

With this little source of water, they can hardly go for 2-3 acres of cultivation rest remains fallow. It generally covers with weed and therefore if they go for 1-2 cows can be fed well. With this assumption dairy was promoted as the IGA for these refugees through SHGs. As the families are either agriculturists or agriculture labourers, livestock best suits their requirement as a subsidiary source of income.

5.1 Does it really increase the Family Income?

² District Statistical Office, Raichur.

A study was conducted for about 10 families, randomly selected from different colonies, to know the cost-benefit analysis of the dairy enterprise promoted through SHGs in the Sindhanur Rehabilitation Project. The result of the study is furnished below in table 2.5.1.1.

It is seen from the study, if a agriculture related (either farmer or agriculture wage laborer) family adopt Dairy as a subsidiary source of income along with the primary occupation,, can earn an additional income not less than Rs.2292 per month i.e. about Rs.76/- per day per animal if a single cross breed cow is maintained properly. An agricultural laborer can easily manage 2 cows along with his / her routine works.

Table-2.5.1.1: Profitability Analysis of the Dairy Enterprise adopted in the Sindhanur Rehabilitation Project.

Sl. No	Particulars	Financial Outlay	
		1 Animal	2 Animals
A	FIXED COST		
A1	Purchase of Animal	10,000	20,000
A2	Shelter Construction using locally available materials	2,000	2,500
A3	Chain, Milking Vessels & other accessories	1,000	1,500
A4	Insurance @ 5%	500	1,000
A5	Interest on investment @ 24% (higher side)	3,240	6,000
	Sub Total	16,740	31,000
B	RECURRING COST		
B1	Cost of Concentrates @ Rs.5 per Kg for 3 Kg per cow per day: Assuming green fodder is available free of cost	5,475	10,950
B2	Medical Expenses @ Rs.0.50 per day per cow	183	365
B3	Man Power @ Rs.3 per hour for 365 days: Considering the entrepreneurs put 2 hours per day for feeding, washing, milking, etc.	2,190	4,380
	Sub Total	7,848	15,695
C	INCOME		
C1	Income from Milk: Assuming 10 liters of milk is produced per day per cow @ Rs.7.50 per liter for 300 days	22,500	45,000
C2	Cow dung, if converted into compost / vermi compost for one year	3,000	6,000
C3	Calf, if sold after one year	2,000	4,000
	Sub Total	27,500	55,000
D	ANALYSIS		
D1	Total income per annum	27,500	55,000
D2	Average Income Per month	2,292	4,583
D3	Loan Installment + interest per month	600	1,200
D4	Food & other recurring expenditure per month	654	1,308
D5	Monthly Net Income : excluding all expenditure & labor cost and repayment of loan and interest	1,038	2,075

5.2 Forward & Backward Linkages for Dairy Enterprise

Any enterprise becomes sustainable in long run if proper backward and forward linkages is made available.

Backward Linkage: Dairy as an enterprise requires the backward service like finance at cheaper cost to own the productive animals, availability of animals & raw materials in the market. Since, the IGA is being promoted through SHGs, the Banks are coming forward to finance these animals. BASIX has also extended the credit service to these SHGs to a larger extent. Not less than Rs.18.00 lacks has been invested by these institutions through the SHGs in the last 3-4 years. As per as the animals are concern the local market fulfills the requirement as of now. In some cases the farmers go around the surrounding villages upto a radius of 20 km and purchase the animals through brokers. The raw materials required for the dairy enterprise is nothing. The feed is available in their farms.

Forward Linkage: Marketing is assumed as the most important forward linkage in any enterprise. Janakalyan, therefore, promoted dairy as an IGA only after establishing MPCS in the colonies. Initially, the MPCS were registered and affiliated to KMF and then the finance was made available for the IGA through SHGs. Thus dairy as an enterprise is fully supported with backward and forward linkage services.

However, how far the services are fulfilling the need of the people is a question before us. As far as backward service is concerned, people do not have much objection except in some cases when the bankers delay the process of lending due to their lengthy procedure. And regarding the animals, some time the farmers are cheated by giving wrong information about the age of the animals, number of calving and milk yield. But, the community is definitely satisfied with the marketing arrangement that is presently available for them as they get very less price for their produce. The issue need to be considered seriously. However, since there is no other marketing network in place, though few private companies tried and escaped without making a huge amount of payment, all of them are selling the milk to these MPCS. The male-female ratio of the members of the MPCS are almost 40:60 and 2 MPCS are managed by the SHG members only while in others more than 45% of the Executive Committee are woman. The R.H. Colony No.5 still does not have a MPCS which need to be started in future.

5.3 How much wealth does dairy bring to these Colonies?

Processing of the data available with these MPCS shows about **Rs.36,61,708.75** (average) is brought into the Rehabilitation Project every year in exchange of the weeds that grow in the waste land. This is the

Table-2.5.3.1: Coloni-wise annual wealth coming into the villages

Sl. No.	Name of the Village	Annual Return through MPCS in Rs.		
		1999-00	2000-01	2001-02
1	R.H. Colony No.1	16,79,402	13,03,817	13,44,058
2	R.H. Colony No.2	2,79,006	10,62,369	3,62,171
3	R.H. Colony No.3	6,17,033	5,98,253	5,25,819
4	R.H. Colony No.4	5,09,723	4,93,626	4,10,461
5	Basavarajeshwari	2,92,420	3,62,171	2,92,420
6	Eranna Camp	2,60,227	3,05,099	2,87,054
TOTAL		36,37,809	41,25,335	32,21,983

N.B. Milk Price @ Rs.7.35 per liter

quantum of money comes into the Colonies through the MPCS as the payment for the milk produced by feeding weeds and we give nothing out of our villages. If we have earned through agriculture, we need to sell our produce i.e. the food grain or agricultural produce goes out and money comes in. But, in Dairy enterprise nothing goes out than the weeds transformed into milk through the Dairy factory. The data for the last 3 years are furnished in the table 7.3.1. The wealth of the Rehabilitation Project increases by **Rs.3,05,142.40** every month through Dairy alone. About

Rs.50,857.07 comes in every month in every Colony at the present rate of milk price i.e. Rs.7.35 per liter.

5.4 Increase in Family Income

Increase in Village Wealth is nothing but the increase in the family income and family here does not mean all the families of a particular colony. Family here means and includes only those who are the member of the MPCs. Therefore, whatever amount comes into the Rehabilitation Project through the MPCs are

Table-2.5.4.1: Average Annual Family Income increase through dairy enterprise

Sl. No	Name of the Colony	1999-2000			2000-2001			2001-2002		
		Members	Milk Yield (liter)	per family (Rs.)	Members	Milk Yield (liter)	per family (Rs.)	Members	Milk Yield (liter)	per family (Rs.)
1	R.H. Colony No.1	113	228,490	14,862	91	177,390	14,328	115	182,865	11,687
2	R.H. Colony No.2	23	37,960	12,131	60	144,540	17,706	67	49,275	5,406
3	R.H. Colony No.3	49	83,950	12,593	48	81,395	12,464	52	71,540	10,112
4	R.H. Colony No.4	63	69,350	8,091	52	67,160	9,493	57	55,845	7,201
5	Basavarajeshwari	43	39,785	6,800	49	49,275	7,391	52	39,785	5,623
6	Eranna Camp	33	35,405	7,886	46	41,510	6,633	51	39,055	5,629
	TOTAL	324	494,940	11,228	346	561,270	11,923	394	438,365	8,178

the income of few selected families. If we take an average of the annual income per families, it comes to around Rs.10,443/- excluding family milk consumption. Also, all the families who are members of the MPCs do not sale their milk to the MPCs regularly. But, since the average is calculated using total number of members the families income has come down to Rs.10,443/-. otherwise, there are enough cases where the families are solely dependent on the milk of 2-3 animals.

CHAPTER IV

CHILD LABOR ELIMINATION PROGRAM

Children: Today's citizens, not tomorrow's

4.1 Introduction

Children are considered to be the 'would be' citizens of a nation but Janakalyan's slogan is that "*Children are today's citizens*". Such children below the age of 14 years is entitled to "**free & compulsory education**" in the Indian Constitution. But the reality is far away from it. Majority of the children in the age group of 8-14 is out of schools. Most of the children who are out of schools are earning for their livelihood in the age of learning. The majority of the victims of this social issue are girls in the rural India. Most of the activities in which these children are engaged are hazardous and hinders the natural growth of a child.

In one hand the government is trying its level best to provide free & compulsory education to the children through various schemes while in the other hand the poverty & lack of resources at the disposal of the parents forcing their children to pick the sickle up instead of pencils. It was bothering Janakalyan for the last few years. Although, the regular schools are available in the villages, lack of motivation keep the children away from these schools. Janakalyan planned for an effective intervention to eradicate the issue from the area. Two Child Labor Special Schools are started as the means to eradicate the issue from the area. As the name indicates the schools are not similar to the regular schools but have lot of specialties and are meant for child labors only. Till last year (2000-01), we had mainstreamed about (78+) children. During the current year 100 child labors were selected in two schools.

4.2 What is CLEP?

Child Labor Elimination Program (CLEP) of Janakalyan is targeted to the children below the age of 14 years, who are engaged in various hazardous industries to earn. Such children are deprived from their child rights and are called as "Child Labors". CLEP is to help them to join the mainstream for making their brighter future.

4.3 Where CLEP?

A thorough survey of the areas of Janakalyan was done in the year 1999-2000 to identify the children who are engaged in hazardous industries. Timmapur & R.H. Colony No.2 were found highly populated with child labors. Therefore, two schools were started to begin with in these two villages. Swami Vivekananda Child Labor Special School, Timmapur and Ma Sharada Child Labor Special School, R.H. Colony No.2 are these two schools running in the Sindhanur taluka.

Timmapur: It is a remote village with about 2000 population. About 170 children were identified as the child labor in 1999 during the survey. Timmapur village is about 25 Km away from the block town Sindhanur. It is neither connected with proper road nor with telephone. The basic facilities like postal service, medical service, hygienic drinking water, are lacking still in the 21st Century. The major castes in the village are nayak, banajiga, vaddaru, muslim, lingayat,, etc. Unity & Cooperation are daydream in this village. However, the villagers have built a huge Temple for Ayyappa tata with public contribution. The annual festival is celebrated in a big-way. Irrigation facility is very poor, as it is the end of the irrigation canal. Land holding varies between 1 acre to 15 acres. Family planning is not being adopted by most of the families. Illiteracy is very high. The Kannada speaking people reside in this village.

Why Diddigi? After successfully completing 2 years in Timmapur and after mainstreaming all the child labors, the Timmapur was declared as “Child Labor Free village”. Then we thought to shift the school to Diddigi, which is a village situated on the boundary of Sindhanur block. Although t has relatively good transport and communication means, the socio-economic0educational status as bad as Timmapur. It is a village with more than 3500 population. About 80% families are agriculture laborers. The wage rate is as low as Rs.15-20 per day per laborer. Children are totally engaged in agricultural works to fulfil the family requirement.

Rehabilitation Colony No.2: It is biggest among all the 5 Rehabilitation Colonies of Sindhanur Rehabilitation Project and is not a village but Colony. The population of the colony is more than 3500 and has a primary school and also a high school. More than 200 child labors were found during the survey in 1999. The socio-economic condition of the colony is relatively better than Timmapur. Even then the children are forced to work in the agricultural field despite having facilities for schooling.

4.4 Identification of Child Labors

Door to door survey of the entire village is done to identify the children below the age of 14 who are engaged in hazardous work. The teachers then visit each of these children’s homes to convince the child and its parents and thus finalize the list of 50 child labors for each school. The table below gives the data regarding the child labors so far admitted in the special schools.

Academic Year	Ma Sharada Child Labor Special School			Swami Vivekananda Child Labor Special School		
	Boy	Girl	Total	Boy	Girl	Total
1999-2000				14	36	50
2000-2001	17	33	50			
2001-2002	14	36	50	15	35	50
TOTAL						

4.5 Motivation to Continue in the Child Labor School

Identification does not ensure the attendance of child labors in the Schools. Motivation of parents as well as children is equally important. Door-to-door visits in the initial period are the only way out opted by the Janakalyan team. Frequent meeting with the parents, especially mothers of the children were conducted, whenever the attendance was seen to be less than the average. Even then seasonal effects were seen throughout the year. However, we could maintain about 88% (44 children out of 50) of attendance in both the Schools.

Attempts to Keep the Children in Schools: Lots of innovative strategies were introduced to maintain attendance of the children in Schools. Few of them are like –

- ✓ Door visit of the absentees' house by the attainer, every day after roll call.
- ✓ Door-to-door visits by the team of teachers in the evening to motivate the parents of frequently absent children.
- ✓ Recreational facilities for the children in the School and using participatory tools and techniques for teaching them.
- ✓ Monthly Betterment Committee Meeting and visit by the Committee members to the absentees' parents.
- ✓ Frequent **Parents Meet** in the School to discuss about improving the attendance and other qualities of schools.

4.6 Making Children Capable of Joining Mainstream Education

Our motto is to motivate the children to join mainstream education after a year and not giving them formal education. However, as the child labors are from different age groups and need to be admitted in different classes in the Government Schools, we do give some kind of orientation about formal education according to their ages.

For the first 3 months, we give motivational inputs to all the children together. Later, the whole class is divided into various groups as per their age and knowledge. Then they are taught the syllabus through participatory approach through play & games. Emphasis is always given towards keeping the interest of these children static through various recreational activities. We declared prizes for the students, who are good in study, regular to school, active in sports and cultural activities, etc. Sometime, we have also organized picnic for the children.

Free Textbooks and Educational Kits to the Children: Textbooks were distributed to the children of both the Schools, free of cost. Also the educational kits like pen, notebook and other school stationery was also distributed from time to time.

Sl. No	Name of the School	Class I		Class II		Class III		Class IV		Class V		Total	
		B	G	B	G	B	G	B	G	B	G	B	G

1	Swami Vivekananda												
2	Ma Sharada	4	6	5	5	1	9	4	16	-	-	14	36

4.7 Vocational Training to make their Future Brighter

We have a provision for the Child Labors in the age group of 13-14 years to give vocational training. This facility for those children who will not fall under the definition of child labors after completing the education in our schools. Even for these children, we try our level best to admit them in the mainstream. However, in case the family needs his/her genuine supports in terms of earning, we do help him/her to earn for the family.

Sl. No	Name of the School	Tailoring		
		Boys	Girls	Total
1	Swami Vivekananda	-	8	8
2	Ma Sharada	4	15	19

Vocational Training materials Distribution: Keeping the key issue of poverty in mind, we did supply the vocational training materials, free of cost, required to learn the tailoring course.

4.8 Balanced Nutrition

We also keep an eye on the health of the children. It is an established fact that these children are child labors only because their parents are poor. Till now, these children were supporting their families, in whatever small way was possible by them. Now, they are in the Schools and hence are not able to support their families. Moreover, they need financial backup from their parents for their education, clothing, food, etc. To support their parents, we are offering balanced food as lunch during the school hours. We spend Rs.2.5 per day per child who attends the class.

4.9 Health Service

Periodic health check up and treatment were organized in the schools with the help of the Medical Officer of Primary Health Unit /Center of the villages. This helped the children to determine many diseases and get treatment free of cost at their doorsteps.

4.10 Stipend to the Children

To assist the children in getting the required things for their education purpose, a monthly stipend of Rs.100/- per child labor is deposited in the name of the child labor in a passbook opened either in Bank or in Post Office.

4.11 Extracurricular Activities

Alongside the formal education, we have organized various extracurricular / cultural activities, national programs, etc. during the year. The list is given below:

1. Independence Day
2. Training about music and dance.
3. Gandhi Jayanti (2nd October)

4. Karnataka Rajyotsava was a grand celebration at Swami Vivekananda School, Diddigi in the presence of Assistant Commissioner, Tahasildar, Block Education Officer, Child Development Project Officer, Bank Managers, Religious Priests, etc. (1st November)
5. Awareness Procession in the villages about Child Labor issues (19th November).
6. Exhibition of Products prepared out of mud by the children.
7. Participated in Swami Vivekananda Jayanti at Vivekananda Hindi High School, R.H.Colony No.4.
8. Grand Celebration of Subash Jayanti at Ma Sharada Child Labor Special School, R.H.Colony No.2 (23rd January).
9. Republic Day celebration (26th January).
10. Participated in Chinnara Mela (Children Meet) of CRC, Jawalgera.

4.11 Constraints faced in the Process

Any activity, which is meant for betterment of public at large never goes smoothly, is our experience. Lots of obstacles come in the way. We did experienced such difficulties in implementing this holy program meant for the innocent future citizens of India. Few of them are dealt in here.

- **Parents** are the first obstacles in this program. They willingly force their children for earning in the age of learning. This attitude is more for the girl child. Why should a girl learn at all? What shall be the use of education for a farmer's son? are the basic questions posed to us by the parents, often.
- **Stipend** is a facility made for the children to support their families. But the same is creating lots of problem between parents and teachers. Delayed release is the major reason for it. Also, the parents are generally misusing it. If we try to control it, they turn back start creating problems for their children.
- **Discrimination by Government** is creating another kind of problem to keep the children in Schools. In the regular schools, children are getting free textbooks, dresses, etc. While if we request for the same facilities for these child labors, the related departments acts differently. This disappoints the children as well as parents to drop out from the schools.

CHAPTER V

Poverty Alleviation Package for Refugees

An Approach for Sustainable Livelihood Generation

Agriculture has been a way of life for many for several hundreds of years. The transition from shifting cultivation to permanent agriculture took place over several hundred years. In India, forest cover is only about 21%, shifting cultivation is not so prevalent and mostly we have permanent agriculture. Further green revolution with hybrid seeds, fertilizers, pesticides and irrigation as a package was implemented in the 1960s, which changed the characteristics of agriculture.

Green Revolution was implemented, when increasing the production to meet the food demand and make the country self reliant in food production was the prime objective. With population growth, economic development from agrarian to industrialized society and changing consumer life styles of people, agriculture became an enterprise wherein the resource base could be exploited for higher productivity and specialized production. Specialization and simplification of the agriculture system was adopted to achieve higher productivity. Farmers got into the clutches of the middlemen and became dependent on the market.

Now, in retrospect, we ask the question whether it was wise decision to adopt specialized agriculture like dairy farming, poultry farming, sugarcane farming, cotton farming, tea plantation, etc. We are starting to look for alternatives to get the farmers out of the market clutches and restore the resource base.

Agriculture was integrated and well-balanced with people, crops, trees and animals having a role to play. In this article, we explore the reasons for the problems in present day agriculture and see how integrated agriculture can solve the ecological and financial problems of the farmers. With this objective, Janakalyan designed a package to alleviate the poverty from the area and launched a pilot project from February 2002. The principle of the project is dealt in here.

The Project Principle

The underlying principle behind this pilot project is represented pictographically as under. This project alone fulfils the mission of Janakalyan i.e. serving four holy mothers like *Manavi Mata*, *Bhoo Mata*, *Go Mata* & *Ganga Mata*. The fundamental principle of selecting these sets of program is that each of these components is complementary to each other. It needs an integrated approach.

The Soil, Crop and Cow have unique dependency relationship with the Human Being, as shown in the figure. None of the element can maintain it's health without the help of other three - is clear from the figure. However, **Water has its own importance and effects on each of these elements.** Therefore, the farm ponds are being constructed in each of the farms.

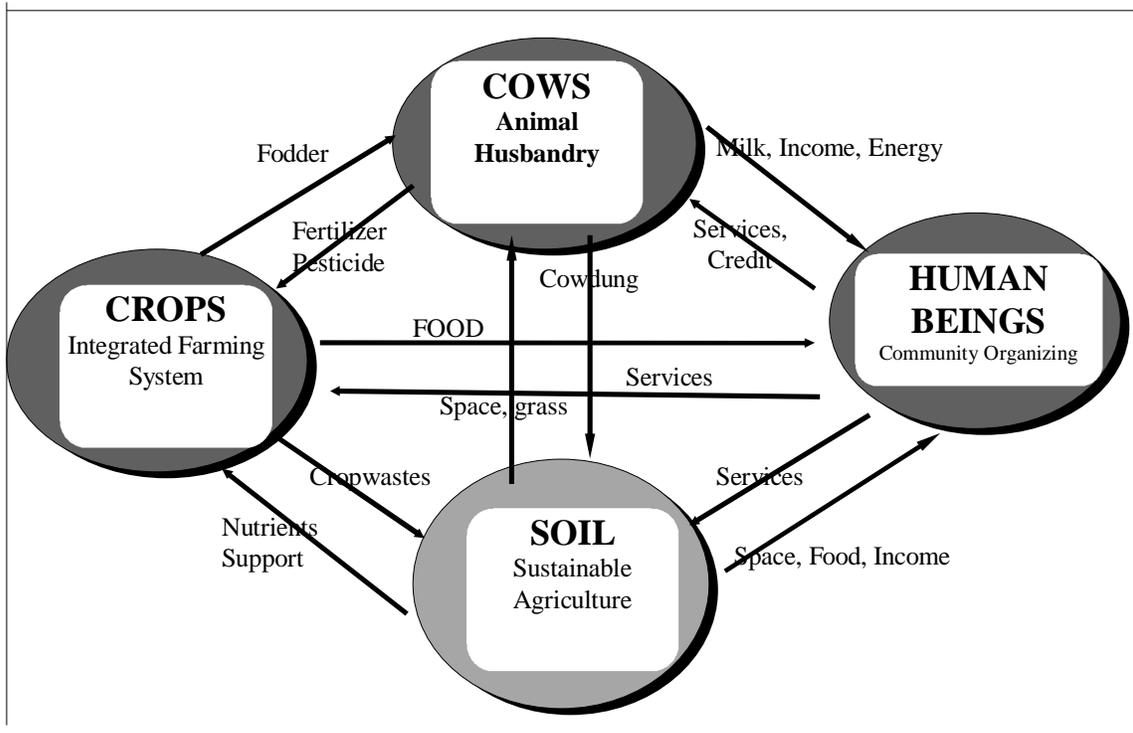


Fig.1: Schematic diagram showing the relationship between Soil, Crops, Cow & Human beings.

With the above principle, the program is being launched with the support of Sir Dorabji Tata Trust, Mumbai in the Sindhanur Rehabilitation Project of Raichur district with 6 farmers.

CHAPTER VI

Towards Sustainability

Changes in Organisational Policies

The year 2001-02 could also be termed as “transition year” as the organisation changed its approach from informal to formal to professional. Many changes in the organisational policies were seen during the year. As a result, staff turnover has also been high and it took about 6 months to finalise the team. Capacity building of the existing & new staff were another area of focus during the year towards sustainability. The major development are briefly described in this chapter.

5.1 Developed Professional Managers

Mr.Prasen Raptan, one of the key person of Janakalyan, completed his one year Post Graduate Diploma in Management of NGOs (PGDMN) from Entrepreneurshp Development Institute of India (EDI), Ahmedabad. He was awarded with a Gold Medal for his scholastic performance in the Insitute and securing I Rank for the year 2001-02. His research report “An Obscure Hope in the Eyes of Refugees: What Went Wrong & How to Improve the Livelihood of Sindhanur Rehabilitation Project” was the best report for the year and thus secured the second Gold Medal of the Institute. He is the first person in the history of EDI to secure two Gold Medals. Many NGOs were represented by the students from almost all the states of India and Mr.Raptan brightened the name of Janakalyan as well as Karnataka among them. NABARD pleased to sanction the full fellowship for Mr.Raptan and released Rs.97,000/- to EDI towards the course fees, Food & Accommodation for one year.

5.2 Financial Management & Accounting System (FMAS) Development

The first step of Mr.Raptan after returning from EDI in September’2001 was development of a Financial Management & Accounting System for Janakalyan. He designed a set of formats like Cash, Journal Voucher, Travell Allowance, Staff Advance form, receipt, Advance Settlement form, etc. Certain rules for accounting and finance management was framed in consultation with the employees. Unlike other years, the Pay-day was decided to be the day of monthly review meeting. All the bills should be settled on or before the last day of the month, without fail. The responsibility of Cashier & Accountant was assigned to different persons to put checks in the process. All the bills need to approved by the appropriate authorities before reimbursement.

5.2.1 Practical Training to the Accountant: After introduction of the FMAS in Janakalyan, it was found that Mr.Jagadish (B.Com.& PGDBM), the Accountant of Janakalyan, was facing lots of difficulties in following the system. Therefore, he was put in Prerana-Raichur for practical training for 15 days. The objective was to develop his skills in accounting and to identify the weak areas.

5.2.2 FMAS training to Accountant at KKID: Karl Kubel Institute for Development & Education (KKID), Coimbatore is a reputed Institute in the field of capacity building of NGO personnels in various sectors. Mr.Jagadish participated in Financial Management & Accounting System for NGOs (FMAS) training at this Institute. An thus, a perfect system development for accounting was completed, although there are many areas where we need to improve. Our next endeavour regarding FAMS is computerisation.

5.3 Human Resource Development

Human resource is the most precious resource for an organisation of our kind. Therefore, regular efforts has to be put to develop their skills and knowledge. More often, programs are to be conducted to update their knowledge base about their sectors. Janakalyan is not lacking in this regard.

5.3.1 Capacity Building of Land & Women Organiser: Regular training was organised for Mr.Shishir Ranjan Roy, the Land Organiser & Ms.Minakshi T A Gouda, the Women Organiser of Janakalyan, in their respective fields. About 7 training were organised for them at different places with different reknown subject matter specialists.

5.3.2 Capacity Bulding for the Child Motivators: Child Labour is a hazardous issue in our area of operation. To work with the child labour one should have required skills. To develop such skills in our child motivators a three-days training was organised at District Institute for Education & Training, Yarmaras, Raichur and Mr.Pampapathi, Mr.Sugaiah, Mr.Indraneel Sarkar & Mr.Pradeep Sarkar participated in the training.

5.3.3 Child Rights Workshop: A three-days workshop on Child Rights was organised at INGRID, Gillesugur and Mr.Pampapathi, Mr.Indraneel Sarkar & Mr.Deepankar Mondal participated in the workshop.

5.4 Rural & Micro Enterprise Development

Lately, the team realised the need for shifting the base of economy from agriculture to industries in the rural areas where Janakalyan is working. Agriculture is becoming loss-making enterprise due disguised employment and land fragmentation. Therefore, Janakalyan decided to enter into the field of Rural Industries Program. But before that it should acquire the required knowledge and experience in the field. Of course, Mr.Raptan has undergone a thorough training in the field. Even then it decided to train another person in the field.

5.4.1 SIDBI Sponsored “Certificate Course for Small & Rural Enterprise Consultants”: Luckily by the same time when Janakalyan took a policy decision to enter into the field of micro enterprise development, the EDI announced a course on the same topic. Sri S R Das, the Chief Executive of Janakalyan himself attended a 12 weeks Certificate Course on Small & Rural Enterprise Development Consultant.