The Experience of Community Foodgrain Banks

An Evaluation



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FOREWORD

In economically underprivileged families, over sixty per cent of the earnings go to the purchase of food for the family. Food being the first among the hierarchical needs of a human being, physical, economic and social access to balanced diet and clean drinking water is essential for the full expression of a person's innate genetic potential for physical and mental development. This is why Mahatma Gandhi mentioned that to those who are hungry God is bread and "To a people famishing and idle, the only acceptable form in which God can dare appear is work and promise of food as wages".

The M S Swaminathan Research Foundation has among its major areas of focus, the development of a strategy for a hunger free India. One of the important components of this strategy is the establishment of Community Foodgrain Banks. Such banks have multiple advantages since they help to enlarge the food basket through the inclusion of local grains and tubers, and at the same time, help to avoid distress sales and panic purchase. A National Grid of Community Foodgrain Banks will help to ensure the availability as well as access to food on the principle of social inclusion.

Inspite of having many nutrition safety nets, India occupies an unenviable position in indicators relating to the prevalence of malnutrition and hunger. Women and children tend to be even more malnourished and low birth weight children are common due to maternal and foetal under and malnutrition. The country is experiencing difficulty in achieving the UN Millennium Development Goal of reducing hunger by half by 2015. Therefore, we should explore the opportunities for decentralized approaches to food security. With the onset of Panchayat Raj Institutions with one third representation for women, it is possible to organize a network of food banks throughout the country operated by local communities preferably by women self help groups, under the overall oversight of Gram Sabhas. We should develop a self sustaining and self replicating model of Foodgrain Banks, if this method of contributing to the goal of a hunger free India is to make an impact.

The MSSRF's experience in this field is summarized in the present publication. It provides information on community led and managed Foodgrain Banks in Orissa and Tamil Nadu. The Government of India has announced its intention to bring legislation for food guarantee, in order to make rapid progress in eliminating hunger from the country. The present publication provides useful insights on the role community food banks can play in achieving sustainable food security. I am grateful to Ms R V Bhavani, Director, Food Security MSSRF as well as to Prof Venkatesh Athreya, Ms G Anuradha, Mr R Gopinath, Mr T R Nayak, Mr A K Panda and Mr A Vedhamoorthy for the trouble they have taken to compile this report. I hope it will be read and used widely in the development of local level strategies for elimination of chronic hunger. An added advantage of a decentralized grid of community food banks will be the opportunity they will provide to overcome transient hunger caused by global warming and climate change.

M S Swaminathan

The Experience of Community Foodgrain Banks An Evaluation

Preface

The right to food is a basic human right inherent in the right to life. It is not unreasonable to suggest that the duty of every State that is representative of the people it governs is to ensure that every individual has access to adequate food as a matter of right. Despite significant growth in food production at a rate more rapid than that of the population, at least in the period from 1947 till 1990, the Indian State has not succeeded in ensuring such food security. India has had in place a large system of procurement and public distribution of food grains since at least the adoption of the green revolution strategy in the late 1960s in the wake of a serious foodgrain crisis in the mid 1960s. However, the reach of this system has not been comprehensive, with coverage varying considerably across states and as between urban and rural areas. Since 1991, policies of globalization, privatization and liberalization have led to a serious agrarian crisis and an emerging threat, to even the limited food security achieved after the famines and devastation of colonial rule. As the State of Food Insecurity in Rural India (MSSRF and WFP, 2009) points out, the food security situation in rural India has not improved significantly between 1998-2000 and 2004-06, and may even have worsened in terms of all three dimensions of food security, namely availability, access and absorption.

Besides the PDS, there are several direct support and supplementary feeding programmes like the Midday Meal Programme in schools, the Integrated Child Development Services (ICDS), the *Antyodaya Anna Yojana* to reach the poorest of the poor and old age pension scheme, to alleviate hunger. There are also in existence several programmes for livelihood and income generation, intended to address the food security needs of the vulnerable sections of the population. Specific programmes to address micronutrient malnutrition like iodine deficiency, vitamin A deficiency and anemia are also in existence. In spite of a plethora of such programmes, India today has not just the largest population of undernourished people in the world (which would not be altogether surprising, given its population and the extent of poverty), but also a shockingly high

proportion of malnourished children, the proportion being even higher than for sub Saharan Africa. In this context, there is increasing recognition of the need for an inclusive approach, and the government is now considering the enactment of a National Food Security Act. The government has also put in place a National Food Security Mission to address the issue of availability, and initiated programmes such as the National Rural Employment Guarantee Scheme to improve the access dimension of food security. Effective implementation of the National Rural Health Mission and the drinking water and sanitation schemes should help improve the absorption situation.

The present critical situation apart, even in earlier times of more rapid growth of foodgrain production and relatively better economic access provided by a universal PDS, the more inaccessible regions were poorly served. It is in this context that decentralized local initiatives aimed at ensuring food security of vulnerable communities facilitated and supported by people's movements, community based organizations and non government organizations (NGOs) acquire importance. These, in many instances, arise as responses to inadequacies in the working of the State welfare mechanism. The success of these initiatives depends upon the effectiveness of consensus and decentralized collective action at the micro level. More often, in addressing the immediate need of hunger and food scarcity, they have the potential to serve as effective entry points or triggers to mobilize the community and build their capacity to demand and access their entitlements. Community Foodgrain Banks (CFBs) constitute one such initiative. Government efforts in promoting CFBs have been largely in partnership with local NGOs, since a very high level of community mobilisation is necessary. Initiatives spearheaded by NGOs reflect a range of approaches.

The Community Foodgrain Bank (CFB), as the name suggests, is a community managed food security system, where the community is trained to setup a bank of foodgrains from which they can borrow during times of need and repay after harvest in kind, with interest also in kind. Decentralised storage and management of foodgrain through a mechanism of CFBs can be an effective instrument for addressing the problem of hunger in areas where transient hunger is a common phenomenon or where there has been a natural calamity like floods.

Typically, in many tribal pockets across the country, three to four months of the year, usually June to September, are lean periods when the local workforce does not have any work, lacks purchasing power and the access to the Public Distribution System is poor. Often, grain-deficit households end up borrowing from the local moneylender at exorbitant rates of interest. A system like the CFB enables them to borrow foodgrain during the lean period and repay with interest also in kind (at a rate decided upon collectively), after the next harvest. The significance of the CFB is especially felt during times of crisis like floods, when employment and access become even more difficult. Once a corpus is in place, the cycle of borrowing and repayment sustains the operation.

At the core of this mechanism is collective action, consensus and community management. Capacity building of the community is therefore crucial to the sustainable operation and management of CFBs.

The M S Swaminathan Research Foundation (MSSRF) has piloted a few models of CFBs in tribal pockets in Orissa and Tamil Nadu, with support from the UN World Food Programme. This publication presents the findings of an evaluation of six CFBs in Koraput-Kalahandi districts of Orissa undertaken in 2005 and two in Kalrayan Hills in Villupuram district of Tamil Nadu undertaken in 2006, three years after their inception in each case. While the experience has been a mixed one, the usefulness of the mechanism to address transient hunger and as a useful entry point activity comes out clearly.

The study, methodology and design of questionnaire was initiated and coordinated by Professor Venkatesh Athreya during his tenure as Director, Food Security. The field survey was done by MSSRF staff at site offices — Mr A Vedhamoorthy, Mr Tusar Ranjan Nayak and Mr Akshaya Kumar Panda. Following data entry and information reporting by them, Ms G Anuradha and Mr R Gopinath at Chennai worked on the Orissa and Tamil Nadu reports respectively. The report went through several drafts and corrections under the guidance of Prof. Athreya, currently Advisor, Food Security, before finalization in its present form.

R V BHAVANI Director, Food Security MSSRF, Chennai

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Community Foodgrain Banks in Orissa

Introduction

Community Foodgrain Banks were started in eight hamlets in Koraput and Kalahandi districts of Orissa in 2002-03. In 2005, three years after the commencement of the initiative, it was decided to evaluate their functioning and household surveys were conducted in six of the eight hamlets. An attempt is made in this paper to document and evaluate the CFB initiative. Section I below gives a description of the work area. This is followed in Section II by a profile of the study villages. Section III describes the process of initiation of the CFBs and other related initiatives. Section IV analyses the findings of the evaluation study. Finally, Section V summarises the lessons learnt and seeks to explore the way forward.

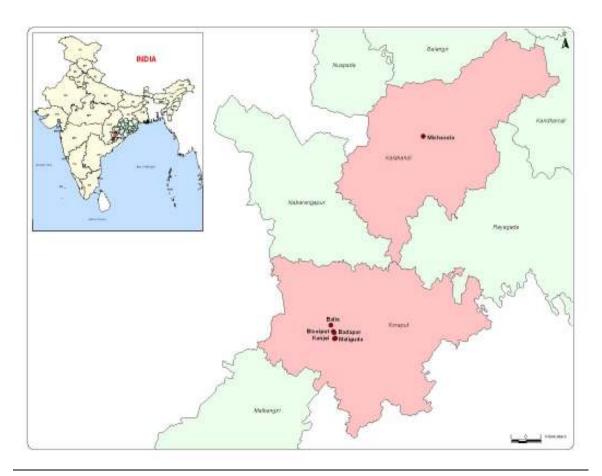
I. The Work Area

Situated along the east coast of India, more than 80 per cent of the population of the State of Orissa is rural and dependent on agriculture and allied activities. Most of the agriculture is rainfed. The tribal population is largely in the hills towards the south and west.

Koraput district is in south Orissa, lying between 17°40" and 20° 7" N latitude and 81° 24" and 84°2" E longitude, covering an area of 8379 sq km. Kalahandi district, a little to the southwest, is situated between 19° 3' N & 21° 5" N latitude and 82° 30"E & 83° 74"E longitude and has an area of 8364.89 sq km, 59 per cent of which is covered by forest. The map of the study area is given below. Both districts are rural, with high percentage of tribal population, high levels of poverty and low levels of literacy. They are rich in natural resources, largely unexploited. Most of the heavy rainfall runs off, leading to situations of water scarcity during certain months of the year. The per capita availability of land is less than one acre. Landlessness and lack of livelihood opportunities as well as low productivity levels are among the main causes of widespread poverty in this region.

Pilot 'community foodgrain banks' (CFBs), were started in seven villages of Koraput district in the year 2002 and in one village in Kalahandi district in 2003, as part of an

initiative to address the problem of food insecurity in this region. The seven villages in Koraput district are in Jeypore block, within a radius of 18 kms of Jeypore town. Michasola village in Kalahandi district, the site of the eighth CFB, is located 18 kms, southeast of Bhawanipatna, the district headquarters.



Map of Orissa with study villages highlighted

<u>Selection of villages:</u> These villages were selected based on the following criteria:

- Existence of food insecurity in terms of prevalence of transient hunger during certain months of the year.
- Existence of small farmers and landless laborers.
- ➤ The degree of mutual rapport between the community and MSSRF team on the ground, as this is essential for any medium or long term intervention.

The process underlying the selection involved compilation of available secondary data, primary survey and interaction with the community.

Characteristics of the villages: The seven project villages in Jeypore tract are surrounded by hills, which form a part of the Koraput plateau. These villages are inhabited by Scheduled Tribes (Bhumiya, Gadba, Paroja, Bhumiya, Kandha, Adivasi), Scheduled Castes (Harijan) and by other castes (Rona and Mali). The villages are patriarchal in constitution with male members being the decision makers. Each village has a symbolic village head, invariably a male. Women participate in the agricultural activities and marketing, apart from carrying out domestic chores. Agriculture is largely rainfed and heavy run-off precludes the possibility of cultivation throughout the year. Land distribution is skewed with a large number of marginal farmers and landless families. Many landless families lease in land for cultivation. The villagers mainly grow paddy and millets; a few farmers have taken up vegetable cultivation. Lack of proper storage facility for foodgrains and the dependence on moneylenders have been perennial problems; the villagers have been vulnerable to distress sale. Besides cultivation, most villagers work as wage-laborers in nearby villages and in Jeypore town. A large part of the population being landless, in the absence of significant industrial and other nonagricultural employment opportunities, the options for livelihood are limited to agricultural wage labor and gathering of minor forest produce. Irregular availability of wage employment often forces people to migrate to other places in search of work. The majority of the families suffer from acute food scarcity, particularly during the monsoon and pre-harvest season.

Malnutrition is widespread, with most newborn babies being low birth weight. The diet of the people consists mostly of carbohydrates — rice potato and a small quantity of pulses. Occasionally, they consume meat and fish.

Given the prevalence of food scarcity and transitory hunger through the monsoon months as well as low levels of food availability among poor households suggestive of chronic hunger, setting up CFBs seemed a logical step. It would address the problem of food

scarcity and provide an entry point for further work on food and nutrition security as well as livelihood issues in the area.

II. Profile of Study Villages

The demographic profile of the six villages (see map) selected for evaluation of the intervention is given in *Table 2.1* below. *Table 2.2* gives the pattern of land ownership. This is followed by a brief description of characteristics of each hamlet. The remaining two hamlets, Bedhaguda and Chhemiyaguda¹ are very small hamlets with sixteen and nine households respectively and were not included in the evaluation.

Table 2.1 Profile of Field Study Villages

Sl. No.	Village		No	. of hous	eholds		Po	pulatio	on	BPL households
		ST	SC	OBC	OC	TOTAL	M	F	T	
1.	Balia	81	36		05	122	276	253	529	115
2.	Bisoiput	56				56	137	175	312	35
3.	Kanjei	31			04	35	90	111	201	29
4.	Maliguda			35		35	92	97	189	22
5.	Badapar	39		6	2	47	119	109	228	34
6.	Michasola (Kalahandi)	32	14	12		58	112	108	220	24
	Total	239	50	53	11	353				

ST – Scheduled Tribe, SC – Scheduled Caste, OBC – Other Backward Caste, OC – Other Caste BPL – Below Poverty Line

Note: The first five villages are in Koraput district.

Maliguda is the only hamlet without tribal population, whereas Bisoiput is wholly tribal. The other four hamlets — Balia, Badapur, Kanjei and Michasola have tribals and non-tribals.

¹ They are located on top of a hillock and are totally cut-off during the monsoons. A village level storage was a felt need there.

Table 2.2 Landownership Patterns of Households

Sl. No.	Village	Land owner	Landless tenant	Landless Labourer	Total Households
1.	Balia	112	06	04	122
2.	Bisoiput	49	04	03	56
3.	Kanjei	23	04	08	35
4.	Maliguda	21	12	02	35
5.	Badapar	45	01	01	47
6.	Michasola (Kalahandi)	38	06	14	58
	Total	288	33	32	353

In Maliguda, Kanjei and Michasola, around 60 per cent of the households are owner cultivators and 25 to 30 per cent are labourers. In Balia, Badapar and Bisoiput, nearly 90 per cent are owner cultivators.

1) Maliguda

Maliguda village is a ward of Dongarchinchi gram panchayat in Jeypore block. It is approximately 12 kms southeast of Jeypore town. The village is surrounded by hills and has mostly low land with some upland. The 35 households in this village largely belong to the *Mali* caste. Agricultural labour is the major source of livelihood, followed by owner cultivation and collection of minor forest produce. The villagers grow vegetables commercially along with paddy and maize. The total agricultural land in this village is 32 acres. A second crop is also raised, thanks to a canal flowing through the village. Though most of the families do not suffer from acute food crises, there are 14 landless families who find it hard to make both ends meet, particularly during monsoon. It is important to note that the vegetables produced are mostly sold off in the market and only the remaining damaged vegetables are left for domestic consumption. The lower primary school and anganwadi centre nearest to the village are both located at Kanjei. The PDS shop is at the panchayat village of Dongarchinchi and supplies are available only once a month.

2) Kanjei

Kanjei, adjacent to Maliguda, is also a ward of Dongarchinchi gram panchayat. The 35 households in this village belong to *Bhumiyas*, *Gadbas* and *Rona* caste. This village is

also surrounded by hills, which form a part of the Koraput plateau. There is a lower primary school and an anganwadi centre. The PDS outlet is at the panchayat village of Dongarchinchi and supplies are available only once a month. The village has some low land and considerable upland. About 25 acres of land is wasteland, a part of which can be developed for cultivation. Land distribution is skewed, with a large number of marginal farmers and landless families. Crop cultivation, agricultural labour and collection of minor forest produce are the main occupations. The villagers mostly grow paddy and millets; a few farmers have recently taken up ginger and tomato cultivation. Apart from cultivation villagers, both male and female, also work as wage-labourers in nearby villages and town. During certain seasons, women collect minor forest produce. Some of the villagers have cows, buffaloes and other livestock. The total agricultural land in the village is 32 acres. The majority of the families suffer from food crises particularly during the monsoon and pre-harvest season.

3) Balia

Balia is a big revenue village in Balia gram panchayat, located at a distance of 11 km south of Jeypore town. The 122 households in the village comprise 42 Scheduled Caste families (*Harijan* and *Gadba*), 75 Scheduled Tribe families (*Bhumia*, *Saura*, *Paroja*) and 5 households belonging to the *Kamar* caste. The village is characterized by widely dispersed settlements. The Scheduled Tribes occupy the lowest position in the social hierarchy. Around 108 families depend upon irregular wage labor and agriculture for their livelihood. A hundred families having marginal and small land holdings suffer from food scarcity for 4 to 8 months in a year and ten landless families are vulnerable throughout the year. While rainfall in this region is high, there is no scope to cultivate more than once, except for a small patch of lowland that is cultivated twice with canal water. Total agricultural land in the village is 154 acres. There is a PDS shop, an upper primary school and an anganwadi centre in the village.

4) Bisoiput

Bisoiput is a revenue village adjacent to Balia village and also falls in Balia gram panchayat. All households in Bisoiput belong to the *Gadba* Scheduled Tribe. There are 56 households in this village. Of the total labour force, 39 are engaged in agriculture as

the main occupation, 34 are agricultural labourers, 25 depend on minor forest produce collection, 2 run shops and 2 are in government service. The PDS shop (supply available once a month), primary school and anganwadi centre which serve the village are all located in Balia.

5) Badapar

Badapar falls in the same panchayat as Maliguda and Kanjei. It is located near Bisoiput village and is 2 km from the main road. The 46 households in this village are dominated by the *Gadba* community and their livelihood is cultivation and agricultural labour. Most of the families having small and marginal land holdings, suffer from acute food crisis during lean period. The total agricultural land in this village is 48 acres. The PDS outlet is at the panchayat headquarter, Dongarchinchi and supply is monthly. There is an upper primary school but no anganwadi centre.

6) Michasola

Michasola falls in Tal-Jaring gram panchayat in Junagarh block of Kalahandi district. It is a revenue village situated at a distance of 18 km from the district headquarter (Bhawanipatna) towards west and is approachable through 16.5 km of National Highway 201 towards Junagarh and then 1.5 km of fair weather road. The 58 households in this village are a mix of *Kandha*, *Damba*, *Gouda* and *Mali* households. The main occupation is agriculture, supplemented by agricultural labour, other wage labour, fuelwood sale and collection of minor forest produce. Total agricultural land in the village is 115 acres. Around 20 households are landless. There is a primary school and an anganwadi centre in the village. The PDS outlet is at the panchayat headquarter in Tal-Jaring, 3 km away.

Common Features

It can be seen that owner cultivation, agricultural labour and collection of non timber forest produce are the main occupations in all the villages. Only one crop is raised in most of the hamlets. However, some farmers in Maliguda and Balia villages are able to raise a second crop due to water availability. Though the PDS shop is located at a distance in the gram panchayat village except for Balia, which is also the panchayat headquarter, the supply of stocks is monthly. This creates problems in terms of

households not having adequate purchasing power to lift the stocks. Often they have to borrow.

The process of setting up community grain banks in these six hamlets is described in brief below.

III. Setting up Community Foodgrain Banks

1. Initial Corpus in CFB

The process starts with building a corpus of foodgrains from which those in need can borrow. In this case, an initial corpus of foodgrains (rice, paddy, ragi and some dhal/pulses) was provided to get the banks started. This was done based on baseline information about scarcity period and the requirement during the period. Some amount of voluntary contribution from the members according to their capacity was insisted upon to bring about a sense of ownership. Rice was provided so that the villagers could have ready access to grains while paddy could be stored and processed when required. The initial stock of rice had part contribution from MSSRF while the paddy stock was entirely contributed by the villagers.

The rough estimation of minimum grains to be contributed by the project, shown in *Table 3.1a* below, was calculated based on the food crisis period in the villages. Generally, the crisis period in this region prevails from June to October every year, when casual work is not available to the landless and other labour households. But as creating a stock to cover this entire period was not possible within the resources available under the project, it was decided to contribute a stock of one week's grain requirement and target to create a stock of at least 4 weeks' requirement in each village over the period of a year. It was observed that each rural family (average number of 5 members, including children) requires 3.5 kg of rice every day (approximately 700 grams/person/day).

Table 3.1a Foodgrain Corpus at the time of CFB Initiation (2002-03)

Village	Total no. of hhds	Estimated coverage of hhds*	Household Contribution (Grain in kg)	Project Contribution (Grain in kg)
Maliguda	35	14 (40 %)	272	425
Kanjei	35	18 (50 %)	26	475
Badapar	46	29 (63 %)	47	525
Bisoiput	56	26 (46 %)	74	625
Balia	122	49 (40 %)	441	975
Michasola	58	50 (86 %)	175	375

[♣] The estimated number of households basically covered landless households and those possessing holdings less than one acre.

In all these villages, pearl millet used to be a traditional staple grain; easy access to rice and the cumbersome procedure involved in processing millets had started bringing down consumption. But since millets constitute an excellent source of micronutrients, it was decided to provide one fourth of the grain in pearl millet to encourage its consumption. Besides pearl millet, it was decided to provide 25 kg of pulses initially to each village, also with a view to encourage its consumption from the nutrition perspective. The quantity of other two grains, namely rice and paddy, were decided based on the socioeconomic status of the village and the people's choice. *Table 3.1b* shows the initial contribution of rice, paddy, pulses and ragi by villagers and from the project.

Table 3.1b Community and Project Contribution of Different Grains

Village	Villa	ge cont	ributio	n (kg)	MSSRF contribution (kg)				
, mage	Rice	Ragi	Pulses	Paddy	Rice	Ragi	Pulses	Paddy	Total
Maliguda	102	0	0	170	250	150	25	0	697
Kanjei	26	0	0	0	300	150	25	0	501
Badapar	47	0	0	0	350	150	25	0	572
Balia	216	0	0	225	650	300	25	0	1416
Bisoiput	74	0	0	0	400	200	25	0	699
Michasola	100	50	25	0	300	50	25	0	550

The villagers did not make any contribution of ragi or pulses except in Michasola where the villagers contributed 50 kg of ragi and 25 kg of dhal.

2. Formation of Management Committees

Management Committees (MC) were formed for the management of the grain banks in all the villages/hamlets. The members of this governing body were drawn from the *Palli Samity* (Village Committee) or *Palli Unnayan Samity* (Village Development Committee), of which every willing adult villager could be a member. The Samity selected/nominated an executive/management committee in a democratic manner, with a *Sabhapati* (President), *Sampadak* (Secretary), a *Koshadhaskhya* (Cashier) and other officials. The size of the management committee depended upon the population of the village. In general there were 3 to 8 members with at least 2 female members.

<u>Functions of MC</u>: The committees usually meet once in a month; they also meet more frequently if required. The meetings are generally held in the evenings. Sometimes during the off-season when there is no agricultural activity, festival periods and during any sudden emergency, the committees meet at any time. The meetings generally take place near the CFB storehouse, which is usually a central place in the hamlet. The committees discuss on food grain distribution and repayment, grain bank management, maintenance of registers, contribution to strengthen the corpus, utilization of excess stock, village development, problems and issues related to grain bank, quality checking during repayment and also proper storage of the stock. The decisions are generally taken through consensus. The committee maintains the record of the grains deposited, lent and collected.

3. Rate of Interest and Record Maintenance

Rules and regulations were formulated for the smooth management of the food bank. It was decided that the interest rate should be little higher in the initial period to increase the corpus fund and could be lowered when the foodgrain stock was sufficient. Initially, the following rates of interest were fixed for the food bank transactions:

Period of loan	Rate of interest
0-7 days	Nil
7 days to 30 days	25 %
> 30 days	50 %

- ➤ Since paddy is normally borrowed for a longer period (4-6 months), the interest is calculated on monthly basis (till next harvest) and the interest charged is 50% per annum.
- For pulses, the interest rate is calculated for a shorter period (normally for a month)
- > Same rate is applicable for rice and ragi

Grain Bank Registers (GBR) were given to each CFB to maintain record of transactions. Individual household passbooks with the photograph of the individual member were also printed and given to each CFB member. The stock, loan, repayment and other details regarding CFB are recorded in the GBR. Training was given to the management committee members on these aspects.

4. Storage

A sizeable quantity of foodgrains gets lost due to improper storage and moisture and pest attack. A secular and safe place within the village for storing the grains was an immediate requirement. The possibilities considered were brick and mortar rooms or pre-fabricated bins, RCC rings or steel silos. The villagers were in favour of constructing storehouse, because these could be tailored to their needs and put to multiple use. The CFB building is seen as the general grain storehouse of the village; the veranda in front is used to conduct meetings. This also provides for flexibility of storage both in terms of quantity and quality, withdrawal of grains and regular cleaning. In these villages, the storage cells (*Kothis*) inside the storage houses have been constructed based on scientific principles with guidelines from the Save Grain Campaign of the Government of India. Permanent storage houses of two metric ton capacity with two cells (*Kothis*) have been built raised from the floor to avoid moisture seepage. A room adjacent to the *Kothis* is kept for geneseed storage. The scientific storage system was preferred to the traditional storage system

at household level as it prevents food grain damage from insects, rodents, pest, moisture, fungus, etc. The community identified the construction sites for the storehouses; these were both in private as well as in panchayat owned places. Prior consent was taken from the concerned authority in both cases to ensure that no problem would arise later. The storage house having cells (*Kothis*) was constructed with contribution from the project towards purchase of materials and voluntary contribution of labour from the community. Women played a vital role in monitoring and in construction of the store houses.

5. Other Initiatives

Village Development Funds (VDFs) were started in each village to raise money for the general development of the village. The Village Development Committee (VDC) with the consent of all the members decided the monthly contribution by the members and bank accounts were opened. This fund is utilized to provide loans to people in need and interest earned on the principal amount helps increase the fund.

Self-help Groups were promoted in the villages with a view to improve the income earning ability of the people. Based on local resources, feasible market-driven microenterprises were identified, and capacity building programs were organized for the members. Help of local resource persons was taken for the purpose and some exposure visits to see micro-enterprise operations were also organized. The groups were linked with the nearby commercial banks to get support for the initiation of economic activities. The prevailing high level of illiteracy is a constraint for micro-enterprise development in these villages.

Entitlement cards listing out all the existing Government schemes for food and nutrition were prepared and given to each household. Dissemination workshops were held to share the lessons from the CFB experiences. Backyard kitchen gardens for vegetable and fruit cultivation, seed banks and village medicinal plants garden were some of the other activities initiated.

IV. Evaluation Study

In 2005, after three years of operation, it was decided to undertake an evaluation of the impact of CFB in six of the project villages. A brief profile of each of the villages has been given earlier in Section II above.

1. Methodology

The study was conducted using a structured questionnaire for individual household interviews and guidelines for focus group discussion. The questionnaire covered in detail the household composition, assets, income profile, access to Government schemes, food security and coping mechanisms, operation of CFB, etc. Out of the total 353 households in the six villages taken together, 20 per cent (68 households) were taken up for the sample survey. The distribution of sample households across the six villages is shown in *Table 4.1* below.

Table 4.1 Distribution of Sample Households across Villages

Village	No. of sample households
Maliguda	08
Kanjei	07
Badapar	07
Balia	22
Bisoiput	09
Michasola	15

Among the 68 respondents, 36 were women and 32 were men². A majority of the households belonged to Scheduled Tribes.

2. Household Characteristics

The respondents of the sample households were classified into different age groups. The age distribution is given in *Table 4.2a*. Most of them are in the age group 30 - 50 years.

² Not all respondents were 'heads of households'. Where the 'head' was not available, an adult member of the household was the respondent

The distribution of households in the study villages based on caste/tribe is presented in *Table 4.2b*. The majority of the households in these villages belong to the Scheduled Tribes and Scheduled Castes. The average family size is 5, with a maximum of 9 members and a minimum of one. Nearly 60 per cent of the respondents were illiterate and 15 per cent could only sign.

Table 4.2a Age Distribution of Sample Respondents

Age distribution of the respondents (years)	No. of sample households	Percentage
21-30	6	08.8
31-40	31	45.6
41-50	19	27.9
51-60	9	13.2
above 60	3	04.4

Table 4.2b Distribution of Sample Households by Caste

Caste	No. of households
SC	25 (36.8)
ST	32 (47.1)
OC	8 (11.8)
OBC	3 (4.4)

Note: Figures in parenthesis are percentages

2.1. Assets and Income

The distribution of the sample households based on the primary occupation is given in *Table 4.2c*. In a majority of the households, the persons in the workforce are either cultivators or wage labourers. The category of wage labourers includes wage labourers both in agriculture and in other activities. Less than 10 per cent of them are involved in other occupations. Nearly 40 per cent of sample households reported both cultivation and wage labour as among the occupations of the members of the household, and this is by far the largest category. *Table 4.2d* presents the ownership distribution of land holdings of the sample households. Nearly three-tenths of the households are landless. The proportion of households having less than one acre of land is slightly more than this, while around one-fourth own between 1 and 2.5 acres of land. Only two sample

households own more than ten acres of land. Thus, nearly 57 per cent of the households are marginal farmers cultivating less than 2.5 acres of land.

A majority of the households cultivate paddy and a few cultivate ragi. Agricultural implements like plough, sickle, spade and leveler were some of the other assets owned by the households. Around 52 per cent of the households own a plough, more than 75 per cent own spades and sickles and 44 per cent own levelers.

It is clear that most sample households own a very limited amount of productive assets.

Table 4.2c Occupational Pattern of Sample Households (hhds)

Primary occupation	No. of sample hhds	Percentage of sample hhds
Cultivation	15	22.1
Wage labour	20	29.4
Other	2	02.9
Cul+ wage labour	27	39.7
Cul+other	1	01.5
Wage labour+other	3	04.4

Table 4.2d Land Ownership Pattern of Sample Households

Land holdings (acres)	No. of hhds	Percentage
Landless	20	29.4
Up to 1 acre	21	30.9
1 - 2.5	18	26.5
2.5 - 5	5	7.4
5 - 10	2	2.9
Above 10	2	2.9

The main sources of income are crop cultivation, wages and animal husbandry. *Table 4.2e* presents the distribution of households by the range of annual income from crop cultivation. More than three-fifths of sample households receive no income from crop cultivation. Only one household has crop income exceeding Rs.10,000. Less than one-fifth of sample households have crop income exceeding Rs.3000. As can be seen from *Table 4.2f*, nine-tenths of sample households derive some income from wage labour. In the case of more than two-thirds of households, annual wage income exceeds Rs.3,000.

For one-seventh of sample households, wage income is the main source of income, exceeding Rs.10,000 per household.

Table 4.2e Annual Income from Crop Cultivation

Income from Crop cultivation	No. of hhds	Per cent
Nil	42	61.8
Up to 1000	3	4.4
1001-3000	10	14.7
3001-5000	3	4.4
5001-10000	9	13.2
above 10000	1	1.5

Table 4.2f Annual Income from Wage Labour

Income from wages (Rs.)	No. of hhds	Per cent
Nil	7	10.3
upto 1000	4	5.9
1001-3000	11	16.2
3001-5000	17	25.0
5001-10000	20	29.4
above 10000	9	13.2

Table 4.2g provides data on the distribution of different livestock among sample households owning some livestock. Nearly one-third of all sample households own cows and/or bullocks, while over one-fourth own chicken.

Table 4.2g Ownership of Livestock among Sample Households

Livestock	estock No. of owning hhds Per cent	
Cow	22	32
Bullock	22	32
Buffalo	13	19
Goat	8	12
Sheep	6	9
Chicken	18	27
Others	1	1

Table 4.2h shows the distribution of households based on the income from livestock. Animal husbandry is clearly an important source of income for over 50 per cent of sample households, exceeding Rs.3,000 per household. Nearly three-fourths of all sample households derive some income from animal husbandry and in the case of 15 per cent of sample households, the annual income from animal husbandry exceeds Rs.10,000. However 19 out of the 68 sample households also reported no income from livestock.

Table 4.2h Annual Income from Livestock

Income from livestock (Rs.)	No. of hhds	Per cent
No income	19	28
Up to 1000	9	13
1001-3000	5	7
3001-5000	6	9
5001-10000	19	28
above 10000	10	15

The distribution of sample households by total income is presented in *Table 4.2i*. Nearly two-thirds of sample households earn an annual income below Rs.10,000. Only 2 out of 68 sample households earn an annual income from all sources exceeding Rs.20,000. The prevalence of poverty in the study villages comes out clearly.

Table 4.2i Distribution of Sample Households by Range of Annual Income from All Sources

Income Range	No. of hhds	Per cent
(Rs.)		
< 5000	13	19.1
5001 – 7500	14	20.6
7501 - 10000	18	26.5
10001 - 15000	13	19.1
15001 - 20000	8	11.8
> 20000	2	2.9
All	68	100

2.2 Housing Conditions

While most households have their own dwelling, the quality of shelter is quite poor. Only 26 per cent of dwellings are electrified. As can be seen from *Table 4.2j* and *4.2k*,

nearly half of all dwellings have only thatched roof and 60 per cent have only mud flooring. There is no toilet facility in the study villages. These data together with data on wealth and income levels of sample households, confirm the picture of massive poverty and deprivation.

Table 4.2j Type of Roof of Sample Households

Type of roof	No. of hhds	Per cent
Thatched	30	44
Tiled	12	18
RCC	12	18
Thatched and RCC	12	18
Others	2	3
All	68	100

Table 4.2k Type of Floor of Sample Households

Type of floor	No. of hhds	Per cent
Mud	41	60
Cement	16	24
Mud and cement	1	1
Others	10	15
All	68	100

3. Functioning of Community Foodgrain Banks

CFB operation broadly entails accumulation of a reserve of foodgrain stock to cover community needs from time to time, borrowing and repayment activities, monitoring incidences of default and democratic functioning. This is examined below.

3.1 Membership

In Balia, Bisoiput and Kanjei, only 75 per cent of the households are members of the CFB. In Michasola, nearly 97 per cent of the households are CFB members. In the other two hamlets, Maliguda and Badapur, all households are CFB members.

3.2 Change in stock over the Years

One indicator of the viability of CFBs would be their ability to build on the initial corpus stock, while also providing grain loans to members to meet urgent foodgrain needs. *Table 4.3a* presents data on the closing stock of foodgrains in each of the six study villages. It also shows the percentage growth of grain stocks over the initial corpus.

Table 4.3a Closing Stock of Grains in CFB (kilograms)

Village	2002-03	2003-04	2004-05	2005-06	Growth over Initial Corpus (per cent)
Maliguda	337	1012	3488	3001	330.56
Kanjei	62	435	496.5	874	74.45
Badapar	154	309	718	902	57.69
Balia	1082	650	1433	1515	6.99
Bisoiput	175	181	317	454	-35.05
Michasola		654	759	588	6.91

The opening stock of grains in 2002 in CFB of Maliguda village (*Table 3.1b*) was 697 kg of which 272 kg of grains was contributed by the community. The stock was maintained well with proper repayment of grains with some additional contributions from the community. The increased stocks level made them sell 1120 kg and 1200 kg of paddy in 2004-05 and 2005-06 respectively and the proceeds were deposited in the Village Development Fund. The closing stock of grains was 3001 kg in 2005-06 (*Table 4.3a*). The initial contribution in Kanjei village was 501 kg of grains of which the community contributed 26 kg of rice. They also maintained their stocks with repayment of grains and some additional contribution by the community. The closing stock was 874 kg. The initial contribution in Badapar village was 572 kg of which the community contributed 47 kg of rice. A large additional contribution of paddy was made by the community. The closing stock of grains was 902 kg in 2005-06. The initial contribution in Balia village was 1416 kg of grains of which 441 kg (rice and paddy) was by the community. There was no contribution thereafter from the community. This village has 122 households and

initially 108 households became members of the CFB. The closing stock was 1515 kg of grains, a growth of hardly 7 per cent over the initial stock. Bisoiput village had 699 kg of grains as initial contribution, of which the community contributed 74 kg of rice. There was very minimal contribution thereafter from the community and the closing stock was 454 kg of grains, a large decline from the initial stock level.

The following are the main points that emerge from the above analysis

- ➤ Three villages (Maliguda, Kanjei and Badapar) showed rapid growth of stocks over time, indicating effective and active functioning of CFBs.
- ➤ The CFB in Bisoiput seems to be recovering and building up stock after a large decline in corpus in 2002-04.
- ➤ The performance of the CFB in Balia is modest.

As mentioned earlier, CFB was initiated in Michasola village in 2003. The initial contribution in this village was 550 kg of grains of which 175 kg was by the community and there was no further contribution by the community. The closing stock was 588 kg, showing an order of increase similar to Balia.

One must be careful in assessing the changes in stock from year to year. The offtake by way of loans and the repayment patterns differ both across villages and over time in each village. These variations reflect both varying local needs and differential effectiveness in functioning of CFBs.

A reflection of the concern to maintain CFBs in good order with adequate stocks was the fact that respondents from all the villages except Maliguda felt CFB stock was not enough.

3.3 Borrowing and Repayment of Grains

A grain bank, to be useful must have a fair amount of borrowing and lending activity. For it to be viable, as indeed for any lending institution to be viable, loans must be repaid with interest and on schedule as far as possible. In the mainstream financial system, this

is sought to be ensured through rules and regulations, which have the force of law. In the case of CFBs, however, it is social mobilization and the preserving of a social consensus that is critical for ensuring prompt repayment. The accent on prompt repayment need not and should not imply undue rigidity, since accommodation backed by community consensus may be essential in times of crisis.

Table 4.3b presents data on the number of borrowers of grain from the CFB in each of the study villages.

Table 4.3b Number of Borrowers of Grains

Village	2002-03	2003-04	2004-05	2005-06
Maliguda	26	26	17	15
Kanjei	19	11	14	13
Badapar	23	16	19	17
Balia	38	40	22	20
Bisoiput	27	19	15	14
Michasola		28	18	12

The number of families who availed loan was found to have decreased gradually over the years. Of the 35 households in Maliguda, 26 had borrowed during the first two years. The number of borrowers decreased to 17 and 15 in the next two years (*Table 4.3b*). The quantity of loan availed in Maliguda was highest in 2004 at 635 kg. The repayment transactions were maintained properly.

Of the 35 households in Kanjei, 19 households borrowed grains during the first year. This further got reduced to 13 households, which was around 40 per cent. The quantity of loan availed in Kanjei village also decreased slowly. The repayment transactions were also marginal.

Of the 47 households in Badapar, 23 households used CFB for borrowing grains in the first year. This came down to 17 households over the years. The quantity of loan availed in Badapar was highest in 2004 at 958 kg.

Out of 122 households in Balia, around 38 households were borrowing grains from CFB in the first two years. Later, this number came down to around 20 households, covering 16 per cent of the households. The quantity of loan availed in Balia village was highest in 2002 at 1150 kg. The repayment transaction was maintained properly.

The number of borrowers of grain from CFB in Bisoiput initially was 27 households out of 56 households. Slowly this number decreased to 14 households. The repayment transactions were also marginal. The maintenance of records was not proper in this village. The quantity of loan availed in Bisoiput village was highest in 2002 at 635 kg.

Repayment is as important as borrowing in any assessment of the usefulness and viability of a CFB. *Table 4.3c* shows the repayment of grains to the CFB in different villages over a period of time.

Table 4.3c Number of Repayments of Grains by Sample Households

Village	2002-03	2003-04	2004-05	2005-06
Maliguda	0	26	26	14
Kanjei	0	17	10	10
Badapar	0	24	16	13
Balia	15	14	34	15
Bisoiput	0	21	19	15
Michasola		3	5	4

In the below *Table 4.3d* the number of CFB defaulters in all the villages over a period of time is given.

Table 4.3d Number of Defaulters among Sample Households

Village	2002-03	2003-04	2004-05	2005-06
Maliguda	0	0	0	3
Kanjei	0	3	3	6
Badapar	0	2	2	6
Balia	0	10	7	9
Michasola	0	0	0	5
Bisoiput	0	8	8	7

There is a declining trend in both the number of borrowers and consequently in the number of repayments made in a year. On the other hand, the number of defaulters is showing an upward trend in several of the study villages. It is possible that the inability to repay on time may also have led to a decline in the number of borrowers. It is also possible that after 2002-03, the local production of grain has gone up and the cultivator households have faced less food scarcity in some of the years in some of the villages. This positive outcome itself may be related to the functioning of CFBs. In Michashola, of the 58 households during the first two years, around 28 households were borrowing grain from the CFB

3.4 Functioning of Management Committee

Every village has a management committee drawn from the general body. The number of members varies from 5 to 8 (*Table 4.4a*), with at least 2 female members. There is around 80-90 per cent of attendance during the meetings. The committees appear to be meeting regularly, and monitoring the CFB functioning as well as taking decisions on lending and the terms thereof.

Table 4.4a Management Committee Members

Village	Males	Females
Maliguda	3	2
Kanjei	2	3
Badapar	3	2
Balia	2	4
Bisoiput	3	2
Michasola	4	4

3.5 Usefulness of CFB

Nearly 88 per cent of the households reported having access to PDS and a small percentage of the households had access to other government programmes. More than 90 per cent of the households considered PDS and CFB as coping mechanisms for tiding over food scarcity periods. Migration is not reported in the study. Around 25 per cent of

the households depend on the moneylenders to overcome seasonal unemployment and consequent lack of access to food grains.

More than 95 per cent of the households reported that CFB was useful. Nearly 25 per cent of them reported no scarcity of food in the reference period. A few had some kind of scarcity throughout the year. Around 75 per cent of them had reported no problems in accessing the CFB. In all six villages, the CFB was found to address problems and issues related to food, supporting the needy families in lean period, checking exploitation by the moneylenders, supporting the villagers during family functions and celebration of festivals. Sale proceeds of surplus stock by a CFB had also gone to the VDF to be used for village development.

3.6 Village Development Fund (VDF)

In all villages, a VDF was opened with a monthly contribution of Rs.5 or Rs.10 by each member and the amounts thus obtained were deposited in an account with the bank. The VDC is in charge of collecting money. Money thus collected is lent out to needy households at an interest rate of 10 per cent per month. The committees are involved in many activities, which give economic benefits. In Maliguda, development activities like setting up proper drainage system, concrete roads inside the village, check bunds to check soil erosion and preparation of medicinal plant garden had been undertaken by the committee. The committee purchased community vessels and agricultural equipments from the money earned from lending operations.

In Michasola, the village fund was given as loan to the needy people. Also member households accessed this fund to pay for medical treatment. Some group activities were also undertaken. Barren land was utilized for community farming of pulses and rice cultivation. The community renovated the panchayat pond with 2 days of voluntary labour contribution by each household for the purpose of fish farming. The community also spent the village fund for other developmental activities — a village land acquisition case, (where community land illegally occupied by a landlord was wrested back for the community), and demarcation of village road.

For most activities, the community had to spend part of the money to purchase the material as well as their labour. They also mobilized some funds from the government for the village road construction. These activities gave them employment. Approximately 450 employment days was created in the village in road construction and in other developmental activities during the year.

In Maliguda and Badapar villages, with the support of the panchayat, a community harvesting yard was built; one winnowing fan, five treadle pumps, utensils for catering purposes, one mike set, and tarpaulin for meeting purposes were purchased and one meeting *pandal* erected and vested as assets with the VDF. In Kanjei, no asset was created. In Bisoiput one tarpaulin sheet for meeting purposes and one community radio were the assets created. In Balia, five treadle pumps, one community radio and one gas light for meeting purposes were purchased from the village fund. The entire community utilizes all the assets and infrastructure created. A loan of Rs.4500/- was given from the village fund at an interest rate of 3 per cent per month to another village.

3.7 Self Help Groups and micro-enterprises

There are 15 SHGs in these six villages. Badapar and Bisoiput have one SHG each. In Maliguda, there are 3 SHGs and in Kanjei there are 2 SHGs. Michasola and Balia have 4 SHGs each, of which Balia has 2 male SHGs. The number of members in the SHGs varies from 10 to 15. Of the 15 SHGs, only two groups are male SHGs. The monthly saving per member of these SHGs varies from Rs.20 to Rs.50.

In Maliguda, SHGs made every household in the village conscious about environmental hygiene and dug a common garbage pit to store the household waste. The waste stored in the pit was converted to vermi-compost and used in their fields. With the effort of one SHG, a community bathroom for women to bathe was constructed and women were using it.

In Kanjei, SHGs were linked with the co-operative banks to avail loan support for the micro-enterprises like preparation of value-added products from paddy. In Balia, some

selected women SHG members were sent to University of Agriculture Sciences Dharwar, for training in preparation of value added products from millet and ragi. A small milling unit was set up in the village under another project supported by the International Fund for Agricultural Development (IFAD), to grind the millets. They were also involved in other activities like goatery and sheep farming, vegetable cultivation and mushroom cultivation.

In Badapar village, the SHGs were strengthened to take up market driven microenterprises like preparation of value added products from rice and millets, promotion of kitchen gardens and vegetable cultivation, vermi-composting and mushroom cultivation.

In Michasola, of the four SHGs, one SHG was engaged in rope making from wild plant fibre and its marketing; another was running the only grocery shop in the village; two SHGs combined to manage the dal processing unit, which had been established with financial support from NABARD.

Generally in all SHGs, the amount collected from the members was used for internal lending with low interest rates. To start an economic activity, the SHGs approached the banks for loan and partly used that money also for internal lending.

In the study and intervention villages, the poor people were often deprived of getting their entitlements, as they were unaware of the schemes. Some awareness camps were conducted and entitlement cards distributed to households. They all had problems in marketing their products due to inadequate transport facilities. The details of SHG activities are in Annexure 1.

IV. Lessons Learnt

The study reveals that the CFBs are serving the needy people in all the villages. The initiative helps address transient hunger to some extent but there is still a long way to go. To move from grain bank to address transient hunger to build a **Gene-Seed-Grain-Water Bank continuum** based on sustainable use of available resources for food and livelihood security is the logical next step. Some villages now have Seed Banks. Starting

with mobilising the village community around the CFB initiative to address the immediate problem of food scarcity, attention has moved overtime to improving production and productivity of the land, micro-watershed management, facilitating formation and capacity building of SHGs to undertake micro-enterprise activities (e.g. value-added products from rice, millet), development of Village Fund for common village development activities, to ensure sustainability of the mechanism, and address other issues pertaining to improving the quality of life for people. Awareness generation on Government programmes for food security through 'Entitlement Cards' listing out the various schemes, has led to instances of these programmes being accessed, e.g. old age pension.

Given that the initiative has been tried out in small hamlets with more or less homogeneous communities at the same economic level, social cohesion has not been difficult to ensure. The communities that the MSSRF worked with were those experiencing severe deprivation in term of agricultural productivity, access to education and health, and above all, access to food. The CFB therefore addressed an immediate problem faced by the community. Heterogeneous communities with vast differences in economic status would have created difficulties in the way of social mobilization for collective action.

A major challenge has been capacity building of the community to manage on their own and to ensure sustainability of the bank by having the corpus revolve and grow. The level of literacy in these villages has to improve in order to enable effective maintenance and monitoring of the CFB transactions. More training has to be given to improve their skills according to the needs.

A lesson has been that if one just starts a CFB and restricts support to that, the exercise will be largely a "numbers game", without any substantial ground level impact even within the area of operation or the neighbourhood. Adequate attention to storage is another crucial aspect that has to be built into the project cost.

It also has to be understood that the impact of the CFB initiative can only be limited in terms of coverage and ability to improve the standard of living. Essentially, it helps ward off extreme hunger and starvation, which is what it has helped do in the project villages. Indebtedness due to food shortage is another aspect that is addressed and dependence on the moneylender is reduced. If the initiative can be scaled up, inter-grain bank transactions encouraged, and linkages established with the vast umbrella of government programmes for food and nutrition security, the initiative could be made more sustainable. However, macroeconomic policy efforts to increase production and productivity and focus on nutrition security issues, taking into account the entire gamut of issues of availability, access and absorption of food, are critical to addressing the issue of food and nutrition security for all. Small initiatives, such as the one discussed here, though important, have limited local relevance.

Community Foodgrain Banks in Tamil Nadu

Introduction

In 2003-04, the M S Swaminathan Research Foundation (MSSRF) undertook to set up pilot Community Foodgrain Banks (CFB) in two villages in a tribal block in Tamil Nadu. This was a follow-up to discussion with the state Planning Commission, wherein it was decided to attempt to demonstrate a model of community food security.

The two villages, Melvazhapadi and Talvellar in Kalrayan Hills block of Villupuram district (see map), were identified with the help of the state Planning Commission and World Vision India (WVI), the NGO operating in the area.

This paper presents the findings of a household survey carried out in 2006 to gauge the impact of the intervention, three years after the initiation of CFBs. This is supplemented further by information gathered through group discussion during follow-up visits in 2008. The experience of each village is presented separately, based on the information collected under the survey, group discussions and information gathered from secondary sources. Section I examines the situation in Melvazhapadi and Section II profiles the Talvellar experience. The final Section III summarises the learning from the exercise.



Map of Tamil Nadu with study villages highlighted

I. Melvazhapadi

1.1 Village Profile

Melvazhapadi is a hamlet falling under the Vazhapadi revenue village in Vellimalai panchayat of Kalrayan Hills block, Sankarapuram taluk in Viluppuram district, Tamil Nadu. Other hamlets of the Vazhapadi revenue village are Talvazhapadi, Kannumathivalavu, Melthevanur and Talthevanur. *Table 1.1* below gives some characteristics of the village.

Table 1.1 Socio-Economic Characteristics of Melvazhapadi Village

Sl. No.	Criteria	Status
1.	Total no. of hhds	95
2.	Population – Male	223
	Female	241
	Persons	464
3.	Castes residing in the	Scheduled Tribe
3.	village	(Malayala Goundars); Two SC households
4.	School	Residential Middle School (run by ST Welfare
4.		Department)

_	Road	Pucca tar road connects the village to Vellimalai,
5.	11000	Block Headquarter (5 km)
6	Public transport	5 km (Vellimalai)
6.	facility	, , ,
7	Drinking water	Unprotected water from a well (1 km away from
7.		the village)
8.	Electricity	Street lights and house connections
9.	Telephone	Public coin box and mobile phones
10.	ICDS centre	The village has one centre with an AWW & AWH
11.	Nearest PDS outlet	Vellimalai (5 km)
12.	Nearest bank	Indian Bank at Vellimalai (5 km)

The hamlet is located on hilly terrain with substantial land under forests, under the control of the Forest Department; the people's asset ownership is restricted to houses, livestock and some amount of land.

Most of the households own some land in the village. According to the baseline survey, 15 of the 95 households do not own any land. The local people reported that some are also occupying forest land near their land for cultivation. If the Forest Department files case against the encroachers, they are fined between Rs.2000 – 5000. Therefore, encroachment of forest lands has come down over the years.

Half of the houses do not have electricity connection. Radio and television are there only in a limited number of houses. The remote location of the village has induced the households that could afford the expense to buy motorcycles and bicycles for transport. Around 15 of the 95 households own a motorcycle and 25 households own a bicycle.

1.1.1 Occupational Profile

Agriculture in Melvazhapadi village is largely rain-fed. There is a stream flowing about 1 km from the hamlet. By using water from the stream, farmers cultivate paddy and tapioca. They use diesel engine to pump water from the stream to their lands. However, the extent of use of the stream water for irrigation is very limited. Land using surface irrigation is just 19.6 per cent of total cultivated lands (15.55 acres of 79.50 acres) in this hamlet. The cultivation of paddy and other food crops is only to meet subsistence requirements.

Livestock rearing occupies an important position in the village economy. The main livestock in this hamlet are goats, cows, bullocks, poultry and pigs. Pigs are not used commercially, but are reared for sacrifice in worship. The old persons, irrespective of sex, take responsibility for maintaining livestock. People build sheds for the goats at 3-4 feet height from the ground by using sticks to protect them from forest animals. Fencing is used for sheltering cows and bullocks. According to villagers, livestock dropping serves as manure for their lands.

The main occupations of the resident population are cultivation and agricultural wage labour. Income from wage employment through off-season migration to other areas is an important source of household income. Since locally available agricultural employment is inadequate, seasonal migration of labourers to other places in search of employment for subsistence is very common. Migration takes place both among the landless and landholder households. They go to Coimbatore, Erode, Chennai, Kerala, Karnataka and also to north India. They generally get hired as casual labour in construction activity, plantation estates and textile mills in the south and bore-well digging in north India. According to Annamalai, a marginal landholder, employment opportunities are available for people on agricultural lands from the second or third week of May to the last week of January. Annamalai also informed that youngsters in 16 – 30 age group and landless labourers generally come back to the village during the month of January.

People collect forest produce for their own needs and also for earning income. All households collect firewood from the forest and no one, including the schools and ICDS centre, buy firewood or use LPG gas. The villagers said during the course of discussion that firewood is collected from the forest as per their rights. However, the people are not permitted to cut green trees; they are allowed to collect the dry and wasted sticks from trees. Black myrobalan (*Kadukkai*), tamarind, Indian beans (*Punkankai*), bottle gourd (*Thandikkai*), curry leaf and honey are other products they collect from the forest. *Kadukkai* is dried and sold while the other products are consumed and any excess available is sold.

1.1.2 Food Security

Most of the households have kitchen garden around their houses; the limited availability of land for cultivation is also a reason for growing vegetables in kitchen gardens. The consumption pattern of the people in this hamlet is largely determined by the availability of local produce, with only a few essential items being purchased from the market. The people grow vegetables in kitchen garden for their own consumption rather than for sale. The vegetables cultivated in kitchen garden are *okra*, *brinjal*, *radish*, *chillies*, *moringa*, *tomato*, *papaya*, *lab lab*, leafy vegetables and banana. A group of women on one street said that they do not purchase vegetables other than onion and potato from the market.

All households have access to the PDS outlet. The cardholders can buy 35 kg of rice at Rs.2 per kg along with a minimum of 0.5 kg and maximum of 2 kg of sugar and 3 litres of kerosene per month per card. The people said that they can buy even more than 35 kg of rice by paying an extra Re.1 per kg. The PDS rice is the major source of rice for the villagers, both cultivators and landless households. They also said that Rs.2 per kg rice scheme was very useful to meet their rice requirements at affordable prices³.

1.1.3 Educational Infrastructure

The village has one middle school run by the Scheduled Tribe Welfare Department and one ICDS centre. According to the Anganwadi Helper (AWH), noon meal is provided and supplementary feeding given for children below 5 years of age and pregnant women. The ICDS centre functions only as a food distribution centre and there are no other activities.

The government residential middle school is at Melvazhapadi. WVI has helped the school by providing play material, financial assistance for constructing additional classrooms and kitchen and also appointing one assistant for teaching⁴.

³ The price of rice was reduced to Re.1/kg in October 2008.

⁴ WVI directly appointed this person and pays his salary.

The educational status of the villagers is very poor; three males got educated upto graduate level with the help of WVI. Two of them are studying for a M.Ed. degree with WVI assistance; the highest educated female had studied only up to Class X. According to 2001 Census, the literacy rate in Vazhapadi revenue village is 19.66 per cent.

1.1.4 SHG Activity

Self-help groups (SHGs) in Melvazhapadi hamlet were started in 2001 with assistance from WVI. In 2008, there were three female SHGs — *Mullai*, *Samanthi*, *Kurinchi* (started in 2001-06) and one newly formed male SHG still unnamed, in the hamlet. The membership of the SHGs varies from a minimum of 12 (*Samanthi* group) and maximum of 19 (*Kurinchi*) and their monthly subscription is Rs.52 per member per month. The SHGs have fortnightly meetings. They discuss the financial position of their group, available credit opportunities in the bank, agriculture and their village development in the meeting. These SHGs reported support of the WVI Animators for the record keeping and documentation work.

The SHGs practice internal lending activities by using their savings and revolving fund loan given by bank. The loans are given for children's education agriculture, income generation activity (milch animal, goat rearing, tamarind processing) and house construction activities. The loan amount per capita is between Rs.500 and Rs.4500 at 24 per cent interest and the borrower has to repay the amount in 10 months. The SHGs also arrange bank loans for their members. These loans are lent for the purposes of agriculture, income generation, family expenditure and education. No group activity has been undertaken so far. There is also a building for SHGs built by the panchayat. It is being used for community activities.

1.2 Analysis of Household Survey

A survey was conducted among a random sample of 46 households (23 CFB member and 23 non-CFB member households) from out of the 95 households in the hamlet. The interviews with sample households took place during May - June of 2006 and the reference year was 2005 - 06. A brief analysis of the data thrown up by the survey is

presented below. This is followed by an analysis of CFB member households and their experience with the CFB.

1.2.1 Demographic Characteristics of Sample Households

The demographic profile of the 46 sample households is given in *Tables 1.2* and *1.3*. The average household size is 4.5 and the work participation rate is 66 per cent, with 137 workers and 71 non-workers.

Table 1.2 Number of Persons in Sample Households

Sl. No.	Age Group (in	No. of Persons			
51. 110.	years)	Male	Female	Persons	
1.	Less than 15	29	42	71	
2.	15 & Above	70	67	137	
	Total	98	108	208	

Table 1.3 Household Distribution by Size

Sl. No.	Households	All Households		
	Size	Number	Per cent	
1.	Upto 3	17	37.0	
2.	4 – 6	25	54.3	
3.	7 – 10	3	6.5	
4.	> 10	1	2.2	
	Total	46	100	

Thirty seven per cent of the sample households had a family size of 3 and 54 per cent reported between 4 and 6 members in the households.

1.2.2 Educational Status

The overall literacy rate among the sample households is 46.6 per cent (*Table 1.4*). Only 5 of 97 literate persons had studied above class 10 in the sample households.

Table 1.4 Educational Status of Members in Sample Households

Sl. No.	Educational Status	Male	Female	Persons
1.	Illiterate	49	62	111
2.	Upto 4	17	15	32
3.	5 – 10	33	27	60
4.	11 &12	0	1	1
5.	Post school	4	0	4
6.	Total Literate	54	43	97
	Literacy Rate (%)	52.4	41	46.6

The male literacy rate in Melvazhapadi is higher (52.4 %) than that for rural Tamil Nadu (47.19 %) but lower than the corresponding figure for rural India (57.39 %); the female literacy rate in Melvazhapadi (41 %) is higher than that for STs in rural Tamil Nadu (29.48 %) as well as rural India (32.4 %). Overall, around half of the males and more than half of the females in the village are illiterates.

1.2.3 Asset Ownership Pattern

1.2.3.1 Housing Conditions

Many houses in the villages have shifted from thatched roof to tiled roof over the years. It was found in the course of discussion with the villagers that the tiled houses have been built with the household members' own earnings and not under any Government scheme. There are houses in the village having free electricity supply under the 'single light scheme' of the State Government⁵. Others have either deposited Rs.2100 with the Electricity Board to get power connection or kept their house without electricity. Only fifty per cent of the sample households had electricity connection.

The built up area of houses is small (1 - 2 cents) in size, like houses in other hill areas. The sample survey revealed that 87 per cent of houses are built on less than 2 cents; the biggest houses are built on 3 cents (*Table 1.5*). The percentage of houses with thatched and tiled roofs was found to be almost equal (*Table 1.6*). An important point to note was that regardless of the roof being tiled or thatched, more than 90 per cent of houses had

⁵ The scheme providing free electricity to thatched houses of SCs/STs, popularly known as 'single light scheme', was started by late Chief Minister Shri M. G. Ramachandran during his tenure.

mud walls and flooring. The percentage of houses with mud floor in Tamil Nadu was 35.6, according to 2001 census report.

Table 1.5 Household Distribution by Built-up House Area

Sl. No.	Built Area (in cents)	No. of hhds	Per cent
1.	1	5	10.9
2.	1.5	18	39.1
3.	2	17	37.0
4.	2.5	4	8.7
5.	3	2	4.3
	Total	46	100

Table 1.6 Characteristics of Houses

Sl. No.	Variable	Condition	No. of hhds	Per cent
		Thatched	23	50
1.	Roof Type	Tiled	22	47.8
1.	Koor rype	RCC	1	2.2
		Total	46	100
	Floor Type	Mud	41	89.1
2.		Cement	4	8.7
2.		Both	1	2.2
		Total	46	100
		Mud	42	91.3
3.	Wall Type	Brick	4	8.7
		Total	46	100
	Electricity	Yes	23	50
4.	Electricity Connection	No	23	50
		Total	46	100

1.2.3.2 Landholding Pattern

The landholdings are small and marginal in nature with the majority owning between 1 and 5 acres. As can be seen from *Table 1.8*, only a few households are completely landless. Of the 46 households surveyed, 7 own lands under pump irrigation. The pump irrigated and surface irrigated lands (around 20 per cent) get water from the stream that flows a kilometer away from the hamlet. Otherwise, rainwater is the main source for

cultivation. This is reflected in the land holding of the sample households (*Table 1.7*), with 80 per cent of owned land being dry or rain-fed.

Table 1.7 Total Land under Different Categories in Sample Households

Sl. No.	Category	Land (in acre)
1.	Dry & Rain-fed	63.95
2.	Surface irrigated	9.80
3.	Pump Irrigation	5.75
	Total	79.50

Leasing in land does not seem to be common. Only one of the 46 households had leased in land (1 acre). People reported that the households with land depended on it for food and cultivated the lands themselves. Of the 39 land operating households in the sample, only one farmer cultivated more than 5 acres of land.

The distribution of operated land is unequal, but less so than in the plains in general. The calculated Gini coefficient value is 0.417 as against values in excess of 0.6 in most parts of the country. Among the 46 households, one-fourth of farmers (12 of 46 households) held 53.5 per cent of operated lands (*Table 1.8*). Since there was little leasing, this also more or less reflects the pattern of ownership of land as well.

Table 1.8 Net Operated Area

Sl. No.	Operated area (acre)	No. of hhds	Area (acre)	Avg. area (acre)
1.	Nil	7	0	0
2.	Less than 1	5	2.55	0.510
3.	1 - 2.50	22	34.85	1.584
4.	2.50 - 5	11	38.10	3.46
5.	5 and above	1	5.00	5
	Total	46	80.50	1.75

1.2.3.3 Livestock Ownership Pattern

A total of 89 goats, 22 bullocks and 30 pigs are reported as being owned by the sample households (*Table 1.9*). Since bullocks are used for cultivation, they are valued more than cows.

Table 1.9 Livestock Owned by Sample Households

Sl. No.	Livestock Type	Number
1.	Cow	2
2.	Bullock	22
3.	Goat	89
4.	Chicken	83
5.	Pig	30
	All	226

31 of 46 sample households own livestock (*Table 1.10*). According to Rajendiran, a resident of the hamlet, owning livestock helps them tide over periods of financial crisis. The availability of common grazing area was an incentive to buy livestock.

The value of livestock exceeds Rs.10,000 for 13 out of 46 sample households. Income from livestock rearing, though not very high, does play a crucial role in the case of many sample households.

Table 1.10 Household Distribution by Total Value of Livestock

Sl. No.	Value of Livestock (in Rs.)	No. of hhds	Per cent
1.	Nil	15	32.6
2.	Less than 1000	6	13.0
3.	1000 - 5000	8	17.4
4.	5000 - 10000	4	8.7
5.	10000 - 25000	12	26.1
6.	More than 25000	1	2.2
	Total	46	100

1.3 Occupational Distribution

The occupational distribution of sample households reveals that cultivation and wage labour activities are the main sources of occupation for villagers in Melvazhapadi (*Table 1.11a&b*). Out of 60 male workers, 56 persons (93 per cent) reported that they are engaged in agriculture either as cultivators or as wage labourers; the corresponding figure for females is 56 out of 59 workers (94 per cent).

39 of 46 (85.7 %) sample households are engaged in cultivation (*Table 1.12*). More than 60 per cent of households are engaged in both cultivation and wage labour. Only 2.2 per cent of sample households are solely cultivators. Other livelihood options, such as labour in organized sector and petty trade, contribute very little to the occupational profile of Melvazhapadi village.

Table 1.11 Occupational Profile of the Sample Workforce

a) Male

Category	Cultivators		Local Daily Wage Labourers		Other Workers	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
No. of Persons	51	0	5	45	4	9
Average (per hhds)	1.11	0	0.11	0.98	0.09	0.20

b) Female

Category	Cultivators		Local Daily Wage Labourers		Other	Workers
	Primary	Secondary	Primary	Secondary	Primary	Secondary
No. of Persons	51	0	5	49	3	5
Average (per hhds)	1.11	0	0.11	1.07	0.07	0.11

Table 1.12 Household Distribution by Sources of Income

Sl. No.	Source(s) of Income	No. of hhds	Per cent
1.	Crop cultivation	1	2.2
2.	Wage labour	5	10.9
3.	Cultivation & wage labour	29	63.0
4.	Crop Cultivation & 'Other'	2	4.3
5.	Wage labour & 'Other'	2	4.3
6.	All three	7	15.2
	Total	46	100

Since very limited land is available for cultivation and around 74 per cent of sample households (*Table 1.8*) are either landless or marginal farmers, people depend on wage employment for their livelihood. According to Thangamani and Annamalai, both residents of the village, a male labourer can get a maximum of Rs.80 and female labourer Rs.60 per day as wage; the normal working hours in agriculture sector are 8 a.m. to 5 p.m. with around an hour's break for lunch.

However, sufficient work is not available throughout the year. Around 89 per cent of labourers were found to get less than 100 labour days of wage employment in local agriculture (*Table 1.13*). It is also to be noted that the proportion of agricultural wage income to total family income was below 50 per cent for more than 90 per cent of the sample households. The result is that labourers migrate to other areas in search of employment.

Table 1.13 Local Wage-paid Agricultural Employment days per Worker in a Year

Sl. No.	Employment days in a year	No. of hhds	Per cent
1.	Nil	7	15.2
2.	Upto 50	14	30.4
3.	51 – 100	20	43.5
4.	101- 150	3	6.5
5.	151-200	2	4.3
	Total	46	100

The household survey found that members of 38 out of 46 sample households (83 per cent) migrated to other areas in search of employment.

Among the 54 males who reported that they moved to other places for employment, 24 persons worked outside for a maximum of three months in a year; the corresponding figure for females was 12 out of 21.

The migration period varied from one month to even 10 months in a year in some cases (*Tables 1.14 and 1.15*). However, a sizeable proportion of the labourers (45 per cent for male and 35 per cent female) migrated to other areas for 4 to 6 months in a year.

Table 1.14 Number of Persons in the Sample Households who Migrated during Reference Year

			Male	Female		
Sl. No.	No. of months spent away from village	No	Avg. duration in months	No.	Avg. duration in months	
1.	1 to 3	24	2.7	12	1.8	
2.	4 to 6	19	5.3	6	5.7	
3.	7 to 9	5	7.8	2	7	
4.	10 to 12	6	11	1	12	
	Total	54	5	21	4.5	

Table 1.15 Households Reporting Male or Female Migration during Reference Year

		Ma	ile	Female	
Sl. No.	No. of months spent away from village	No. of hhds reporting male migration	Per cent	No. of hhds reporting female migration	Per cent
1.	1 to 3	8	24.2	8	40
2.	4 to 6	15	45.5	7	35
3.	7 to 9	7	21.2	4	20
4.	10 to 12	3	9.1	1	5
	Total	33	100	20	100

Of 33 households reporting male migration, 13 reported finding work as casual labour in Kerala and 8 in Karnataka. Coimbatore, Erode, Attur, Salem and Chennai within Tamil

Nadu were also migrant destinations, while some migrants went to states in north India. Migrants found employment in plantations, construction sites, textile mills, painting, borewell digging, cotton hybridization and flower marketing. Labourers going to Kerala and Karnataka mainly work on plantations while migrants to north Indian states found employment mainly in well digging.

1.4 Agriculture

Paddy is the dominant crop grown on both irrigated and dry lands. Some farmers expressed the view that the area under tapioca, sunflower and sugarcane are increasing over the period at the cost of area under small millets. The main reason for increasing commercial crop cultivation is to meet other expenditure and the requirement of cash.

Table 1.16 Land Type and Crops Cultivated

Sl. No.	Type of Land	Crops Cultivated
1.	Surface irrigated land	Paddy, sugarcane, areca nut and banana
2.	Dry and rain-fed land	Dry land paddy, tapioca, finger millet, little millet, foxtail millet, kodo millet, pearl millet, sorghum, sunflower, garden & field lab lab, cowpea, hoarse gram, red gram, mustard, mesta and other green leafy vegetables

Mixed cropping is done extensively on rain-fed lands. Farmers cultivate small millets, red gram, mustard, cowpea, mesta, and other green leafy vegetables on the same land during same period. Discussions with farmers suggest that mixed cropping is a conscious strategy of minimizing risk.

Nearly three quarters (72 per cent) of the sample households reported cultivation of paddy and millets (*Table 1.17*). 27 of 39 landholders (69 per cent) reported cultivating paddy. The total area under paddy is 23.15 acres (29 per cent of total area cultivated by the sample households). The average yield is a rather low 492.57 kg per acre. The correlation coefficient I value between area under paddy and its productivity is rather low at -0.124 suggesting that there is no link between area and yield. The scatter diagram

(Figure 1.1) also brings out this point. All the 27 paddy producing farmers keep the produce for their own consumption.

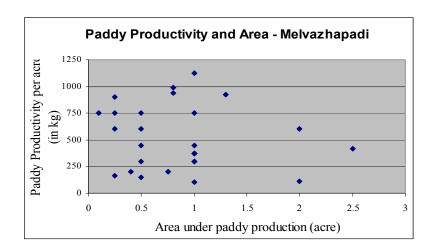
Tapioca, considered as the main commercial crop in this area, accounted for about 57 per cent of cultivated area, showing the importance of tapioca cultivation in the village. The small millets are cultivated in rain-fed lands.

Table 1.17 Cropping Pattern

Sl. No.	Crop	No. of hhds cultivating the crop	Area (in acres)
1.	Paddy	27 (69)*	23.5
2.	Millets	6 (15.4)	3.90
3.	Tapioca	30 (76.9)	45.50
4.	Sugarcane	5 (12.8)	2.25
5.	Other Crops	3 (7.7)	1.30

Note: *- per cent of 39 sample households

Figure 1.1



1.5 Kitchen Garden

The survey found that 14 out of 46 households had a kitchen garden. Vegetables such as okra, brinjal, chilies, tomato, papaya and banana are grown in the kitchen garden. Only two of the sample households, sold the vegetables (lablab and cucumber) grown in the garden.

1.6 Food Scarcity

The sample households of Melvazhapadi hamlet, despite their relatively higher per capita income, reported that 50 per cent of households had food scarcity for more than 9 months in a year (*Table 1.18*). The households reporting food scarcity for more than 9 months consisted mostly of wage labour as well as small and marginal farmer categories (*Table 1.19*). Another 11 per cent suffered food scarcity for 7 months in a year. These figures highlight the importance of a mechanism like CFB to address transient hunger.

Table 1.18 Household Distribution by Food Scarcity Months in a Year

Sl. No.	No. of Months	No. of hhds	Per cent
1.	Nil	1	2.17
2.	1 to 3	0	0
3.	4 to 6	11	23.91
4.	7 to 9	11	23.91
5.	Above 9	23	50
	Total	46	100

Table 1.19 Household Distribution by Occupational Status and Food Scarcity Months

Sl. No.	Occupation	Food Scarcity Period (in months)				
	Occupation	Nil	4 to 6	7 to 9	Above 9	Total
1.	Cult.	0	1	0	0	1
2.	WL	0	2	0	3	5
3.	Cult. + WL	1	6	8	14	29
4.	Cult. + Other	0	2	0	0	2
5.	WL + other	0	0	0	2	2
6.	Cult. + WL + Other	0	0	3	4	7
	Total	1	11	11	23	46

Note: Cult.- Cultivators; WL- Wage Labourers: Other- Others such as petty traders, government employees etc.,

The households reporting food scarcity, borrow money from others, migrate to other places seeking work and sell the forest produce to tide over the food scarcity periods. Borrowing money from others was the main source to manage food scarcity of the households with 30 of 46 households reporting the same; 20 of 46 households also reported that they had income from forest produce to manage food scarcity in their

households. Borrowing also includes grains borrowed from CFB to meet their food scarcity. 20 of the 46 households reported that they borrowed grains from CFB to meet their food scarcity.

Using the Indian Council of Medical Research (ICMR) norm of 330 grams per day per capita for calculating per household requirement of food grains in a year, around 70 per cent of sample households (32 of 46 households) were found to have food grain deficit during the reference period (*Table 1.20*). Total foodgrain availability at household level consists of own production of rice⁶ plus rice purchased from PDS. When this is inadequate, people migrate to other places in search of employment and additional income. 37 of 42 (80 per cent) households reported that their migration, either single source or combined with others, was a mechanism to cope with food scarcity; 30 households (65 per cent) reported that borrowing from different sources such as CFB, SHGs was their coping mechanism.

Table 1.20 Difference between Households' Requirement as per ICMR Norms and Rice Available from Their Own Production and PDS*

Status of Households	Surplus/deficit level (kg/annum)	No. of Households
	Less than 100	27
Deficit	100 and above	5
	Total	32 (69.5)
	Less than 100	7
Surplus	100 and above	7
	Total	14 (30.4)
	Grand Total	46 (100)

Note: Figures in parenthesis are proportion to total

1.3 Community Foodgrains Bank (CFB)

The Community Foodgrain Bank (CFB) was initiated in the village by two women's self-help groups in July, 2003. The CFB had 44 members at the end of 2005; among them, 31

^{*} A household is in 'deficit' if own production of rice plus rice from PDS falls short of household requirements of grain as per ICMR norms and in 'surplus' if opposite is the case.

were engaged in cultivation activities besides working as wage labour (*Table 1.21*). Regardless of their occupational status, most households are poor and have been keen to join the CFB.

Table 1.21 Occupational Distribution of CFB Members

Sl. No.	Occupational Category	No. of Persons
1.	Cultivator	31
2.	Landless labour	9
3.	Govt. jobs	2
4.	Small business, trade	2
	Total	44

The CFB started in July 2003 with contributions from both villagers and project support. MSSRF contributed more than 80 per cent of initial corpus for paddy and 100 per cent of little millet (*samai*), foxtail millet (*thinai*) and finger millet. The initial corpus grant of grains from MSSRF was based on assessment of the lean period requirement of the SHG member households (per day grains requirement was calculated for each member household; the lean period was calculated by taking average period of food scarcity reported i.e. 6 months; then the total requirement calculated by multiplying per day requirement of all households by the average lean period). The people's requirement of quantity and types of grains were calculated using baseline survey and the grants covered 50 per cent of the estimated total food grain scarcity. The members' contribution was insisted upon to instill a sense of ownership.

It was decided by the CFB members that grain borrowed from CFB had to be repaid within the year with 20 per cent interest; the rate was not revised during 2003 – 06. The CFB being in the early stages was a reason for not revising the interest rate. The extra grain returned as interest gets added to the corpus stock. A management committee consisting of 4 members from two SHGs was formed to operate the CFB.

⁶ Production of rice calculated by taking 52 per cent of own paddy production. The rate of conversion is based on the local estimation.

Table 1.22 Initial Corpus (as on July '03)

Sl. No.	Grains	Villagers' contribution (in kg)	MSSRF contribution (in kg)	Total (in kg)
1.	Paddy	360	2175	2535
2.	Little millet	0	400	400
3.	Foxtail millet	0	400	400
4.	Finger millet	0	400	400

A programme on safe storage of grains from moisture and pest was conducted in April, 2004 in collaboration with WVI and the *Save Grain Campaign* (SGC) of the Government of India, following which each member household was given a metal storage bin of 300 kg capacity. Subsequently a pucca storehouse for the CFB with capacity to store 10 tonnes of grain was constructed in August 2005 with technical support from SGC and MSSRF; the construction costs were borne by WVI. SHG members participated by contributing their labour for constructing the building. The storage chamber has four divisions, each for one type of grain.

1.3.1 Impact Assessment Survey among CFB Member Households

Since the CFB of this hamlet is maintained by the female SHGs, female respondents were purposively selected for interview.

The occupational distribution of members was found to vary from cultivators to wage and other labourers (*Table 1.23*). The land holding pattern among the CFB member sample households shows that 5 of the 23 sample respondents (22 per cent) were landless; among the remaining 18 households, 5 households operated more than 2.5 acres and the rest less than 2.5 acres (*Table 1.24*).

Table 1.23 Occupational Distribution of CFB Member Households

Sl. No.	Occupation	No. of hhds	Per cent
1.	Cultivator	1	4.3
2.	Wage labour	3	13.0
3.	Cultivator & wage labour	14	60.9
4.	Cultivator & Others	1	4.3

5.	Wage labour & others	2	8.7
6.	All three	2	8.7
	Total	23	100

Note: 'Others' includes government jobs and trade

Table 1.24 Landholding Pattern of CFB Member Households

Sl. No.	Land Holding (in acre)	No. of hhds	Per cent
1.	Nil	5	21.7
2.	Less than 1	3	13.0
3.	1 to 2.50	10	43.5
4.	2.50 to 5	4	17.4
5.	5 & above	1	4.3
	Total	23	100

The services of CFB were availed across all income categories (*Table 1.25*). Out of 23 households, 5 households (21.7 per cent) with annual income higher than Rs.50,000 were members of the CFB at Melvazhapadi. The CFB member households derived their income mainly from agricultural activities (both income from crop and agricultural wage employment). Wage earnings of household members who migrated to seek work also accounted for a significant part of household income in many instances.

Table 1.25 Distribution of CFB Member Households by Income

Sl. No.	Income Range (Rs. in '000)	No. of hhds	Per cent
1.	10 - 25	8	34.8
2.	25 - 50	10	43.5
3.	50 - 75	4	17.4
4.	75 – 100	1	4.3
	Total	23	100

1.3.1.1 Reasons for Becoming Member of CFB

The reason cited most often by respondents for joining the CFB, was access to foodgrains during the scarcity period (code number 2 in *Table 1.26*). Other reasons such as protective grain storage and availability of grains at lower interest rate have also been given, but as can be seen from *Table 1.26*, the availability of foodgrains during scarcity period was the main reason.

Table 1.26 Household Distribution by Reasons for Membership in CFB

Sl. No.	Reasons	No. of hhds	Per cent
1.	1	1	4.3
2.	2	8	34.8
3.	7	1	4.3
4.	1+2	5	21.7
5.	2+4	2	8.6
6.	2+5	1	4.3
7.	2+7	1	4.3
8.	2+8	1	4.3
9.	4+6	1	4.3
10.	1+2+3	1	4.3
11.	1+2+3+4	1	4.3
	Total	23	100

Code for Reasons Given by Respondents

Collective, common and safety grain storage	1
Food grain will take during scarcity period	2
Protective grain storage	3
Grain availability at low interest rate	4
No own cultivation of grain	5
To avoid migration	6
At the time of crop failure or low production	7
To receive benefits of government	
programmes through CFB membership	8
Others - No interest, I don't know, Alternative	
jobs, Old age, Member in other SHGs and	9
Migration	

1.3.1.2 Nature of Grains Borrowed from CFB

20 of 23 households reported that they had availed loan from the CFB; three households had not taken loan during the reference period.

The type of grains distributed to CFB member households were paddy, little millet, foxtail millet and finger millet. More than 50 per cent of households received 20 *vallam* (1 vallam = around 4 kg) and one-fourth received 8 *vallam* of paddy (*Table 1.27a*). Since rice is now a part of the daily diet, there was more interest to borrow paddy from the CFB; finger millet, foxtail and small millets were also borrowed, but in smaller quantities, ranging between 8 and 16 kgs or 2 – 4 *vallam* in local units (*Table 1.27b*).

Table 1.27 a) Household Distribution by Quantity Borrowed from CFB a) Paddy

Sl. No.	Quantity Borrowed (kg)	No. of hhds	Per cent
1.	Nil	1	4.3
2.	30	6	26.1
3.	72	1	4.3
4.	78	13	56.5
5.	156	2	8.7
	Total	23	100

b) Other Grains

Sl.	Quantity	Little	Millet	Foxta	il Millet	R	lagi
No.	Borrowed (kg)	No. of hhds	Per cent	No. of hhds	Per cent	No. of hhds	Per cent
1	Nil	7	30.4	7	30.4	7	30.4
2	8	1	4.3	0	0	0	0
3	12	15	65.2	16	69.6	0	0
4	16	0	0	0	0	16	69.6
	Total	23	100	23	100	23	100

1.3.1.3 Repayment Status

Repayment of borrowed grains from CFB was calculated for 18 households who repaid grains in March, 2005. The remaining 5 households borrowed grains during Feb-March 2005 period and had not repaid till May, 2006. Repayment status of borrowed grains from CFB households in May 2006 showed that only 4 of 18 borrowers (20 per cent) repaid the grain with interest (*Table 1.28*). The remaining households had either not

repaid (7 households or 35 per cent), or only partly repaid the borrowed grains (9 households or 45 per cent).

Table 1.28 Household Distribution by Proportion of Grain Repaid to Total Loan Availed from CFB

Sl. No.	Proportion (per cent)	No. of hhds	Per cent
1.	Nil	4	23.5
2.	Up to 25	1	5.9
3.	25 to 50	2	11.8
4.	50 to 75	4	23.5
5.	75 to 99	2	11.8
6.	100	4	23.5
	Total	17	100
	Loan not availed	1	
	Grand Total	18	

Note: Out of 23 sample respondents, only 18 persons availed loan from the CFB before March, 2005. The remaining 5 households are considered as new households who borrowed grains during Feb-March, 2005.

9 of 18 households reported that they had problems in repaying the grains borrowed from CFB (*Table 1.29*). We have already discussed that land under tapioca, a non-food crop, is significant among the sample households. Eight of the nine CFB members also said that the lack of cultivation of food crops was the main reason for non-repayment. The other reason was that land owners paid wages in cash and not grain.

Table 1.29 Reasons for Non-Repayment of Borrowed Grain

Sl. No.	Reasons	No. of hhds	Per cent
1.	No	9	50
2.	Food crop affected due to heave rain and drought	1	5.6
3.	Not cultivated food crop	4	22.2
4.	Land owners gave cash wages	1	5.6
5.	Not sufficient food grain production + Not cultivated food crop	1	5.6
6.	Food crop affected due to heavy rain and drought + Not cultivated food crop	1	5.6
7.	Not cultivated food crop + Land owners gave cash wage	1	5.6
	Total	18	100

Being primarily dependent on rainfed agriculture, both cultivators and landless labourers became part of the CFB initiative in the hamlet. The landless labourers repaid the borrowed grains from their own kind wages (44 per cent) and by borrowing from neighbours (*Table 1.30*). 8 households had not repaid their loan till 2006. The landowner members also repaid the borrowed grains not only from their own land (35 per cent) but also from their kind wage (61 per cent) and other sources. The two tables suggest that repayment sources vary only slightly between land owners and the landless.

Table 1.30 Distribution of Landowning CFB Members by Source of Grain Repayment

Sl. No.	Sources	No. of hhds	Per cent
1.	From own land	7	43.75
2.	Kind wages	8	50
3.	Borrowed from neighbours	1 6.3	
	Total	16	100

Note: Sources of repayment calculated for the 16 landholders in CFB member households who repaid in March, 2005.

II Talvellar

2.1 Village Profile

Talvellar, located 6 km away from Vellimalai, is one of the hamlets in Kariyalur revenuecum-panchayat village of Kalrayan Hills block in Villupuram district. Pulavupadi, Melvellar, Nochimedu and Kodunthurai are the other hamlets of Kariyalur village.

Table 2.1 Socio-Economic Characteristics of Talvellar Village

Sl. No.	Criteria	Status
1.	Total number of hhds	72
2.	Population – Male	145
	Female	130
	Total	275
3.	Caste	Scheduled Tribes (Malayala Goundars)
4.	School	Residential Primary School (run by ST Welfare Department)
5.	Road	Tar road
6.	Public Transport Facility	2 KM (Vellimalai-Salem Road)

7.	Drinking Water	Protected drinking water facility available in the village		
8.	Electricity	Street lights and house connections		
9.	Telephone	Public phone & mobile phones		
10.	ICDS centre	The village has one centre with one AWW and AWH		
11.	Nearest PDS outlet	Kariyalur (6 km)		
12.	Nearest bank	Vellimalai (5 km)		

More than 80 per cent of the houses in this hamlet have been converted into pucca tiled houses under the Kalrayan Hills Block Development Plan (KBDP). Under this programme, each household had to contribute Rs.4,783 (50 per cent of the total cost) to convert its house into a tiled house; the remaining 50 per cent of cost was contributed by the KBDP. The WVI gave financial assistance to SHG members for participating in house re-modeling programme. The impact of this programme is visible. Only a few houses still have a thatched roof. On the other hand, due to lack of finance for deposit and service charges to electricity board for getting electricity connection for their houses, many houses are still using kerosene lamps, even though the electrical wiring work within the house has been done.

Out of the 72 households in Talvellar, 10 - 15 households do not own land; the remaining households come under the category of marginal (with less than an acre) and small (with 5 - 6 acres) land owning categories. With such small holdings, most landowning households also naturally seek wage employment. Livestock rearing in Talvellar includes cows, pigs and dogs, but goats predominate.

2.1.1 Occupational Profile

Agriculture and employment as migrant workers are the two main sources of livelihood. February to June is the lean season for work in agriculture and people migrate in large numbers to Coimbatore and Karnataka during this period. Landowners and landless households migrate during the lean season in search of employment. They come back in June for sowing the land.

Agriculture in Talvellar hamlet is based on water from the Vellar river, which flows through the hamlet and is used for irrigation along with a small stream. Diesel motors are used for pumping water from Vellar. Small canals are also dug from the stream for irrigation. Check dams constructed in the river help to lift water from the river. Farmers feel more check dams would be useful for them during the off-season. The river irrigation has led to Talvellar hamlet having more of cash crops, such as sugarcane, tapioca, coconut.

Collection of Non Traditional Forest Produce (NTFP) is an important activity for the women in Talvellar hamlet. Firewood, tamarind and *Kadukkai* are collected from the forest. Firewood and tamarind are used for household requirements; *Kadukkai* is sold in the nearest market at Karumanthurai, 12 km away from the hamlet. *Kadukkai* collection is one of the main sources of income for women during July to October. But NTFP collection has been affected because of increasing seasonal migration, including by women workers.

Migration activity has been taking place since 50 years and has increased over the last 20 years due to the decline in use of forest lands for cultivation. This is the result of strict action taken by Forest Department against use of forest lands for cultivation, even where tribals have traditionally cultivated such lands. According to some local respondents, this affected availability of employment and led to further migration. Sudakar, aged 22 years, said he went to Karnataka or Coimbatore during February-May for working in the construction sector. Even though his father owns 4 acres of irrigated land, there is no agricultural activity during this period. So, he migrates in search of employment.

The discussion with people in different places in Talvellar revealed that the availability of rice at Rs.2 per kg in PDS shop contributes to fulfilling their basic grain requirements. Each cardholder gets 35 kg of rice per month, which would meet more than 90 per cent of household consumption. The cardholders also get kerosene and sugar from the PDS centre.

2.1.2 Educational Status

According to Population Census 2001, total literacy rate in Kariyalur village, which includes Talvellar, is 41.49 per cent. Discussions with people revealed that even though they are educated upto elementary level, the overall status needs to improve further. At present, there is only one graduate (a male) living in the hamlet.

A residential school is run by the ST Welfare Department and gets some assistance from WVI. 105 students from the village and nearby areas study in the school. There are two teachers and two cooks. It is common to see children below 5 years stay with their parents either at home or agricultural field rather than go to the ICDS centre.

2.1.3 Self-Help Group (SHG) Activity

WVI started facilitating formation of SHGs in Talvellar in 2001. At that time, one group, named *Malligai* was started; two new groups, *Samanthi* and *Kurinchi* were started in 2004. *Samanthi* is a male SHG with 15 members. *Malligai and Kurinchi*, with only female members, have 19 members each. One more male SHG, *Tamara* with 17 members was started in 2006, under the guidance of WVI.

At present, there are 7 SHGs operating in this hamlet under the guidance of WVI, SEWA (another NGO) and Forest Department. The Forest Department has promoted one male SHG; SEWA have promoted 1 male and 1 female SHG. These SHGs are involved internal lending and getting loan from the banks. The Forest Department also facilitates loan for leveling people's forest land to make it suitable for cultivation. Rajammal, Sivappayee, Valli and Sangeetha from the village are key members in organizing SHG meetings.

Monthly savings per member in SHG varies from Rs.50 to Rs.100. According to Rajammal, savings rate per member in female SHG is higher than male, because women have better savings habit than the men. Among the 7 female SHGs, 6 groups have fixed Rs.100 per member per month as savings and Rs.2 as subscription. Male groups have fixed Rs.50 per member per month as savings and Rs.2 as subscription. It was noted that

the fortnightly meetings are not regularly conducted by the groups due to seasonal migration by the members. The members are also not able to pay their subscription regularly; but, once they return to the village from the worksite they pay the dues. Hence, the rules are not rigid and the organizers are flexible with regard to collection of savings and organizing of meetings.

SHGs use the savings for internal lending. They are also using the revolving fund given by Indian Bank, Vellimalai. According to Rajammal, SHGs are giving loan for house construction, marriage, festivals, agricultural activities, etc. The money borrowed from SHGs has to be repaid in 2-3 years; loan availed from Bank could be repaid in 5 years. The records are maintained by the members themselves; out of the four groups started with the help of WVI, only one female group requires the organizers to maintain minutes of meetings and accounts. However, according to Sivapayee, the limited availability of educated persons in their groups means they are not able to rotate the office bearers.

2.2 Analysis of Household Survey

The utilisation of CFB by the member households was assessed by an evaluation study conducted among all 72 households in Talvellar during May-June, 2006. All 72 households were interviewed for assessing the socio-economic conditions in Talvellar. The households have been grouped into two categories — those with CFB members and those without.

2.2.1 Demographic Characteristics of Sample Households

The total population of 72 households in Talvellar is 351 (176 males and 175 females) with the sex ratio of 994 during the reference period (*Table 2.2*). The village has average household size of 4.9 with work participation rate of 70.3 per cent. Even though the household size is close to five, the higher work participation rate gives more scope for income earning to the households. But this depends on the availability of employment and the landholding pattern of the households. Among the survey respondents, 43 were male and 29 were female.

Table 2.2 Number of Persons in the Sample Households

Sl. No.	Age Group (in yrs)	Male	Female	Persons
1.	Less than 15	52	52	104
2.	15 & Above	124	123	247
	Total	176	175	351

2.2.2 Educational Status

Among the 351 persons, only one person had post-school education; three had studied upto higher secondary (*Table 2.3*). The overall literacy rate of Talvellar (39.9 %) is marginally higher than that of STs in rural Tamil Nadu (38.41 %) but well below than that for rural India as a whole (45.02 %). The male literacy rate in Talvellar is higher (51.7 %) than that for STs in rural Tamil Nadu; but it is lower than the corresponding figure for rural India (57.39 %). On the other hand, female literacy rate in Talvellar (28.2 %) is lower than that for STs in rural Tamil Nadu (29.48 %) as well as rural India (32.4 %); the number is also less than one-third of their population. The presence of elementary school within the village and higher secondary school in Vellimalai has improved the enrolment among the present generation.

Table 2.3 Educational Status of Members in Sample Households

Sl. No.	Educational Status	Male	Female	All
1.	Illiterate	84	127	211
2.	Upto class 4	24	20	44
3.	Class 5-10	64	28	92
4.	Class 11&12	1	2	3
5.	Post-School	1	0	1
6.	Total Literate	90	50	140
7.	Literacy Rate (per cent)	51.7	28.2	39.9

2.2.3 Asset Ownership Pattern

2.2.3.1 Housing conditions

73.7 per cent of houses (53 of 72) are built within 1.5 cent area indicating vary small built up area. As already mentioned the average household size being around five, people find

it difficult to stay within the house when forced to do so during the rainy season. Among the houses, 67 per cent have tiled roof because of KBDP. However, the majority of the houses still have mud floor (85 per cent) and wall (83 per cent); around 80 per cent of the households do not have electricity facility (*Table 2.4*). The overall housing condition of residents in Talvellar therefore has scope for improvement.

Table 2.4 Characteristics of Houses

Sl. No.	Variable	Conditions	No. of hhds	Per cent
		Thatched	20	27.8
1.	Roof Type	Tiled	48	66.7
1.	Koor rype	RCC	4	5.5
		Total	72	100
		Mud	61	84.7
2.	Floor Tymo	Cement	10	84.7 13.9 1.4
۷.	Floor Type	Both	1	1.4
		Total	72	100
		Mud	60	83.3
3.	Wall Type	Brick	16.9	
	• •	Total	72	100
	Electricity	Yes	15	20.8
4.	Electricity Connection	No	57	79.2
	Connection	Total	72	100

2.2.3.2 Landholding Pattern

Even though farmers used surface irrigation for their cultivation, only 34 per cent of total cultivated land (53.4 of 157.2 acres) among the households comes under this category; whereas 66 per cent of cultivated area (103.8 of 157.2 acres) is rain-fed (*Table 2.5*).

Table 2.5 Total Land under Different Categories in Sample Households

Sl. No.	Category	Land (acre)
1.	Rain-fed land	103.80
2.	Surface	12.15
	irrigated	
3.	Pump irrigated	41.25
	Total	157.20

The survey found that more than 90 per cent of households own some amount of land ($Table\ 2.6$). Only 3 of 72 households are landless households. 56 per cent of households own 1 – 2.5 acres and 25 per cent own 2.5 – 5 acres of land. Majority of the farmers come under the small and marginal farmer category. However, 6 of the 72 households (8 per cent) control 34.4 of 156.5 acres (22 per cent) land available for cultivation in the village.

Land leasing activities are not significant in this hamlet; only three households reported that they leased-in lands from others for cultivation. But these lands are leased out for personal reasons and do not relate to the general trend of the economy of this area.

Table 2.6 Net Operated Area

Sl. No.	Operated Area (acre)	No. of hhds	Total (acre)	Avg. per hhd (acre)
1.	Nil	3	0.00	0.00
2.	Less than 1	4	2.30	0.58
3.	1 to 2.5	41	62.70	1.53
4.	2.5 to 5	18	57.15	3.18
5.	5 and Above	6	34.35	5.73
	Total	72	156.50	2.17

2.2.3.3 Livestock

The survey found that 41 of 72 households own goats; 36 households own bullocks and only 12 households own cows (*Table 2.7*). Bullocks are purchased for cultivation activities and their ownership has comparatively higher value than other livestock; this contributed to 33 of the 56 households owning livestock exceeding Rs.10,000 in value terms (*Table 2.8*).

Table 2.7 Livestock Owned by Sample Households

Sl. No.	Livestock Type	Number
1.	Cow	20
2.	Bullock	72
3.	Goat	200
4.	Chicken	191
5.	Pig	18
	All	501

Table 2.8 Household Distribution by Total Value of Livestock

Sl. No.	Value (Rs.)	No. of hhds	Per cent
1.	Nil	16	22.2
2.	Upto 1000	2	2.8
3.	1000 - 5000	11	15.3
4.	5000 - 10000	10	13.9
5.	10000 - 25000	30	41.7
6.	Above 25000	3	4.2
	Total	72	100

2.2.4 Occupational Distribution

More than 90 per cent of households own land. Their primary occupation is cultivation; most holdings are small in extent. So, many land owning households depend on agricultural wages as a secondary source of income (*Table 2.9 & 2.10*).

Table 2.9 Occupational Profile of the Sample Workforce a) Male

Category	Cultivators		Local Daily Wage Labourers		Other	Workers
	Primary	Secondary	Primary	Secondary	Primary	Secondary
No. of Persons	112	0	0	92	4	16
Average (per hhds)	1.56	0	0	1.23	0.01	0.22

b) Female

Category	Cult	Vators		Local Daily Wage Labourers		Workers
	Primary	Secondary	Primary	Secondary	Primary	Secondary
No. of Persons	113	0	3	82	2	24
Average (per hhds)	1.57	0	0.04	1.14	0.03	0.33

Table 2.10 Local Wage-paid Agricultural Employment days per Worker in a Year

Sl. No.	No. of Days	Frequency	Per cent
1.	Nil	19	26.4
2.	Upto 50	23	31.9
3.	51 - 100	21	29.2
4.	101 - 150	8	11.1
5.	151 - 200	1	1.4
	Total	72	100

Out of 72 households, 58 households (80.6 per cent) reported that male members migrate to other places in search of employment; female migration was reported by 46 households (36.1 per cent) (*Table 2.11*). Female migration is comparatively less (*Table 2.12*). The number of months of migration varies from one to twelve. Three households reported some family members as being employed elsewhere throughout the year. Even though these households own some land, the younger members go to work as labourers in Kerala and Karnataka.

Among members of 58 households who migrated to other places during the reference period, 83 per cent (46 households) worked outside the village for upto 6 months during the reference year.

Table 2.11 No. of Persons in the Sample Households who Migrated during Reference Year

	No. of months		Male	Female	
Sl. No.	spent away from the village	Number	Avg. duration in months	Number	Avg. duration in months
1.	1 to 3	44	2.61	26	2.77
2.	4 to 6	28	5.5	7	5.29
3.	7 to 9	1	7	0	0
4.	10 to 12	3	11.67	0	0
	All	76	4.09	33	3.3

Table 2.12 Households Reporting Male or Female Migration during Reference Year

Sl. No.	No. of months	No. of hhds reporting male migration	Per cent	No. of hhds reporting female migration	Per cent
1.	1 to 3	20	34.5	17	65.4
2.	4 to 6	29	50	7	26.9
3.	7 to 9	6	10.3	2	7.7
4.	10 to 12	3	5.2	0	0
	Total	58	100	26	100

The migrants work as causal labourers in Kerala (26 of 55 households) Coimbatore (17 households) and Karnataka (21 households) as single destination or combined with other places such as Chennai, Tiruppur and North India. The types of work done by these labourers are plantation estate work, construction, textile mills, painting, borewell digging, etc.

2.2.5 Agriculture

The crops cultivated in different areas under irrigated and rainfed condition is given in *Table 2.13*.

Table 2.13 Land Type and Crops Cultivated

Sl. No.	Type of Land	Crops cultivated		
1.	Surface irrigated land	Paddy, sugarcane, coconut, finger millet, mulberry, vegetables & green leafy vegetables		
2.	Rain-fed land	Tapioca, finger millet, little millet, foxtail millet, red gram, mustard, cowpea, hoarse gram, sunflower and green leafy vegetables		

Inter cropping takes place but in a limited manner and is less on the land under surface irrigation. According to an informant, tapioca with leafy vegetables is the major intercrop in Talvellar. Farmers reported that the foodgrains produced (paddy, finger millets and other millets) are not marketed and are used for domestic consumption only.

Farmers also feel that the area under small millets and rain-fed crop cultivation in general has declined over the years; cultivation of tapioca, paddy and sugarcane has increased. According to Velliammal, the limited paddy production along with rice at PDS meets their household grain requirements and hence they are cultivating commercial crops for meeting other expenditure (*Table 2.14*).

Out of 69 land owning households, 74 per cent of farmers cultivate paddy covering 30.9 acres; 63 farmers cultivate tapioca, accounting for 72.35 acres; commercial crops, sugarcane and tapioca occupy 71 per cent of total cultivated area (97.6 of 137.55 acres) indicating the extent of commercialization of agriculture in Talvellar. One of the reasons for this is partial availability of assured irrigation. Paddy and sugarcane are water-intensive crops and more than half of the households reported that they are cultivating these crops. At the same time, farmers are keen to cultivate paddy to meet their domestic food requirements. However, among the 51 paddy cultivating households, no one sold the paddy produce during the reference year. The productivity of paddy crop, like in Melvazhapadi, depended on the availability of water (Fig 2.1); the correlation coefficient (r) between area under paddy and productivity is statistically insignificant at – 0.240.

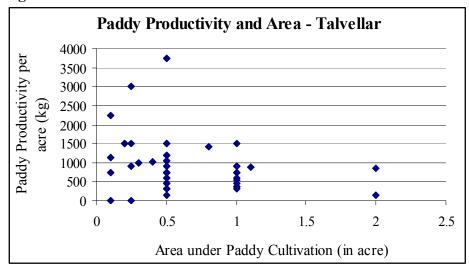
Selvam, who owns 2 acres of river water irrigated land, said that there is extensive sugarcane cultivation in the village. Traders come from Salem to buy cane from the farmers. Some farmers also process the cane into jaggery themselves after harvesting.

Table 2.14 Cropping Pattern

Sl. No.	Crop	No. of hhds cultivating the crops	Area (in acre)
1.	Paddy	51 (73.9)*	30.90
2.	Sugarcane	39 (56.5)	25.25
3.	Tapioca	63 (91.3)	72.35
4.	Millets	19 (27.5)	8.50
5.	Other Crops	2 (2.9)	0.55

^{*}Proportion to 69 land cultivating households

Figure 2.1



2.2.6 Kitchen Garden

The household survey showed that only 7 of 72 households (9.7 per cent) have kitchen garden. The households having kitchen garden use the cultivated vegetables such as green leafy vegetables and ladies finger only for domestic consumption. Only three households sold the vegetables such as tomato and brinjal produced in their kitchen garden in the market. One-third of households have more than half of the house site area free, making some space available for having a kitchen garden. The villagers also buy vegetables from the nearest market in Vellimalai for consumption. According to Rasathi from the village, since most households have a habit of eating vegetables like potato not grown in their kitchen gardens, they buy the same from the weekly and daily markets at Vellimalai and Karumandhurai.

2.2.7 Food Scarcity

Even though people work outside during lean season to meet expenses, food scarcity exists in the hamlet. 39 of 72 households (54.17 per cent) reported that they have food scarcity for more than 6 months in a year (*Table 2.15*). It is necessary to note that the reference period was a normal year with enough rainfall; therefore, the given food scarcity months reported by the respondents are not over estimated. Transient hunger exists among all occupational groups in Talvellar (*Table 2.16*).

Table 2.15 Household Distribution by Food Scarcity Months in a Year

Sl. No.	No. of Months	No. of hhds	Per cent
1.	0	1	1.39
2.	1 to 3	8	11.11
3.	4 to 6	24	33.33
4.	7 to 9	17	23.61
5.	Above 9	22	30.56
	Total	72	100

Table 2.16 Household Distribution by Occupational Status and Food Scarcity Period

Sl. No.	Household	Food Scarcity Period (in months)					
S1. 1VU.	Occupation	Nil	Upto 3	4 to 6	7 to 9	10 to 12	Total
1.	Cultivator	1	0	1	0	0	2
2.	Wage labour	0	0	0	0	2	2
3.	Others	0	0	0	0	1	1
4.	Cultivator + wage labour	0	5	15	5	9	34
5.	Cultivator + Others	0	0	0	1	1	2
6.	All three	0	3	8	11	9	31
	Total	1	8	24	17	22	72

The coping mechanism followed by the households varies. 33 of 72 (45.8 per cent) households reported that they borrow from others, including CFB and SHGs, to meet their food scarcity. Half of all households (36 of 72) borrowed grains from CFB to meet their food scarcity in a year. The other major source for meeting the food scarcity is migrating and obtaining paid employment elsewhere; 57 households (79.2 per cent) reported that they migrate to other places for work in order to overcome the food scarcity.

Calculation of households consuming less than the ICMR suggested norms showed that 43 households – more than 50 per cent of all households – consume less than the prescribed norms (*Table 2.17*). Out of these 43 households, 36 reported that their deficiency was more than 100 kg per annum. A point to be kept in mind here is that all households had access to PDS during the reference period. It shows the existence and severity of hunger in Talvellar.

Table 2.17 Difference between Households' Requirement as per ICMR Norms and Rice Available from their Own Production and PDS

Status of Households	Surplus/ deficit level	No. of Households
	(kg/annum)	
	Less than 100	7
Deficit	100 and above	36
	Total	43 (59.7)
	Less than 100	14
Surplus	100 and above	15
	Total	29 (40.3)
Grand Total	72 (100)	

Note: Figures in parenthesis are percentage to total

2.2.8 Community Foodgrains Bank (CFB) Initiation

The factors like migration and insecure agricultural activity in the village made MSSRF propose and discuss the idea of a CFB with the community, which was positively received. The CFB was started in July, 2003 with the help of WVI and women's SHG with 15 members managing operations; in the year 2006, 2 female and one male SHG with 49 members (48 cultivator households and one landless household) were members of the CFB. The CFB management committee consists of four members, three females and one male.

The 49 households contributed foodgrains to mobilize initial corpus for CFB (*Table 2.18*). The initial corpus for three grains, namely paddy, little millet and finger millet was created in July 2003; the quantity of grains for corpus was calculated based on an assessment of members' requirement from the baseline survey. MSSRF contributed around 90 per cent of total paddy requirement and 100 per cent for little millet and finger millet in Talvellar. The total grants covered half of the total foodgrains requirement during scarcity period. Even though the members' contribution was low, the basic purpose of collecting grains from members was to develop the CFB as a participatory programme right from the beginning.

Table 2.18 Initial Corpus (as on July 2003)

Sl. No.	Grains	Villagers' Contribution	MSSRF Contribution	Total
1.	Paddy	147	1125	1272
2.	Little Millet	0	200	200
3.	Finger millet	0	400	400

The CFB management committee decides on rate of interest to be levied; the prevailing rate of interest for borrowed grains was 20 per cent and this rate had not been revised between the years 2003 and 2006. According to Rajammal, a pioneer of SHGs and CFB in Talvellar, loan period is one year and the members could repay the borrowed grain with other grains. She further said that they had monthly meetings and overall average attendance was 95 per cent. On an average, every meeting extended to three hours and they discussed about the current status of grains in storage, maintaining the building and issues relates to agriculture during the meeting.

A pucca CFB storehouse was constructed in 2005 with financial assistance from WVI and technical guidance from MSSRF. SHG members contributed free labour for basement construction and donated panchayat land with government approval. The CFB building has 10 tonnes storage capacity with four equally divided chambers inside. Every member household was also provided a metal storage bin of 300 kg capacity for storing their domestic grains and seed, under the training conducted by SGC in April 2004.

2.3 Impact Assessment Survey among CFB Member Households

49 people from 39 households are members of the CFB. The number of members is greater than the number of households, because there are some households with more than one CFB member, with the members belonging to different groups of SHGs. The CFB in Talvellar is run by two female SHGs and one male SHG. Therefore, two or even three members from one household are possible here, but their contribution to the corpus and borrowing from CFB is the same like other households.

All but two of the 39 CFB households are cultivators. Two are landless labour households (*Table 2.19*). CFB members include both marginal farmers with less than one acre of land and medium ones with more than 5 acres (*Table 2.20*).

Table 2.19 Occupational Distribution of CFB Member Households

Sl. No.	Occupation	No. of hhds	Per cent
1.	Wage labour	1	2.6
2.	Cultivator and wage labour	25	64.1
3.	Cultivator and Others	1	2.6
4.	All three	12	30.8
	Total	39	100

Others – Petty shop owner & small trader

Table 2.20 Landholding Pattern of CFB Member Households

Sl. No.	Operated Area (in acres)	No. of hhds	Per cent
1.	Nil	1	2.6
2.	> 1	1	2.6
3.	1 - 2.49	22	56.4
4.	2.50 - 4.99	12	30.8
5.	5 & Above	3	7.7
	Total	39	100

The household annual income of CFB members varied from Rs.10,000 to Rs.2,00,000 per annum. A large number of members (53.8 per cent) belong to the Rs.25,000 – Rs.50,000 annual income group (*Table 2.21*). The income of CFB member households is mostly from crop cultivation and wage labour. Among the 39 CFB member households, 23 households (59 per cent) reported that they are getting more than 50 per cent of their household income from working outside the village.

Table 2.21 Distribution of CFB Member Households by Income

Sl. No.	Income (Rs. in '000)	No. of hhds	Per cent
1.	10 - 25	8	20.5
2.	25 - 50	21	53.8
3.	50 - 75	7	17.9
4.	75 – 100	2	5.1
5.	100 - 200	1	2.6
	Total	39	100

2.3.1 Reasons for CFB Membership

Foodgrains availability during the scarcity period is a single reason which caused 37 of 39 (95 per cent) CFB members to engage in the CFB related activities (*Table 2.22*). 20 households reported common and safe storage of their grains and 11 reported availability of foodgrain at the time of crop failure (which indirectly relates to the earlier reason) as a reason. These factors highlight the relevance of CFB in the hamlet.

Table 2.22 Household Distribution by Reasons for Membership in CFB

Sl. No.	Reasons	No. of hhds	Per cent
1.	2	8	20.5
2.	1+2	12	30.8
3.	2+4	2	5.1
4.	2+7	1	2.6
5.	2+8	1	2.6
6.	4+7	1	2.6
7.	7+8	1	2.6
8.	1+2+3	3	7.7
9.	1+2+7	3	7.7
10.	1+2+8	1	2.6
11.	2+4+8	1	2.6
12.	2+7+3	1	2.6
13.	2+7+8	2	5.1
14.	7+8+2	1	2.6
15.	7+1+2+4	1	2.6
	Total	39	100

Code for Reasons Given by Respondents

Collective, common and safe grain storage	1
Food grain will avail during scarcity period	2
Protective grain storage	3
Grain availability at low interest rate	4
No own cultivation of grain	5
To avoid migration	6
At the time of crop failure or low production	7
To receive benefits of government programmes through CFB	8
Others - No interest, I don't know, alternative jobs, Old age, Member	9
in other SHGs and Migration	

2.3.2 Nature of Grains Borrowed from CFB

Among the 39 households, 37 households (94.9 per cent) availed grains from CFB (*Table 2.23a & 2.23b*); two households reported not borrowing.

Types of grains distributed under CFB were paddy, little millet and finger millet. More than half of the CFB member households received 10 *vallam* (1 *vallam* = 4 kg) of paddy from CFB; and 39 per cent (15 of 39 households) got 12 *vallam* (88 kg) during the reference period. 30 of 39 households (77 per cent) borrowed either finger millet or little millet from CFB during the reference period.

Table 2.23 Household Distribution by Quantity Borrowed from CFB a) Paddy

Sl. No.	Quantity (kg)	No. of hhds	Per cent
1.	Nil	2	5.1
2.	40	22	56.4
3.	88	15	38.5
	Total	39	100

b) Other Grains

Sl. No.	Quantity	Little Millet		Ragi	
S1. 1\u.	(kg)	No. of hhds	Per cent	No. of hhds	Per cent
1.	Nil	24	61.5	24	61.5
2.	16	15	38.5	0	0
3.	40	0	0	15	38.5
	Total	39	100	39	100

2.3.3 Repayment Status

The repayment status among the CFB member households was relatively poor. Only one-third of the households reported that they repaid some proportion of borrowed grains (*Table 2.24*). General reasons for not repaying the grains are inadequate production of foodgrain (12 households or 97 per cent) and crop failure (1 household) (*Table 2.25*).

One landless household and six land holders repaid their borrowed grains with the wages in kind that they had received.

Table 2.24 Household Distribution by Proportion of Grain Repaid to Total Loan Availed from CFB

Sl. No.	Proportion (per cent)	No. of hhds	Per cent
1.	Nil	2	13.3
2.	25	1	6.7
3.	30	10	66.7
4.	37	2	13.3
	Total	15	100

Note: Out of 39 member households, 15 households borrowed and repaid grains in March, 2005 and others are new members who borrowed grains only during Feb-March, 2005.

Table 2.25 Reasons for Non-Repayment of Borrowed Grain

Sl. No.	Reasons	No. of hhds	Per cent
1.	Own grain production insufficient	7	46.7
2.	Food crop affected due to heave rain and drought	1	20
3.	Both	5	33.3
	Total	15	100

3. Summing Up & Conclusions

The analysis of socio-economic conditions in Melvazhapadi and Talvellar hamlets in Kalrayan hills reveals that more than half of the households (74 per cent in Melvazhapadi and 54 per cent in Talvellar) reported facing food scarcity for more than 6 months in a year. Even though the households' average income per annum is moderately high (Rs.39,382 in Melvazhapadi; Rs.38,744 in Talvellar), the existence of food scarcity is an indicator of transient hunger in these hamlets. It is also needs to be noted that 70 per cent of households in Melvavazhapadi and 60 per cent of households in Talvellar do not have sufficient access to rice to meet their basic requirements.

The low productivity of food crops and the limited extent of land owned and cultivated by the households are the main reasons for inadequate foodgrain availability at the village level. Paddy productivity was just 492.57 kg per acre among the sample households in Melvazhapadi and the figure was 881 kg per acre in Talvellar. Even though paddy productivity in Talvellar is higher than in Melvazhapadi due to better access to surface irrigation to some extent, both the villages have yields of less than a tonne per acre. It also shows that there is vast scope for improving yields through technological and social interventions.

Agriculture in this region is seasonal and largely dependent on rainfall. This is an important reason for the insufficient employment opportunities available in the village. Around 90 per cent of sample households in Melvazhapadi and 88 per cent of households in Talvellar reported that they are getting employment for 100 days or less in a year within their village. Therefore, working people, including from landowning households migrate in search of employment. The lack of non-farm or other employment opportunities locally, force people to migrate long distances, with negative consequences for their well-being and for the health and education of their children.

A mechanism of decentralized storage of foodgrains at the village level, from which they can borrow during the lean period, can help them tide over the seasonal food insecurity. It is therefore reasonable to expect that the CFB idea would be relevant to the community and evoke its active involvement. MSSRF's initiative was started in 2003 with this perspective.

3.1 The Challenge of Sustainability

MSSRF gave the initial corpus, technical guidance and training to the member households in collaboration with WVI, the local partner NGO. Attention was also paid to grain storage and preservation and proper storehouses were constructed in the two villages. MSSRF's guidance continued till March 2005. After that, while MSSRF withdrew, WVI continued to work in the villages. The collection of data for evaluation was done in May-June 2006 and the findings have been analysed in this paper. Though the evaluation shows that the CFB had been an important support system and had evoked community involvement, it also showed the rising trend of non-repayment of borrowed grain. A visit in January, 2008 found that CFB operation in both the hamlets had been affected by non-repayment and no subsequent loan was taken after March, 2005. According to members, lack of proper facilitation was the reason for the prevailing situation. The dependence on an organization, in this case, a local NGO with global funding and changing priorities possibly donor-driven, had led to a weakening of CFB During the course of discussion with CFB member households, they functioning. expressed willingness to revive the system by repaying the borrowed grain and participating in CFB activities. They also admitted the usefulness of CFB during food scarcity period. Around 90 per cent of CFB member households (87 per cent in Melvazhapadi; 95 per cent in Talvellar) said that they would avail foodgrains during the scarcity period from CFB. But, in the scenario of low levels of literacy and numeracy skills, (Melvazhapadi had a literacy rate of 48 per cent and Talvellar of 40 per cent) external support and monitoring of CFB activities for a certain period would be essential to revive and sustain the CFB.

The CFB was started initially among the SHG member households; however, after March, 2005, the number of SHGs increased in both hamlets. After that, only a few SHGs joined the CFB during 2006; SHGs started by other NGOs were not included by WVI in CFB activities. It is also important to mention here that the villagers viewed CFB

as an activity of the SHGs. This resulted in the lack of involvement of other people in the CFB activities. The rejuvenation of and sustenance of the initiative, it was felt, required some more facilitation and phased systematic withdrawal thereafter. The process was initiated in June 2008 and we have been operating with a one-year timeframe. It has been a slow process starting with convening village meetings, resolving SHG conflicts and getting more members to join. Response from the community has also not been forthcoming to the extent hoped for. Not having a base there and with lack of support from WVI, MSSRF is not in a position to indefinitely continue the process of facilitation.

The experience has important lessons for us in terms of evolving a replicable and sustainable CFB strategy. The choice of villages, assessment of people's felt need for a CFB, methods of motivating the community to own the initiative, and clarity about the role of different players — government, elected local bodies, other local partners — all these would need to be carefully planned if the CFB is to become a successful and sustainable intervention. Most of these elements were found wanting in the cases discussed here, but the fact that the CFB could be an important intervention for addressing transient food insecurity is also demonstrated by the brief 'success' of the experiment.

Community Foodgrain Bank - Kalrayan Hills, Tamil Nadu



Community Foodgrain Bank - Kalahandi, Orissa

