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OUTPUT AND IMPACT MONITORING STUDY OF KAWAD PROJECT

R S Deshpande

M J Bhende

S Erappa

Agricultural Development and Rural Transformation Unit

Institute for Social and Economic Change

Nagarbhavi, Bangalore-560 072

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Karnataka State has a strong history in managing watershed development programme effectively. The State was considered as a model state in its watershed development programme and many other States followed the model. Following the good response to the programme DFID had taken initiative to initiate watershed development programme with a redesigned institutional approach. This approach is unique in the country in three respects viz., (i) It begins from building up of the institutions and promoting group action in two spheres connecting farm and non-farm activities, (ii) the approach incorporates credit as the most crucial component of the farm economy with the farm development initiatives, and (iii) By establishing village level institutions it ensures participation both in physical and financial programmes as well as sustainability. This unique institutional approach will surely result in a good number of income and employment generating activities.

The present study was undertaken to understand the project in its context of activities, outputs and impacts. Measure of livelihood and group self assessment formed an important objective of the study. This study was assigned to us with this specific focus. We are thankful to KAWAD for providing this opportunity. We are grateful to Mr. Shivakumar of Catalyst Management Services Pvt. Ltd., for providing the necessary tools designed for the study as a consulting agency. He has taken pains to explain the tools to all of us and to the staff members as well as participated in the discussions on the methodology. We are grateful for his untiring efforts which saw the study through. At KAWAD, we were helped by Mr. Manohar Rao, Natural Resources Specialist. We thank him for his support but for that the study would not have taken this shape. We also received a strong support from Mr. Antony Mendonca , Administrative Officer of KAWAD and his colleagues. We thank them for their kind help.

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1	Mr N V Nadagir	Project Coordinator
2	Mr Ganesh Setty	Community Organiser
3	Mr Anil Kulkarni	Field Officer
4	Mr Raju Teggi	Horticulture Specialist
	ISEER	
1	Mr M B Pattana Setty	Project Coordinator
2	Mr S R Doddamani	Community Organiser
3	Mr P B Biradar	
	VISHAL	
1	Mr S T Patil	Civil Engineer
2	Mr Aravind Badigar	Community Organiser
3	Ms Meenaxi Patil	Community Organiser
	SEEDA	
1	Mr P M Huddar	Project Coordinator
2	Mr G M Biradar	Community Organiser
3	Mr A P Sonal	Field Assistant
4	Mr Ramesh Teli	Book Writer
	RSC (MOLKALMUR – CHITRADURGA)	
1	Mr Jayanarayan	Coordinator
2	Mr Channabasaiah	Field Officer
	GUARD	
1	Mr Shanmukappa	Coordinator
2	Mr Boraiah	Community Organiser
3	Mr Gurulingaiah	Office Assistant
	MYRADA	
1	Mr Hallizar	Co-Project Officer
2	Mr Umesh	Engineer
	DPG (BELLARY DISTRICT)	
1	Mr G M Sudhakar	Project Coordinator
2	Mr Umashankar	Engineer
3	Mr Tejavardan	Agriculture Specialist
4	Ms Prema	Community Organiser

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R S Deshpande

M J Bhende

S Erappa

FIELD STAFF

Sl. No.	Name of the staff	Name of the Watershed/Village Visited	Name of the District
1	Dr K J Parameswarappa	Supervisor	All Watersheds
2	Mr H S Gangadhar	Upparahalla Watershed	Bellary
3	Mr Rajendra B Desai	Upparahalla Watershed	Bellary
4	Mr Prabhakar Reddy	Upparahalla Watershed	Bellary
5	Mr Rangegowda	Upparahalla Watershed	Bellary
6	Mr Iranagouda R Patil	Doddahalla Watershed	Bijapur
7	Mr Malik H Tahasildhar	Doddahalla Watershed	Bijapur
8	Mr Chandrahasa	Doddahalla Watershed	Bijapur
9	Mr Shashi Kumar S D	Doddahalla Watershed	Bijapur
10	Mr Venugopala Reddy A	Chinnahagari Watershed	Chitradurga
11	Mr M V Kumaraswamy	Chinnahagari Watershed	Chitradurga
12	Mr R Venkatesh	Chinnahagari Watershed	Chitradurga
13	Dr Subbanarasaiah G	Chinnahagari Watershed	Chitradurga

CHAPTER I

INTRODUCTION

1.1 Introduction

Karnataka State has an unduly large share of drought-prone areas of the country. This not only causes a drag on the growth performance of the State but also perpetuates regional inequality. To mitigate the adverse impact of crop failures, instability and drought condition, tanks and other sources of irrigation were developed by the erstwhile rulers. However, scientific efforts to develop technologies for drought-prone rain-fed agriculture began only in the early 20th century. Dry Land Research Centres were established to cater to the needs of rain-fed agriculture as early as 1930s. The problem of weather induced instability in agricultural production of the State became quite prominent in the late seventies and early eighties. It was decided at a meeting called by the then Development Commissioner of Karnataka that the State should launch a programme of Watershed Development on a massive scale. That initiated the efforts in the direction of a unified Development Programme through dry Land Development Board. This was also a unique institutional model in the country. The State already had the World Bank Watershed Development Project being implemented at that time at Kabbalnala. By then, the State had already achieved significant strides in implementing Watershed Development Programmes and this was reflected in the development of Chitravathi Watershed in Kolar district, a drought-prone district of Karnataka.

In the history of Watershed Development Programme in the State, the first major landmark in the development of an institutional approach in Karnataka was the establishment of Dry Land Development Board (DLDB). This began its operations in early eighties and had a focussed institutional multi-disciplinary approach. Extremely dedicated and competent officers administered the DLDB successfully and this had set in a process that was termed as “Karnataka Model” of watershed development. The model had four specific components, namely, integration of farm and non-farm activities, unique organisational structure, vertical and horizontal integration in the process of implementation and combining social and technological components in an effective way. The DLDB had undertaken 19 watersheds for development, one in each district of the State and the organisation of watershed management and administration was at three

levels, viz., (i) the State level, (ii) division level, and (iii) watershed level. The project won laurels throughout the country.

In Karnataka, the department of Agriculture has implemented the National Watershed Development Programme for Rain-fed Agriculture at about 85 locations. The Dry Land Development Board (DLDB) was the line agency which looked after the technical aspects of the watershed development programme. Apart from government funded watershed projects, there are a number of watershed projects being implemented within Karnataka State with the financial assistance from different agencies like SIDA, DANIDA, SDC, KWF and others. Similarly, the Ministry of Rural Development implements and supervises Operational Research Projects (ORPs), wherein various donor agencies, NGOs and agricultural institutions implement watershed development projects using various experimental types of approaches.

Karnataka State is one of the priority states of the Department for International Development (DFID). The DFID in 1994 decided to launch a project on rain-fed agriculture in collaboration with the Government of Karnataka in semi-arid and drought-prone regions of the State. The new project was known as the Karnataka Watershed Development project (KAWAD).

Watershed development programme in Karnataka went through three institutional phases. The initial attempts were state sponsored, predominated by the soil conservation specialists that marked the first phase. This was technology-dominated phase and the hardware consisted of various soil and water conservation measures. The second phase, identified with the formation of DLDB, attempted to give a multi-disciplinary facelift to the approach. Diversification across concerned disciplines helped intensify the impact and enhanced the efficiency in implementation. This marked the first institutional model in the country. Simultaneously, similar projects were being implemented by many States as well as by non-governmental agencies in the country. The experience suggested that the involvement of stakeholders was quite crucial for the successful implementation of the programme. It was strongly felt that the participation of the community would ensure equity, efficiency and sustainability in the project. This software aspect thus became quite crucial in the process and that marked the third phase of changing institutional structures under the watershed. All the funding agencies

and even the state sponsored programmes emphasised participation of the stakeholders as an essential pre-condition for the sustenance of the programme.

Most of the watershed programmes adopted top-down approach and focused on physical, soil and water conservation works. The local communities were seldom consulted and were regarded as recipient rather than as participants or partners. The action had been blue-print-technical rather than flexible and need based. The investment made in the creation of assets could not be sustained for long once the government managed programmes ended. The KAWAD project adopted a bottom-up planning approach taking a holistic view of all aspects of life: social, community, institutional, technical, etc. It is a participative approach in the development of technology, NGO involvement, cost benefit sharing with gender and equity focus. The stakeholders in the watershed are supposed to be *de-facto* managers of land, water and natural resources in the project. KAWAD project intends to expand and diversify livelihood opportunities by following a holistic approach and by including non-land based activities.

Three watersheds were chosen for the KAWAD project, one each in Bijapur, Bellary and Chitradurga districts. These watersheds were selected based on various criteria of poverty, drought occurrence, high percentages of women-headed households, high percentages of landless labourers as well as small and marginal farmers. The watersheds selected for the KAWAD project are characterised by erratic and unevenly distributed rainfall and a typical rain-fed cropping pattern. These regions are endowed with shallow soils having low water holding capacity. They also suffer from rainwater run-off and soil erosion due to crust formation resulting in poor soil fertility. Pasture denudation due to over-grazing, expansion of agriculture into marginal lands, and loss of bio-diversity has been noted in the area. The communities in the selected watersheds have a high reliance on agriculture for income and wages due to lack of alternative employment opportunities resulting in food insecurity for the landless. These regions also experience shortages in fodder, and therefore, provide little scope for allied activities. The KAWAD project began in this background setting a herculian task before it

The central focus of the KAWAD project is on ensuring livelihood security in the drought-prone and degraded areas of Karnataka through the restoration of degraded habitats. The project envisages that the needs of the poor people in the treated

watersheds are met fully through environmental improvements and non-land-based activities. The current project aims at the development of replicable approaches and tested models for watershed development which are equitable, gender and poverty focused and effective in meeting the set goals. A basic premise of the project approach is the need to engage with all parts of the natural resource base and of the farming system. Each part of the system interacts with the others so that the total is believed to be greater than the sum of individual parts. Biological sustainability is believed to depend fundamentally on maintaining vigorous interactions.

KAWAD helps communities to plan and implement, to maintain assets created and to share the costs. The project concentrates not only on land based activities but also has the non-land based activities as its major thrust. Land based activities follow an integrated farming system approach, including development of crop varieties, cropping and livestock management system, soil and water conservation with emphasis on cash generating farm activities. The project intends regenerate pastures and grazing lands through the planting of improved grasses, development of private and common waste lands for cultivation and plantation of fuel and timber yielding trees and introduction of improved small scale irrigation technologies.

KAWAD has undertaken the implementation of the livelihood development programmes in three watersheds, namely, Chinnahagari watershed in Molakalmuru block of Chitradurga district, Upparahalla watershed in Kudligi block of Bellary district and Doddahalla watershed in Indi block of Bijapur district. The project area covers 62 villages in 13 Gram Panchayats and one Town Panchayat in the above three districts. The purpose of the project is ‘replicable approach and tested models for development operating in three watersheds which empower men and women (including marginalised groups) to demand better services and to gain access to expanded and diversified livelihoods and enable secondary stakeholders to respond to their needs'.

Based on the experiences of earlier programmes and other institutions, engaged in the implementation of watershed project, KAWAD has introduced an element of community participation as the fulcrum for sustainability of watershed programmes. Micro-Watershed Developmental Committees (MWSDCs) are formed at the micro-watershed level to take decisions about developmental activities (land based activities) whereas, Self-Help Groups (SHGs) are formed to look after the non-land based

activities. Services of competent NGOs are being used to work with and support micro-watershed communities in the micro-watersheds. These are called Partner NGOs (PNGOs). There are three different implementing agencies i.e., NGO in Chitradurga, Zilla Panchayat in Bellary and Watershed development department in Bijapur. The organizational chart of KAWAD project has been presented in figure 1.1. This is a vertically integrated structure with involvement of the communities at every step.

1.1.1. Activities undertaken in the project

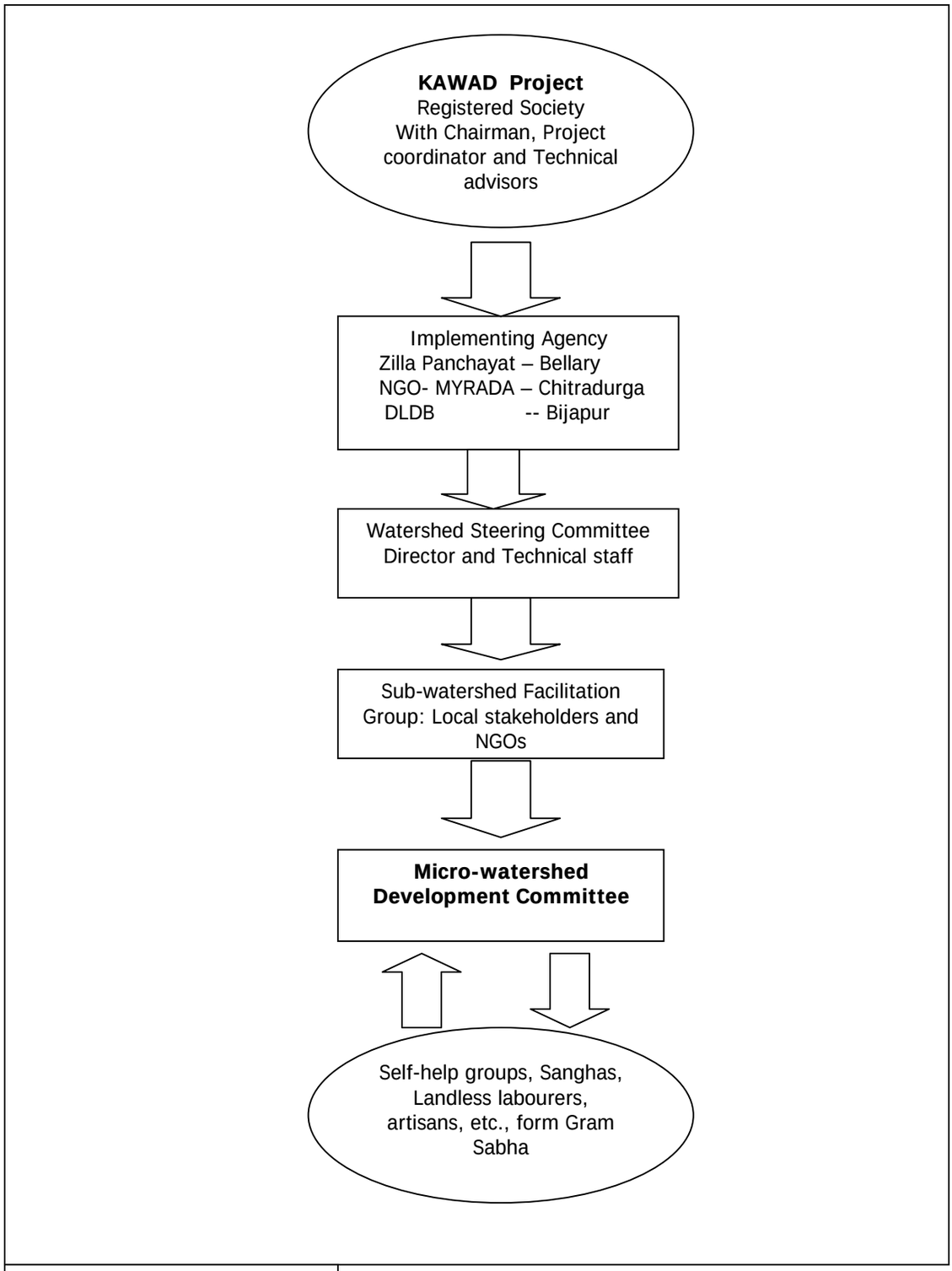
- **Land based activities**: Soil and water conservation measures, land treatment and agriculture demonstration activities such as planting of fruit orchards, propagation of drip irrigation, etc.
    - **Non-land based activities**: Income generation activities and enterprises for the landless, poor and vulnerable group of people.
    - **Promotion of Community Based Organizations (CBOs)**: Community based organizations are promoted at various levels for ensuring community participation in the management of the project and sustaining the project impacts beyond the project life.
    - **Capacity-building and networking**: Capacity building of the community based organizations and the government to take up livelihoods related activities. Also, networking and advocacy, esp. with the Government on the approaches of the project.

1.1.2. Expected Outputs and Impact of KAWAD project

- Communities empowered to develop and manage natural resources in a participatory manner through the use of appropriate and sustainable measures
- Poor people (especially women and marginalised groups) empowered to access and sustain new and enhanced livelihood options.
- All stakeholders sensitised and their capacities enhanced to address the needs of the community (especially the poor, women and marginalised groups) now and in future.
- Replicable approaches to watershed development tested, documented and their uptake promoted to influence relevant stakeholders.

ORGANIZATIONAL CHART OF KAWAD

Figure 1.1



Source: Based on KAWAD

1.2 Monitoring Watershed Treatments: A System Approach

The systems involved in the design of monitoring system involve four steps given below. The system basically works at three levels, namely, the process and core domain level, in terms of time dynamics and spatial spread level.

In a monitoring system required for this institutional structure, three components assume importance. These will feature as sub-systems and can include large number of counters for the purpose of monitoring. The first sub-system includes, monitoring of the institutions involved from Implementing Agencies, PNGOs, MWSDCs and SHGs. This has to be viewed from the point of efficiency of the institutions. The second sub-system in the process of monitoring should deal with the density and spread of participation of the stakeholders from the point of view of equity, efficiency and sustainability. Third and final sub-system deals with the output and impact parameters at the micro-level.

The monitoring system adopted by KAWAD consists of the following steps

- Inputs and activities monitoring- through regular (monthly, quarterly & six monthly) reports
- Critical process quality - through check-lists and peer reviews
- Outputs - Group self-assessment (GSA), Participation Index and Sample survey
- Impact - through a Measure of Livelihoods (MOL) study

1.3 Objective and Scope

The main objective of the study is to assess the output indicator and livelihood status of households in the project area using specific tools which have been developed and tested.

1.3.1 Scope:

- To understand the project, its activities, outputs and impacts.
- To understand the Measure of Livelihood (MOL), sample survey of output indicators and Group Self Assessment (GSA) tools
- Conduct a field study to collect data using tools already developed

- Analyse field data and produce a document summarizing the livelihood status of the community.

1.4 Methodology

As suggested by KAWAD, this study was undertaken in three districts of Karnataka, namely, Bijapur, Bellary and Chitradurga in the project areas of KAWAD. There are about 110 Micro- Watershed Development Committees (MWSDCs) and 700 Self-Help Groups (SHGs) in the project area. The project is being implemented in the following blocks.

Table 1.1 Details of Blocks where watershed Programmes are being implemented

Districts	Block	No. of villages	No. of Households	No. of MWSDC	No. of SHGs	Area (ha)	Implementing Agency
Bijapur	Indi	7	4,581	37	228	15,008	DWDO (DLDB)
Bellary	Kudligi	38	5,904	40	321	18,340	ZILLA PARISHAD
Chitradurga	Molakalmuru	17	3,100	31	148	17,025	CIDOW/MYRADA
All	--	62	12,721	108	697	52,719	-------

As stipulated by KAWAD, we had to select 10 per cent of all MWSDCs. The choice of MWSDCs was guided by the requirement to select at least one committee from each of the PNGOs working in the field. This allowed us, not only to look at the performance of MWSDCs but also that of PNGOs. Accordingly, we selected 4, 4 and 3 MWSDCs from Doddahalla, Upparhalla and Chinnahagari watersheds, respectively so as to provide proportionate representation to all the watersheds. Thus, a total of 11 MWSDCs were selected for the present exercise. After deciding about the number of MWSDC from each watershed, we selected one MWSDC randomly from among the list of MWSDCs prepared by each participating NGO. Similarly, a total of 70 SHGs and 1173 households were selected randomly from the selected micro watersheds as shown below.

Table 1.2 Selected SHGs and Households

Particulars	**Bijapur**	**Bellary**	**Chitradurga**	**All**
MWSDCs	4	4	3	11
SHGs	21	28	21	70
Households	273	555	345	1,173

Appropriate tools and techniques were used to collect the required data from different stakeholders/ actors in the project area. These have been described in the chapters that follow. Various tools developed by KAWAD for impact assessment and output monitoring were used to collect data from the concerned individuals. The tools used were:

- **MOL tool -** is developed by KAWAD for assessing the impact of the project. The tool was used to collect data from the members of selected MWSDCs and SHGs.
- **GSA tool** meant for output assessment was also canvassed to the members of SHGs and members of MWSDCs.
- **A Household survey** was conducted using pre-tested structured questionnaires. Data were collected from the head of the household by trained investigators through personal interview method.
- **Interviews of service providers** were conducted with the help of a checklist.

1.5 Outline of the Study

The outcome of the study has been presented in 5 chapters. The present chapter sets the Focus of the study, followed by an analysis of output and impact from an institutional perspective in the second chapter. An analysis has been made of the implementing agencies, PNGOs, MWSDCs and SHGs from the viewpoint of the objectives with which these institutions were formed. The performance of the institutions has been analysed with the help of the tools as well as specially developed methodology. The third chapter covers the Monitoring of the Livelihood of the respondents, especially focussing on the members of the MWSDCs, and SHGs. This chapter serves as a good benchmark and provides an in-depth understanding of the livelihood systems. The fourth chapter includes an analysis of the household level data with the twin objectives of drawing a clear benchmark and understanding the output and impact parameters of the programme. The chapter also presents a clear picture of the involvement of the community in the process from equity, efficiency and sustainability point of view. The last chapter brings together the main findings.

CHAPTER II

KAWAD OUTPUT AND IMPACT: AN INSTITUTIONAL ANALYSIS

2.1 Introduction

The history of institutions in watershed development in India can be traced in four phases. In the first phase, the programme was largely State sponsored and therefore, right from planning through implementation, the responsibility was that of the state officials. Naturally, it was the then existing Department of Soil Conservation which predominated the operations of watershed management. Therefore, it was not unexpected that the programme was crowded by soil conservation measures and structures. The technical and engineering components were on the forefront as the major hardwares of the projects. The manpower of the soil conservation department was fully trained in this respect, and their historically acquired skills were put to use. More or less, at the same time, a parallel movement began in the country, wherein a good number of NGOs started the phase of non-governmental intervention in the watershed development without any State support. At the same time, there were projects funded by external funding agencies where the state machinery or agricultural universities acted as implementing agencies. Operation Research Projects or the World Bank aided projects were of this generation. This marked the second phase in the history of watershed development. A number of studies compared the experience of these institutions with the one gathered from the State-run programmes and found that the programmes taken up voluntarily provided exemplary results compared with the State run programmes. The NGO initiatives emboldened another important aspect of the programme, namely, the software or incorporation of the perception of the people about the watershed development interventions. It was soon realised that without a proper approach, participation in the programme will be difficult, and such failure will not sustain the intervention in the field. Moreover, participation was quintessential for ensuring the effectiveness, equity and institutional sustainability of the programme.

This realisation soon descended on the State and as a consequence the ongoing programmes were modified incorporating a strong role for people's organisations or NGOs. This heralded the third phase in the institutional intervention in Watershed Development. There were two different experiments undertaken during this phase, one involving a few

likely beneficiaries and training them in order to create awareness among the other intended groups in the village and the community. Similarly, on the other side, efforts were on to build different institutional structures in different States to organise the watershed development programme. The Dryland Development Board of Karnataka was one such example. Similarly, the National Watershed Development Programme for Rainfed Agriculture (NWDPRA) also considered incorporating people's participation through "Mitra Kisan" and "Gopal", representing a farmer and a livestock owner. These initiatives did not yield satisfactory results and around the same time a good number of national/international funding agencies had shown keen interest to support watershed development programmes in various States. Such funding agencies included the Word Bank, DFID, GTZ, Aga Khan Foundation, Varanrai and other such reputed organisations. These organisations made it mandatory to have a proper institutional structure to seek and promote people's participation in the programme. The fourth phase was marked by the institutional structure proposed in the programmes sponsored by these funding agencies. Such institutional structures were either drafted in the design for the continued support from the funding agencies or emerged subsequently. The funding agencies also approached directly a few NGOs, which had the necessary technical capabilities and presence in the field for organising the beneficiaries. A good number of experiments undertaken in this phase of institutional development proved successful. However, the failures proved detrimental. Therefore, some funding organisations thought it prudent to approach the NGOs through the State Governments for implementing the watershed development programme.

This arrangement provided four distinct and obvious advantages. First, the closeness of the NGOs in the field with the people, made the programme more effective and participatory as expected by the funding agency. Second, the State officials took the full responsibility of identifying proper NGOs with the required technical backup and expediency in handling similar projects. That avoided fishing from a large group of NGOs and taking the risk or ending up with one, without proper infrastructure. Third, the technical knowledge in the State departments as well as the ground level State machinery could be made use of for the effective implementation of the programme. This could not have been feasible if the programme was implemented by an NGO, having no backup from the State. Lastly, the funding agency also got the required assurance from the State and thus, the programme could be implemented properly in the field. KAWAD programme is set in this institutional design.

Watershed development is basically a resource region development approach. It involves not only the natural resources in the delineated hydro-geological region but also the people of the region. The most important aspect of the people's participation is the heterogeneity that exists in the Indian rural scene. Therefore, it involves social engineering aspects and an interaction between three distinct spheres; namely, biosphere, socio-sphere and the economic sphere. The interactions between these three spheres are quite complex and therefore, initiating any developmental programme in the Indian rural scene becomes a challenging task. It is in this context that the role of institutions becomes important as they can be effectively monitored as well as they can deliver the goods more equitably. In the typical parlance of institutional economics, institutions fall into two broad groups, namely, the formal State sponsored institutions and the informal community or society sponsored institutions. There are quite a few negative and positive aspects of these two groups of institutions and therefore, it is argued that an effective institution is the one which combines the best part of these two broad groups. Therefore, the institution managing a resource region based programme requires a combination of State and non-state organisations. Such combination can effectively increase the ease of implementation of the programme, its organisation and reach the benefits in the pre-decided manner. More than that, such combination will also ensure the sustainability, equity and efficiency of the programme in delivering the outputs and impacting the pre-decided parameters.

Sustainability, equity and efficiency are the basic requirements of any resource region based programme. The programme has to be sustainable not only on the ground of its immediate outputs but also in the form of institutions created while implementing the programme. The sustainability of the institutions depends on the participation of the stakeholders in the programme at the time of planning and through its implementation. Equity, on the other hand, has two connotations, namely, the regional connotation based on the outputs emerging from the upper reach through the lower reach and the inter group equity connotations about the benefits going to different groups. The equity aspect also needs to be viewed from the point of view of direct beneficiaries as well as benefits to indirect participants. Effectiveness involves getting the anticipated outputs and impact with the preplanned unit cost of the programme. In other words, it is the productivity (of an anticipated output) per unit of the cost involved in the programme. Thus, the three important parameters of sustainability, equity and efficiency have a direct bearing on the output and impact of the project, and have a strong link with the type of institutions

governing the implementation. The role of institutions, therefore, becomes crucial in dictating the output and impact parameters.

Among the output and impact parameters, we have listed the major components observed at the field level. The output can be grouped into three broad groups, namely, the institutions as output, production and value addition as output, and environmental parameters having positive externality as output. Similarly, we have a large number of impact components at farm level that have been identified and analysed in the fourth chapter. These also can be classified into three groups, namely, livelihood system, resource augmentation system and a system of indirect economic activities generated. But, the impact and output parameters are largely dictated by the institutional process through which these are achieved. The conduit institutions thus play a crucial role in generating these effects. In the KAWAD framework, it is the PNGOs which act as conduit institutions between the people and the State, and thus, their role is crucial.

Based on the objectives, ideologies, nature of activities and location, NGOs can be classified under four broad categories: operational or grassroots NGOs, support NGOs, network NGOs and funding NGOs. Operational or Grassroots NGOs directly work with the oppressed sections of society. The grassroots NGOs are either local based, working in a single and small project location, or working in multiple project areas in different districts, states and regions, covering a larger population. The approach and orientation of grassroots NGOs differ across projects and therefore the following distinction can be made among them. *Charity and welfare NGOs* are involved in charity (giving food, clothing, medicine, alms in cash and kind, etc.), welfare (providing facilities for education, health, drinking water, etc.), relief (responding to natural calamities like floods, drought, earthquakes and man-made calamities like refugee influx, ravages of war, etc.) and rehabilitation (undertaking the work in areas struck by calamities and starting activities durable in nature) whereas, *Development NGOs* are involved in providing (facilitating the provision) development services such as credit, seeds, fertilisers and technical know-how. The effective implementation of any programme and its sustainability in the field will thus depend upon the role these NGOs play. In other words, the performance of these institutions can make or break the initiative.

WHILE IDENTIFYING AN EFFECTIVE INSTITUTION (NGO) THE FOLLOWING CRITERIA ARE CONSIDERED OF GREAT SIGNIFICANCE:

- The Institution is owned and managed by the users/stake holders, producers or beneficiaries themselves;

- The institution is accountable to the community;
- The institution has the capacity to become self-reliant over a period of time;
- It has the capacity to diagnose the needs of the area, interact with the governmental agencies in order to draw the need based local level plans and to implement those plans in close co-operation with the administration;
- It will try to bring about integration of various segments of the society for the achievement of common goals of development (Identified in the Eighth Plan Document).

KAWAD project combines the ease of NGOs in reaching the people and NGO's skills to organise beneficiaries with a purpose and at the same time provides a strong support from the state machinery to ensure sustenance of the institution and the programme. The design aims at a self generated sustainability, effectiveness and equity in the programme by equipping the institutions to spurr such effect. In this chapter we analyse the output and impact parameters of KAWAD from institutional perspective. The attempt here is to bring out the specific institutional structure in the project with a focus on the empowerment of the community made feasible by the structure. We have tried here to document the role of institutions in the planned activities under the programme. The chapter also includes the process through which the institution made feasible the enhanced livelihood options to the stakeholders.

2.2 KAWAD: The Structure of Institutions

The institutional structure of KAWAD consists of four layers. The first layer is identified as the implementing agency and there are three different implementing agencies in the three selected watersheds (see Figure 2.1). These represent different institutional aspects and, therefore, the outcomes could be different in the three regions. Karnataka Watershed Development Department represented by an Assistant Director of Agriculture, is the implementing agency for Doddahalla watershed in Indi taluka of Bijapur district. This represents the culture of implementation from the State perspective superimposed on the institutions created under KAWAD. Naturally, the distance between the implementing agency and the NGOs is wider and the relationship is always the 'recipient' and the 'giver'. Therefore, the success of this watershed should be credited largely to partner Non-Governmental Organisations (PNGOs). The second implementing agency is the Zilla Parishad (PRI at the district level) through the Officer of the Department of Agriculture. In this case, the role of the public representatives features indirectly. Similarly, the Zilla

Parishad officers have a much closer interaction with the stakeholders, or at least that was observed in the field. The third type of implementing agency is the NGO, fully responsible for the task of implementing the project. The programme is entrusted to them based on the earlier experience in watershed management and organisational skills. Therefore, there are three different cultures of implementation in KAWAD project, namely, the State - NGO combination, state – PRI-NGO combination and the NGO - NGO combination. These three will certainly give different results based on their interactions with the stakeholders. The second layer includes the PNGOs which have been assigned the task of organising the MWSDCs and SHGs. The PNGOs selected at this stage have a differential background as well as experience. Table 2.1 gives a brief outline of the PNGOs involved. It can be seen from the table that the PNGOs have differential experience as well as work culture. Naturally, the likely impact and output of their work will very according to their involvement and understanding of the project. Figure 2.2 gives the outline of the implementation structure from IAs downwards, It also shows the manpower and technical skills of each of the PNGOs. The third and fourth layers consist of the MWSDCs and SHGs as well as the task set in front of them. Here, the variations in the institutions of MWSDCs and SHGs not only depend on the PNGOs but also the members and interaction between the members of the groups.

Table 2.1 : A Brief Outline of the Partner Non-Governmental Organisations (PNGOs) Involved

Name of the PNGO	Experience	Specialisation
Development Promotion Group (DPG)	25 Years Karnataka & Tami Nadu	Projects handled include : Housing, Watershed development, Child Labour
Leading Organisation for Rural Development (LORDS)	18 Years Local NGO working in the district	Watershed development, Organising People, Agricultural Development Projects
Group for Urban and Rural Development (GUARD)	18 Years Karnataka	Organising Women, SHGs, Agricultural Development Projects
Mysore Resettlement and Development Agency (MYRADA)	40 Years Karnataka, Andhra Pradesh, Tamil Nadu	Poverty Alleviation Programmes, Watershed Development
Socio-Economical, Environmental Development Association (SEEDA)	13 Years Karnataka	Organising SHGs , Child Health, Women Development
VISHALA	12 Years	Women and Child Development, Watershed Development
Bijapur Integrated Rural Development Agency (BIRDS)	10 Years Karnataka Local Organisation in the district	SHGs, Organising People, Watershed Development
Institute for Education and Environmental Research (ISEER)	10 Years Karnataka Local Organisation working in the district	Organising SHGs, Agricultural Development Programmes
Research Service Centre (RSC)	7 Years Karnataka Local Organisation working in Bellary district	Organising SHGs, Agricultural Development Programmes

Note : These organisations work in two districts with two different groups organised for the purpose of KAWAD project**.**

Figure 2.1: KAWAD: An Innovative Institutional Structure

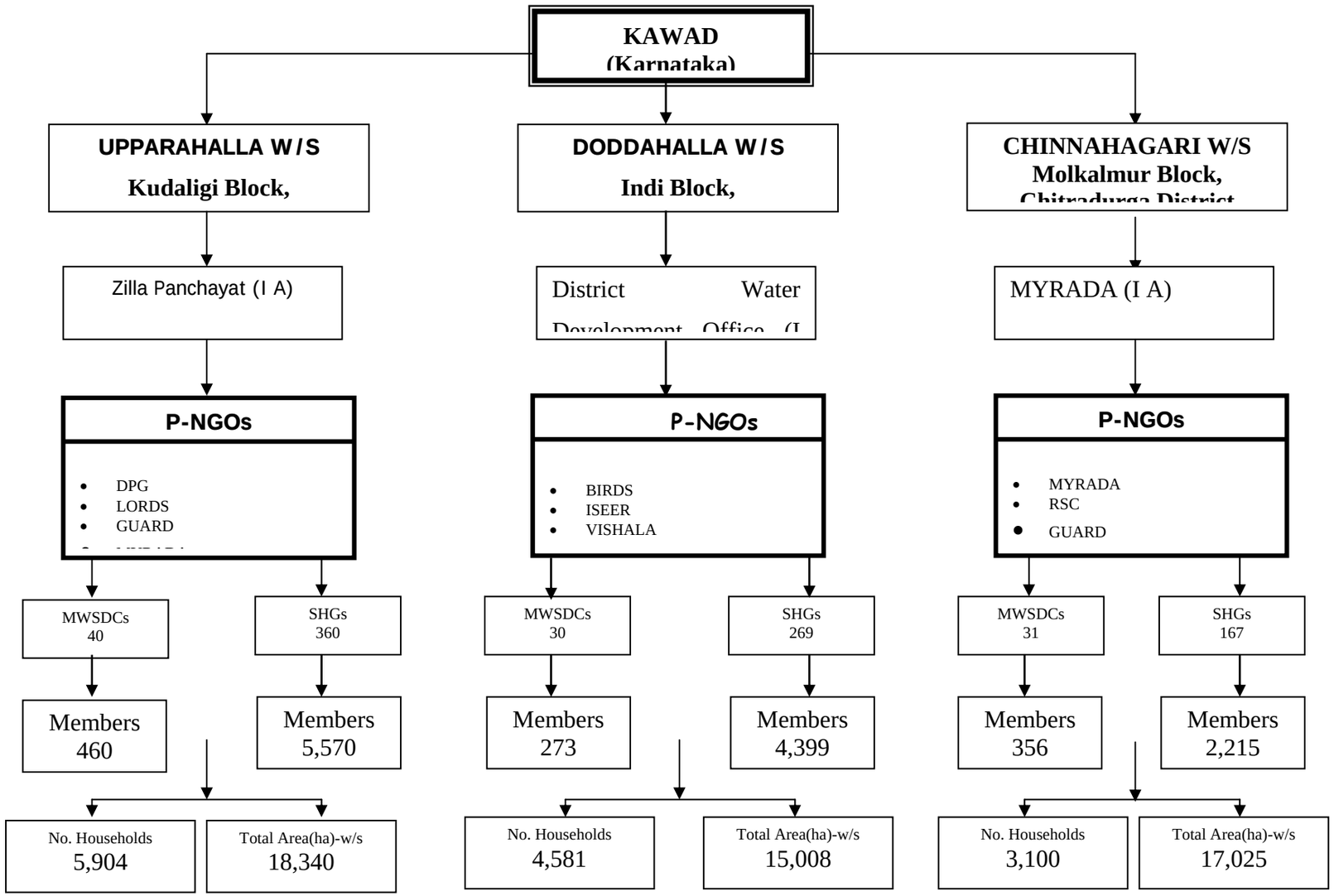
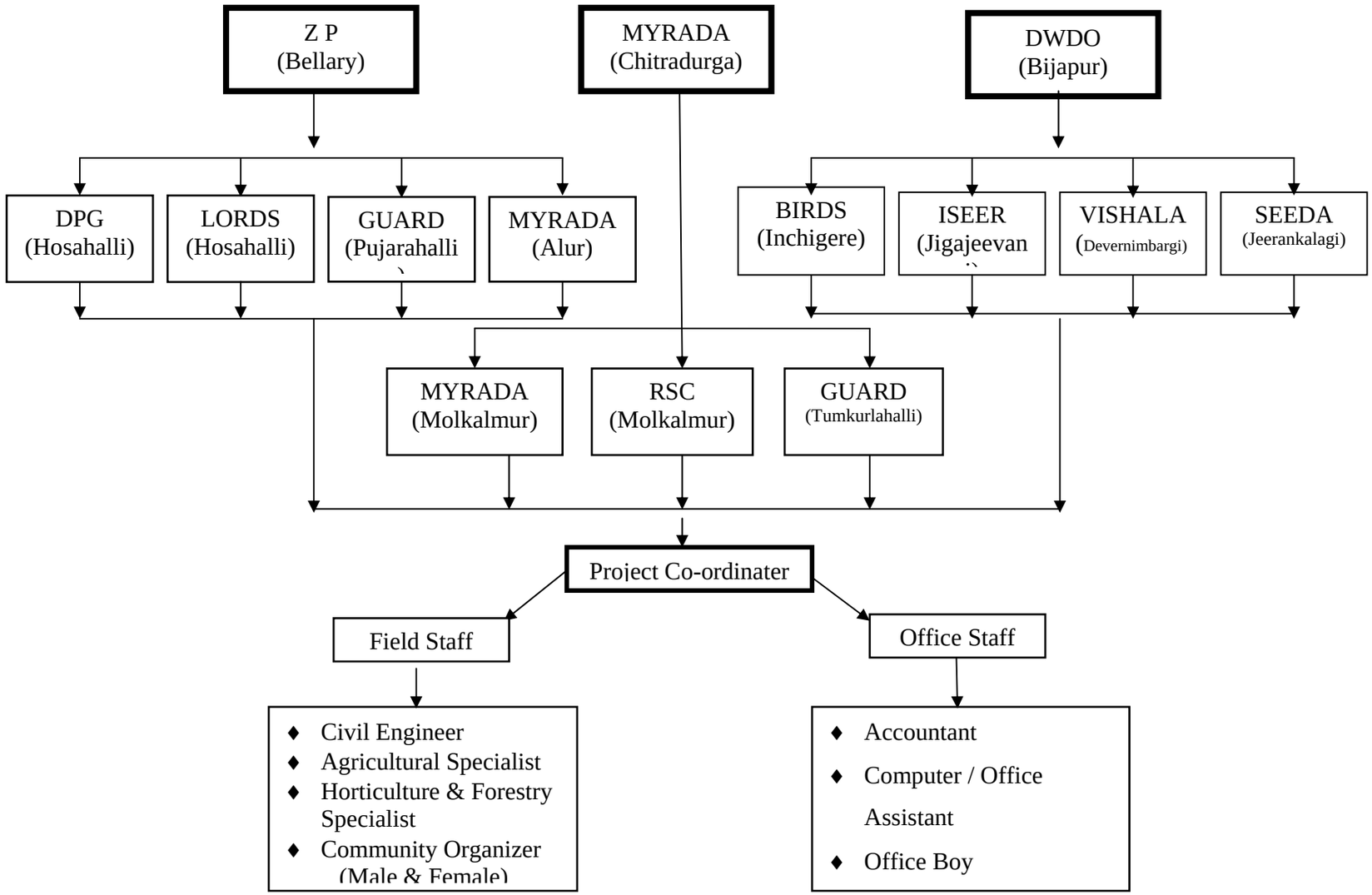


Figure 2.2: Organisational Profile for Implementation



The strength of the institution is depicted by the number as well as quality of the staff. Watershed development being a multi-disciplinary concept it requires specialists from different disciplines. Table 2.2 gives the existing staff of the PNGOs engaged in organising the project. There are differences across the organisations, and one can note LORDS as the weakest organisation and MYRADA, ISEER having larger density of staff. Probably, the average density should be 12, but the spread across disciplines is also quite crucial for the purpose of effective implementation. Absence of horticulture and forestry specialists in four PNGOs and female community organisers in five PNGOs could cause lopsided impact.

Table 2.2 Staff Engaged by P-NGOs for the Project

P-NGO Code	P-NGO Name	Co-ordinator	Civil Engineer	Agi. Specialist	Horti & Forest	Community Organizer		Accountant	Computer/ Office Assistant	Attender/ Office Boy	Field Assistance	Total
						Male	Female					
1	DPG	1	1	1	1	1	1	1	1	1	7	16
2	LORDS	1	1	-	-	1	1	-	1	1	7	13
3	GUARD	1	1	1	1	2	-	1	1	1	-	9
4	MYRADA	1	1	1	-	4	-	1	1	1	17	27
5	BIRDS	1	1	1	1	1	-	1	1	-	9	16
6	ISEER	1	1	2	1	1	1	1	1	1	17	27
7	VISHALA	1	1	1	1	1	1	1	1	-	6	14
8	SEEDA	1	1	1	1	1	-	1	1	-	5	12
9	MYRADA	1	1	1	1	2	1	2	2	1	-	12
10	RSC	1	1	1	-	1	-	1	1	1	7	14
11	GUARD	1	2	1	-	-	-	1	1	1	7	14

2.3 Micro-Watershed Development Committees (MWSDCs): As people's Institutions

MWSDC is the basic institutional tool used to spur people's participation in the development programme supported by SHGs. The MWSDC helps to organise the stakeholders and helps the programme in four different ways. First, the constitution of MWSDCs involves members broadly representing all the economic and social groups in the village and thereby ensures democratic participation. The statutory membership includes marginal farmers, large farmers, women members, representatives of Scheduled Castes and Scheduled Tribes, and a member from the SHGs. This takes care of full participation of the stakeholders and a representation for various groups. Second, the MWSDCs discuss and take most of the decisions pertaining to the watershed development land-based activities in the watershed. This allows full participation for the stakeholders in planning the activities as well as considering various alternatives available. Therefore, the stakeholders' get a satisfaction of involving in the planning process of watershed based activities. The empowering process for the communities originates here by design. This insures long run sustainability of the activities as well as MWSDC as an institution. Third,

MWSDCs supervise the physical work as well as have full control on the monetary aspects of the work and thus can ensure effective implementation of the land activities. All the payments are made by cheques and the decisions about the payments are taken in the meeting providing for full transparency of the decision. This sends positive signals to the other stakeholders in the village and provokes them to participate in the programme. Apart from that it works as an inbuilt mechanism of this institutional structure and empowers the communities. Finally, MWSDCs have strong backward and forward linkages with the social institutions represented by various members of the MWSDCs and of the formal and informal type of institutions above represented by the administrative, political and social structures. It was noted that the composition of

Table 2.3 : Aggregate Performance of MWSDCs up to November 2002

P-NGO code	P-NGO Name	No. of house-holds	Total area planed (Ha)	Total Cost Involved (lakhs)	Total contri-bution (lakhs)	Total cost (lakhs)	% of KAWAD contri-bution	% of farmers contri-bution	Total cost per house hold (Rs.)	Total Cost per ha. (Rs.)
Kudaligi taluka, Belllary dist. (Upparahalla W/S)										
1	DPG	1,264	3,692	80	22	101	30	27	8,020	2,746
2	LORDS	960	3,657	79	24	102	30	29	10,646	2,795
3	GUARD	1,198	3,114	10	4	14	4	5	1,207	464
4	MYRADA	2,482	7,877	94	31	125	36	38	5,030	1,585
Total		5,904	18,340	262	80	343	100	100	5,807	1,870
							39 *	37 *		
Indi taluka, Bijapur dist. (Doddahalla W/S)										
5	BIRDS	1,662	3,864	71	26	97	29	28	5,862	2,522
6	ISEER	1,257	6,299	109	42	151	44	44	11,994	2,394
7	VISHALA	866	2,902	35	13	48	14	14	5,590	1,668
8	SEEDA	796	1,943	32	13	44	13	13	5,582	2,287
		4,581	15,008	247	94	341	100	100	7,446	2,272
							37 *	43 *		
Molakalmur taluka, Chitradurga dist. (Chinnahagari W/S)										
9	MYRADA	212	3,145	15	4	19	10	9	8,896	600
10	RSC	1,375	5,994	66	20	86	42	43	6,249	1,433
11	GUARD	1,513	7,886	75	22	97	48	48	6,408	1,229
Total		3,100	17,025	156	46	202	100	100	6,507	1,185
							23 *	21 *		
Grand Total		**13,585**	**50,373**	**666**	**220**	**886**				

Note : * Per cent contribution by the farmers in the watershed to the total contribution from all the watershed

MWSDCs involves poor and historically marginalised groups. Most of the decisions are taken in the meetings of the committee and therefore, they are directly empowered to take decision about the natural resource management. In the process they get sensitised and feel empowered to take decisions that dictate the avenue for new enhanced livelihood options. Therefore, theoretically, the success of MWSDCs through operational ease is guaranteed but it depends on how they perform in the field.

The aggregate performance of the PNGOs and MWSDCs is shown in Table 2.3. The total number of households covered under KAWAD projects come to 13,585 and the planned area is 50,373 hectares. The total cost involved is Rs. 885.6 lakhs out of which 220 lakhs is the contribution of the beneficiaries. The cost of the project per household as well as per beneficiary is higher in Doddahalla watershed. It is the lowest in Chinnahagari watershed. The contribution is only about 21 per cent in Chinnahageri to total contribution. Among the PNGOs, GUARD in Upparahalla and MYRADA in Chinnahageri have a lower share in the total contribution.

Table-2.4a: Basic Information on the selected MWSDCs

Sl. No.	Group code	Name of the P-NGO	Group name	Village	S-W/S number	Date of establish-ment	Number of members	Female memb-ers
Kudaligi Taluka, Belllary Dist. (Upparahalla W/S)								
1	Be-1	DPG	Kalparuksha	B.T.Guddi	3	01-12-99	9	2
2	Be-2	LORDS	MWSDCs-3	H.K.Gollarahatti	2	02-07-00	12	4
3	Be-3	GUARD	Hudedahalla	Poojarahalli	5	27-06-01	10	3
4	Be-4	MYRADA	Sri Basaveshwara	Alur	1	03-07-01	15	4
Indi Taluka, Bijapur Dist. (Doddahalla W/S)								
5	Bi-1	BIRDS	Sarvodhaya	Inchigeri	1	14-11-99	13	6
6	Bi-2	ISSER	Karibasweshwara	Jigajevani	2	11-08-00	10	5
7	Bi-3	VISHALA	Sri Basaveshwara	Devernimbargi	4	16-02-01	9	3
8	Bi-4	SEEDA	Sri Kalameshwara	Jeerankalagi	5	27-02-01	9	5
Molkalmur Taluka, Chitradurga Dist. (Chinnahagari W/S)								
9	Ch-1	MYRADA	Nelabande	Devarahatti	1	03-11-99	12	3
10	Ch-2	RSC	Bailadevi	Kanakanahatti	4	13-12-99	11	3
11	Ch-3	GUARD	Kamarayanakatte	Tumkurlahalli	2	30-01-00	11	4

Table 2.4b: Total Number of Women Headed Households

Sl. No	Group code	P-NGO	Village	Total No of House	Women Headed House Holds	
					Total No.	%
Kudaligi Taluka, Belllary Dist. (Upparahalla W/S)						
1	Be-1	DPG	B.T.Guddi	1264	160	12.65
2	Be-2	LORDS	H.K.Gollarahatti	960	23	2.39
3	Be-3	GUARD	Poojarahalli	1198	12	1.00
4	Be-4	MYRADA	Alur	2482	52	2.09
Total				**5904**	**247**	**4.18**
Indi Taluka, Bijapur Dist. (Doddahalla W/S)						
5	Bi-1	BIRDS	Inchigere	1662	85	5.11
6	Bi-2	ISSER	Jigajevani	1257	32	2.54
7	Bi-3	VISHALA	Devernimbargi	866	35	4.04
8	Bi-4	SEEDA	Jeerankalagi	796	45	5.65
Total				**4581**	**197**	**4.30**
Molkalmur Taluka, Chitradurga Dist. (Chinnahagari W/S)						
9	Ch-1	MYRADA	Devarahatti	212	15	7.07
10	Ch-2	RSC	Kanakanahatti	1375	21	1.52
11	Ch-3	GUARD	Tumkurlahalli	1513	10	0.66
Total				**3100**	**46**	**1.48**
Grand Total				**13585**	**490**	**3.60**

We have selected 11 MWSDCs from among the 110 MWSDCs spread over the three watersheds. In order to have a good representation of various institutional structures and for the purpose of selection, we grouped the MWSDCs under different PNGOs. One MWSDC was elected from each of the PNGOs groups. The basic information on the selected MWSDCs is given in tables 2.4a and 2.4b. These 11 MWSDCs have 121 members as stakeholders. The tools illustrated in the introductory chapter meant for MWSDCs were canvassed for these 11 MWSDCs as well as to the members of these committees.

Table-2.5: Membership and Activities of MWSDCs

Sl. no	Group code	Total members	Total amount for LBA (In lakhs)	Total contribution (In lakhs)	Major Activities Undertaken (In codes)
Kudaligi Taluka, Belllary Dist. (Upparahalla W/S)					
1	Be-1	9	19.36	5.33	2,5,11,6,8,3,16,12,18,19
2	Be-2	12	5.65	1.04	2,1,4,3,5,6,8,11,9,
3	Be-3	10	2.39	1.00	2,1,6,3,10,11,20
4	Be-4	15	6.38	2.44	2,5,3,16,1,14,15,6,8,11,20
Indi Taluka, Bijapur Dist. (Doddahalla W/S)					
5	Bi-1	13	5.96	2.40	2, 13, 11, 10, 19, 1, 17
6	Bi-2	10	9.20	2.49	1,2,4,13,12, 20
7	Bi-3	9	2.20	0.82	1, 2, 11
8	Bi-4	9	4.76	2.15	1, 2, 11,15
Molkalmur Taluka, Chitradurga Dist. (Chinnahagari W/S)					
9	Ch-1	12	7.00	1.60	1,2, 12, 13, 3, 5, 17,11
10	Ch-2	11	8.31	0.00	12, 3, 5, 4, 11, 1,2
11	Ch-3	11	3.97	0.00	19, 3, 12, 16, 17, 13,2,1,5

Note: For activity codes see the list
LBA : Land based activity;
(P-NGOs -RSC and GUARD did not provide for LBA contribution by the farmers in Chinnahagari Watershed)

The major activities undertaken by the MWSDCs (for activity codes see Annexure Table 2.1) are indicated in the last column of the Table 2.5. Bunding, land leveling,

horticulture seem to be more common activities. Check dams, silt application, jungle clearance and farm ponds seem to be the second most popular activities. The total amount on land-based activities invested by the selected MWSDCs goes up to Rs 73 lakhs. Among the selected MWSDCs, the groups in Upparhalla watershed have invested larger amounts than the other two watersheds. Similarly, we also fond that the number of activities undertaken in Upparhalla watershed are more than the other two watersheds. The contribution from the members of MWSDCs in Upparhalla is also much higher compared to Doddahalla and Chinnahagari watersheds. In fact, the contribution is quite low in the Chinnahagari watershed. The variations in contributions as well as the amount invested clearly shows differential efforts by the watershed committees.

The social classification of the members of MWSDCs and their participation in land-based activities is quite important from the viewpoint of empowering poor/marginalised people. One of the major determinants of sustaining an institution is the homogeneity in their social structure. But in this case the converse is not true, since even the socially heterogeneous institution can also survive provided the activities are interesting and promise a definite value addition to the members of the group. Among the members of the selected MWSDCs more than 25 per cent belong to Scheduled Castes and about one-third of them are women. The land-based activities are undertaken on the lands of more than half of the members. Even here too, we find that the Scheduled Castes have a good representation. About one-third of the land-based activities are taken on the lands of Scheduled Castes. That stands as a clear testimony of the equity aspect of the programme and the expected output of empowering the poor among the group. There are, however, slight variations across the selected MWSDCs and in Chinnahagari, the highest proportion of Scheduled Castes seem to have benefited from the land-based activities (Table 2.6a). Table 2.6b makes it clear that the benefits from land-based activities are judiciously spread across the social groups. The sources of funds for the land-based activities as well as the activities undertaken on the wasteland are indicated in Table 2.7. Largely, the members utilised funds from SHGs and commercial banks. The preference for non-institutional finance seems to be very little and that has brought in significant changes. The process of eliminating the informal money market and reducing the role of money lenders was quite clear. We also note from the table that the activities on the wastelands have not been taken intensively on the `commons' but the wastelands under private ownership received significant attention. This is not surprising in the context of an institution largely meant for

undertaking land-based activities on the lands of the members. The institutional process needs to mature to fan out and cover the `commons' under watershed treatment.

Table 2.6a : Social classification of MWSDC members

Sl. No.	Group Code	Social categorization of members												
		Land less			Large Farmers			Small Farmers			Marginal Farmers			Total
		SC/ ST	OBC	Oth-ers	SC/ ST	OBC	Oth-ers	SC/ ST	OBC	Oth-ers	SC/ ST	OBC	Oth-ers	
Kudaligi Taluka, Bellary Dist. (Upparahalla W/S)														
1	Be-1	0	0	1	0	4	0	1	3	0	0	0	0	9
2	Be-2	0	0	0	0	9	0	0	1	0	0	2	0	12
3	Be-3	1	0	0	1	5	0	3	0	0	0	0	0	10
4	Be-4	0	0	2	0	9	0	1	1	0	2	0	0	15
Indi Taluka, Bijapur Dist. (Doddahalla W/S)														
5	Bi-1	0	2	0	0	4	0	1	3	0	1	2	0	13
6	Bi-2	0	0	1	0	1	2	1	2	2	1	0	0	10
7	Bi-3	1	1	0	0	2	1	0	1	1	2	0	0	9
8	Bi-4	1	0	3	0	1	1	1	0	0	0	2	0	9
Molkalmur Taluka, Chitradurga Dist. (Chinnahagari W/S)														
9	Ch-1	2	0	0	1	0	2	2	0	0	5	0	0	12
10	Ch-2	0	0	2	1	3	0	0	2	0	0	3	0	11
11	Ch-3	2	1	0	2	0	0	2	0	0	4	0	0	11

Table 2.6b : Land Based Activities undertaken by MWSDC members

Sl. No	Group Code	Social categorization of farmers									
		Large Farmers			Small Farmers			Marginal Farmers			Total
		SC/ ST	OBC	Others	SC/ ST	OBC	Others	SC/ ST	OBC	Others	
Kudaligi Taluka, Bellary Dist. (Upparahalla W/S)											
1	Be-1	0	4	0	1	3	0	0	0	0	8
2	Be-2	0	7	0	0	0	0	0	0	0	7
3	Be-3	1	3	0	0	0	0	0	0	0	4
4	Be-4	0	7	0	0	1	0	1	0	0	9
Indi Taluka, Bijapur Dist. (Doddahalla W/S)											
5	Bi-1	0	2	0	1	2	0	1	0	0	6
6	Bi-2	0	1	1	1	0	0	0	0	0	3
7	Bi-3	0	2	1	0	0	0	1	0	0	4
8	Bi-4	0	1	1	1	0	0	0	1	0	4
Molkalmur Taluka, Chitradurga Dist. (Chinnahagari W/S)											
9	Ch-1	1	0	2	2	0	0	2	0	0	7
10	Ch-2	0	3	0	0	1	0	0	2	0	6
11	Ch-3	2	0	0	2	0	0	2	0	0	6

Table 2.7: Land Based Activities Undertaken by the Members of the Selected MWSDCs

Sl. No	Group code	Members accessing funds for LBA				WL under MWSDCs (in acres)					
		Banks	Co-oper.	SHG	Any other FI	Common			Private		
						Pro.	Unpro.	T & MP	Pro.	Unpro.	T & MP
Kudaligi Taluka, Bellary Dist.(Upparahalla W/S)											
1	Be-1	0	0	3	2	0	8.5	8.5	0	5	5
2	Be-2	3	2	11	0	0	0	0	0	7	7
3	Be-3	3	2	0	4	0	0	0	0	2	2
4	Be-4	8	3	7	0	0	3	3	0	5	5
Indi Taluka, Bijapur Dist.(Doddahalla W/S)											
5	Bi-1	0	2	2	1	0	0	0	0	0	0
6	Bi-2	1	0	9	0	0	0	0	61	537	61
7	Bi-3	0	2	1	1	0	0	0	0	0	0
8	Bi-4	0	0	2	2	0	15	0	0	4	0
Molkalmur Taluka, Chitradurga Dist.(Chinnahagari W/S)											
9	Ch-1	0	0	1	1	0	96	0	0	0	0
10	Ch-2	0	0	5	0	0	5	5	0	0	0
11	Ch-3	0	0	6	0	0	5	1	0	0	0

Note : WL - Wasteland Pro. - Productive Wasteland
Unpro. - Unproductive Wasteland T & MP. - Treated and made productive
F I - Finance Institutes

2.4 Output and Impact as Perceived by the Members of MWSDCs

The benefits of the watershed development treatment perceived by the members of the MWSDCs are given in the Table 2.8. A clear picture emerges from the perceptions of the beneficiaries that all of them have understood clearly the watershed treatment and the probable benefits that will flow out of it. This is a clear depiction of the process of empowerment and access to information. They have indicated the benefits in seven major components. First, most of them clearly indicated control of soil erosion due to land leveling and land bunding. This was also visible during our field visits. Second, increase in the land fertility was recorded as an important benefit by most of them and this was credited to application of silt and increased moisture retention capacity. Third, the beneficiaries noted a significant change in the crop yields both due to the exposure to new technology and increased attention in the field in addition to the availability of moisture for a longer period. Fourth, quite a few of them indicated that the land based activities have helped to bring the wasteland under cultivation. This has been made possible to increase the horizontal land base and consequently the base for income generation. Fifth, almost all of them have unanimously expressed the opinion that the

Table 2.8 : Benefits of Watershed Treatment as Perceived by the Members of the MWSDCs

Group code	Group name	Benefits
Be-1	Kalpharuksh	♦ The groundwater table has increased ♦ Soil fertility has improved because of silt application ♦ Soil erosion is controlled ♦ Now fodder availability is throughout the year, and therefore, villagers are getting sufficient fodder
Be-2	No..3 MWSDC	♦ Soil erosion is controlled ♦ Fertility of the land has improved ♦ Uncultivable land is brought under cultivation ♦ Awareness has increased about NLBA
Be-3	Hudedahalla	♦ Application of silt has increased the soil fertility ♦ Soil erosion is controlled ♦ Crop yields have increased ♦ Farmers' economic condition has improved
Be-4	Sri Basaveswara	♦ Soil erosion is controlled ♦ Soil fertility has increased ♦ Crop yields have increased ♦ Savings have increased
Bi-5	Sarvodaya	♦ Groundwater table has improved ♦ Agricultural income has increased ♦ Savings have increased
Bi-6	Karibasaveswara	♦ Water level in borewells has increased ♦ Crop yields have increased ♦ Land value has increased
Bi-7	Sri Basaveswara	♦ Groundwater table has improved ♦ Poverty decreased to some extent ♦ Awareness has been created about agriculture and environmental issues
Bi-8	Sri Kalmeshwar	♦ Land fertility has improved ♦ Wasteland became fertile land and it could be brought under cultivation ♦ Groundwater table has improved
Ch-9	Nalabande	♦ Wasteland can now be converted into cultivable land ♦ Crop yield has increased ♦ Organization of SHGs and MWSDCs has been made possible
Ch-10	Bailadavi	♦ Wasteland could now be converted into cultivable land ♦ Non land based activities have increased, giving good support to the economy ♦ Awareness about development has increased among the women members
Ch-11	Kamarayanakatte	♦ Crop yield has increased ♦ Soil erosion has been controlled ♦ Socio-economic conditions have improved

Self-Help Groups and the formation of MWSDCs inculcated togetherness, community feeling and group initiatives towards developmental activities. They also indicated increase in the saving habits and proper utilisation of the funds available to the group. The support provided by NLBA activities to the household economy was an unexcludable benefit indicated by the participants. Sixth, quite a few of them indicated increased groundwater table and availability of irrigation for increasing cropping intensity. This has also enhanced the land value and supported the income flow to the farm households. Seventh, the members of MWSDCs expressed their happiness towards the diversification made feasible by the watershed based activities especially horticulture, fodder and livestock rearing. These supporting activities have substantially increased the income to the households. All

these seven components together indicate a renewed awareness about watershed development treatment and they also stand testimony for the additional income flow to the households. Certainly, we cannot overlook the fact that in addition to the direct benefits flowing to the beneficiaries the project has also provoked a large number of economic activities in the selected villages. These have clearly featured in the household level study.

Table 2.9a : Suggestions Received from the Members of the MWSDCs for Effective Implementation of Watershed Development Programme

Group Code	Group name	Suggestions
Be-1	**Kalparuksha**	♦ Preference has to be given to local people for initiation of any activity ♦ Contribution rate for LBA should be lower ♦ Quality of the LBA works needs improvement
Be-2	**NO .3 MWSDC**	♦ Farmers' contribution to LBA should be lower ♦ Effective training is needed for the cultivation practices of crops and their varieties ♦ KAWAD project should continue for another 2 to 3 years ♦ The same committee members should continue for minimum 2 years
Be-3	**Hudedahalla**	♦ LBA works should be implemented without getting any contribution from the farmers ♦ Community irrigation system needs to be introduced ♦ KAWAD project should be extended for another 5 years
Be-4	**Sri Basaveswara**	♦ Ceiling limit should be increased ♦ Contribution rate for LBA needs to be lower ♦ The implementation of drip irrigation system should be directly given to the farmer and it should not be implemented through agents
Bi-5	**Sarvodaya**	♦ Contribution rate for LBA should be reduced ♦ Loans should be provided to the landless labourers
Bi-6	**Karibsaveswara**	♦ Project should provide the facility for utilising the common fund ♦ Wasteland reclamation activities should be implemented on a larger scale ♦ More check dams and bunds should be built.
Bi-7	**Basaweswara**	♦ KAWAD project should be extended for another 2 to 3 years ♦ Contribution rate for LBA should decrease ♦ Along with LBA, NLBA should also be implemented on an increased scale
Bi-8	**Kalameswara**	♦ Project rules and regulations should be equally applicable to all the communities ♦ Propagation of horticultural crops is needed ♦ Self-employment and training for BPL farmers should be provided.
Ch-9	**Nelabande**	♦ Contribution rate for LBA should decrease ♦ Complete previous estimation of works should be available ♦ Remove the ceiling limits ♦ Create awareness about the benefits of the project
Ch-10	**Bailadavi**	♦ Necessary to implement the same type of project throughout the country ♦ KAWAD project should be extended for another 2 to 3 years ♦ Contribution money should be reduced
Ch-11	**Kamarayankatte**	♦ It is necessary to provide loan facilities for livestock development ♦ Technical training should be given to the committee members

The MWSDCs are essentially heterogeneous groups and therefore, their sustenance is always threatened. However, it is to the credit of MWSDCs that they have been able to

perform extremely well and execute the developmental works in the watersheds. There are quite a few suggestions received from the members of MWSDCs and these are presented in Table 2.9a and 2.9b. Among these suggestions, the members of MWSDCs invariably asked for lowering of the contributions from the farmers

Table 2.9b: Suggestions received from MWSDCs women members

MWSDCs	Suggestions
Kalparuksha	➢ KAWAD should not take any contribution from farmers for LBA works ➢ Increase the matching grants amount for SHGs ➢ KAWAD project should be extended for a few more years ➢ Provide marketing linkages for the NLBA activities
NO .3 MWSDC	➢ Effective training is needed in book writing and its maintenance ➢ Retain the same committee for another 2-3 years, with out reshuffling ➢ Auditing should be done in the committee office at village Laval. Presently auditing is being done by P-NGO staff at there office ➢ Improve the quality of LBA works by proper involvement of P-NGO staff
Hudedahalla	➢ Decrease the contribution amount for different land based activities. This helps the small and marginal farmers ➢ Take up land based activity manually machines should be used where there is a need. This creates employment for village labours and quality of the work will be maintain ➢ Training and permission is needed for utilization of common fund for initiation of any developmental activities ➢ Increase the number of female members in the MWSDCs and minimum should be 4
Sri Basaveswara	➢ Provide effective training in NLBA for MWSDC and SHGs members ➢ Decrease the contribution amount for land based activities ➢ Suggested to extend KAWAD project for another 2 years
Sarvodaya	➢ Preference has to be given to local people for initiation of any LBA activity ➢ Contribution rate for LBA should be reduce ➢ Preference should be given to women members at the time of meetings
Karibsaveswara	➢ Effective training is needed for effective cultivation practices of crops and their verities ➢ KAWAD project should continue for another 2 to 3 years ➢ P-NGO staff members should attend the committee meetings and they should actively participate in the LBA works
Basaweswara	➢ Project rules and regulations should be equally applicable to all the communities ➢ LBA works and its benefits should be equally distribute to all the community ➢ Technical training's should be provided to the committee members
Kalameswara	➢ It is necessary to provide loan facilities for Livestock development ➢ LBA Contribution should be reduce and it would be helpful to marginal and small farmers
Nelabande	➢ KAWAD should allow to increase the women member and number should be increased to reach 50% of the total members ➢ Effective training needed in the field of administration for women members ➢ Training and guidance is needed for women members in the field of NLBA ➢ Wasteland/gomala should be allowed for cultivation to landless women in the village
Bailadavi	➢ Effective training is needed in book writing and its maintenance ➢ KAWAD should allow to constitute exclusive women MWSDCs

while undertaking land based activities. This was felt necessary because a few farmers who could not afford the contribution stayed out of the activity thereby creating a gap in

the geographical continuation of the land based activities which is required for full treatment of watershed. They have also indicated higher intensity of the training in the watershed development technology so as to implement the project more effectively in future. Provision of irrigation also features prominently among the suggestions given by the farmers. In addition to this, the suggestions also included increased NLBA and training for the other employment-oriented economic activities. The members also urged for setting up of the scale of activities and long run continuation of the project.

2.5 SHGs: An Initiating Institution

Self-help groups (SHGs) are the micro-finance organisations. These are based on the principle of mutual help. Rural poor require credit for the farm and non-farm activities. Their credit needs are met either by the banking sector, cooperatives or moneylenders. In all these cases, the institutions lending credit as well as the borrowers face quite a few problems. Among the major problems confronted the transaction costs, inadequacy of credit, untimely availability, and undue harassment by the lender are the immediate problems faced by the borrowers, whereas, poor repayment, adverse selection, difficult monitoring and cost involved in enforcement are the problems faced by the lending institutions. SHGs provide a via media which works on the principle that an organisation will sustain only when the interest of its members continue in building the organisation. The theory of collective action indicates that rational and self-interested individuals when they realise the problems, tend to get together for the solution of the problem. The mutual lending process works on these principles. SHGs satisfy three Olsonian conditions of group behaviour, namely, a small group with similar interest, selective and equal incentives, and efforts towards a similar goal. In the SHGs five conditions apply, namely, i. Credit is available only to the people who save and therefore, it is provided only to a disciplined person with saving habit; ii. Credit needs are satisfied without any time-lag and therefore, the creditor does not suffer from the waiting period for economic losses; iii. Rate of interest is the rate agreed by the members of the group and hence, it cannot be exploitative; iv. The repayment is ensured due to the peer pressure and threatened non-cooperation by the other members of the group, and v. The funds of the group increase over time to provide economic viability to the group and that keeps up the group spirit.

SHGs in the context of watershed development programme act as an institution supporting the MWSDCs and having a closer link with the main programme. The interlocking of the SHGs and MWSDCs helps both institutions to sustain the interest of the members and these act as mutually supportive. The members of SHGs get associated with

the group under the credit programme and therefore, their participation is more secured to sustain in longer run. The hinge between the SHGs and MWSDCs is provided in the programme. MWSDCs undertake the land-based activities with ease and SHGs support the MWSDCs to sustain financially.

We have selected 70 SHGs from among 700 SHGs spread over the three watersheds. The proportion of SHGs initiated by the PNGOs in the three watersheds guided the selection procedure. Therefore, the selected SHGs bear the same proportion as the number of SHGs initiated by different PNGOs. Out of these, 28 SHGs are located in Upparhalla watershed, 21 in Doddahalla watershed and another 21 in Chinnahagari watershed. We analyse here the picture emerging from the selected SHGs. There are 1,156 members of these SHGs and together they have initiated fortyfive not land-based activities (See table 2.10 and annexure table 2.2). The total savings generated by the members of the SHGs in Upparhalla watershed amounts to Rs 547,545, averaging Rs. 19,555 per SHG. Upparhalla watershed has 139 members belonging to the Scheduled Castes and 301 members are females. The amount of credit given to the members of SHGs comes to Rs 2,101,620 in the Upparhalla watershed. Out of this Rs 819,802 is the outstanding amount and only Rs 2,750 can be called as overdue (See Annexure Table 2.3). In Doddahalla watershed, there are 354 members of SHGs and out of these, 120 belong to the Scheduled Castes. Only 236 members (66 per cent) are females and that shows lower concentration of females in the SHGs compared to the other two watersheds. The total savings generated in Doddahalla watershed comes to Rs 495,419 and the loan amount disbursed comes to Rs 2,405,848. Out of this, the outstanding amount is Rs 1,299,044 and Rs 67,000 is overdue. This is quite high compared to Upparhalla watershed but certainly lower than Chinnahagari watershed. The total number of members of SHGs in Chinnahagari watershed are 369, out of whom 219 belong to the Scheduled Castes and 276 are females. This is a watershed that has higher percentage of females as members of the SHGs. The total amount of saving generated by their SHGs in Chinnahagari watershed is Rs 519,043 and they have disbursed loan of Rs 3,341,850. Out of this, Rs 1,472,293 has been the amount outstanding, and Rs 125,756 can be termed as overdue. The credit advanced as proportion to the savings generated in Upparhalla watershed comes to about 384 per cent. The loan outstanding is 39 per cent of the total amount given as loan. In Doddahalla watershed, the loan advanced is 4.85 times that of the savings generated, whereas, the outstanding credit is about 53.9 per cent of the total credit given and overdue amount to 2.78 percent of the total credit given. The situation is not very different in

Chinnahagari watershed. Here, the loan amount given is about 6.44 times that of the savings generated by the SHGs. The outstanding amount is 44 per cent of the total credit given and the overdue comes to 3.76 per cent. Tables 2.11 (a) and (b) give the information about selected SHGs at the average level on totals about the membership, savings, loans given and loan outstanding. In an aggregate, the performance of Upparhalla watershed has better performance indicators as against the other two watersheds.

Table 2.10: Basic Information on the Selected SHGs and Membership

Sl. No.	Name of the P-NGO	Name of the village	Number of	
			SHGs	Members
Kudaligi Taluka, Bellary District (Upparahalla W/S)				
1	DPG	B.T.Guddi	6	103
2	LORDS	H.K.Gollarahatti	7	105
3	GUARD	Pujarahalli	5	67
4	MYRADA	Allur	10	158
Indi Taluka, Bijapur District (Doddahalla W/S)				
5	BIRDS	Inchigeri	4	59
6	ISEER	Jigajeevani	5	84
7	VISHALA	Devaranimbargi	5	87
8	SEEDA	Jeerankalagi	7	124
Molakalmur Taluka, Bijapur District (Chinnahagari W/S)				
9	MYRADA	Devarahatti	4	75
10	RSC	Kankanahatti	14	248
11	GUARD	Tumkulahalli	3	46
Total			**70**	**1,156**

Note: Abbreviations as given in the list of abbreviations used

Table 2.11(a): Information on Selected SHGs Collected through GSA Tool

Sl. No	Group Code	Members			Total (In Rs.)			
		Total	SC / ST	Female	Savings (Rs)	Loan given (Rs)	Out-standing (Rs)	Over dues (Rs)
Kudaligi Taluka, Bellary District (Upparahalla W/S)								
Total		433	139	301	547,545	2,101,620	819,802	2,750
Indi Taluka, Bijapur District (Doddahalla W/S)								
Total		354	120	236	495,419	2,405,848	1,299,044	67,000
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)								
Total		369	219	276	519,043	3,341,850	1,472,293	125,756

Table 2.11(b). Information on Selected SHGs Collected through GSA Tool

Sl. no	Group code	Members			Total (in Rs.)			
		Total	SC / ST	Female	Savings	Loan given	Out-Standing	Over-dues
Kudaligi Taluka, Bellary District (Upparahalla W/S)								
Average		15	5	11	19,555	75,058	29,279	98
Indi Taluka, Bijapur District (Doddahalla W/S)								
Average		17	6	11	23,591	114,564	61,859	3,190
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)								
Average		18	10	13	24,716	159,136	70,109	5,988

Members of SHGs are involved in different activities initiated by the SHGs under NLBAs. These are presented in Tables 2.12 (a, b & c). There are about 45 activities undertaken in the three watersheds. The highest number of activities, 28 of them, are undertaken in Upparhalla watershed, and the other two watersheds have more or less equal number of activities. These activities have provided supplementary income to about 242 families. The per capita income generated in these activities ranges between Rs 200 and Rs 13,500 in Upparhalla Watershed; Rs 867 and Rs 10,750 in Doddahalla watershed and between Rs 1,129 and Rs 42,331 in Chinnahagari watershed. Among the NLBA undertaken by the members of SHGs, hotel, petty shops, handloom and selling of clothes are better income yielding activities (See Table 2.13(a) and (b)).

Table 2.12a : Different Social Groups and NLBA Initiation by SHGs in Each Watershed: Information Based on SHG Level Sample Survey

Sl. No.	Group Code	Members by social group			Total No. Of members		Total No.of members initiated NLBA	
		Landless	Artisan	Others	Male	Female	Male	Female
Kudaligi Taluka, Bellary District (Upparahalla W/S)								
Total (28 SHGs)		2	6	308	132	289	80	262
Indi Taluka, Bijapur District (Doddahalla W/S)								
Total (15 SHGs)		1	0	209	63	193	45	136
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)								
Total (21 SHGs)		0	0	147	93	276	40	204
SHGs which have not initiated any NLBA in three watersheds								
Total (6 SHGs)		0	0	101	56	45	-	-

Note: NLBA - Non land based activity
Fingers in brackets indicate total number of SHGs

Table 2.12b: NLBA Initiated by SHGs in Each Watershed: Information Based on SHG Level Sample Survey

Group Code	Individual activity				Group activity				Total	
	Self initiated		Project supported		Self initiated		Project supported			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Kudaligi Taluka, Bellary District (Upparahalla W/S)										
Total (28 SHGs)	29	138	50	123	0	0	1	1	80	262
Indi Taluka, Bijapur District (Doddahalla W/S)										
Total (15 SHGs)	4	30	41	106	0	0	0	0	45	136
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)										
Total (21 SHGs)	24	2	16	202	0	0	0	0	40	204
SHGs which have not initiated any NLBA in three watersheds										
Total (6 SHGs)	-	-	-	-	-	-	-	-	-	-

Table 2.12c : SHGs Members Self Initiated NLBAs in Each Watershed: Information Based on SHG Level Sample Survey

Group Code	Individual activity		Group activity		Total	
	Male	Female	Male	Female	Male	Female
Kudaligi Taluka, Bellary District (Upparahalla W/S)						
Total (28 SHGs)	29	138	0	0	29	138
Indi Taluka, Bijapur District (Doddahalla W/S)						
Total (15 SHGs)	4	30	0	0	4	30
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)						
Total (21 SHGs)	24	2	0	0	24	2

Table 2.13(a): Total Members Involved in Different Activities Initiated SHG in Each W/S

Activities	No. of SHGs					
	Upparahalla		Doddahalla		Chinnahagari	
	Total	%	Total	%	Total	%
1. Sheep rearing	20	71.4	2	9.5	10	47.6
2. Cow rearing	11	39.3	2	9.5	2	9.5
3. Buffalo rearing	7	25.0	1	4.8	3	14.3
4. Goat rearing	1	3.6	5	23.8	1	4.8
5. Purchasing of bullocks	4	14.3	-	-	-	-
6. Purchasing of bullock cart	1	3.6	1	4.8	-	-
7. Auto-rickshaw	-	-	-	-	1	4.8
8. Bangle shop	1	3.6	-	-	-	-
9. Petty shop	7	25.0	-	-	11	52.4
10. Hotel	4	14.3	-	-	6	28.6
11. Bakery	1	3.6	-	-	-	-
12. Vegetable vending	4	14.3	-	-	6	28.6
13. Fruit vending	-	-	-	-	2	9.5
14. Tamarind selling	1	3.6	-	-	-	-
15. *Prosofis* business	1	3.6	-	-	-	-
16. Egg business	-	-	-	-	1	4.8
17. Flower business	-	-	-	-	1	4.8
18. Kerosene business	-	-	-	-	1	4.8
19. Courier office	1	3.6	-	-	-	-
20. Awareness programme related to agri.	2	7.1	1	4.8	-	-
21. Street cleaning and gram nairmalya	3	10.7	3	14.3	-	-
22. Education purpose	5	17.9	1	4.8	-	-
23. Polio jatha	1	3.6	-	-	-	-
24. Alcoholism abolition drive	-	-	3	14.3	-	-
25. Electric service support rally	-	-	1	4.8	-	-
26. To promote the school children to rejoin the schools	-	-	2	9.5	-	-
27. Literacy programme	-	-	4	19.0	-	-
28. Awareness drive in agriculture	-	-	-	-	-	-
29. Awareness for school children	-	-	-	-	-	-
30. Support for the formation of women's milk society	1	3.6	-	-	-	-
31. Drip irrigation	1	3.6	-	-	-	-
32. Horticulture garden	1	3.6	1	4.8	-	-
33. Floriculture garden	-	-	3	14.3	-	-
34. Compost pit	1	3.6	-	-	-	-
35. Tree plantation	1	3.6	5	23.8	-	-
36. Tailoring	7	25.0	1	4.8	3	14.3
37. Mike set and lighting	1	3.6	-	-	-	-
38. Leaf plates	1	3.6	-	-	-	-
39. Washerman	1	3.6	-	-	-	-
40. Carpentry works	-	-	-	-	1	4.8
41. Hand loom	-	-	-	-	10	47.6
42. Sari embroidery	-	-	-	-	1	4.8
43. Leather works	-	-	1	4.8	-	-
44. Honge and neem oil extr. Mill	1	3.6	-	-	-	-
45. Flour mill	-	-	1	4.8	1	4.8

Table 2.13(b): Income Generation from Non Land Based Activities Initiated by SHGs

Activity	Upparahalla		Doddahalla		Chinnahagari		Three districts
	Total		Total		Total		
	Members involved	Income / Worker (Rs)	Members involved	Income / Worker (Rs)	Members involved	Income / Worker (Rs)	Total (Rs.)
1. Buffalo rearing	19	2,101	31	2,627	10	4,332	9,060
2. Cow rearing	16	2,204	10	3,488	1	9,000	14,692
3. Sheep rearing	132	1,641	14	1,469	27	3,668	6,778
4. Bangle shop	1	650	-	-	-	-	650
5. Purchasing of bullocks	1	500	-	-	-	-	500
6. Petty shop	30	2,447	3	10,750	18	15,027	28,224
7. Carpentry works	2	2,825	-	-	1	5,000	7,825
8. Goat rearing	7	3,217	77	1,786	-	-	5,003
9. Tailoring	7	1,904	4	2,717	11	4,832	9,453
10. Vegetable vending	8	1,653	-	-	25	14,094	15,747
11. Mike set and lighting	1	4,500	-	-	-	-	4,500
12. Hotel business	8	3,333	1	45,000	9	42,331	90,664
13. Mobile flour mill	1	3,500	-	-	-	-	3,500
14. Liquor business	1	13,500	-	-	-	-	13,500
15. Courier shop	1	10,000	-	-	-	-	10,000
16. Washerman	1	3,300	-	-	-	-	3,300
17. Goldsmith works	3	200	-	-	-	-	200
18. Leaf plates making	3	200	-	-	-	-	200
19. Grain merchant	-	-	1	7,540	1	9,000	16,540
20. Cloth selling	-	-	2	8,710	2	7,500	16,210
21. Lather works	-	-	1	7,500	-	-	7,500
22. Poultry	-	-	17	867	-	-	867
23. Flour mill	-	-	1	5,400	-	-	5,400
24. Hand loom	-	-	-	-	55	22,375	22,375
25. Iron shop	-	-	-	-	4	1,500	1,500
26. Bicycle shop	-	-	-	-	1	3,500	3,500
27. Fruit vending	-	-	-	-	8	1,129	1,129
28. Tamarind selling	-	-	-	-	2	10,238	10,238
29. Egg business	-	-	-	-	1	3,500	3,500
30. Auto-rickshaw	-	-	-	-	1	36,000	36,000
31. Flower business	-	-	-	-	3	7,200	7,200
Total	242	57,675	162	97,854	180	200,226	355,755

2.6 Suggestions and Benefits as Perceived by the Members of SHGs

The benefits perceived by the members of SHGs were enlisted through an open ended questionnaire. Their responses were recorded and the most common responses were tabulated in order to get their perceived benefits. The results have been presented in Annexure Table 2.6. It can be seen from the Annexure that the respondents were quite satisfied with the functioning of SHGs. They indicated that the waiting time for availing credit had been eliminated and now credit was available at the hour of need. They also expressed happiness about the SHGs inculcating saving habits among the members and inducing group activities. The increase in community work and togetherness of the members was indicated as a positive outcome. The members also felt that SHGs had not only helped financially but also impacted the social and other developmental aspects in the village. Urge to increase the sources of income and locating new avenues of employment had improved substantially. Overall, the members of the SHGs expressed that these institutions effectively fulfilled the role assigned to them.

The SHGs survey tool provided opportunity to the members of SHG for making suggestions to improve the functioning of the programme and its effectiveness. These were open ended questions and therefore the responses were quite a few. We tried to make a list small by incorporating groups of similar responses and arrived at the proportion of responses in particular groups. The results have been presented in Tables 2.14 (a), 2.14 (b) and 2.14 (c). These suggestions could be further generalised into five groups based on the density of frequency. First, we find that most of the members expressed the need for training in different activities. The specific needs were expressed in the table. Second, a large number of respondents felt that the density of NLBA activities, awareness about it and training for undertaking such activities would help the success of the project. Third, they had expressed reservations about the intra-institutional and inter-institutional ease of the functioning of PNGOs. This could be mitigated with the help of joint meetings. Fourth, they expressed difficulties in managing funds and needed proper training for holding the accounts. This was one of the crucial factors indicated by the respondents. Finally, the weaknesses of the Community Resource Persons were indicated. It was felt by the respondents, that the training for group activities and community work would eliminate this shortcoming.

Table 2.14 (a) : Suggestions Received from the Members of SHGs at Upparahalla Watershed

Sl. No	**Comments / Suggestions**	**%**
1	Training is needed for the maintenance of records	50.0
2	Relation among P-NGO is very cordial	28.6
3	Needs training on group activity and its promotion	17.9
4	Due to illiteracy, record maintenance is very poor. Some alternatives should be initiated	17.9
5	NLBA training is essential	17.9
6	Training for group activity and its implementation is required	14.3
7	Training / guidance is required to utilize the group funds	10.7
8	Linkage with GOs is not good-off, can be improved by joint meetings	7.1
9	CRP training is essential	7.1
10	CRP should be given training on SHG concept, leadership, social analysis, vision building, etc	7.1
11	The group totally depends on sheep rearing. Along with these activity other NLBA needs to be promoted	7.1
12	Farmers should be made aware of NLBA benefits	7.1
13	Literacy improvement activities need to be initiated.	7.1
14	They need training on group planning and about handling the threats	3.6
15	They need exposure on different kinds of work and economic support	3.6
16	CRP training is not up to the mark. It needs improvement	3.6
17	Book writing should not depend on a single individual in the group, and a minimum of two/three person should be able to write	3.6
18	Drum kit concept should not be implement	3.6
19	Guidance towards project benefits and its usage is required	3.6
20	LBA works should be initiated equally for all communities	3.6
21	Voluntary work is required	3.6
22	Training about cultural practice of important crops be given	3.6

Table 2.14 (b) : Suggestions Received from the Members of SHGs at Doddahalla Watershed

Sl. No	Comments / Suggestions	%
1	Training is needed for the maintenance of records	60.0
2	Training for group activity and its implementation is required	55.0
3	Linkage with GOs is not good. It can be improved by joint meetings	10.0
4	They need exposure to different kinds of work and economic support	10.0
5	Relation among P-NGO is very cordial	5.0
6	They need training on group planning and about handling the threats	5.0
7	CRP training is not up to the mark. It needs improvement	5.0
8	Training is needed for record maintenance especially for cash Books	5.0
9	Farmers should be made aware of NLBA benefits	5.0
10	Exposure and trainings are needed for work at the leisure time	5.0
11	P-NGOs do not provide any benefit. Their working needs improvement	5.0
12	Women members are not attending the meetings. It is necessary that they do	5.0
13	Self-employment needs to be created	5.0

Table 2.14 (c): Suggestions Received from the Members of SHGs at Chinnahagari Watershed

Sl. No	Comments / Suggestions	%
1	Linkage with GOs is not good. It can be improved by holding joint Meetings	45.5
2	Training is needed for the maintenance of records	40.9
3	Training / guidance is required for utilising the group fund	40.9
4	Training for group activity and its implementation is required	36.4
5	CRP training is very much essential. It needs improvements	13.6
6	Marking systems have to improve	9.1
7	Training on group activity and its promotion is needed	4.5
8	Training on group planning and about handling the threats is needed	4.5
9	Farmers should be made aware of NLBA benefits	4.5
10	Guidance towards project benefits and its usage is required	4.5

Abbreviations used
P-NGO: Partner Non Govt. Organization, **LBA:** Land based activity, **GOs:** Govt. Organizations, **CRP:** Community Resource Person, **NLBA:** Non land based activity

2.7 Performance of MWSDCs

The performance of MWSDCs has been assessed with the help of eight indicators. These include group consensus and equity in decision-making; the group fund management; maintenance of records; the group norms and their implementation;

development of skills; the resource persons in the group; and planning and ability of the group to resist external threats. These indicators were assigned scores in terms of percentages from zero to hundred based on their level of performance by the stakeholders. The results have been are presented in Tables 2.15 and 2.16. While comparing across MWSDCs, Doddahalla watershed showed consistently high performance followed by Chinnahagari watershed. The performance of MWSDCs from Upparhalla watershed seemed to be much lower despite the fact that a large number of activities were undertaken in this watershed. Probably, it was the multiplicity of activities that made the people clear about the performance of MWSDCs and they could express the performance level more precisely. Over a year of experience, the stakeholders clearly understood the performance of indicators. Therefore, the views of the members of MWSDCs were truly reflective of the performance. Tables 2.15 and 2.16 gives the average score of each of the indicators selected for judging the performance of the MWSDCs. Surprisingly, the group fund management received low score when compared with other indicators. This is certainly a matter of concern. It is quite impressive that the group consensus and equity in decision-making along with ability of the group to resist political and administrative interference have the highest score. There are, of course, variations among the MWSDCs as well as between the three watersheds. A clear depiction of the performance of MWSDCs between the three selected watersheds is given in figure 2.3. It is quite visible that Doddahalla watershed scored much ahead of Chinnahagari and far ahead of Upparhalla watersheds. Among the determinants of the performance of MWSDCs in the watersheds we found seven important components. i. The social homogeneity of MWSDCs at the beginning played an important role in its sustenance but heterogeneity did not depress the performance. ii. If there were close friends involved in the formation of MWSDCs, then good performance was assured. iii. There should be sufficient checks and balances on management of the funds and that helped in building up mutual trust and healthy atmosphere in the MWSDCs. iv. Presence of an extremely dominant member of the MWSDCs, initially steered the group to accept a few suggestions quickly but over time the group splintered creating opposition for such a dominant member. v. The exposure of the group members to outside information and benefits of group association, kept the group going despite the aberrations that occurred in the process of implementation. vi. Skills and skill development were quite important for the sustenance of the group. vii. There existed at least one splinter element in the group and it was to the credit of the group members to accommodate or rationalise such dissenting voice. This process ensured the sustainability of the institutions.

Table 2.15: Performance Score of the Selected MWSDCs Based on GSA Tool

Sl.no.	Group Code.	Avg. Score In Each Section *									
		A	B	C	D	E	F	G	H	Total	Avg. (columns)
Kudaligi Taluka, Belllary Dist.(Upparahalla W/S)											
1	Be-1	100.0	0.0	37.5	100.0	66.7	100.0	100.0	100.0	604.2	75.5
2	Be-2	100.0	0.0	62.5	100.0	66.7	100.0	12.5	100.0	541.7	67.7
3	Be-3	100.0	0.0	37.5	100.0	100.0	100.0	100.0	100.0	637.5	79.7
4	Be-4	100.0	0.0	25.0	100.0	100.0	100.0	50.0	100.0	575.0	71.9
Avg. Score (Rows)		100.0	0.0	62.5	100.0	83.3	100.0	65.6	100.0	611.46	76.43
Indi Taluka, Bijapur Dist. (Doddahalla W/S)											
5	Bi-1	100.0	66.6	100.0	100.0	83.3	100.0	75.0	100.0	724.9	90.6
6	Bi-2	100.0	33.3	100.0	100.0	100.0	100.0	87.5	100.0	720.8	90.1
7	Bi-3	100.0	66.6	100.0	100.0	83.3	100.0	50.0	100.0	699.9	87.5
8	Bi-4	100.0	83.3	100.0	100.0	66.6	100.0	43.7	100.0	693.6	86.7
Avg. Score (Rows)		100.0	62.5	100.0	100.0	83.3	100.0	64.1	100.0	709.8	88.7
Molakalmur Taluka, Chitradurga Dist. (Chinnahagari W/S)											
9	Ch-1	100.0	50.0	75.0	75.0	100.0	67.0	50.0	100.0	617.0	77.1
10	Ch-2	100.0	50.0	100.0	75.0	100.0	50.0	81.0	100.0	656.0	82.0
11	Ch-3	100.0	67.0	75.0	100.0	100.0	83.0	75.0	100.0	700.0	87.5
Avg. Score (Rows)		100.0	55.7	83.3	83.3	100.0	66.7	68.7	100.0	657.7	82.2

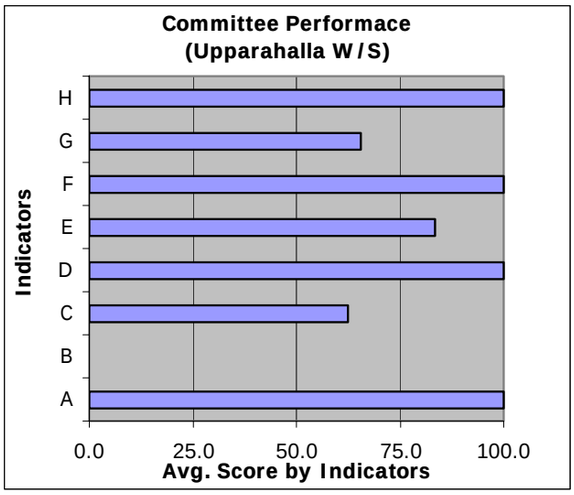
Note: See Annexure 2.2 for code list of MWSDCs; * - codes are given in Table 2.11
GSA tool is having only three points scale (0%, 50% and 100%). It may not express clear-cut performance. Hence, 5 scale (0%, 25%, 50%, 75% and 100%) would be ideal

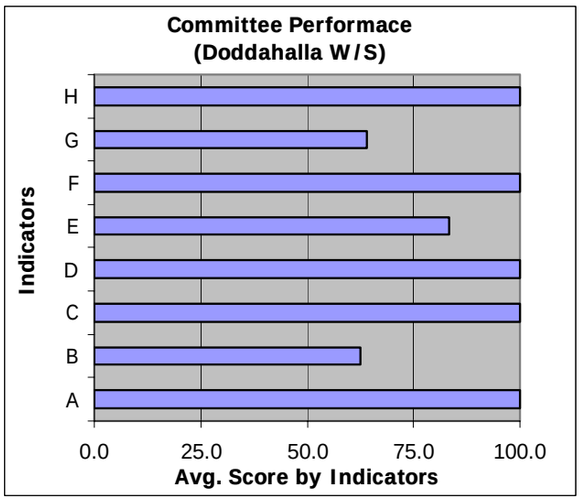
Table 2.16: Performance Indicators Across the Selected Watersheds

Codes	Indicators	Be-U	Bi-D	Ch-C	Avg. (columns)
A	Group consensus and equity in decision-making	100.0	100.0	100.0	**100.0**
B	Group fund management	0.0	62.5	55.7	**39.4**
C	Maintenance of records	62.5	100.0	83.3	**74.6**
D	Presence of group norms and their implementation	100.0	100.0	83.3	**94.4**
E	Development of skills/Resource persons in the group	83.3	83.3	100.0	**88.9**
F	Linkage with GOs/NGOs/Panchayat	100.0	100.0	66.7	**88.9**
G	Group planning on development of its resource and its Executions	65.6	64.1	68.7	**66.1**
H	Ability of the group to resist political /social / Administrative threats	100.0	100.0	100.0	**100.0**
Average Score (Across rows)		**76.43**	**88.7**	**82.2**	**82.5**

Note: Be-U : Upparahalla Watershed, Kudaligi taluka, Bellary district
Bi-D : Doddahalla Watershed, Indi taluka, Bijapur district
Ch-C: Chinnahagari Watershed, Molakalmur taluka, Chitradurga district

Figure 2.3: Performance Indicators of MWSDCs Across the Selected Watersheds





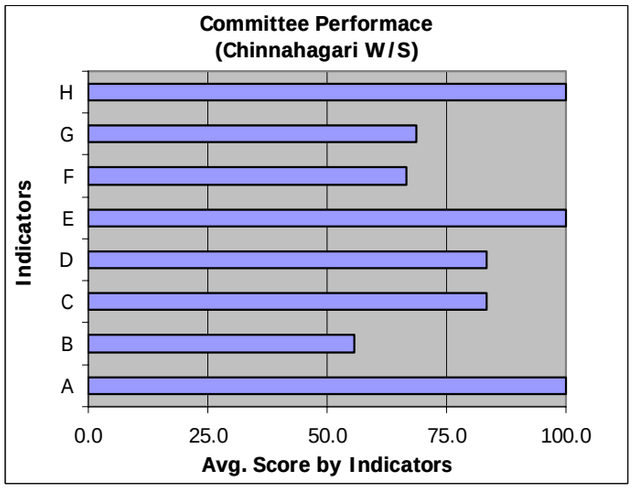


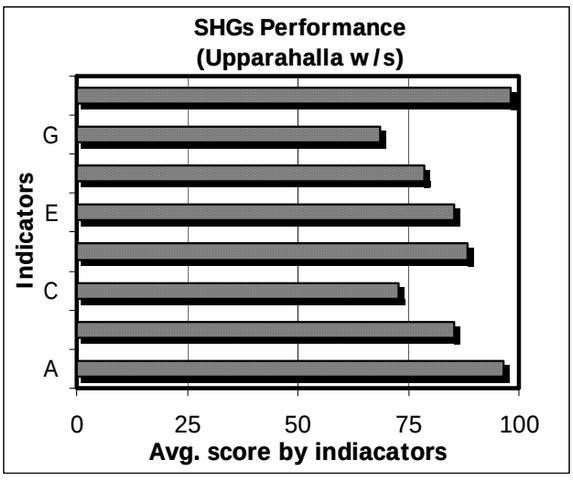
Table 2.17: Performance Scores of SHGs based on GSA Tool

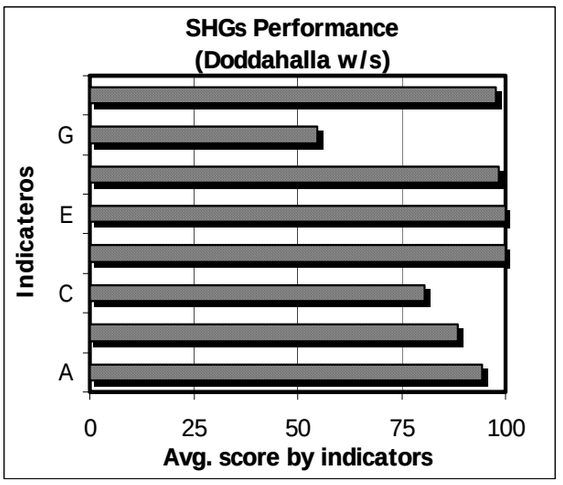
Code	Indicators	Be-U	Bi-D	Ch-C	Avg. (Columns)
A	Group consensus and equity in decision making	96.4	94.4	88.9	**93.2**
B	Group fund management	85.4	88.6	68.1	**80.7**
C	Maintenance of records	72.7	80.4	79.1	**77.4**
D	Presence of group norms and their implementation	88.3	100.0	81.0	**89.8**
E	Development of skills/Resource persons in the group	85.3	100.0	97.6	**94.3**
F	Linkage with GOs/NGOs/Panchayat	78.1	98.4	66.7	**81.1**
G	Group planning on development of its resource and its Executions	68.7	54.6	63.7	**62.3**
H	Ability of the group to resist Political / Social / Administrative threats	98.2	97.6	92.9	**96.2**
Avg. Score (Across Rows)		**84.2**	**89.3**	**79.8**	**84.4**

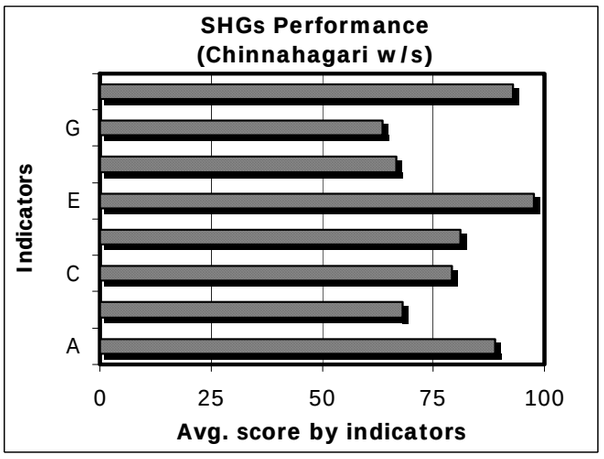
Note: Be-U : Upparhalla Watershed, Kudaligi taluka, Bellary district
Bi-D : Doddahalla Watershed, Indi taluka, Bijapur district)
Ch-C : Chinnahagari Watershed, Molakalmuru taluka, Chitradurga district

The performance of SHGs was also judged on similar scale with the help of GSA tool. The detail results have been presented in Annexure table 2.7. The gist of the performance indicator has been given in Table 2.17 and figure 2.4. The lowest score was assigned to group planning and execution. This was a crucial activity. Therefore, it caused concern. Ability of the group to resist political/administrative threats has the highest score, followed by skill development and presence of the resource person in the group. Among the watersheds, Chinnahagari watershed had the lowest performance score compared to the other two watersheds. The details of performance indicators could also be used to monitor the progress and capabilities of these SHGs.

Figure 2.4: Performance Scores of SHGs Based on GSA Tool







2.8 Service Providers

One of the important activities in KAWAD project is to provide impetus to peripheral activities and incentives for rural artisans. This is achieved by incorporating a significant role to the Services Providers in the main project work. There are a large number of service providers who partake some components of the main work in the project. These include blacksmiths, carpenters, tractor-owners, weavers, electricians and others. We have interviewed the service providers with the help of the tool provided for that purpose.

It was located that in each village there are at least one or two units of service providers and the income ranges between Rs 1,680 to Rs 1,45,000 average per annum. These activities not only generate employment to help provide income to those who are dependent on non-land economic activities, but also give rise to other related economic activities.

Table 2.18: Service Provider's activities and its annual income in the watershed area

Sl. NO	Dist. Code	Type of service	Activities in Detail	No. villages catering	No. of units in this village	Annual Income Rs	Avg. Income Activity Wise(Rs)
1	Bi	Artificial Insemination	Cow, Buffalo	4	4	81000	
2	Bi	Artificial Insemination	Cow, Buffalo	20	4	64800	72900
3	Be	Barber		3	1	3600	3600
4	Be	Blacksmith	Sickle, spade, tractor plough, etc	5	1	3500	
5	Be	Blacksmith	Sickle, spade, tractor plough, etc	1	1	6000	
6	Ch	Blacksmith	Sickle, spade, tractor plough, etc	1	1	9600	
7	Ch	Blacksmith	Sickle, spade, tractor plough, etc	2	1	3000	5525
8	Be	Carpenter	Plough, seed dril, handel for sikels	3	1	19520	
9	Be	Carpenter	Plough, bar, house hold,etc	4	1	8675	
10	Be	Carpenter	Plough, bar, house hold,etc	3	1	12000	
11	Ch	Carpenter	Plough, bar, house hold,etc	20	1	9600	
12	Ch	Carpenter	Plough, bar, house hold,etc	4	1	4200	10799
13	Ch	Dossier	Land leveling	1	20	145000	145000
14	Ch	Drip irrigation	Installation	6	22	54000	53200
15	Be	Electrician	Electric work, switch board	5	1	1885	1885
16	Be	Floor Mill		2	1	24000	24000
17	Be	Gas lights		5	2	1680	1680
18	Be	Hotel	Food items, Tea, K.T	1	1	27000	27000
19	Be	Lighting and mike set		5	1	9300	
20	Be	Lighting and mike set		1	1	1950	5625
21	Bi	Muster introduction	Demonstration work	6	1	2000	2000
22	Be	Pottery	Pots, Teracota items	5	1	9000	9000
23	Be	Tailoring		4	1	8640	8640
24	Be	Tractor	Transpt.,plough, silt	4	1	70000	
25	Be	Tractor	Plough, Transportation	1	1	55000	
26	Be	Tractor	Plough, Transportation, jatha	9	2	68000	
27	Be	Tractor	Plough, silt, transpiration	1	1	84000	
28	Bi	Tractor	Land leveling	1	1	120000	
29	Bi	Tractor	plough, land leveling	1	1	75000	
30	Bi	Tractor	Land leveling, Plough,silt,trans.	5	1	68000	
31	Bi	Tractor	Land leveling, Plough,silt	7	2	82000	
32	Ch	Tractor	Plough, silt, transpiration	3	1	30000	
33	Ch	Tractor	Plough, silt, transpiration	2	1	50000	
34	Ch	Tractor	Land leveling	4	1	97000	72636
35	Be	Washerman		1	1	1500	
36	Be	Washerman		2	1	3500	2500
37	Be	Weaving	Silk items		2	12000	
38	Be	Weaving	Silk items	1	5	91000	51500

2.9 Conspectus

The institutional design of KAWAD watershed is unique from four different angles. First, it has a close vertical integration and four layers of different operational institutions. These combine the skills and technology of public institutions with flexibility and people friendliness of NGOs. Second, it has a bi-directional linkages between the core project institutions (MWSDCs) and the financial support institutions (IAs and SHGs). Third, the design of the programme itself is participatory and therefore only the participants are the beneficiaries. The free rider problem is avoided. Lastly, the institutions are organised on the basis of skills and mutual dependence to ensure their sustainability. We have documented the role of different institutions involved from the point of bringing out the impact and output of the project. After analysing the basic structure, we have tried to get into the impact parameters. This is followed by the analysis of performance indicators provided under GSA tool. The suggestions given by the members of these institutions and benefits perceived by them have been analysed in detail.

Annexure Table 2.1: List of Codes Used in the Text

- **Activities Undertaken by the MWSDCs Members**

Code	Activity	Code	Activity
1	Land leveling	11	Horticulture
2	Bunding	12	Land reclamation
3	Check dam	13	Boulder bunding
4	Gully plugs	14	Vermicomposting
5	Silt application	15	Compost pit
6	Jungle clearance	16	Ravine reclamation structure (RRS)
7	Pebbles removal	17	Social forestry
8	Farm pond	18	Support to form womens' milk societies
9	Surplus tank		
10	Drip irrigation	19	Conducting trainings
		20	Mobilization of NLBA grant for the
		21	SHGs

- **Activities Undertaken by the SHG Members**

Code	Activity	Code	Activity
1	Sheep rearing	22	Hotel
2	Cow rearing	23	Courier office
3	Buffalo rearing	24	Washerman
4	Bangle shop	25	Bakery
5	Vegetable vending	26	Posofis business
6	Petty shop	27	Leaf plates
7	Purchasing of bullocks	28	Tree plantation
8	Awareness programme	29	Alcoholism abolition drive
9	Street cleaning and grama nairmalya	30	Electric service support rally
10	Goat rearing	31	Floriculture garden
11	Tailoring	32	To promote the school children to
12	Mike set and lighting		rejoin the schools
13	Bullock cart	33	Floor mill
14	Education purpose	34	Literacy programme
15	Polio jatha	35	Leather works
16	Drip irrigation	36	Awareness drive in agriculture
17	Horticultural garden	37	Awareness for school children
18	Compost pit	38	Carpentry works
19	Honge and neem oil mill	39	Hand loom
20	Support for the formation of	40	Fruit vending
	women's milk society	41	Egg business
21	Tamarind selling	42	Sari embroidery
		43	Auto rickshaw
		44	Flower business
		45	Kerosene business

- **Non Land Based Activities Undertaken by the SHGs**

Code	Activity	Code	Activity
1	Buffalo rearing	17	Goldsmith
2	Cow rearing	18	Leaf plates making
3	Sheep rearing	19	Grain merchant
4	Bangle shop	20	Cloth selling
5	Purchasing of bullocks	21	Lather works
6	Petty shop	22	Poultry
7	Carpentry works	23	Flour mill
8	Goat rearing	24	Hand loom
9	Tailoring	25	Iron shop
10	Vegetable vending	26	Bicycle shop
11	Mike set and lighting	27	Fruit vending
12	Hotel	28	Tamarind selling
13	Mobile flour Mill	29	Egg business
14	Liquor business	30	Auto rickshaw
15	Courier shop	31	Flower business
16	Washerman		

Annexure Table 2.2: Detailed Information on Selected SHGs

Sl. No	Group code	Group name	Village name	P-NGO code	Date of establish-ment	Total members
Kudaligi Taluka, Bellary District (Upparahalla W/S)						
1	Be-1.1	Sri Veerabhadreshwara	B.T.Guddi	DPG	25/11/99	20
2	Be-1.2	Sri Saraswathi	B.T.Guddi	DPG	03/11/99	16
3	Be-1.3	Sri Vinayaka	B.T.Guddi	DPG	28/10/99	16
4	Be-1.4	Siddeshwara	B.T.Guddi	DPG	03/11/99	16
5	Be-1.5	Basaveshwara	B.T.Guddi	DPG	11/08/99	19
6	Be-1.6	Manjunatha	B.T.Guddi	DPG	11/08/00	16
7	Be-1.7	Swasthigokula	H.K.Gollarahatti	LORDS	12/10/01	15
8	Be-1.8	Sri Ranganathaswomy	H.K.Gollarahatti	LORDS	23/11/01	15
9	Be-1.9	Veereshwara Kurigarara San	H.K.Gollarahatti	LORDS	10/10/99	15
10	Be-1.10	Sri Krishna	H.K.Gollarahatti	LORDS	10/10/99	16
11	Be-1.11	Durgeshwari	H.K.Gollarahatti	LORDS	28/06/99	15
12	Be-1.12	Kanakadurga	H.K.Gollarahatti	LORDS	09/08/99	15
13	Be-1.13	Swasthigangothri	H.K.Gollarahatti	LORDS	13/12/01	14
14	Be-1.14	Durgambhika	Pujarahalli	GUARD	04/07/01	12
15	Be-1.15	Vinayaka	Pujarahalli	GUARD	04/07/02	13
16	Be-1.16	Sushma	Pujarahalli	GUARD	27/01/01	13
17	Be-1.17	Basaveshwara	Pujarahalli	GUARD	27/11/00	14
18	Be-1.18	Marikamba	Pujarahalli	GUARD	31/01/01	15
19	Be-1.19	Kalikamba	Alur	MYRADA	18/12/00	11
20	Be-1.20	Maruthi	Alur	MYRADA	18/01/00	15
21	Be-1.21	Sri Uligammadevi	Alur	MYRADA	15/12/02	14
22	Be-1.22	Sri Shivashakthi	Alur	MYRADA	22/03/02	19
23	Be-1.23	Sri Sharanabasaveshwara	Alur	MYRADA	03/01/01	17
24	Be-1.24	Yellamadevi	Alur	MYRADA	27/11/00	18
25	Be-1.25	Sri Vinayaka	Alur	MYRADA	08/05/01	13
26	Be-1.26	Sangeetha	Alur	MYRADA	19/09/01	15
27	Be-1.27	Kaveramma	Alur	MYRADA	23/12/00	18
28	Be-1.28	Dandammadevi	Alur	MYRADA	27/11/00	18
Indi Taluka, Bijapur District (Doddahalla W/S)						
29	Bi-1.1	Saraswathi	Inchigeri	BIRDS	01/01/00	12
30	Bi-1.2	Husenphasa	Inchigeri	BIRDS	11/01/99	14
31	Bi-1.3	Banasankari	Inchigeri	BIRDS	15/02/99	17
32	Bi-1.4	Revanasideswara	Inchigeri	BIRDS	12/07/99	16
33	Bi-1.5	Yallava	Jigajeevani	ISEER	21/05/99	16
34	Bi-1.6	Dattatreya	Jigajeevani	ISEER	08/12/99	17
35	Bi-1.7	Maragamadevi	Jigajeevani	ISEER	22/07/99	15
36	Bi-1.8	Dhanammadevi	Jigajeevani	ISEER	04/08/99	20

Sl. no	Group code	Group name	Village name	P-NGO code	Date of establish-ment	Total members
37	Bi-1.9	Samakkadevi	Jigajeevani	ISEER	22/07/99	16
38	Bi-1.10	Mathangi	Devaranimbaragi	VISHALA	29/08/00	15
39	Bi-1.11	Sri Swami Vivekananda	Devaranimbaragi	VISHALA	22/01/01	20
40	Bi-1.12	Lokammadevi	Devaranimbaragi	VISHALA	29/11/00	18
41	Bi-1.13	Saraswathi	Devaranimbaragi	VISHALA	07/07/00	16
42	Bi-1.14	Lakshmidevi	Devaranimbaragi	VISHALA	29/11/00	18
43	Bi-1.15	Akkamahadevi	Jeerankalagi	SEEDA	01/08/00	20
44	Bi-1.16	Sri Veerabhadra	Jeerankalagi	SEEDA	18/12/00	20
45	Bi-1.17	Mali Basavanna	Jeerankalagi	SEEDA	15/01/01	15
46	Bi-1.18	Sri Basavanna	Jeerankalagi	SEEDA	01/01/01	19
47	Bi-1.19	Saraswathi	Jeerankalagi	SEEDA	11/09/00	19
48	Bi-1.20	Kittur Chanamma	Jeerankalagi	SEEDA	02/01/01	15
49	Bi-1.21	Vivekananda	Jeerankalagi	SEEDA	31/01/01	16
Molakalmur Taluka, Bijapur District (Chinnahagari W/S)						
50	Ch-1.1	Sri Ranganatha	Chikkunthi	MYRADA	23/01/01	15
51	Ch-1.2	Madhakari	Devarahatti	MYRADA	17/05/02	20
52	Ch-1.3	Ekalavya	Devarahatti	MYRADA	01/06/02	20
53	Ch-1.4	Kotteguddada Maramma	Chikkunthi	MYRADA	05/12/00	20
54	Ch-1.5	Prakruthi	Kanakanahatti	RSC	18/09/99	20
55	Ch-1.6	Pragathi	Kanakanahatti	RSC	21/01/01	16
56	Ch-1.7	Chaithanya	Kanakanahatti	RSC	19/08/99	20
57	Ch-1.8	Navayuga	Kanakanahatti	RSC	02/02/02	20
58	Ch-1.9	Yamuna	Kanakanahatti	RSC	20/08/99	17
59	Ch-1.10	Sri Dhanalakshmi	Kanakanahatti	RSC	31/11/00	17
60	Ch-1.11	Kamadenu	Kanakanahatti	RSC	26/01/01	16
61	Ch-1.12	Banasankari	Kanakanahatti	RSC	05/09/00	17
62	Ch-1.13	Maliyamma	Kanakanahatti	RSC	18/01/00	20
63	Ch-1.14	Ekalavya	Kanakanahatti	RSC	16/03/01	16
64	Ch-1.15	Kamakshamma	Kanakanahatti	RSC	23/12/01	16
65	Ch-1.16	Shubhodaya	Kanakanahatti	RSC	21/04/00	17
66	Ch-1.17	Navodaya	Kanakanahatti	RSC	31/10/00	17
67	Ch-1.18	Pancharuksha	Kanakanahatti	RSC	18/10/00	19
68	Ch-1.19	Gadripalaiah	Tumkurlahalli	GUARD	26/08/99	17
69	Ch-1.20	Kaveri	Tumkurlahalli	GUARD	29/05/00	15
70	Ch-1.21	Suramma	Tumkurlahalli	GUARD	02/07/99	14

Annexure Table 2.3: Information on Selected SHGs Collected Through GSA Tool

Sl. no (1)	Group code (2)	Members			Total (In Rs.)				Major activities under taken(code)
		Total (3a)	SC / ST (3b)	Female (3c)	Savings (4a)	Loan given (4b)	Out-standing (4c)	Over dues (4d)	
Kudaligi Taluka, Bellary District (Upparahalla W/S)									
1	Be-1	20	0	0	29,218	144,300	72,000	0	2,3
2	Be-2	16	0	16	17,360	119,550	50,900	0	1,3,
3	Be-3	16	0	16	21,350	130,600	49,990	2,000	21,4,2,3,5
4	Be-4	16	2	15	24,145	53,800	24,440	0	1,6,7
5	Be-5	19	0	0	32,776	231,300	73,955	0	2,8
6	Be-6	16	0	0	17,125	31,500	23,000	0	9,1,7
7	Be-7	15	0	0	19,946	40,000	0	0	1,2,3
8	Be-8	15	0	0	15,168	52,000	45,000	0	1,10,3,6,11,12
9	Be-9	15	0	0	21,150	75,000	0	0	1
10	Be-10	16	0	0	17,693	48,000	0	0	1,11,6
11	Be-11	15	0	15	26,915	77,000	60,000	0	1,2,11,14
12	Be-12	15	0	15	29,985	210,400	82,200	0	15,1,2
13	Be-13	14	0	14	15,137	35,000	2,600	0	1,16
14	Be-14	12	12	11	7,773	5,380	100	0	1
15	Be-15	13	11	13	11,090	18,000	12,792	0	1
16	Be-16	13	3	13	23,336	42,500	15,700	0	17,1,2,3,11,6
17	Be-17	14	7	0	12,868	10,500	6,335	750	18,19,20,1
18	Be-18	15	13	15	20,834	33,200	19,120	0	1,11,15
19	Be-19	11	11	11	19,790	43,180	24,980	0	1
20	Be-20	15	11	15	13,672	44,000	6,300	0	6,5,22,1
21	Be-21	14	14	14	10,000	8,500	5,750	0	5
22	Be-22	19	0	19	10,756	27,000	15,850	0	23,6,2
23	Be-23	17	0	17	27,480	125,500	36,750	0	24,25,23,26,15
24	Be-24	18	18	18	27,500	147,800	61,610	0	11,5,6,27,9
25	Be-25	13	0	13	12,815	66,600	28,511	0	11,23,28,2,3,9
26	Be-26	15	15	15	12,000	50,900	28,850	0	29,1,7
27	Be-27	18	5	18	26,798	123,100	26,586	0	8,1,15,23,2
28	Be-28	18	17	18	22,865	107,550	46,483	0	1,2,15,7
Total		433	139	301	547,545	2101,620	819,802	2,750	
Avg.		15	5	11	19,555	75,058	29,279	98	
Indi Taluka, Bijapur District (Doddahalla W/S)									
29	Bi-1	12	1	9	30,170	47,500	47,000	18,000	30,31,9
30	Bi-2	14	0	10	29,319	43,000	93,000	0	30,8
31	Bi-3	17	2	17	33,310	121,000	14,187	0	29,32
32	Bi-4	16	2	0	29,030	66,400	86,400	0	32,29
33	Bi-5	16	15	15	29,280	150,400	89,400	0	29,9
34	Bi-6	17	1	2	26,050	123,530	69,720	22,000	33,30
35	Bi-7	15	15	15	23,100	149,500	0	0	9

Sl. no (1)	Group code (2)	Members			Total (In Rs.)				Major activities undertaken (code)
		Total (3a)	SC / ST (3b)	Female (3c)	Savings (4a)	Loan given (4b)	Out-standing (4c)	Over dues (4d)	
36	Bi-8	20	0	20	34,600	261,626	95,510	14,000	34,10,11,18
37	Bi-9	16	16	14	27,460	188,392	150,000	0	35,2,1,10
38	Bi-10	15	15	15	18,550	148,000	63,750	0	1,15,36
39	Bi-11	20	0	0	19,600	108,500	0	0	10,2,14
40	Bi-12	18	13	10	16,960	86,900	63,500	0	35
41	Bi-13	16	15	16	17,870	84,700	66,370	0	35,33
42	Bi-14	18	13	10	17,350	105,700	32,000	0	10
43	Bi-15	20	0	20	21,350	143,500	96,500	0	10
44	Bi-16	20	0	10	19,400	95,000	50,850	5,000	35
45	Bi-17	15	5	0	13,960	51,600	23,357	0	1
46	Bi-18	19	7	19	37,000	152,900	82,000	5,000	3
47	Bi-19	19	0	19	20,620	131,100	51,800	0	29
48	Bi-20	15	0	15	15,140	83,900	68,000	0	29
49	Bi-21	16	0	0	15,300	62,700	55,700	3,000	32
Total		354	120	236	495,419	2,405,848	1,299,044	67,000	
Avg.		17	6	11	23,591	114,564	61,859	3,190	
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)									
50	Ch-1	15	15	7	15,396	76,970	32,035	0	6,1
51	Ch-2	20	20	14	5,160	6,580	3,430	0	23
52	Ch-3	20	20	0	5,200	0	0	0	39
53	Ch-4	20	20	20	19,420	64,375	55,660	0	1,3
54	Ch-5	20	10	20	32,040	215,350	72,590	15,,500	1,23,3,40
55	Ch-6	16	16	16	15,580	65,410	36,515	0	5,41
56	Ch-7	20	0	20	48,680	410,950	123,635	20,500	40,34,6,23
57	Ch-8	20	0	0	17,552	28,100	13,507	500	40
58	Ch-9	17	17	17	41,863	261,150	98,775	0	1,10,5,42
59	Ch-10	17	0	17	30,732	258,300	90,525	6,390	40,6,23
60	Ch-11	16	0	0	33,361	205,400	197,270	8,500	6,43
61	Ch-12	17	0	17	26,142	185,520	174,760	13,280	40,5,6,11
62	Ch-13	20	14	20	29,785	381,800	123,981	11,050	40,1,3,6,44,23,45
63	Ch-14	16	13	0	24,410	40,500	19,030	1,535	1,23,40
64	Ch-15	16	9	16	11,922	38,150	11,213	5,851	40,5,2,6
65	Ch-16	17	3	17	33,862	140,000	80,210	2,150	40,2,6
66	Ch-17	17	17	17	23,893	107,945	53,405	20,000	1,41,11
67	Ch-18	19	0	19	50,287	407,250	104,380	11,700	40,6
68	Ch-19	17	17	10	16,164	150,000	60,762	0	5,6,1
69	Ch-20	15	14	15	14,059	86,500	33,790	300	1,6,5
70	Ch-21	14	14	14	23,535	211,600	86,820	8,500	1,11,46
Total		369	219	276	519,043	3,341,850	1,472,293	125,756	
Avg.		18	10	13	24,716	159,136	70,109	5,988	

Note: For activity codes see the list

Annexure Table 2.4a: Information on selected SHGs based on sample survey

Sl. No.	Group code	Members by social group			Total No. Of members		Total No.of members initiated NLBA	
		Landless	Artisan	Others	Male	Female	Male	Female
Kudaligi Taluka, Bellary District (Upparahalla W/S)								
1	Be-1	1	4	19	20	0	0	20
2	Be-2	0	0	16	0	16	0	16
3	Be-3	1	1	15	0	16	0	16
4	Be-4	0	0	13	1	15	0	4
5	Be-5	0	1	18	19	0	6	0
6	Be-6	0	0	16	16	0	16	0
7	Be-7	0	0	15	15	0	7	0
8	Be-8	0	0	15	15	0	0	15
9	Be-9	0	0	15	15	0	15	0
10	Be-10	0	0	16	16	0	10	0
11	Be-11	0	0	15	0	15	0	14
12	Be-12	0	0	15	0	15	0	22
13	Be-13	0	0	14	0	14	0	14
14	Be-14	0	0	0	1	11	0	3
15	Be-15	0	0	2	0	13	0	8
16	Be-16	0	0	10	0	13	0	12
17	Be-17	0	0	7	14	0	26	0
18	Be-18	0	0	2	0	14	0	14
20	Be-20	0	0	4	0	15	0	10
21	Be-21	0	0	0	0	14	0	3
22	Be-22	0	0	19	0	19	0	2
23	Be-23	0	0	17	0	17	0	6
24	Be-24	0	0	0	0	18	0	15
25	Be-25	0	0	13	0	13	0	17
26	Be-26	0	0	0	0	15	0	15
27	Be-27	0	0	14	0	18	0	18
28	Be-28	0	0	18	0	18	0	18
Total		2	6	308	132	289	80	262
Avg./SHG		0.07	0.22	11.41	4.89	10.70	2.96	9.70
Indi Taluka, Bijapur District (Doddahalla W/S)								
29	Bi-1	0	0	12	3	9	3	16
30	Bi-2	0	0	14	4	10	6	7
33	Bi-5	0	0	0	1	15	0	8
34	Bi-6	0	0	17	15	2	15	2
35	Bi-7	0	0	0	0	15	0	30
36	Bi-8	1	0	19	0	20	0	12
37	Bi-9	0	0	16	2	14	2	15
38	Bi-10	0	0	0	0	15	0	4
39	Bi-11	0	0	20	20	0	16	0
42	Bi-14	0	0	18	8	10	2	2
43	Bi-15	0	0	20	0	20	0	9

Sl. No.	Group code	Members by social group			Total No. Of members		Total No.of members initiated NLBA	
		Landless	Artisan	Others	Male	Female	Male	Female
44	Bi-16	0	0	20	10	10	1	1
46	Bi-18	0	0	19	0	19	0	4
47	Bi-19	0	0	19	0	19	0	20
48	Bi-20	0	0	15	0	15	0	6
Total		1	0	209	63	193	45	136
Avg./SHG		0.07	0.00	13.93	4.20	12.87	3.00	9.07
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)								
50	Ch-1	0	0	0	8	7	1	5
51	Ch-2	0	0	0	6	14	0	1
52	Ch-3	0	0	0	16	0	10	0
53	Ch-4	0	0	0	0	20	0	8
54	Ch-5	0	0	10	0	20	0	13
55	Ch-6	0	0	0	0	16	0	16
56	Ch-7	0	0	20	0	20	0	16
57	Ch-8	0	0	20	20	0	8	0
58	Ch-9	0	0	0	0	17	0	6
59	Ch-10	0	0	17	0	17	0	12
60	Ch-11	0	0	16	16	0	20	0
61	Ch-12	0	0	17	0	17	0	20
62	Ch-13	0	0	6	0	20	0	20
63	Ch-14	0	0	0	20	0	1	0
64	Ch-15	0	0	7	0	16	0	19
65	Ch-16	0	0	14	0	17	0	17
66	Ch-17	0	0	0	0	17	0	3
67	Ch-18	0	0	19	0	19	0	23
68	Ch-19	0	0	0	7	10	0	4
69	Ch-20	0	0	1	0	15	0	10
70	Ch-21	0	0	0	0	14	0	11
Total		0	0	147	93	276	40	204
Avg./SHG		0.00	0.00	7.00	4.43	13.14	1.90	9.71
Annexure Table 2.4 (Contd) SHGS which have not initiated any NLBA								
31	Bi-3	0	0	17	0	17	-	-
32	Bi-4	0	0	17	17	0	-	-
40	Bi-10	0	0	18	8	10	-	-
41	Bi-11	0	0	18	0	18	-	-
45	Bi-17	0	0	15	15	0	-	-
49	Bi-21	0	0	16	16	0	-	-
Total		0	0	101	56	45	-	-
Avg./SHG		0.00	0.00	16.83	9.33	7.50	-	-

Annexure Table 2.4b: Non-Land Based Activities Initiated by SHG Members

Sl. No	Group Code	Individual activity				Group activity				Total	
		Self initiated		Project supported		Self initiated		Project supported			
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Kudaligi Taluka, Bellary District (Upparahalla W/S)											
1	Be-1	0	13	0	7	0	0	0	0	0	20
2	Be-2	0	6	0	10	0	0	0	0	0	16
3	Be-3	0	12	0	4	0	0	0	0	0	16
4	Be-4	0	0	0	4	0	0	0	0	0	4
5	Be-5	6	0	0	0	0	0	0	0	6	0
6	Be-6	16	0	0	0	0	0	0	0	16	0
7	Be-7	5	0	2	0	0	0	0	0	7	0
8	Be-8	0	9	0	6	0	0	0	0	0	15
9	Be-9	0	0	15	0	0	0	0	0	15	0
10	Be-10	0	0	10	0	0	0	0	0	10	0
11	Be-11	0	0	0	14	0	0	0	0	0	14
12	Be-12	0	2	0	20	0	0	0	0	0	22
13	Be-13	0	14	0	0	0	0	0	0	0	14
14	Be-14	0	0	0	3	0	0	0	0	0	3
15	Be-15	0	0	0	8	0	0	0	0	0	8
16	Be-16	0	2	0	9	0	0	0	1	0	12
17	Be-17	2	0	23	0	0	0	1	0	26	0
18	Be-18	0	14	0	0	0	0	0	0	0	14
20	Be-20	0	10	0	0	0	0	0	0	0	10
21	Be-21	0	0	0	3	0	0	0	0	0	3
22	Be-22	0	0	0	2	0	0	0	0	0	2
23	Be-23	0	0	0	6	0	0	0	0	0	6
24	Be-24	0	1	0	14	0	0	0	0	0	15
25	Be-25	0	4	0	13	0	0	0	0	0	17
26	Be-26	0	15	0	0	0	0	0	0	0	15
27	Be-27	0	18	0	0	0	0	0	0	0	18
28	Be-28	0	18	0	0	0	0	0	0	0	18
Total		29	138	50	123	0	0	1	1	80	262
Avg./SHG		1.07	5.11	1.85	4.56	0.00	0.00	0.04	0.04	2.96	9.70
Indi Taluka, Bijapur District (Doddahalla W/S)											
29	Bi-1	0	9	3	7	0	0	0	0	3	16
30	Bi-2	4	4	2	3	0	0	0	0	6	7
33	Bi-5	0	0	0	8	0	0	0	0	0	8
34	Bi-6	0	0	15	2	0	0	0	0	15	2
35	Bi-7	0	15	0	15	0	0	0	0	0	30
36	Bi-8	0	2	0	10	0	0	0	0	0	12
37	Bi-9	0	0	2	15	0	0	0	0	2	15
38	Bi-10	0	0	0	4	0	0	0	0	0	4
39	Bi-11	0	0	16	0	0	0	0	0	16	0
42	Bi-14	0	0	2	2	0	0	0	0	2	2
43	Bi-15	0	0	0	9	0	0	0	0	0	9

Sl. No	Group Code	Individual activity				Group activity				Total	
		Self initiated		Project supported		Self initiated		Project supported			
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
44	Bi-16	0	0	1	1	0	0	0	0	1	1
46	Bi-18	0	0	0	4	0	0	0	0	0	4
47	Bi-19	0	0	0	20	0	0	0	0	0	20
48	Bi-20	0	0	0	6	0	0	0	0	0	6
Total		4	30	41	106	0	0	0	0	45	136
Avg./SHG		0.27	2.00	2.73	7.07	0.00	0.00	0.00	0.00	3.00	9.07
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)											
50	Ch-1	0	0	1	5	0	0	0	0	1	5
51	Ch-2	0	0	0	1	0	0	0	0	0	1
52	Ch-3	5	0	5	0	0	0	0	0	10	0
53	Ch-4	0	0	0	8	0	0	0	0	0	8
54	Ch-5	0	0	0	13	0	0	0	0	0	13
55	Ch-6	0	0	0	16	0	0	0	0	0	16
56	Ch-7	0	0	0	16	0	0	0	0	0	16
57	Ch-8	2	0	6	0	0	0	0	0	8	0
58	Ch-9	0	1	0	5	0	0	0	0	0	6
59	Ch-10	0	0	0	12	0	0	0	0	0	12
60	Ch-11	16	0	4	0	0	0	0	0	20	0
61	Ch-12	0	0	0	20	0	0	0	0	0	20
62	Ch-13	0	0	0	20	0	0	0	0	0	20
63	Ch-14	1	0	0	0	0	0	0	0	1	0
64	Ch-15	0	0	0	19	0	0	0	0	0	19
65	Ch-16	0	0	0	17	0	0	0	0	0	17
66	Ch-17	0	1	0	2	0	0	0	0	0	3
67	Ch-18	0	0	0	23	0	0	0	0	0	23
68	Ch-19	0	0	0	4	0	0	0	0	0	4
69	Ch-20	0	0	0	10	0	0	0	0	0	10
70	Ch-21	0	0	0	11	0	0	0	0	0	11
Total		24	2	16	202	0	0	0	0	40	204
Avg./SHG		1.14	0.10	0.76	9.62	0.00	0.00	0.00	0.00	1.90	9.71

Annexure Table 2.4b (Contd) SHGS which have not initiated any NLBA										
31	Bi-3	not initiated any NLBA		-	-	-	-	-	-	-
32	Bi-4	not initiated any NLBA		-	-	-	-	-	-	-
40	Bi-10	not initiated any NLBA		-	-	-	-	-	-	-
41	Bi-11	not yet come any economy			-	-	-	-	-	-
45	Bi-17	not initiated any NLBA		-	-	-	-	-	-	-
49	Bi-21	not initiated any NLBA		-	-	-	-	-	-	-
Total		-	-	-	-	-	-	-	-	-	-
Avg./SHG		-	-	-	-	-	-	-	-	-	-

Annexure Table 2.5: Details of Non-Land Based Activities Undertaken by the Selected SHGs

Sl.no.	Details of NLBAs (During the last one year)								
	Type of activity (code)	No. of members Involved 2(b)	Gross earnings	Cost of material	Cost of Labor	Establi-shment	Net Income	Per head income	Avg. income
Kudaligi Taluka, Bellary District (Upparahalla W/S)									
1	1	6	14,000	24,000	5,700	2,000	6,500	1,083	
2	1	1	1,500	5,000	500	500	500	500	
3	1	1	4,500	5,000	3,000	250	1,250	1,250	
4	1	1	3,850	3,000	0	0	850	850	
5	1	1	6,000	3,000	1,000	500	3,500	3,500	
6	1	2	7,680	7,000	500	500	6680	3,340	
7	1	1	7,000	4,000	600	200	6,200	6,200	
8	1	1	5,000	3,500	3,000	200	1,800	1,800	
9	1	3	10,000	9,000	4,500	300	5,200	1,733	
10	1	2	7,800	6,000	0	300	1,500	750	2,101
11	2	1	1,500	2,800	800	500	200	200	
12	2	1	3,920	5,000	500	500	2,920	2,920	
13	2	2	6,800	4,000	0	2,800	4,000	2,000	
14	2	2	4,800	6,000	500	250	4,050	2,025	
15	2	1	5,500	3,000	600	200	4,700	4,700	
16	2	2	7,000	7,000	3,000	400	3,600	1,800	
17	2	2	5,760	7,500	0	2,000	3,760	1,880	
18	2	1	4,800	3,000	3,000	200	1,600	1,600	
19	2	2	10,000	8,000	4,500	300	5,200	2,600	
20	2	1	3,360	3,500	0	1,000	2,360	2,360	
21	2	1	3,360	4,200	0	1,200	2,,160	2,160	2,204
22	3	10	20,000	10,000	2,000	380	17620	1762	
23	3	1	1,750	800	200	30	720	720	
24	3	5	23,000	15,000	0	1,000	7,000	1,400	
25	3	4	22,000	12,000	4,000	500	17,500	4,375	
26	3	15	200,000	100,000	15,000	3,000	82,000	5,467	
27	3	5	20,000	10,000	2,000	250	7,750	1,550	
28	3	8	40,000	24,000	2,500	250	13,250	1,656	
29	3	15	25,000	12,000	5,000	1,000	7,000	467	
30	3	9	13,500	7,200	900	0	5,400	600	
31	3	3	10,500	4,800	3,000	200	2,500	833	
32	3	7	20,000	11,200	3,500	250	5,050	721	
33	3	3	9,000	4,500	1,500	150	2,850	950	
34	3	14	28,000	10,500	3,000	200	14,300	1,021	
35	3	14	21,000	11,900	1,400	0	7,700	550	

Sl.no.	Details of NLBAs (During the last one year)								
	Type of activity (code)	No. of members Involved 2(b)	Gross earnings	Cost of material	Cost of Labor	Establi-shment	Net Income	Per head income	Avg. income
36	3	6	18,000	9,000	3,000	250	5,750	958	
37	3	1	6,000	2,500	3,000	200	2,800	2,800	
38	3	11	20,400	7,700	0	1,650	18,750	1,705	
39	3	1	4,800	2,500	0	200	2,000	2,000	1641
40	4	1	1,700	5,500	1,000	50	650	650	650
41	5	1	1,500	5,500	500	500	500	500	500
42	6	2	19,000	10,000	6,000	2,000	11,000	5,500	
43	6	2	18,000	10,000	2,000	0	6,000	3,000	
44	6	4	37,250	24,600	200	1,000	11,450	2,863	
45	6	1	2,000	3,000	1,000	0	1,000	1,000	
46	6	2	10,000	8,000	6,000	500	3,500	1,750	
47	6	2	8,000	5,000	0	500	2,500	1,250	
48	6	1	8,000	3,000	5,475	150	2,375	2,375	
49	6	1	45,000	30,000	3,000	2,000	10,000	10,000	
50	6	1	4,500	3,000	3,000	300	1,200	1,200	
51	6	1	3,000	2,500	2,000	200	800	800	
52	6	1	4,500	5,000	3,000	250	1,250	1,250	
53	6	1	4,000	8,000	3,000	500	500	500	
54	6	1	8,800	5,000	0	1,500	2,300	2,300	
55	6	10	22,550	13,400	0	1,700	4,750	475	2,447
56	7	1	7,500	13,500	2,600	0	4,900	4,900	
57	7	1	4,000	2000	3000	250	750	750	2825
58	8	1	6,000	3,000	1,000	200	4,800	4,800	
59	8	4	20,000	8,000	1,500	200	10,300	2,575	
60	8	2	10,000	4,000	1,250	200	4,550	2,275	3,217
61	9	1	6,000	3,500	3,000	300	2,700	2,700	
62	9	1	2,500	2,200	1,200	150	1,150	1,150	
63	9	1	10,950	2,000	7,300	175	3,475	3,475	
64	9	1	4,800	1,800	600	0	2,400	2,400	
65	9	1	4,000	3,000	2,500	200	1,300	1,300	
66	9	2	6,000	4,500	5,000	200	800	400	1,904
67	10	1	5,500	4,000	3,000	250	2,250	2,250	
68	10	1	6,000	4,000	3,500	500	2,000	2,000	
69	10	2	8,500	5,000	3,000	200	300	150	
70	10	3	8,000	1,500	3,500	250	2,750	917	
71	10	1	3,600	2,000	500	150	2,950	2,950	1,653
72	11	1	10,000	8,000	3,000	2,500	4,500	4,500	4,500
73	12	1	4,500	1,000	3,000	250	250	250	
74	12	1	24,000	12,000	1,400	0	10,600	10,600	
75	12	1	5,000	4,000	3,000	500	1,500	1,500	
76	12	2	10,000	6,000	6,000	800	3,200	1,600	

Sl.no.	Details of NLBAs (During the last one year)								
	Type of activity (code)	No. of members Involved 2(b)	Gross earnings	Cost of material	Cost of Labor	Establi-shment	Net Income	Per head income	Avg. income
77	12	2	7,000	8,000	4,000	500	2,500	1,250	
78	12	1	6,500	4,000	0	1,700	4,800	4,800	3,333
79	13	1	6,500	2,500	1,000	2,000	3,500	3,500	3,500
80	14	1	18,000	10,000	3,500	1,000	13,500	13,500	13,500
81	15	1	1,00,000	50,000	15,000	25,000	10,000	10,000	10,000
82	16	1	7,300	2,000	3,500	500	3,300	3,300	3,300
83	17	3	8,000	4,500	7,500	250	250	83	83
84	18	3	3,000	600	1,600	200	600	200	200
Total		242	1,148,030	697,200	212,825	73,185	454,120	2,00,275	57,558.78
Avg.		2.9	13667.0	8300.0	2533.6	871.3	5406.2	2384.2	3197.7
Indi Taluka, Bijapur District (Doddahalla W/S)									
1	1	8	69,120	64,000	16,000	12,000	41,120	5,140	
2	1	8	57,600	64,000	12,800	5,600	39,200	4,900	
3	1	2	10,400	11,000	1,050	0	9,350	4,675	
4	1	2	1,200	8,000	400	300	500	250	
5	1	4	9,000	16,000	2,000	0	7,000	1,750	
6	1	5	6,000	40,000	2,500	0	3,500	700	
7	1	2	3,000	9,000	750	300	1,950	975	2,627
8	2	2	12,000	10,000	1,600	4,000	6,400	3,200	
9	2	4	40,000	24,000	8,000	12,000	20,000	5,000	
10	2	2	14,000	12,000	4,000	2,000	8,000	4,000	
11	2	2	6,000	15,000	1,000	1,500	3,500	1,750	3,488
12	3	6	19,200	1,200	3,000	30,000	12,000	2,000	
13	3	8	12,000	16,000	4,500	0	7,500	938	1,469
14	6	1	75,000	30,000	36,500	18,250	20,250	20,250	
15	6	2	8,000	4,000	1,500	0	2,500	1,250	10,750
16	8	14	56,000	28,000	7,000	7,000	14,000	1,000	
17	8	6	24,000	12,000	4,200	600	19,200	3,200	
18	8	8	16,000	17,600	3,200	800	12,000	1,500	
19	8	11	33,,000	22,000	5,500	250	27,250	2,477	
20	8	2	6,000	4,000	1,500	0	3,500	1,750	
21	8	10	20,000	30,000	5,000	0	15,000	1,500	
22	8	3	6,000	6,000	600	300	5,100	1,700	
23	8	5	15,000	10,000	3000	3,500	8,500	1,700	
24	8	4	10,000	8,000	1,500	1,500	7,000	1,750	
25	8	14	21,000	30,000	3,000	0	18,000	1,286	1,786
26	9	1	7,000	3,500	3,000	500	3,500	3,500	
27	9	1	4,500	2,800	700	300	3,500	3,500	
28	9	2	3,500	4,000	1,000	200	2,300	1,150	2,717

Sl.no.	Details of NLBAs (During the last one year)								
	Type of activity (code)	No. of members Involved 2(b)	Gross earnings	Cost of material	Cost of Labor	Establi-shment	Net Income	Per head income	Avg. income
29	12	1	150,000	90,000	15,000	0	45,000	45,000	45,000
30	19	1	62,400	52,000	2,600	260	7,540	7,540	7,540
31	20	2	104,000	78,000	7,800	780	17,420	8,710	8,710
32	21	1	65,000	50,000	5,000	2,500	7,500	7,500	7,500
33	22	14	7,000	1,400	0	1,400	4,200	300	
34	22	2	2,000	200	0	200	1,600	800	
35	22	1	2,000	2,000	500	0	1,500	1,500	867
36	23	1	27,000	14,000	4,000	3,600	5,400	5,400	5,400
Total		162	983,920	789,700	169,700	109,640	411,780	159,540	97,853.02
Avg.		4.5	27331.1	21936.1	4713.9	3045.6	11438.3	4431.7	8154.4
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)									
1	1	1	3,000	2,000	0	0	1,000	1,000	
2	1	3	27,000	10,800	1,800	0	14,400	4,800	
3	1	5	16,640	5,000	0	0	9,640	1,928	
4	1	1	14,400	4,800	0	0	9,600	9,600	4,332
5	2	1	1,000	250	0	0	9,000	9,000	9,000
6	3	4	10,000	2,500	0	0	7,500	1,875	
7	3	6	18,000	6,000	0	0	12,000	2,000	
8	3	4	8,000	2,400	0	0	5,600	1,400	
9	3	1	6,000	2,800	0	0	3,200	3,200	
10	3	1	6,000	2,500	0	0	3,500	3,500	
11	3	2	25,600	9,200	0	0	16,400	8,200	
12	3	1	10,000	2,500	0	0	7,500	7,500	
13	3	2	15,000	7,000	0	0	8,000	4,000	
14	3	3	15,000	7,000	0	0	8,000	2,667	
15	3	3	10,000	3,000	0	0	7,000	2,333	3,668
16	6	1	264,000	240,000	0	500	18,000	18,000	
17	6	2	90,000	72,000	0	2,000	16,000	8,000	
18	6	1	108,000	90,000	0	500	17,500	17,500	
19	6	1	12,000	10,000	0	500	18,000	18,000	
20	6	1	25,200	24,000	0	0	1,200	1,200	
21	6	1	102,000	60,000	6,000	0	36,000	36,000	
22	6	2	3,800	2,800	0	0	12,000	6,000	
23	6	2	48,000	39,600	1,200	0	7,200	3,600	
24	6	2	312,000	240,000	0	12,000	60,000	30,000	
25	6	1	45,000	36,000	0	1,000	8,000	8,000	
26	6	4	360,000	280,000	0	4,000	76,000	19,000	15,027
27	7	1	8,500	2,000	3,500	0	5,000	5,000	5,000
28	9	2	14,400	2,880	6000	0	8,400	4,200	
29	9	1	7,500	1,500	,0	0	6,000	6,000	
30	9	1	7,200	1,440	0	760	5,000	5,000	

Sl.no.	Details of NLBAs (During the last one year)								
	Type of activity (code)	No. of members Involved 2(b)	Gross earnings	Cost of material	Cost of Labor	Establi-shment	Net Income	Per head income	Avg. income
31	9	7	50,400	20,000	0	1,500	28,900	4,129	4,832
32	10	9	5,050	3,500	0	0	1,550	172	
33	10	2	18,000	10,000	0	500	7,500	3,750	
34	10	2	36,000	30,000	0	0	6,000	3,000	
35	10	8	16,800	11,040	0	0	69,120	8,640	
36	10	1	792,000	720,000	0	10,000	62,000	62,000	
37	10	3	129,000	108,000	0	0	21,000	7,000	14,094
38	12	1	45,000	36,000	2,000	500	6,500	6,500	
39	12	1	126,000	108,000	0	0	18,000	18,000	
40	12	2	72,000	36,000	7,200	0	28,800	14,400	
41	12	2	73,000	60,000	0	2,050	10,950	5,475	
42	12	1	162,000	144,000	3,600	0	14,400	14,400	
43	12	2	46,200	24,000	10,200	0	12,000	6,000	42,331
44	19	1	60,000	50,000	0	1,000	9,000	9,000	9,000
45	20	6	150,000	100,000	5,000	0	45,000	7,500	
46	20	2	45,000	30,000	0	0	15,000	7,500	7,500
47	24	5	600,000	480,000	0	0	120,000	24,000	
48	24	1	114,400	88,000	17,600	0	4,800	4,800	
49	24	3	343,200	198,000	52,800	0	92,400	30,800	
50	24	1	103,200	72,000	14,400	0	16,800	16,800	
51	24	2	187,200	108,000	28,800	0	50,400	25,200	
52	24	10	240,000	100,000	20,000	0	120,000	12,000	
53	24	16	1920,000	640,000	256,000	0	1024,000	64,000	
54	24	17	134,300	110,500	23,800	0	23,800	1,400	22,375
55	25	4	8,000	2,000	0	0	6,000	1,500	1,500
56	26	1	9,000	5,000	0	500	3,500	3,500	3,500
57	27	7	5,900	4,100	0	0	1,800	257	
58	27	1	8,000	5,500	0	500	2,000	2,000	1,129
59	28	1	20,000	5,000	0	0	15,000	15,000	
60	28	1	41,975	36,500	0	0	5,475	5,475	10,238
61	29	1	4,000	500	0	0	3,500	3,500	3,500
62	30	1	78,000	42,000	0	0	36,000	36,000	36,000
63	31	3	45,360	18,000	5,760	0	21,600	7,200	7,200
Total		186	7282,225	4575,610	465,660	37,810	2319,435	679,401	19,3024.9
Avg.		3.0	115590.9	72628.7	7391.4	600.2	36816.4	10784.1	11354.4

Annexure Table 2.6: Benefits Received from SHGs as Perceived by the Members of SHGs

Sl. no	Group code	Benefits
1	Be-1	♦ Members of SHGs are involved in self-initiated activities. ♦ Members get loan easily to initiate NLBA activities at lower interest without any surety or saving. ♦ Awareness is created among members.
2	Be-2	♦ Members do saving. ♦ Members get regular income by investing loan on a cow & buffalo. ♦ Members easy to get loan at lower interest without any surety do saving.
3	Be-3	♦ Awareness created among members of SHG. ♦ Members get loan easily to initiate NLBA activities at lower interest without any surety or saving.
4	Be-4	♦ Beneficiaries get the NLBA & matching grants. From this they can get more loan from their SHGs. ♦ By LBA, the beneficiaries can do water harvesting & from this, they can improve soil fertility and get the fodder for livestock. ♦ Members can easily get the seeds & fertilizer by using SHGs loan.
5	Be-5	♦ KAWAD Programme- DPG Different activities like silt application earthen bund are very useful in preventing soil Erosion ♦ Every farmer is getting loan facilitates from Sanghas. ♦ Landless farmers are getting more benefits from these Sanghas. ♦ Increase in environment awareness.
6	Be-6	♦ Beneficiaries are getting loan from the SHGs. ♦ Beneficiaries' saving is increased. By this, farmers are improving their agricultural activities. ♦ The Kawad project is more useful to landless farmers.
7	Be-7	♦ Crop loan facilities are available during the season. ♦ Beneficiaries take loans from the SHGs. ♦ Beneficiaries are getting more awareness about how to save the money.
8	Be-8	♦ Members get loan easily to initiate NLBA activities at lower interest without any surety or saving. ♦ The farmers have started NLBA activities. By this their financial status has improved. ♦ Members are becoming literate and awareness is created among members.
9	Be-9	♦ Compared to other sources, beneficiaries can easily get money at a lesser interest from SHG. ♦ Without wasting money, beneficiaries can save money and can improve their assets (sheep is one major asset). ♦ From SHG, beneficiaries become literate and easily involve themselves in marketing activities. ♦ KAWAD land activity has improved their agricultural production.
10	Be-10	♦ Literacy rate has improved in their SHG and they have learnt savings. ♦ They have learnt bank business. ♦ They can judge the Govt. benefits and uses. ♦ Awareness has increased in the Agricultural field.
11	Be-11	♦ Project has created relation between beneficiaries and the bank. By these linkages they are benefited. ♦ They learnt the civilized life and involved with the daily proceedings. ♦ Improvement in literacy rate is the major benefit.
12	Be-12	♦ Saving is the major benefit. ♦ NLBA activities like sheep rearing are very profitable. ♦ We are getting loan easily from the SHGs and it is used for children's education, cultivation, etc.

Sl. no	Group code	Benefits
13	Be-13	♦ Kawad Programme-DPG Different activities like silt application. earthen bund are very useful in preventing soil Erosion. ♦ Every farmer with the Sanghas is getting loan facility. ♦ Landless formers are getting more benefit. ♦ Environmental awareness has increased.
14	Be-14	♦ Beneficiaries can get loan from their SHGs. ♦ Beneficiaries have learnt reading from their SHGs. ♦ Beneficiaries can save money, without wasting and have become familiar with bank business.
15	Be-15	♦ Beneficiaries can get loan from their SHGs with a low interest. ♦ Beneficiaries can save the money and that can be useful during emergency period. ♦ Beneficiaries know the bank business and they can save their life without depending to their husbands.
16	Be-16	♦ Bank usage has improved from the SHG activity. ♦ Literacy has increased in their SHG. ♦ After the constitution of the SHG, the women members have been able to come out of the house and meet people.
17	Be-17	♦ Neem oil and Honge oil production mill was initiated from the group activity and this mill provided work for the beneficiaries. ♦ Their SHG is giving monetary support to initiate any group activity at any time on low interest rate and by this they have all benefited. ♦ Land activity has improved agricultural production.
18	Be-18	♦ Awareness on saving and credit facilities. ♦ Women are becoming self-confidence.
19	Be-19	♦ Saving is being done. ♦ Easy to get loan at lower interest rate without surety. ♦ Awareness is developed among the members.
20	Be-20	♦ Beneficiaries can get loan from their SHGs. ♦ Beneficiaries have learnt reading from their SHGs. ♦ Beneficiaries can save money without wasting and they know the bank business.
21	Be-21	♦ The beneficiaries can go out of the village and transact business independently. ♦ Beneficiaries can save the money. ♦ Beneficiaries are all involved closely and their friendship has improved.
22	Be-22	♦ Beneficiaries can get loan easily and with that amount they invest in petty shop. ♦ Beneficiaries can get loan for cultivation at a very low rate of interest.
23	Be-23	♦ Beneficiaries have learnt bank business. ♦ Beneficiaries can speak easily with officials. ♦ Beneficiaries have become aware of the importance of education. ♦ Beneficiaries can save money without wasting it.
24	Be-24	♦ For LBA, they all getting work in summer time. ♦ Bank business and literacy rate have improved. ♦ They come out from their traditional culture. ♦ They can save money without wasting.
25	Be-25	♦ They have learnt bank business ♦ They can speak with the committee members and MYRADA. ♦ Without pledging any valuable things they can get the loan at a lesser interest.
26	Be-26	♦ The loan is easily available and they can access it even during the uncertain time. ♦ All the women are improving in mental and political status. ♦ It has improved the leadership quality and has developed awareness.
27	Be-27	♦ Has improved the business awareness. ♦ They can get loan easily. ♦ The beneficiaries have become aware of equality and this also help for the children's education.

Sl. No	Group code	Benefits
28	Be-28	♦ Get better knowledge of business, savings and bank. ♦ Awareness of sanitation and personality development. ♦ Sheep loan is available.
29	Bi-1	♦ Has improved their land activities. ♦ Social status has improved. ♦ Political awareness.
30	Bi-2	♦ By saving the money, their economic status has improved. ♦ Business awareness. ♦ Their social status has improved and have become aware of social service.
31	Bi-3	♦ They are able to get the loans for different purpose.
32	Bi-4	♦ They can get good yield in the land. ♦ They can get loan on low interest rate.
33	Bi-5	♦ It is helpful for saving the money and their financial awareness has improved. ♦ It helps in the Agricultural activities. ♦ It is the opportunity for them to assemble and have discussions.
34	Bi-6	♦ Water holding capacity is higher and agricultural production has increased. ♦ Financially their status has improved. ♦ They have become organized.
35	Bi-7	♦ They have benefited for land leveling and bund formation. ♦ Increased Agricultural production. ♦ Awareness about savings and utilization of money
36	Bi-8	♦ Able to get loans to take part in NLBA. ♦ Increased Agriculture production. ♦ Awareness about the group unity.
37	Bi-9	♦ They can get loans easily. ♦ Loans available on low interest rate ♦ Awareness about savings.
38	Bi-10	♦ Awareness about savings has increased. They are able to get loans easily during necessity. ♦ They have got assistance for self-employment. ♦ They have become familiar with bank business.
39	Bi-11	♦ After the formation of SHGs their financial dependency has decreased. ♦ Water holding capacity of the land is higher, and also this has increased the Agricultural productions. But this year due to the failure of rains they have not been able to achieve the target. ♦ Socially they have become well improved.
40	Bi-12	♦ We became organized ♦ They can get loans easily on low interest rate. ♦ Got technical knowledge on marketing and Agri.
41	Bi-13	♦ They can get loans easily at low interest rate. ♦ Awareness on small savings.
42	Bi-14	♦ They have got more production after land activities. ♦ They can get loans easily at low interest rate.
43	Bi-15	♦ They can get loans easily at low interest rate. ♦ Income is higher after the NLBA(Goat rearing)
44	Bi-16	♦ More income expected after LBA ♦ They can get loans easily at low interest rate. ♦ Water holding capacity is higher after the LBA
45	Bi-17	♦ They can get loans easily at low interest rate. ♦ Increased the Agricultural production after the LBA
46	Bi-18	♦ They can get loans easily at low interest rate.
47	Bi-19	♦ They are getting more income from buffalo, goat rearing. ♦ They can get loans easily at low interest rate.

Sl. No	Group code	Benefits
48	Bi-20	♦ They get loan for any activities. ♦ SHG's are there for their welfare.
49	Bi-21	♦ Awareness on savings. ♦ They can get loans easily at low interest rate.
50	Ch-1	♦ They can get loans easily at low interest rate. ♦ Increased the Agricultural production
51	Ch-2	♦ They can get loans easily at low interest rate. ♦ Educational awareness
52	Ch-3	♦ Improving their Economic status ♦ Awareness
53	Ch-4	♦ They can get loans easily at low interest rate. ♦ Awareness for offices
54	Ch-5	♦ They can get loans easily at low interest rate. ♦ Awareness about banking system
55	Ch-6	♦ Income has increased after the LBA ♦ They can get loans easily at low interest rate. Before that they were getting loan from moneylenders. ♦ They have become united and consequently their confidence has become strong.
56	Ch-7	♦ Family earnings have increased ♦ Credit availability increased. ♦ Awareness developed.
57	Ch-8	♦ They can get loans easily at low interest rate. ♦ Greater cooperation between members. ♦ Training availability has increased.
58	Ch-9	♦ Educational awareness is more ♦ They can get loans easily at low interest rate.
59	Ch-10	♦ They are getting loan for the purchase of handloom machine and for starting general stores etc. ♦ They have the opportunity for assemble in one ♦ They have become good in agriculture
60	Ch-11	♦ They are getting money from the Project. ♦ They have become self confident in managing to solve the problems through sangha's
61	Ch-12	♦ They can get loans easily at low interest rate. ♦ Personality development training is available.
62	Ch-13	♦ Their income has increased. ♦ They have become self confident in managing to solve the problems through sangha's ♦ Improved their Social and Economic status.
63	Ch-14	♦ They have developed the habit of savings. ♦ They have got confidence in solving their Socio and Economical problems.
64	Ch-15	♦ Income increased through LBA ♦ They have become self confident in managing to solve the problems through sanghas ♦ They have become a financially sustainable, and need not to borrow the money.
65	Ch-16	♦ Their financial status has improved after the formation of SHGs ♦ The have become self confident in managing to solve the problems through sanghas ♦ Awareness in solving the socio economic problems
66	Ch-17	♦ They can get loans easily at low interest rate. ♦ Awareness
67	Ch-18	♦ The project is helpful in the formation of SHG ♦ Increase their savings awareness ♦ Their self-confidence has increased through their group involvement.
68	Ch-19	♦ It is helpful to assemble and discuss with members' different views. ♦ Helpful for the formation of groups

Sl. No	Group code	Benefits
69	Ch-20	♦ They can get loans easily at low interest rate. ♦ It has improved their literacy. ♦ Now they are not dependants on others.
70	Ch-21	♦ They can get loans easily at low interest rate. ♦ From this project, they have purchased the tailoring machine.

Annexure Table 2.7: Performance score of SHGs based on GSA Tool

Sl.No	Group Code	Avg. Score in each section									
		A	B	C	D	E	F	G	H	Total	Avg.
Kudaligi Taluka, Bellary District (Upparahalla W/S)											
1	Be-1	100.0	100.0	100.0	100.0	100.0	83.3	100.0	100.0	783.3	**97.9**
2	Be-2	100.0	100.0	87.5	100.0	100.0	100.0	100.0	100.0	787.5	**98.4**
3	Be-3	100.0	100.0	100.0	100.0	100.0	100.0	50.0	100.0	750.0	**93.8**
4	Be-4	100.0	70.0	75.0	100.0	100.0	100.0	68.8	100.0	713.8	**89.2**
5	Be-5	100.0	90.0	100.0	87.0	66.0	83.0	56.0	100.0	682.0	**85.3**
6	Be-6	100.0	90.0	100.0	87.0	66.0	66.6	62.0	100.0	671.6	**84.0**
7	Be-7	100.0	90.0	87.0	87.0	83.0	66.0	62.0	100.0	675.0	**84.4**
8	Be-8	100.0	100.0	75.0	100.0	100.0	100.0	100.0	100.0	775.0	**96.9**
9	Be-9	75.0	90.0	62.5	75.0	83.3	75.0	68.8	100.0	629.6	**78.7**
10	Be-10	100.0	90.0	37.5	87.5	83.3	83.3	68.8	100.0	650.4	**81.3**
11	Be-11	75.0	80.0	50.0	75.0	100.0	67.0	68.8	100.0	615.8	**77.0**
12	Be-12	100.0	100.0	87.5	100.0	83.3	88.3	81.3	100.0	740.4	**92.5**
13	Be-13	83.0	80.0	62.0	75.0	83.0	66.0	75.0	100.0	624.0	**78.0**
14	Be-14	100.0	80.0	75.0	62.5	83.3	66.6	75.0	100.0	642.4	**80.3**
15	Be-15	100.0	70.0	62.5	100.0	88.3	88.3	68.8	100.0	677.9	**84.7**
16	Be-16	100.0	80.0	62.5	75.0	100.0	83.3	75.0	100.0	675.8	**84.5**
17	Be-17	100.0	70.0	100.0	87.5	100.0	83.3	87.5	100.0	728.3	**91.0**
18	Be-18	100.0	80.0	62.0	87.0	50.0	50.0	43.0	100.0	572.0	**71.5**
19	Be-19	100.0	100.0	50.0	100.0	100.0	100.0	50.0	100.0	700.0	**87.5**
20	Be-20	83.0	80.0	62.5	87.5	100.0	100.0	87.5	100.0	700.5	**87.6**
21	Be-21	100.0	70.0	25.0	100.0	83.3	83.5	50.0	100.0	611.8	**76.5**
22	Be-22	100.0	90.0	100.0	100.0	83.3	50.0	75.0	100.0	698.3	**87.3**
23	Be-23	100.0	90.0	100.0	87.5	83.3	50.0	50.0	100.0	660.8	**82.6**
24	Be-24	100.0	90.0	62.5	87.5	83.5	66.6	68.8	50.0	608.9	**76.1**
25	Be-25	100.0	90.0	87.5	100.0	100.0	88.3	68.8	100.0	734.6	**91.8**
26	Be-26	100.0	70.0	50.0	75.0	66.0	66.0	62.0	100.0	589.0	**73.6**
27	Be-27	83.3	90.0	62.0	75.0	83.0	50.0	50.0	100.0	593.3	**74.2**
28	Be-28	100.0	60.0	50.0	75.0	50.0	83.0	50.0	100.0	568.0	**71.0**
Avg. Score		**96.4**	**85.4**	**72.7**	**88.3**	**85.8**	**78.1**	**68.7**	**98.2**	**674.2**	**84.2**
Indi Taluka, Bijapur District (Doddahalla W/S)											
29	Bi-1	100.0	80.0	75.0	100.0	100.0	100.0	0.0	100.0	655.0	**81.9**
30	Bi-2	100.0	80.0	75.0	100.0	100.0	100.0	37.5	100.0	692.5	**86.6**
31	Bi-3	100.0	100.0	100.0	100.0	100.0	100.0	50.0	100.0	750.0	**93.8**
32	Bi-4	100.0	100.0	75.0	100.0	100.0	100.0	100.0	100.0	775.0	**96.9**
33	Bi-5	100.0	40.0	75.0	100.0	100.0	100.0	31.2	100.0	646.2	**80.8**
34	Bi-6	100.0	80.0	100.0	100.0	100.0	100.0	68.7	50.0	698.7	**87.3**
35	Bi-7	66.6	60.0	75.0	100.0	100.0	100.0	37.5	100.0	639.1	**79.9**
36	Bi-8	100.0	100.0	75.0	100.0	100.0	100.0	81.3	100.0	756.3	**94.5**
37	Bi-9	100.0	100.0	75.0	100.0	100.0	100.0	50.0	100.0	725.0	**90.6**
38	Bi-10	100.0	80.0	50.0	100.0	100.0	100.0	25.0	100.0	655.0	**81.9**

Sl.No	Group Code	Avg. Score in each section									
		A	B	C	D	E	F	G	H	Total	Avg.
39	Bi-11	66.6	80.0	100.0	100.0	100.0	100.0	50.0	100.0	696.6	**87.1**
40	Bi-12	100.0	100.0	75.0	100.0	100.0	100.0	75.0	100.0	750.0	**93.8**
41	Bi-13	100.0	100.0	75.0	100.0	100.0	100.0	75.0	100.0	750.0	**93.8**
42	Bi-14	100.0	100.0	62.5	100.0	100.0	100.0	75.0	100.0	737.5	**92.2**
43	Bi-15	100.0	100.0	75.0	100.0	100.0	100.0	43.8	100.0	718.8	**89.8**
44	Bi-16	100.0	100.0	100.0	100.0	100.0	100.0	68.8	100.0	768.8	**96.1**
45	Bi-17	100.0	100.0	75.0	100.0	100.0	83.3	68.8	100.0	727.1	**90.9**
46	Bi-18	100.0	100.0	100.0	100.0	100.0	100.0	43.8	100.0	743.8	**93.0**
47	Bi-19	100.0	100.0	100.0	100.0	100.0	83.3	50.0	100.0	733.3	**91.7**
48	Bi-20	100.0	70.2	75.0	100.0	100.0	100.0	65.5	100.0	710.7	**88.8**
49	Bi-21	50.0	90.0	75.0	100.0	100.0	100.0	50.0	100.0	665.0	**83.1**
Avg. Score		**94.4**	**88.6**	**80.4**	**100.0**	**100.0**	**98.4**	**54.6**	**97.6**	**714.0**	**89.3**
Chitradurga District, Molakalmur Taluka (Chinnahagari W/S)											
50	Ch-1	83.3	80.0	100.0	75.0	100.0	100.0	75.0	100.0	713.3	**89.2**
51	Ch-2	100.0	90.0	100.0	87.5	66.0	50.0	56.5	50.0	600.0	**75.0**
52	Ch-3	66.0	30.0	100.0	75.0	100.0	50.0	50.0	100.0	571.0	**71.4**
53	Ch-4	100.0	80.0	75.0	62.5	100.0	50.0	62.5	50.0	580.0	**72.5**
54	Ch-5	100.0	70.0	100.0	87.0	100.0	100.0	43.0	100.0	700.0	**87.5**
55	Ch-6	100.0	50.0	62.0	75.0	100.0	50.0	37.0	100.0	574.0	**71.8**
56	Ch-7	100.0	80.0	100.0	88.0	100.0	100.0	81.0	100.0	749.0	**93.6**
57	Ch-8	67.0	60.0	100.0	87.5	100.0	67.0	75.0	50.0	606.5	**75.8**
58	Ch-9	75.0	70.0	50.0	100.0	100.0	17.0	69.0	100.0	581.0	**72.6**
59	Ch-10	100.0	50.0	50.0	75.0	100.0	83.0	56.0	100.0	614.0	**76.8**
60	Ch-11	100.0	80.0	100.0	75.0	100.0	100.0	100.0	100.0	755.0	**94.4**
61	Ch-12	50.0	80.0	75.0	75.0	100.0	100.0	94.0	100.0	674.0	**84.3**
62	Ch-13	100.0	50.0	75.0	75.0	100.0	50.0	37.0	100.0	587.0	**73.4**
63	Ch-14	67.0	80.0	100.0	87.0	83.0	67.0	69.0	100.0	653.0	**81.6**
64	Ch-15	100.0	70.0	75.0	75.0	100.0	16.0	50.0	100.0	586.0	**73.3**
65	Ch-16	100.0	50.0	75.0	75.0	100.0	50.0	31.0	100.0	581.0	**72.6**
66	Ch-17	100.0	70.0	75.0	88.0	100.0	67.0	56.0	100.0	656.0	**82.0**
67	Ch-18	100.0	70.0	62.5	75.0	100.0	67.0	100.0	100.0	674.5	**84.3**
68	Ch-19	83.0	70.0	62.5	75.0	100.0	50.0	69.0	100.0	609.5	**76.2**
69	Ch-20	100.0	70.0	50.0	100.0	100.0	67.0	44.0	100.0	631.0	**78.9**
70	Ch-21	75.0	80.0	75.0	87.5	100.0	100.0	87.5	100.0	705.0	**88.1**
Avg. Score		**88.9**	**68.1**	**79.1**	**81.0**	**97.6**	**66.7**	**63.9**	**92.9**	**638.1**	**79.8**

Annexure Table 2.8 (a): Output Parameters in Upparahalla Watershed

Sl. No	Activity	P-NGOs							
		Nov.02		Sep.02		Sep.02		Oct.02	
		DPG		LORDS		GUARD		MYRADA	
		Finan-cial	Contribu tion	Finan-cial	Contribu tion	Finan-cial	Contribu tion	Finan-cial	Contribu tion
A. At Farmers' Land									
1	Field bunding	-	-	912,753	168,612	-	N.A	-	-
2	Land levelling	512,019	206,177	885,141	250,382	97,329	N.A	1451,812	560,738
3	Pomogranate	57,492	24,237	-	-	-	-	-	-
4	Lime	66,527	30,519	84,360	0	-	-	73,420	10,875
5	Jungile Clearence	66,323	27,528	256,153	74,424	12,942	N.A	805,405	303,086
6	Boulder Bund	-	-	10,525	2,237	284	N.A	3,074	319
7	Nala bunding	-	-	292,832	20,694	-	-	129,632	42,876
8	Sappota	-	-	2,900	0	-	-	76,356	24,775
9	Checkdam	-	-	556,526	52,636	-	-	233,892	74,919
10	Tank silt Appliction	1,667,392	852,608	3031,942	1410,813	381,324	N.A	1730,629	876,023
11	Mango	172,060	32,474	71,195	10,804	-	-	55,100	16,321
12	RubbleCheck	62,647	25,145	83,457	12,383	-	-	-	-
13	Diversionchannel	-	-	12,590	2,886	6,338	N.A	10,572	1,879
14	R.R.S.	520,476	77,542	519,519	82,745	-	-	446,517	103,363
15	Farm pond	5,669	1,417	28,298	9,500	-	-	14,050	2,818
16	Bund planting	111,717	30,883	3,488	1,263	6,193	N.A	21,110	1,488
17	Tammarind	-	-	930	-	-	-	130,500	37,178
18	Vermiculture	4,250	0	2,025	-	-	-	-	-
19	Bank Charges	295	0	-	-	489	N.A	-	-
20	Earthen Bund	2,482,617	617,683	-	-	51,563	N.A	2373,538	568,015
21	Land shaping	-	-	-	-	1,456	N.A	710,561	278,116
22	Ageva plantation	-	-	-	-	1,137	N.A	-	-
23	Horticulture	-	-	230,294	0	100,255	N.A	-	-
24	Boulder Check	91,168	23,921	239,768	61,500	-	-	77,857	36,759
25	Bund Revetment	-	-	8,274	312	-	-	19,846	6,727
26	Avenue Plantation	-	-	-	-	-	-	107,067	9,037
27	Block Plantation	42,873	10,718	87,792	8,520	-	-	-	-
28	Gully Plug	-	-	11,547	2,490	-	-	-	-
29	Land reclamation	14,095	3,523	398,915	94,084	-	-	-	-
30	Surface Tank	-	-	110,879	34,506	-	-	-	-
31	Water Tub for Block Plantation	-	-	4,000	0	-	-	-	-
32	Pond repair	-	-	916	100	-	-	-	-
33	RFC	14,469	5,672	-	-	-	-	-	-
Total		5,892,089	1970,047	7847,019	2300,891	659,310	N.A	8470,938	2955,312
B. Common Land									
1	Nala Bund	-	-	-	-	-	-	246,718	27,756
2	Block Plantation	11,435	0	-	-	-	-	141,793	10,446
3	Check Dam	818,816	80,044	-	-	-	-	107,865	10,787
4	Boulder Check	-	-	-	-	-	-	21,613	2,161
5	Bund revetment	-	-	-	-	-	-	24,765	2,425
6	R R S	1184,301	118,430	-	-	-	-	141,920	14,191
7	Bund plantation	11,815	1181.5	-	-	-	-	-	-
8	Rubble check	37,935	3793.5	-	-	-	-	-	-
9	Nala revetment	7,115	710	-	-	-	-	-	-
Total		2071,417	204,159	-	-	-	-	684,674	67,766
Total (A+B)		79.6351	21.7421	78.4702	23.0089	6.5931	N.A	91.5561	30.2308
Grand Total (4 P-NGOs)									331.236

All values are in Rupees except Total (A+B) and the Grand Total .

Annexure Table 2.8 (b): Output Parameters in Doddahalla Watershed

Sl. No	Activity	P-NGOs							
		Sep.02		Sep.02		Nov.02		Oct.02	
		BIRDS		ISEER		VISHALA		SEEDA	
		Finan-cial	Contribu tion	Finan-cial	Contribu tion	Finan-cial	Contribu tion	Finan-cial	Contribu tion
A. Farmers' land									
1	Field bunding	2302,600	619,934	2509,191	882,381	1501,326	473,612	1187,549	459,649
2	Land levelling	2659,822	1152,240	3484,965	1614,335	1460,614	637,895	1287,085	546,523
3	Pomegranate	507,570	321,254	1056,442	602,773	249,728	134,514	47,703	31,087
4	Lime			139,457	74,469	4,630	2,220	14,313	8,673
5	Drumstick	7,469	3,731	3,720	1,939	43,760	22,351	31,034	17,692
6	Jungle Clearance	0		34,617	16,884			3,435	1,979
7	Reclamation of water logged area	0		119,593	51,215				
8	Reclamation of Waste land	0		855,185	228,533				
9	Boulder Bund	0		47,176	19,601				
10	Nala bunding	219,767	62,532	1778,844	281,211	198,706	27,730	127,697	29,140
11	Checkdam	293,802	132,753	116,544	17,483			157,425	30,382
12	Tank silt application	69,162	36,594	487,872	260,542	7,950	3.975		
13	Guava	56,201	12,393	1,572	702				
14	Mango	1,352	1,352	2,269	1,276	825	441		
15	Farm forestry	40,933	4,786	36,014	6,087				
16	Ber	0		10,138	5,272	15,463	8.547		
17	Rubble check	3,272							
18	Diversion channel	71,234	21,554						
19	Bund planting	0				3,051	800		
20	Tamarind	2,524	1,262						
21	Vermiculture	750	400						
22	Bank Charges	1,582					13.768		
23	Water Storage	96,340	41,938						
24	Floriculture					27,891	14.142		
25	Rose					863	436		
Total		6334,380	2412,723	10683599	4064,703	3514,807	1340,431	2856,241	1125,125
B. Common land		N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A
Total (A+B) in lakhs		63.34	24.13	106.84	40.65	35.15	13.40	28.56	11.25
Grand total(4 P-NGOs)- lakhs									323.32

All values are in Rupees except Total (A+B) and the Grand Total

Annexure table 2.8 (c): Output Parameters in Chinnahagari Watershed

Sl.No	Activity	P-NGOs					
		Oct.02		Oct.02		Oct.02	
		MYRADA		RSC		GUARD	
		Financial	Contribution	Financial	Contribution	Financial	Contribution
A. Farmers' land							
1	Land levelling	117,537	N.A	59,121	N.A	837,088	N.A
2	Pomegranate					89,240	N.A
3	Lime			1,600	N.A	15,382	N.A
4	Jungle Clearance			35,746	N.A	135,187	N.A
5	Boulder Bund	12,131	N.A	466	N.A	174,902	N.A
6	Sappota					96,936	N.A
7	Tank silt application	98,483	N.A	240,819	N.A	1045,146	N.A
8	Mango			10,137	N.A	256,691	N.A
9	Diversion channel			20,062	N.A	72,200	N.A
10	R.R.S.			35,756	N.A	75,418	N.A
11	Farm pond			15,025	N.A	65,165	N.A
12	Bund planting					29,800	N.A
13	Tamarind					51,272	N.A
14	Earthen bund	110,302	N.A	80,885	N.A	567,277	N.A
15	Land shaping	221,372	N.A	141,559	N.A	2591,460	N.A
16	Ageva plantation					34,759	N.A
17	Boulder check	35,090	N.A	13,325	N.A	130,173	N.A
18	Bund revetment					235,609	N.A
19	Dugout pond			3,785	N.A		
20	Shallow wells			6,120	N.A		
21	Check dam					76,139	N.A
22	Desilting of wells					8,940	N.A
Total		594,915	N.A	664,406	N.A	6503,705	N.A
B. Common land							
1	Block plantation					25,973	N.A
2	Check dam	39,059	N.A			28,500	N.A
3	Boulder check	14,104	N.A	2,678	N.A		
4	Percolation ponds	28,400	N.A			39,020	N.A
5	CPT(Rmt)	27,055	N.A	14,631	N.A	85,843	N.A
6	Cattle ponds	34,500	N.A				
7	Earthen bund	58,600	N.A			25,309	N.A
8	Afforestation	57,856	N.A	10,600	N.A		
9	Ageva Plantation	5,500	N.A	1,977	N.A	55,616	N.A
10	Fodder promotion	12,650	N.A			145,298	N.A
11	Trenches					61,946	N.A
12	Dug out ponds					118,716	N.A
13	Plantation			6,603	N.A	16,750	N.A
14	Shallow well			4,610	N.A	3,267	N.A
15	Pongamia					2,280	N.A
16	*Cassiasimia*					1,120	N.A
17	Catch pits					13,800	N.A
18	Gully checks					23,412	N.A
19	Bunding			10,663	N.A		
20	Feeder channel			113,624	N.A		
21	Catch pits			5,400	N.A		
22	Nallabund					37,985	N.A
23	Farm pond					6,268	N.A
Total		277,724	N.A	170,786	0	646,850	N.A
Total (A+B)		8.73	N.A	8.35	N.A	71.51	N.A
Grand Total (3 P-NGOs)							88.58

All values are in Rupees except Total (A+B) and the Grand Total

MYRADA - only on MWSDC information available

RSC - information is also incomplete

CHAPTER III

MONITORING OF LIVELIHOODS (MOL)

3.1 Introduction

MOL is a participative monitoring tool for assessing livelihoods, using the Sustainable Rural Livelihoods (SRL) framework. The tool was developed by Catalyst Management Services for KAWAD and the same has been used in the present study. The tool was used to gather data on five major capitals (assets) of the households in the project area. These capitals are: (i) Physical capital, (ii) social capital, (iii) financial capital, (iv) human capital and (v) natural capital. In the first part five different indicators are listed separately for each of the five capitals. The tool is derived from a series of indicators, which are locally relevant. The consultant had a focus group discussion with local staff of NGOs. The SRL framework was explained and the indicators that best represent the local area, say, for example, in Physical capital, indicators which typically are generated include roof type, number of rooms in the house, etc. were listed. Thus, for each capital, five kinds of local situations were described which ranged from the poorest households to the richest household. For example, the richest will have RCC roof, will have more than five rooms, will use gas or electricity for cooking, will own tractor/Jeep/car. On the contrary, the poorest will have thatched roof as his abode, no electricity connection, no separate kitchen and cooking outside the house using fuel wood for cooking). A matrix of five indicators for five kinds of households was developed for all the five capitals. Each profile was assigned a level i.e., 1 for the poorest and 5 for the richest. The indicators and the profiles generated were pre-tested with the community and cross-verified through observations and field staff experience by the consultants (CMS).

3.2 Canvassing MOL Tool

The matrix of five indicators for each capital was printed on a large cardboard sheet and was explained to the members of the MWSDCs as well as to the SHGs. In the exercise, the group was first asked to identify one or two persons fitting the description as indicated in the chart (**icon**). Thus the group identified five different persons from the village (one each for different levels) for each capital i.e., physical, social, financial, human and natural. Once the members selected/identified the persons (icons), the individuals in the group were asked to identify themselves with one of the icons. The individual who chose a specific icon scored the same level as their icon. MOL tool was canvassed to 11 MWSDCs

and 70 SHGs in the KAWAD project area. The highest level of assets/capital endowment scored 5 points whereas the bottom level of asset endowment scored just 1 point. A brief description of indicators used for assessing the level of capital/ assets endowment is followed by the results of the MOL exercise below.

3.3 Assets/ Capitals Included in the MOL Matrix

Physical Assets indicate the ownership of man made assets like house (type of house, number of rooms), type of roof (RCC/ wooden planks, asbestos sheets, thatched, etc) type of vehicle owned, use of electricity (power points in the house), type of fuel used for cooking (gas, electricity, kerosene or fuel wood). Ownership and use of different assets facilitate classification of the respondent member into different categories or group of physical asset endowment.

Social Asset deals with personal traits of an individual member. These include the leadership qualities of the member, i.e., how widely one is respected in the society. The levels of social assets are determined based on few other parameters like participation in the political process, contacts with the village, district, state and national level elected representatives. Contacts with the village institutions and frequency of visit to the institutions like post office, school, community hall, health centre, police stations, etc; and the membership of institutions like temple trusts, Grama Panchayat, MWSDCs, SHGs, etc.

Financial Assets Ranking of financial assets is attempted based on diversification of sources of income, type of savings and institutions handling the savings. The level of financial assets is ascertained through the kind of investment, instruments used for investment, lending and borrowings (locally or outside), and based on access to different financial institutions, number of sources of borrowing like financial institutions, cooperatives, friends and relatives, SHGs, moneylenders, etc.

Human Capital is assessed through the level of academic or years of formal schooling, exposure to the outside world/outside the village, frequency of visits to bigger cities, proficiency in the number of languages/communication skills, etc.

Natural assets: The categorization of household is based on the access and ownership of natural assets. The higher the level of assets better is the ranking. Total operational holding of the household, irrigated area, area under orchard and plantation crops, or a few trees on the bunds, etc. defines the level of natural resource endowment of the household. Similarly, the number of milch and draught animals owned by the household facilitates in categorizing the households in different groups of assets holding. The summary results of the MOL exercise have been presented below.

3.4 Average Level of Assets Endowment of the MWSDC Members

Four micro-watershed development committees each were selected from Bellary and Bijapur and three from Chitradurga district. As stated earlier, group meetings of members of the MWSDCs as well as SHGs were conducted and the indicators for different levels of capitals were explained to them. After selecting the icons each individual member was asked to identify himself with the icon. The responses we got have been analyzed and presented below.

It can be seen from Table 3.1 that the overall level of capitals for 108 households (members of 11 MWSDCs) ranged from 2.3 for financial capital to 2.89 for human capital. The variation measured in terms of standard deviation varied between

Table 3.1. Average Level of Assets Endowment of MWSDCs Members

Name of Watershed	Name of MWSDC (village)	Levels of assets endowment					
		Physical	**Social**	**Financial**	**Human**	**Natural**	Total Members
Upparahalla (Bellary)	No,3,MWSDC (H.K.Gollarahatti)	3.25 (1.06)*	3.75 (1.06)	3.00 (0.85)	3.75 (1.06)	3.58 (0.90)	12
	Kalpavruksha (Byluthumbera guddi)	2.33 (0.87)	2.56 (0.88)	2.44 (0.73)	3.00 (0.87)	2.56 (0.88)	9
	Hodedahalla (Poojarahalli)	2.70 (1.16)	2.30 (0.67)	2.20 (1.55)	2.70 (0.95)	2.80 (1.40)	10
	Basaveswara (Alur)	2.87 (1.13)	2.53 (0.92)	2.60 (0.83)	3.13 (1.06)	2.47 (1.25)	15
	All	2.83 (1.08)	2.80 (1.05)	2.59 (1.02)	3.17 (1.04)	2.85 (1.19)	46
Chinnahagari (Chitradurga)	Bailahadavi (K.K.Hatti)	2.73 (0.47)	2.27 (0.47)	2.36 (0.50)	3.36 (1.43)	2.27 (0.90)	11
	Kamarayankatte (Tumkurlahalli)	1.67 (1.11)	2.27 (0.88)	1.93 (0.59)	2.73 (1.16)	1.80 (1.15)	15
	Nelabande (Devarahatti)	1.92 (1.00)	2.42 (1.00)	2.17 (1.11)	3.33 (1.37)	1.75 (1.06)	12
	All	2.05 (1.01)	2.32 (0.81)	2.13 (0.78)	3.11 (1.31)	1.92 (1.05)	38
Doddahalla (Bijapur)	Karebasaveswar (Jigajeevangi)	2.13 (0.64)	2.38 (0.52)	2.00 (0.76)	2.13 (0.83)	2.25 (0.71)	8
	Kalmeswar (Jeerankalagi)	2.13 (0.83)	2.25 (0.46)	1.63 (0.74)	2.75 (1.28)	1.88 (1.28)	8
	Basaveswara (Devara Nimaragi)	2.25 (0.89)	2.63 (0.74)	2.25 (0.46)	2.00 (1.07)	2.88 (1.36)	8
	Sarvodaya (Inchageri)	2.70 (1.25)	2.50 (0.85)	2.40 (1.07)	2.20 (1.23)	2.40 (0.97)	10
	All	2.32 (0.94)	2.44 (0.66)	2.09 (0.83)	2.26 (1.11)	2.35 (1.04)	34
All		2.43 (1.07)	2.54 (0.89)	2.30 (0.92)	2.89 (1.21)	2.41 (1.16)	118

Note: Figures in the parenthesis are standard deviation.

0.89 for social capital and 1.21 for human capital. It was observed that, on an average, households from Upparahalla watershed project (Bellary district) were better-off in

respect of all the capitals when compared to their counterparts from other two watersheds viz,Chinnahagari (Chitradurga district) and Doddahalla (Bijapur district). The standard deviation for all the capitals hovered around one in case of households from Upparhalla watershed. The households from Chinnahageri were endowed with the lowest level of physical, social and natural capitals whereas households from Doddahalla had the lowest level in terms of financial and human capitals among the households from three watersheds. The variation in the level of capital endowment was least for physical (σ 0.94), social (σ 0.66), and natural (σ 1.04) capitals among the members of MWSDCs from Doddahalla watershed. The least variability was found among the members of MWSDCs of Chinnageri, and Upparahalla watersheds for financial and human capitals, respectively. The summary sheets of the scores for the selected MWSDCs and the names of the iconised persons for each capital have been presented in annexure 3.1.

It can be seen from the table that in Upparahalla watershed, households from MWSDC No.3 i.e., from H.K. Gollarhatti had the highest level of capital endowment among all the four selected MWSDCs in Bellary district. Similarly, in Chinnahageri watershed, households from Bailahadavi MWSDC (K.K.Hatti village) were found better endowed in most of the capitals when compared to their counterparts from other two MWSDCs in Chitradurga district. In the case of Doddahalla watershed (Bijapur district), members of Sarvodaya MWSDC (Inchegere) had the highest level of physical (2.70) and financial (2.40) capitals among the selected MWSDCs followed by Basaweshwara MWSDC (Devara Nimaragi village) for social (2.63) and natural (2.88) capitals. However, members of Kalmeshwar MWSDC (Jeerankalagi village) had the highest level of human capital. Interestingly, the level of capital was positively associated with the value of standard deviation. The proportion of members following under different levels of assets endowment have been discussed under watershed below.

3.5 Distribution of MWSDC Members by the Levels of Assets Endowment

3.5.1 Upparahalla Watershed (Bellary)

A total of 46 members from 4 MWSDCs in Upparahalla watershed were contacted for MOL exercise. The analysis indicated that more than 70 per cent of the respondent members were concentrated in 2nd and 3rd levels of assets endowment (Table 3.2). Less than 10 per cent of the members identified themselves with the highest level of social, financial and natural resource endowment. Similarly, less than 5 per cent of the members

were found in the poorest category of physical, social and human capital endowment. As far as physical and social capital were concerned, none of the members from MWSDC no 3 (H.K. Gollarahatti village) and Hodehalla MWSDC were found in the poorest level. Similarly, none of the members from sample MWSDC identified with the poorest level of human capital in Upparahalla watershed.

Table 3.2: Distribution of MWSDC Members by the Levels of Assets

(in percentage)

Upparahalla Watershed (Bellary)

Name of MWSDC	Village	*Levels of assets endowment*					Total members
		1	**2**	**3**	**4**	**5**	
Physical assets							
No,3,MWSDC	H.K.Gollarahatti	0.00	25.00	41.67	16.67	16.67	12
Kalpavruksha	B. T. Guddi	11.11	55.56	22.22	11.11	0.00	9
Hodedahalla	Poojarahalli	10.00	40.00	30.00	10.00	10.00	10
Basaveswara	Alur	0.00	53.33	20.00	13.33	13.33	15
All		4.35	43.48	28.26	13.04	10.87	46
Social assets							
No,3,MWSDC	H.K.Gollarahatti	0.00	16.67	16.67	41.67	25.00	12
Kalpavruksha	B. T. Guddi	11.11	33.33	44.44	11.11	0.00	9
Hodedahalla	Poojarahalli	0.00	80.00	10.00	10.00	0.00	10
Basaveswara	Alur	0.00	66.67	20.00	6.67	6.67	15
All		2.17	50.00	21.74	17.39	8.70	46
Financial assets							
No,3,MWSDC	H.K.Gollarahatti	0.00	25.00	58.33	8.33	8.33	12
Kalpavruksha	B. T. Guddi	11.11	33.33	55.56	0.00	0.00	9
Hodedahalla	Poojarahalli	40.00	40.00	0.00	0.00	20.00	10
Basaveswara	Alur	0.00	53.33	40.00	0.00	6.67	15
All		10.87	39.13	39.13	2.17	8.70	46
Human assets							
No,3,MWSDC	H.K.Gollarahatti	0.00	8.33	41.67	16.67	33.33	12
Kalpavruksha	B. T. Guddi	0.00	33.33	33.33	33.33	0.00	9
Hodedahalla	Poojarahalli	0.00	50.00	40.00	0.00	10.00	10
Basaveswara	Alur	0.00	33.33	33.33	20.00	13.33	15
All		0.00	30.43	36.96	17.39	15.22	46
Natural assets							
No,3,MWSDC	H.K.Gollarahatti	0.00	16.67	16.67	58.33	8.33	12
Kalpavruksha	B. T. Guddi	11.11	33.33	44.44	11.11	0.00	9
Hodedahalla	Poojarahalli	10.00	50.00	10.00	10.00	20.00	10
Basaveswara	Alur	26.67	26.67	26.67	13.33	6.67	15
All		13.04	30.43	23.91	23.91	8.70	46

The highest proportion of members were observed in top-most category of physical, social and human capitals from MWSDC no. 3 whereas MWSDC of Hodehalla (Poojarahalli)

had the highest proportion of the members in the richest category of financial and natural capitals.

3.5.2 Chinnahagari MWSDC (Chitradurga)

Three micro-watersheds namely, Bailahadavi, Kamarayanakatte and Nelbande were selected from Chinnahageri watershed for the present study. MOL exercise was carried out for three selected MWSDCs involving a total of 38 members. About 40 to 47 per cent of the members identified themselves with the poorest level of physical and natural assets, respectively (Table 3.3). Similarly, roughly 3, 16 and 11 per cent of the members were found at the bottom level of social, financial and human assets, respectively. None of the members was associated with the highest level of physical assets.

Table 3.3 Distribution of MWSDC Members by the Levels of Assets

(in percentages)

Chinnahagari Watershed (Chitradurga)

Name of Name of MWSDC	Village	Levels of assets endowment					Total members
		1	**2**	**3**	**4**	**5**	
Physical assets							
Bailahadavi	K.K.Hatti	0	27.27	72.73	0	0	11
Kamarayankatte	Tumkurlahalli	66.67	13.33	6.67	13.33	0.00	15
Nelabande	Devarahatti	41.67	33.33	16.67	8.33	0.00	12
All		39.47	23.68	28.95	7.89	0.00	38
Social assets							
Bailahadavi	K.K.Hatti	0.00	72.73	27.27	0.00	0.00	11
Kamarayankatte	Tumkurlahalli	6.67	73.33	13.33	0.00	6.67	15
Nelabande	Devarahatti	0.00	83.33	0.00	8.33	8.33	12
All		2.63	76.32	13.16	2.63	5.26	38
Financial assets							
Bailahadavi	K.K.Hatti	0.00	63.64	36.36	0.00	0.00	11
Kamarayankatte	Tumkurlahalli	20.00	66.67	13.33	0.00	0.00	15
Nelabande	Devarahatti	25.00	50.00	16.67	0.00	8.33	12
All		15.79	60.53	21.05	0.00	2.63	38
Human assets							
Bailahadavi	K.K.Hatti	0.00	45.45	9.09	9.09	36.36	11
Kamarayankatte	Tumkurlahalli	20.00	13.33	46.67	13.33	6.67	15
Nelabande	Devarahatti	8.33	25.00	16.67	25.00	25.00	12
All		10.53	26.32	26.32	15.79	21.05	38
Natural assets							
Bailahadavi	K.K.Hatti	27.27	18.18	54.55	0.00	0.00	11
Kamarayankatte	Tumkurlahalli	53.33	26.67	13.33	0.00	6.67	15
Nelabande	Devarahatti	58.33	16.67	16.67	8.33	0.00	12
All		47.37	21.05	26.32	2.63	2.63	38

About one fifth of the members identified themselves with the topmost level of human capital whereas the proportion of members in the richest level of other assets was negligible. The majority of the members were poorly endowed in social and financial assets

as more than 60 per cent of the members were found in the last but one level from the bottom in the case of financial and social assets.

Large variation was observed in the proportion of members from different MWSDCs identifying with varying levels of assets ownership. For example, none of the members from Bailahadavi identified with the poorest level of physical assets whereas almost one third of the members from Kamarayanakatte MWSDC were from the poorest physical assets category. Similarly, more than half of the members from Kamarayaakatte and Nelabande MWSDCs identified themselves with the poorest level of natural assets when compared with little more than a quarter of members from Bailahadavi MWSDC. However, Bailahadav ranked first with the highest proportion of members identifying themselves with the top level of human capital.

3.5.3 Doddahalla watershed (Bijapur)

As stated earlier, 4 MWSDCs were selected from Doddahalla watershed. There were 34 members in the selected MWSDCs. It was observed that about two thirds of the members identified themselves with bottom two levels of physical, social, and human assets (Table 3.4). Similarly, 73 per cent and 53 per cent of the members were in the bottom two categories of financial and natural assets, respectively. None of the members identified himself/herself with the highest level of social, financial and natural capital and a negligible proportion (less than three per cent) of the members were associated with top most level of physical and human capital. Of course, there were large variations in the levels of asset endowments by the members across the selected MWSDCs. The households from Devara Nimaragi village (Kalmeshwara MWSDC) were found to be better-off in terms of natural assets as almost half of the members from the said village identified themselves with the second level of natural capital from the top. On the contrary, none of the members from Jigajeevangi and Jeerankalagi villages (Karebasaweshwara and Kalmeshwara MWSDCs, respectively) and only 10 per cent from Inchegeri (Sarvodaya MWSDC) identified themselves with the last but one highest level of natural assets. Similarly, one fifth of the members from Sarvodaya MWSDC were associated with the 4^{th} level of financial assets as against none from the other two sample MWSDCs.

Table 3.4 Distribution of MWSDC Members by the Levels of Assets (in percentages)

Doddahalla Watershed (Bijapur)

Name of MWSDC	Village	Levels of assets endowment					Total members
		1	**2**	**3**	**4**	**5**	
Physical assets							
Karebasaveswar	Jigajeevangi	12.50	62.50	25.00	0.00	0.00	8
Kalmeswar	Jeerankalagi	12.50	75.00	0.00	12.50	0.00	8
Basaveswara	Devaranimbargi	25.00	25.00	50.00	0.00	0.00	8
Sarvodaya	Inchageri	20.00	20.00	40.00	10.00	10.00	10
All		17.65	44.12	29.41	5.88	2.94	34
Social assets							
Karebasaveswar	Jigajeevangi	0	62.5	37.5	0	0	8
Kalmeswar	Jeerankalagi	0	75	25	0	0	8
Basaveswara	Devaranimbargi	0	50	37.5	12.5	0	8
Sarvodaya	Inchageri	0	70	10	20	0	10
All		0.00	64.71	26.47	8.82	0	34
Financial assets							
Karebasaveswar	Jigajeevangi	25.00	50.00	25.00	0.00	0.00	8
Kalmeswar	Jeerankalagi	50.00	37.50	12.50	0.00	0.00	8
Basaveswara	Devaranimbargi	0.00	75.00	25.00	0.00	0.00	8
Sarvodaya	Inchageri	20.00	40.00	20.00	20.00	0.00	10
All		23.53	50.00	20.59	5.88	0.00	34
Human assets							
Karebasaveswar	Jigajeevangi	25.00	37.50	37.50	0.00	0.00	8
Kalmeswar	Jeerankalagi	12.50	37.50	25.00	12.50	12.50	8
Basaveswara	Devara Nimaragi	37.50	37.50	12.50	12.50	0.00	8
Sarvodaya	Inchageri	40.00	20.00	20.00	20.00	0.00	10
All		29.41	32.35	23.53	11.76	2.94	34
Natural assets							
Karebasaveswar	Jigajeevangi	12.50	50.00	37.50	0.00	0.00	8
Kalmeswar	Jeerankalagi	50.00	12.50	37.50	0.00	0.00	8
Basaveswara	Devara Nimaragi	25.00	12.50	12.50	50.00	0.00	8
Sarvodaya	Inchageri	20.00	30.00	40.00	10.00	0.00	10
All		26.47	26.47	32.35	14.71	0.00	34

3.5.4 KAWAD Project (all watersheds)

The average status of assets endowment for the members of MWSDCs in the KAWAD project area indicated that the proportion of members identifying themselves with the poorest level of assets endowment was the least (1.7 per cent) for social capital and the highest (28 per cent) for natural capital (Table 3.5). A majority of the members identified themselves with either 2nd or 3rd level of assets endowment. About 4 per cent of the members identified themselves with the highest level of financial and natural capital. Similarly, 5 per cent of the members were associated with the top most level of physical and social capital.

Table 3.5. Distribution of MWSDCsMembers by the Levels of Assets (in percentage)

KAWAD Project (all watersheds together)

(in Percentage)

Assets	Levels of assets endowment					Total members
	1	2	3	4	5	
Physical	19.49	37.29	28.81	9.32	5.08	118
Social	1.69	62.71	20.34	10.17	5.08	118
Financial	16.10	49.15	27.97	2.54	4.24	118
Human	11.86	29.66	29.66	15.25	13.56	118
Natural	27.97	26.27	27.12	14.41	4.24	118

3.6 Average Level of Assets Endowment of SHG Members

As discussed in the methodology section, a total of 70 SHGs were selected from three watersheds being implemented under the KAWAD project. The sample was selected in proportion to the total number of SHGs in each district. The total number of 1,086 members were consulted and asked to identify themselves with the iconized person in their respective villages. The names of the iconized persons for each asset level and the level of assets identified by the SHG member have been presented in annexure 3.2. The results of the exercise are presented below.

The average score for respondent members of SHGs ranged between 1.81 for natural assets and 2.14 for financial assets for the study area of KAWAD project. However, the variation in the asset endowment was the highest in the case of natural assets and the least for financial assets (Table 3.6). The mean level of ownership for all the capitals except human capital was the highest in Upparahalla watershed and the lowest in Chinnahagari watershed. However, the average level of human capital endowment was the highest in Chinnahagari watershed. The standard deviation for the level of ownership of different capitals was positively associated with the average level of capital endowment.

In Upparahalla watershed, the average score of SHG members ranged from 1.97 for natural assets to 2.25 for financial assets and the variation (σ) was the higher for natural assets when compared with financial assets. The mean level of all the five assets was the highest in Kalpavruksha micro-watershed (B.T. Guddi). The average physical and financial assets endowment was the least in Hodehalla micro-watershed (Poojarahalli) whereas, households from Basaweshwara micro-watershed (Alur) were found to be poorly endowded in social, human and natural resources when compared to their counterparts from other micro-watersheds in Upparahalla watershed.

Table 3.6. Average Level of Assets Endowment for Members of Selected SHGs

Name of Watershed	Name of MWSDC (village)	Average level of Capital/Asset endowment					No. of SHGs	Total members
		Physical	**Social**	**Financial**	**Human**	**Natural**		
Upparahalla (Bellary)	No,3,MWSDC (H.K.Gollarahatti)	2.45 (0.98)*	2.45 (1.14)	2.33 (1.00)	1.96 (1.03)	2.26 (1.01)	7	105
	Kalpavruksha (B.T. Guddi)	2.51 (0.97)	2.51 (0.79)	2.56 (0.65)	2.28 (0.83)	2.39 (0.99)	6	103
	Hodedahalla (Poojarahalli)	1.94 (0.88)	2.01 (1.07)	2.06 (0.86)	2.03 (0.75)	1.71 (0.90)	5	68
	Basaveswara (Alur)	2.03 (0.80)	1.87 (0.77)	2.08 (0.64)	1.80 (0.89)	1.63 (0.80)	10	158
	Total	2.23 (0.93)	2.18 (0.97)	2.25 (0.80)	1.99 (0.91)	1.97 (0.98)	28	434
Chinnahagari (Chitradurga)	Bailahadavi (K.K.Hatti)	2.07 (0.84)	2.14 (0.40)	1.96 (0.76)	2.08 (0.91)	1.36 (0.68)	14	244
	Kamarayankatte (Tumkurlahalli)	1.78 (0.79)	2.00 (0.63)	1.98 (0.54)	2.17 (0.61)	1.85 (0.89)	3	46
	Nelabande (Devarahatti)	1.48 (0.56)	2.16 (0.50)	1.60 (0.57)	2.27 (1.00)	1.51 (0.56)	4	73
	Total	1.91 (0.82)	2.12 (0.46)	1.89 (0.72)	2.13 (0.90)	1.45 ((0.71)	21	363
Doddahalla (Bijapur)	Karebasaveswar (Jigajeevangi)	2.19 (0.96)	2.01 (0.64)	2.27 (0.54)	1.78 (0.73)	2.13 (0.97)	5	67
	Kalmeswar (Jeerankalagi)	2.12 (0.90)	1.86 (0.58)	2.26 (0.59)	1.96 (0.77)	1.93 (0.85)	7	101
	Basaveswara (Devaranimbargi)	2.03 (0.77)	2.21 (0.56)	2.27 (0.56)	2.21 (0.75)	2.01 (1.08)	5	71
	Sarvodaya (Inchageri)	2.04 (0.88)	2.10 (0.84)	2.30 (0.51)	1.96 (0.70)	2.12 (0.82)	4	50
	Total	2.10 (0.88)	2.02 (0.65)	2.27 (0.56)	1.98 (0.76)	2.03 (0.93)	21	289
Total		2.09 (0.89)	2.12 (0.75)	2.14 (0.74)	2.03 (0.87)	1.81 (0.92)	70	1086

- Figures in the parenthesis in capital columns indicate standard deviation

The variation in the level of asset holding measured in terms of standard deviation was least in Basaweshwara micro-watershed for physical, financial and natural assets and it was the least in Kalpavruksha and Hodehalla micro-watersheds for social and human assets, respectively.

In Chinnahagari watershed, the mean level of physical assets was the highest (2.07) in Bailahadavi micro-watershed whereas Nalabande micro-watershed was on the top in respect of social and human assets and Kamarayankatte scored the highest for financial and natural assets among the sample micro-watersheds. The standard deviation of scores for assets levels was the least for social capital in Bailahadavi micro-watershed. The same was the case with financial assets in Kamarayankatte.

In the case of Doddahalla watershed, the level of assets ownership ranged between 1.98 for human capital and 2.27 for financial assets across the watershed. The variability in assets endowment was most pronounced in the case of natural assets and least for financial assets. The members from Karebasaweshwara micro-watershed scored the highest for physical and natural assets (poorest in human capital) among the sample micro-watersheds. Similarly, members from Basaweshwara micro-watershed ranked first for social and human assets whereas Sarvodaya scored the highest for financial assets. The variability in endowment was more conspicuous in natural and physical assets when compared with other assets i.e., social, financial and human. The distribution of the SHG members under different levels of assets endowment has been discussed below.

3.7 Distribution of SHG Members by the Level of Assets Endowment

3.7.1 Upparahalla watershed

It was observed that more than two thirds of the SHG members identified themselves with the bottom two levels of all the five capitals (Table 3.7). About one fifth of the SHG members identified themselves with the poorest level of physical and social assets whereas nearly one third of the members were associated with the poorest level of human and natural capital. Less than 15 per cent of the members were found at the bottom level of financial assets. On an average, less than 2 per cent of the members identified themselves with the highest level of physical, financial, human and natural capital. Similarly, roughly 3 per cent of the members were found in the highest level of social assets.

The variations in the proportion of members falling in different levels of assets endowment were conspicuous across capitals even within the same micro-watershed. About 15 to 20 per cent of the SHG members from Kalpavruksha MWSDC identified themselves with the lowest levels of physical, human and natural capitals as against less than 4 per cent identifying themselves with the poorest level of social and financial capital. Similarly, more than 50 per cent of the SHG members from Basaveshwara micro-watershed (Alur village) identified themselves with the poorest level of natural assets as against less than 15 per cent of the members aligning with the lowest level of financial assets.

Table 3.7 Distribution of SHG Members across Asset Levels (in percentages)

Upparahalla Watershed (Bellary)

Name of MWSDC	Village	Level of asset endowment					Total members
		1	2	3	4	5	
Physical assets							
No,3,MWSDC	H.K.Gollarahatti	17.14	36.19	34.29	9.52	2.86	105.00
Kalpavruksha	B.T. Guddi	15.53	33.98	35.92	12.62	1.94	103.00
Hodedahalla	Poojarahalli	33.82	45.59	13.24	7.35	0.00	68.00
Basaveswara	Alur	24.05	55.06	15.82	4.43	0.63	158.00
All		21.89	44.01	24.65	8.06	1.38	434
Social assets							
No,3,MWSDC	H.K.Gollarahatti	21.90	36.19	22.86	13.33	5.71	105
Kalpavruksha	B.T. Guddi	3.88	54.37	29.13	11.65	0.97	103
Hodedahalla	Poojarahalli	33.82	47.06	8.82	4.41	5.88	68
Basaveswara	Alur	32.28	53.16	10.76	3.16	0.63	158
All		23.27	48.39	17.74	7.83	2.76	434
Financial assets							
No,3,MWSDC	H.K.Gollarahatti	20.95	39.05	28.57	8.57	2.86	105
Kalpavruksha	B.T. Guddi	0.97	47.57	47.57	1.94	1.94	103
Hodedahalla	Poojarahalli	23.53	55.88	13.24	5.88	1.47	68
Basaveswara	Alur	15.19	63.92	18.99	1.90	0.00	158
All		14.52	52.76	27.19	4.15	1.38	434
Human assets							
No,3,MWSDC	H.K.Gollarahatti	39.05	37.14	16.19	3.81	3.81	105
Kalpavruksha	B.T. Guddi	14.56	51.46	26.21	6.80	0.97	103
Hodedahalla	Poojarahalli	23.53	52.94	20.59	2.94	0.00	68
Basaveswara	Alur	44.94	36.08	13.92	4.43	0.63	158
All		32.95	42.63	18.43	4.61	1.38	434
Natural assets							
No,3,MWSDC	H.K.Gollarahatti	22.86	43.81	20.95	9.52	2.86	105
Kalpavruksha	B.T. Guddi	20.39	33.98	34.95	7.77	2.91	103
Hodedahalla	Poojarahalli	48.53	39.71	7.35	1.47	2.94	68
Basaveswara	Alur	53.80	33.54	8.86	3.80	0.00	158
All		37.56	37.10	17.74	5.76	1.84	434

About 6 per cent of the SHG members from Hodehalla watershed (Poojarahalli village) identified themselves with the top level of social assets whereas none was associated with the top level of physical and human assets in this group.

3.7.2 **Chinnahagari watershed** (Chitradurga)

Most of the SHG members from Chinnahagari watershed identified themselves with the bottom two levels of capital endowment. However, the proportion of members associated with different levels of assets varied with the type of asset as well as across the micro-watersheds (Table 3.8). On an average, the proportion of members identifying themselves with the lowest level of assets ranged between 2.75 per cent for social capital and 65 per cent for natural capital. The same was true with the proportion of members in the top bracket of assets endowment and it ranged from 0.3 per cent in the case of physical and social assets to 1.4 per cent for human capital.

Table 3.8 Distribution of SHG Members Across Asset Levels (in percentages**)**

Chinnahagari MWSDC (Chitradurga)

Name of MWSDC	Name of village	Levels assets endowment					Total members
		1	2	3	4	5	
Physical assets							
Bailahadavi	K.K.Hatti	25.82	47.54	21.31	4.92	0.41	244
Kamarayankatte	Tumkurlahalli	41.30	41.30	15.22	2.17	0.00	46
Nelabande	Devarahatti	54.79	42.47	2.74	0.00	0.00	73
All		33.61	45.73	16.80	3.58	0.28	363
Social assets							
Bailahadavi	K.K.Hatti	0.82	86.07	11.89	1.23	0.00	244
Kamarayankatte	Tumkurlahalli	17.39	67.39	13.04	2.17	0.00	46
Nelabande	Devarahatti	0.00	87.67	9.59	1.37	1.37	73
All		2.75	84.02	11.57	1.38	0.28	363
Financial assets							
Bailahadavi	K.K.Hatti	26.23	55.74	14.75	2.46	0.82	244
Kamarayankatte	Tumkurlahalli	13.04	78.26	6.52	2.17	0.00	46
Nelabande	Devarahatti	43.84	52.05	4.11	0.00	0.00	73
All		28.10	57.85	11.57	1.93	0.55	363
Human assets							
Bailahadavi	K.K.Hatti	27.46	45.90	18.44	7.38	0.82	244
Kamarayankatte	Tumkurlahalli	8.70	67.39	21.74	2.17	0.00	46
Nelabande	Devarahatti	20.55	46.58	21.92	6.85	4.11	73
All		23.69	48.76	19.56	6.61	1.38	363
Natural assets							
Bailahadavi	K.K.Hatti	73.77	18.85	5.74	1.23	0.41	244
Kamarayankatte	Tumkurlahalli	39.13	43.48	13.04	2.17	2.17	46
Nelabande	Devarahatti	52.05	45.21	2.74	0.00	0.00	73
All		65.01	27.27	6.06	1.10	0.55	363

The distribution of members across level of assets endowment was not uniform. For example, more than 80 per cent of the members identified themselves with the lowest but one level of social capital whereas little more than a quarter of the members identified themselves with the same level of natural capital.

3.7.3 Doddahalla Watershed (Bijapur)

In Doddahalla watershed, 21 SHGs consisting of 289 members were selected for the MOL and other studies. As in the case of other watersheds, more than 70 per cent of the SHG members identified themselves with the lowest two levels of assets endowments (Table 3.9). The proportion of members identifying themselves with the lowest level of

assets ranged from less than 2 per cent for financial assets to more than 32 per cent for natural capital.

Table 3.9 Distribution of Members Across Asset Levels (in percentages**)**

Doddahalla watershed (Bijapur)

Name of MWSDC	Village	Levels of assets endowment					Total members
		1	2	3	4	5	
Physical assets							
Karebasaveswar	Jigajeevangi	25.37	41.79	20.90	11.94		67
Kalmeswar	Jeerankalagi	24.75	46.53	22.77	3.96	1.98	101
Basaveswara	Devaranimbargi	26.76	45.07	26.76	1.41		71
Sarvodaya	Inchageri	28.00	46.00	22.00	2.00	2.00	50
All		25.95	44.98	23.18	4.84	1.04	289
Social assets							
Karebasaveswar	Jigajeevangi	14.93	73.13	7.46	4.48	0.00	67
Kalmeswar	Jeerankalagi	24.75	64.36	10.89	0.00	0.00	101
Basaveswara	Devaranimbargi	5.63	69.01	23.94	1.41	0.00	71
Sarvodaya	Inchageri	22.00	54.00	16.00	8.00	0.00	50
All		17.30	65.74	14.19	2.77	0.00	289
Financial assets							
Karebasaveswar	Jigajeevangi	1.49	73.13	22.39	2.99	0.00	67
Kalmeswar	Jeerankalagi	1.98	75.25	18.81	2.97	0.99	101
Basaveswara	Devaranimbargi	1.41	74.65	19.72	4.23	0.00	71
Sarvodaya	Inchageri	0.00	72.00	26.00	2.00	0.00	50
All		1.38	74.05	21.11	3.11	0.35	289
Human assets							
Karebasaveswar	Jigajeevangi	37.31	50.75	8.96	2.99	0.00	67
Kalmeswar	Jeerankalagi	25.74	58.42	9.90	5.94	0.00	101
Basaveswara	Devaranimbargi	15.49	52.11	28.17	4.23	0.00	71
Sarvodaya	Inchageri	24.00	58.00	16.00	2.00	0.00	50
All		25.61	55.02	15.22	4.15	0.00	289
Natural assets							
Karebasaveswar	Jigajeevangi	26.87	44.78	17.91	8.96	1.49	67
Kalmeswar	Jeerankalagi	32.67	47.52	14.85	3.96	0.99	101
Basaveswara	Devaranimbargi	43.66	23.94	19.72	12.68	0.00	71
Sarvodaya	Inchageri	22.00	48.00	28.00	0.00	2.00	50
All		32.18	41.18	19.03	6.57	1.04	289

None of the members from the sample SHGs identified themselves with the highest level of social and human capitals and one per cent of the members were found in the top-most level of physical and natural capitals. Less than 7 per cent of the SHG members identified themselves with the second level from the top for all the five capitals considered in the study.

3.7.4 KAWAD project Area

The summary statistics for all the members of sample SHGs from three watersheds has been presented in Table 3.10. It can be seen that the proportion of members in the lowest level of assets endowment ranged from 15 per cent in the case of physical assets to 45 per cent for natural assets. On the contrary, the members associated with the top two levels of assets endowment accounted for less than 7 per cent of the total members. The number of members found in the second level from bottom were the highest (65 per cent) for social assets and the least (35 per cent) for natural assets.

Table 3.10: Distribution of SHG Members across Asset Levels (in percentages)

KAWAD Project (all 3 watersheds)

Assets	**Levels of assets endowment**					Total members
	1	**2**	**3**	**4**	**5**	
Physical	26.89	44.84	21.64	5.71	0.92	1,086
Social	14.83	64.92	14.73	4.33	1.20	1,086
Financial	15.56	60.13	20.35	3.13	0.83	1,086
Human	27.90	47.97	17.96	5.16	1.01	1,086
Natural	45.30	34.90	14.18	4.42	1.20	1,086

Annexure 3.1: **Names of the ICONISED Persons and Levels of Assets Endowment by Individual Members of the Selected MWSDCs**

1. MWSDC : Kalpvruksha Village: B.T. Guddi

Level	Names of Iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	H.M.Marulashiddappa	K. Lingappa	Chanabasavaiah	B. Prakash	H.M.Maralusiddaiah
4	M.Sharanappa	Siddaiah	Kmarulashiddappa	G.H.Sharanappa	B.Veerabadrappa
3	H.Ningappa	Siddalingappa	M.harannappa	B.S.Chennagowda	B.Nagaraj
2	G.Basavraj	H.Nagaraj	H.Nagaraj	O.Karibasappa	B.veeresh
1	Amunesh	K.Veerabhadrappa	K.Sharanappa	U.Sharanappa	Gurabasappa

Name of the member	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
A.Veerabadrappa	1	1	1	2	1
B.S.Channagowda	3	3	3	3	2
G.Channabasappa	2	2	2	4	2
K.Veeramma	2	2	2	2	3
K.kotramma	2	2	3	4	3
H.Hotteppa	2	3	3	3	2
H.Naingappa	3	3	3	4	3
J.Nagaraj	2	3	2	3	3
K.Chidanandappa	4	4	3	2	4

2. MWSDC: No.3 MWSDC Village: H. K. Golarahatti

Level	Names of Iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Sannbalappa	Ramanna	Channaveerappa	J,B,Balaraju	J,B,Doddana
4	Ramanna	Balaraju	Siriyappa	Nagaraj	K,S,Siriyappa
3	Basavaraj	Basavaraju	Gopalappa	Rammanna	Venkatesh
2	Balappa	Kariyanna	Shanthamma	MalagiTimmanna	Naganna
1	Nagappa	Naganna	Sannaramanna	Shivanna	Bavaraja

Name of the member	Capital				
	Physical	Social	Financial	Human	Natural
Bhagyamma	2	3	3	5	3
K.S.Nagaraj	3	5	3	3	4
Channaveerappa	5	5	5	5	5
ChikkanaD.C.	2	2	2	3	2
S.G.Indramma	5	4	3	4	4
T.Shantamma	2	2	2	3	2
Snnthamma	3	3	2	3	3
Gowdabalappa	3	4	3	3	4
M.Siriyappa	4	4	4	2	4
Ramanna.R	4	5	3	4	4
G.V.Balaraj	3	4	3	5	4
E.Balaraj	3	4	3	5	4

3. MWSDC: Hodedahalla Village: Poojarahalli

Level	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Malikarjunappa	Govindappa	U.J.Anjanappa	U.Tippana	U.G.Anjanappa
4	Anjanappa.G	N.Tippeswami	Shekarappa	Y.N.Venkatesh	Shekarappa
3	Ujjalli Basanna	Jambunath	Narayanasetti	Ramachandarappa	Narayannasetty
2	Utimmanna	A.K.Rurappa	K.T.Ramachandrappa	U.Manjanna	K.T.Ramachandarappa
1	Sakkamma	Gurumurthi	Rudrann	K.Obanna	Rudranna

Name of the member	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
G,Malikarjun	5	3	5	3	5
K.T.Ramachandrappa	3	2	2	3	2
Ruddranna.T	1	2	1	2	2
Anantamma	3	2	1	2	2
Vishalaxi, N	2	2	1	2	2
Ningamma	2	2	1	2	3
Ruddrappa	3	2	2	3	4
Tippeswami	2	2	2	2	2
K,B,Basavarajappa	2	2	2	3	1
U.G.Anjanappa	4	4	5	5	5

4. MWSDC: Basaveswara Village: Alur

Level	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Revanna	Narayana Reddy	Gopala Reddy	Rajanna	Narayana Reddy
4	Chikanajja	Eswarappa	K.M.Teperudrappa	Karibasava Reddy	Chikkanajja
3	M.KaribasaReddy	K.Jayana	K.Eswarappa	Revanasidappa	Nagaraj
2	B.M.Basamma	ShivaReddy	S.Basavaraj	Shanthappa	Basamma
1	Marajja	Devendrappa	V.Ramanna	C.Shankarappa	Shanthappa

Name of the member	Capital				
	Physical	Social	Financial	Human	Natural
T.k.Gopala Reddy	5	5	5	3	5
Basama	2	2	2	2	2
Guruprasad	3	3	3	5	4
Hema Reddy	3	3	3	4	3
Prakash	2	2	3	3	2
Santhappa	2	2	2	2	1
A.S.Anand	2	2	2	3	1
Anasuyamma	2	2	2	2	2
Rathanama	2	2	2	2	2
Rangana	2	2	2	3	1
Revanashidappa	5	4	3	4	3
K.Nagaraj	3	2	2	3	3
Chikkanajja	4	2	3	5	4
Sarvamangala	2	2	2	2	1
Satish	4	3	3	4	3

5. MWSDC: Sarodaya Village: Inchageri

Levels	Iconized Persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Revanashidappa Budiyal	Mallappa Sakri	Shankarappa Saltalgar	Gurubale Sathalgav	Srimantagowda Biradar
4	Chanabsappa Valli	Mahadev Muragod	Revana-shidddappa Budiyal	Revana-shiddappa Budiyal	Erappa Budiyal
3	Vittal Ningappa Maithri	Vittal Ningappa Maithri	Bhimaray Maithri	Vittal Ningappa Maithri	Vittal Ningappa Maithri
2	Gurubai Maithri	Revanshiddappa Budiyal	Mahadev Muragod	Somalinappa Kolageri	Gurubai Maithri
1	Drupathi Kambar	Shivappa Havi	Mamthaj M.Mulla	Drupathi Kambar	Shekavva Kulageri

Name of the member	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
Chanabasappa	4	4	4	3	3
Mamathaj Mulla	1	2	1	1	1
Mamathaj.B. mulla	2	2	2	1	2
Rthnabai,I.Maithire	3	2	3	1	3
Sunlthabai.L,Latur	3	2	2	2	2
Shekana.C.Kolageri	1	2	1	1	1
Vittal.N.Maithri	3	3	3	3	3
Mahadev.A.Muragod	3	4	2	4	3
Somaninga.B.Kolageri	2	2	2	2	2
Revanashidappa.E.Bubiyal	5	2	4	4	4

6. MWSDC: Karebasaveswar Village: Jigajevene

Level	ICONIZED PERSONS				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	S B Patil	Shekar Gowda Biradar	Ramegowad K Jalageri	Veerabadrappa R.Halasette	Bhimrai B Goddad
4	Mallappa S.Kapse	Sreemanth S Nimboni	Yashavanth R Biradar	Kanthappa R Jalageri	Kanthappa R Jalageri
3	Basappa mallappa Biradar	Veerabadrappa R Halasette	Veerabadrappa R Halasette	Basappa M. Biradar	Basappa M. Biradar
2	Shanthabai Rathod	Basappa mallappa Biradar	Basappa Mallappa Biradar	Tukaram M Chavan	Kasappa J.Hori
1	Suvarna S.Dugani	Somalavalu Chavan	Suvarna S Dugani	Somalavalubai Rathod	Suvarna S Dugani

Name of the member	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
Basappa M. Biradar	3	2	2	3	3
Tukaram N.Chavan	2	2	1	2	2
Basappa S.Kapsi	2	3	3	3	3
Dunara.M.Wali	2	2	2	2	2
Basappa, S.Dugani	1	2	1	2	1
Shanthabi,K.Rathod	2	2	2	1	2
Kasibai Chand.Rathod	3	3	2	1	3
Kasappa.J.Hori	2	3	3	3	2

7. MWSDC: Basaveswara Village: Devaranimbargi

Level	Name of Iconised person				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	L May Busanur	C S Busanur	L M Busanur	R K Gadge	L M Busanur
4	Ayuba Maniyar	Ayubasab Maniyar	Malaiah M Hiremath	Ramanagonda A Dolli	Ramanagonda A Dolli
3	Balappa Jamakandi	Ramanagonda A Dolli	Ramanagonda A Dolli	Kittappa Soregar	Bhimashankar Godage
2	Shanhabai Singe	Kittappa B Soregar	Shankar Navi	Sangitha Kambale	Kittappa Soregar
1	Somakka Hegade	Shivanigappa Gadgi	Krishnappa Nadike	Shamakka Hegade	Shamakka Hegade

Name of the member	Capitals				
	Physical	**Social**	**Financial**	**Human**	**Natural**
Ramanagowda A Dolli	3	4	3	4	4
Shankar Navi	2	3	2	2	4
Balappa Jamakandi	3	2	2	2	4
Kittappa Soregar	3	2	2	3	3
Samakka Hegade	1	2	2	1	1
Shanthabai Singe	2	3	2	1	2
Bhimashankar Gadage	3	3	3	2	4
Sundrabai Kengar	1	2	2	1	1

8. MWSDC: Kalmeswar Village: Jeerankalagi

Level	Iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	A S Kore	Lakashamana Parit	None	Santhosh	None
4	Santhosh Muchundi	Srisail Dundari	D. Katavati	Barakka Kattimani	Santhosh Muchundi
3	Maalppa Badiger	Santhosh Muchundi	Santhosh Muchundi	Dariyappa Honnamoude	Rajashekar Thaily
2	BasannaThaily	Savithi Dondaragi	Rajashekar Thaily	Savithi Dondaragi	Dariyappa Honnamoude
1	Savithri Dondaragi	Kallappa Kattimani	Savithi Dondaragi	Jaibu Nadab	Srimanth Dondaragi

Name of the member	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
Savithri Dondaragi	1	2	1	2	1
Jayashree Thaily	2	2	1	2	1
Thaiboo Nadhob	2	2	1	4	1
Borakka Kattimani	2	2	1	1	1
Basanna Thaily	2	2	2	2	3
Santhosh Muchundi	4	3	3	5	2
Dariyappa Honnamoude	2	2	2	3	3
Rajakumar Thaily	2	3	2	3	3

9. MWSDC: Nelabande Village: Devarahatti

Level	Name of the iconised person				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	No	Membe Boraiah	Doddikamaiah	Mlikarjuna	Yajaman Mallaiah
4	Nagendrappa	Baianna	Toppalu Papaiah	Veerabadrappa	Nagabushan
3	Veerabadrappa	Dasar Obaiah	Dodda Chanaiah	Chinnaiah	Veerabadrappa
2	Chinnaiah	Veerabadrappa	Mallamma	Mallamma	Sanna Mallajja
1	Siddaiah	No	Sanchu Boraiah	Pallamma	Mallamma

Name of the member	Captal				
	Physical	**Social**	**Financial**	**Human**	**Natural**
Jantagutla Boraiah	2	2	2	5	2
Obarasi	3	4	3	3	3
N Veerupaksappa	4	2	5	5	4
Doddachanaiah	2	2	3	3	2
Palamma	1	2	1	1	1
Mallama	1	2	2	2	1
Siddaiah	1	2	1	2	1
P M Malikarjun	2	5	2	5	1
P.Veerabadrappa	3	2	2	4	3
Pboraiah	1	2	2	4	1
B Boran	2	2	2	4	1
Sanchu Boraiah	1	2	1	2	1

10. MWSDC: Bailadadavi Village: Kanakyana Hatti

Level	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	D H Shrinivas	G T Anjanappa	Pandurangappa	Srinivas	Kukkalaboraiah
4	Panduran-gappa	S Thipewswamy	Lakshimidevi	Nirmala	Pandurangappa
3	Sanna-veeranna	Sannaveramma	Krishanppa	Basavaraja	Sannaveeranna
2	Manjula	Kenge Veeranna	Bommanna	Manjula	Ningamma
1	Giriyappa	Shivashankr	Shanthamma	Bojjamma	Venkatesh

Name of the member	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
B P Nirmala	3	3	3	4	2
Basanna	3	3	2	5	3
Gopal	3	2	2	2	1
Srinivas	3	2	3	5	3
G Basavaraj	2	2	2	3	1
Sannveerana	3	3	3	5	3
Malikarjun	3	2	3	5	3
Manjula	2	2	2	2	1
Shankuntalamma	2	2	2	2	3
Timmanna	3	2	2	2	3
Shivaling	3	2	2	2	2

11. MWSDC: Kamarainakatte Village: Tumkurlahalli

Level	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	M. Mallaiah	T.Obanna	M. Mallaiah	T.Obanna	Shivanna
4	Basanna	T.G.Basanna	Sanna Papaiah	Shivanadappa	T.G.Basanna
3	P.Palaiah	H.A. Nagaraj	T.G.Manjanna	Thipamma	Suraiah
2	T. Obanna	Surde Papaiah	Shivanna	Surde Papaiah	T. Thippesawamy
1	Boramma	Thippeswamy	Thippeswamy	Suramma	A.K Thippeswamy

Name of the member	Capital				
	Physical	**Social**	**Financial**	**Human**	**Natural**
T.A. Obanna	2	5	3	5	2
Surde Papaiah	4	2	3	2	3
P.Palaiah	3	3	2	4	3
Tippeswami	1	2	1	3	1
Sakkamma	1	2	1	3	1
T.G. Varalakshmi	1	2	2	3	1
Boramma	1	2	1	1	1
Gadri Palaiah	2	2	2	3	2
Hanumanthappa	1	1	2	1	1
Shivanna	4	3	2	4	5
Palaiah	1	2	2	1	1
Thippeswamy	1	2	2	3	2
Boramma	1	2	2	3	1
Mallappa	1	2	2	3	1
Sanna Mallaiah	1	2	2	2	2

Annexure 3.2 Names of ICONISED persons and assets levels for individual SHG member

SHG: Swasti Gokula Village: H. K. Gollarahatti

Level	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Goppalappa	G B Balaraj	Goppalappa	G B Balaraj	Goppalppa
4	Ramannna	G Balaraj	Ramannna	Nagendrappa	G Balaraj
3	Sannasiriyappa	Sanna Siriyappa	Nagendrappa	G Balaraj	Gegganna
2	Nagesh	Venkatesh	Krishanappa	Govindappa	Nagesh
1	T. Naganna	Timmana	Timmana	Krishappa	

SHG: Swasti Gokula Village: H.K. Gollarahatti

Names of SHG members	Capitals				
	Physical	**Social**	**Financial**	**Human**	**Natural**
S D vekatesh	3	2	2	2	2
Thippeswmi	3	2	2	2	2
R Ramanna	4	5	4	4	2
G B Balaraj	3	5	3	5	4
Timanana R. K	3	1	1	1	1
Sanna Siriyappa	3	3	4	3	4
Nagesh	2	2	2	2	2
Gegganna	3	3	3	2	3
Govindappa	3	2	3	3	3
Krishnappa	2	3	2	2	2
Mukunda	3	3	3	3	3
Shivanna	1	2	2	2	2
Balaraj G	3	4	3	3	4
Gopalappa	5	5	5	1	5
Nagendrappa	3	3	3	4	3

SHG: Ranganatha Swami (men) Village: H.K. Gollarahatti

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Balakrishna	Siriyappa	Channaveerappa	Balaraj	Doddanna
4	Siriyappa	Balaraj	K.S.Siriyappa	Nagendrappa	Siriyappa
3	Sanna Nagappa	Govindappa	Balaraj	Basavaraj	Nagaraj
2	A.Siriyappa	Ramanna	Govindappa	Veerabadrappa	D Naganna
1	Ramanna	Balanna	T.Sannabalappa	Naganna	Ninganna

SHG: RanganathaSwami (men) **Village: H.K. Gollarahatti**

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
K.S.Siriyappa	4	5	5	5	5
K.S.Balaraj	3	4	3	5	3
J B Balakrishna	5	4	3	5	4
G. Nagaraj	3	4	3	3	3
Asiriyappa	1	1	2	2	2
A.S.N. Balakrisha	2	2	2	3	2
S.N.Govindappa	2	2	2	3	2
A.S.N. Rangappa	2	2	1	2	2
SannaNagappa	4	4	4	2	3
D.Naganna	2	3	2	1	2
D.R.Amana	2	2	1	2	2
S.D.Eranna	2	2	3	2	2
Ninganna	2	2	1	3	1
B. Balanna	2	2	2	1	2
Veerabadrappa	3	3	3	2	2

SHG: Veerabhadreshwara (Men) **Village: H.K. Gollarahatti**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Chana Veerappa	China veerappa	Balaraj	Balaraj	Gopalappa
4	Gowada Balappa	Nagendrappa	Nagendrappa	Nagendrappa	Chanaveerappa
3	Kenchanna	Gowada Balappa	Gowada Balappa	Chanaveerappa	Gowada Balappa
2	Nagamma	Mallappa	Goppalappa	Mallappa	Mallappa
1	Chikkanna	Chikkanna	Eranna	Chikkanna	Chikkanna

SHG: Veerabhadreshwar (Men) **Village: H K Gollarahatti**

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
Nagappa	4	2	2	1	3
Basappa	3	2	2	1	3
SannaBalappa	3	1	1	1	2
Godbalappa	4	3	3	2	4
G.Naganna	3	1	2	2	1
K. Eranna	2	2	1	1	3
Kenchappa	2	2	1	1	2
B. Nagappa	2	2	2	1	1
Malige Siriyappa	4	3	3	1	4
T. Atteppa	3	3	2	2	2
Erabalappa	2	1	1	1	1
Nagendrappa	3	4	3	3	3
Gopalappa	4	2	4	2	4
Chikkanna	1	1	1	2	1
Channa Veerappa	4	4	4	4	3

SHG: Shri Krisha (Men) **Village: H. K. Gollarahatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	K. S. Siriyappa	Basavaraj	Indrappa	G Balaraj	Balanna
4	Doddanna	R Ramana	K.S.Siriyappa	Nagendrappa	M Siriyappa
3	Malige Thimmanna	Angadi Balappa	Nagaraj	Basavaraj	Sanna Irappa
2	Kariyappa	Nagappa	Chikkana	R Veeranna	Naganna
1	Ramanna	R Veeranna	Sann Balappa	Sanna Balappa	Nagappa

SHG: Shri Krisha (Men) **Village: H K Golarahatti**

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
K R Eranna	2	1	1	2	1
S ramanna	1	1	1	1	1
Sanna Balappa	1	1	1	1	1
Ajjapur Nagappa	2	2	2	2	2
Gejjanna	2	2	2	2	1
Hallina Eranna	1	1	1	1	1
Ajjehalli Nagappa	2	2	3	3	2
Chikanna	1	2	2	2	2
Sannairappa	3	4	4	4	4
Mallamar Naganna	2	3	3	3	2
Thimanna	3	2	2	3	3
Doddaiah	2	2	2	2	2
Angadi Balappa	2	3	3	3	2
J.B.Inrappa	5	5	5	3	5
Doddapp	2	2	2	2	2
Basavaraj	3	4	4	3	3

SHG: Durgeswari (woman) **Village: H K Gollarahtti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Siriyappa	Basavaraj	Balaraj	Balaraj	Ballanna
4	Channaveerappa	R Ramanna	K.S.Siriyappa	Nagendrappa	Gpalappa
3	MalagiThimanna	Gowada Balappa	Gowda Balappa	Basavaraj	M.Siriyappa
2	Naganna	Mallapp	Sanna Ballappa	R. Veeranna	Gowda Balappa
1	Chikkanna	Nagappa	Chikkanna	Sanna Balappa	Nagappa

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
Shathamma	1	1	2	1	2
Rangamma	2	4	3	2	2
Govindamma	3	5	3	2	3
Sushilamma	2	3	2	1	2
Jakanamma	2	1	2	1	2
Sannakka	1	4	2	2	1
Rathnamma	2	1	2	1	1
Yellakka	2	4	2	2	2
Mallamma	1	1	2	2	1
Kottamma	1	2	2	2	2
Marakka	2	3	3	2	3
Ballakka	3	3	3	2	4
Kottamma	2	4	2	1	2
Shathamma	1	2	2	1	1
Rajamma	1	1	2	1	1

SHG: Kanaka Dhurga (Women) **Village: H.K.Gollarahatti**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	Shanthamma	Chaaveerappa	Akkamma	J.B.Balaraju	J.B.Shanthamma
4	Manjamma	Balaraju	Shathamma	Indramma	G.Eramma
3	Bagyamma	Bhagyamma	Balakka	Doddakka	Dymaggi
2	Chikkamma	Indramma	Erakka	Eramma	Nagamma
1	Nagappa	Siriyakka	Chikkamma	Siriyakka	Balakka

Names of SHG members	Physical	Social	Financial	Human	Natural
Bhagyamma	3	3	4	3	4
Doddakka	3	3	4	3	3
Eramma	3	2	3	2	2
Basamma	3	2	3	2	2
Erakka	1	2	2	1	2
Siriyakka	2	2	2	1	3
Manjamma	4	3	3	1	2
Yashodha	3	3	3	2	2
Bosakka	3	3	3	2	3
Siriyakka	2	1	1	1	1
Chindramma	3	1	2	1	2
Eramma	2	1	1	1	1
Sanna Eramma	3	2	3	2	3
Siriyaamma	2	1	1	1	2
Nagamma	1	2	3	2	2

SHG: Swasti Gangatri (Women) **Village: H.K.Gollarahatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Gopalappa	G.B.Balaraju	Gopalappa	G.B.Balaraju	Gopalappa
4	Ramanna	G.Balaraju	Ramanna	Nagendrappa	G.Balaraju
3	Sannasiriyappa	Sannasiriyappa	Nagendrappa	G.Balaraju	Gejjinna
2	Nagesh	Venkatesh	Krishnappa	Govindappa	Nagesh
1	T.Naganna	Thimmanna	Thimmanna	Krishnappa	Krishnappa

Names of SHG members	Physical	Social	Financial	Human	Natural
Ramakka	2	2	2	1	1
Chikkamma	1	1	1	1	1
Sakamma	2	3	2	1	2
Chikkamma	3	2	2	1	2
Nagamma	2	2	1	1	2
Balakka	1	1	1	1	1
Chandramma	3	3	2	2	2
Pushpa	3	3	1	1	2
Erakka	2	2	1	1	1
Siriyamma	4	4	3	1	3
Puttamma	3	1	2	1	2
Shanthamma	3	3	3	2	3
Rathnamma	2	2	2	1	1
Gangamma	1	1	1	1	1

SHG: Veerabhadreswara **Village: B. T. Guddi**

Level	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	H. M. Marulashidappa	K. Lingappa	Chanabasaiah	B.Prakasha	H. M. Marulashidappa
4	M. Shranappa	Siddaiah	K. Marulashidappa	G H Sharanappa	B.Veeerabadrappa
3	H Ningappa	Shiddalingappa	M. Sharanappa	B.S.Channegowd	B Nagaraj
2	G.Basavaraj	H. Nagaraj	H. Nagaraj	O Karibasappa	B Veeresh
1	A. Munesh	K. Veerabadrappa	K.Sharanappa	U Sharanappa	Gurubasappa

Names of SHG members	Capitals				
	Physical	**Social**	**Financial**	**Human**	**Natural**
O. Sharanajja	3	3	3	2	3
B. Basavaraju	4	4	3	2	3
H. Vijayakumar	1	2	2	3	2
B. Sihddalingappa	4	3	3	2	3
B. Veerabadrappa	3	3	3	3	3
A. Veerabadrappa	1	2	2	1	1
B. Nagaraj	3	3	3	2	3
B.K. Ningappa	4	2	3	2	3
H.Ningappa	2	3	2	3	3
B. Mugappa	2	2	2	3	2
B. D. Veerabhadrappa	2	3	3	2	2
Sanna Veerappa	3	3	3	2	2
O. Basanna	2	2	3	2	3
B. P. Mugappa	3	2	3	3	3
B.S.Veerabhadrappa	3	2	3	3	3
B.KariBasappa	3	2	3	3	3
O. Kari Basappa	3	3	3	2	2
P.Veerana	3	3	3	3	3
K. Chidanandappa	4	4	3	3	4
H. G. Ningappa	3	3	3	4	3

SHG: Saraswati (woman) **Village: B. T. Guddi**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	H. Premakka	K Lingappa	Chanabasavaiah	B.Prakasha	H.M. Maralushiddiah
4	M. Basamma	Shiddiah	K Nagaraj	G. H.Sharanappa	B.Kariyamma
3	H. Nagaveni	Shiddalingappa	Basanna	B. S. Chananagowda	B.Nagaraj
2	G Rathnamma	H Nagaraj	H. Nagaraj	O.Karibasappa	B.Veeresh
1	A Kamalamma	Veerabadrappa	K Sharanappa	U.Sharanappa	Gurubasappa

SHG: Saraswati (woman) **Village: B. T. Guddi**

Names of SHG members	Capitals				
	Physical	**Social**	**Financial**	**Human**	**Natural**
B. Shakunthala	2	2	2	2	2
Kamalamma	1	2	2	2	2
B. Anasuyamma	2	2	2	2	1
K Veeramma	2	3	2	2	3
K. Sujatha	3	2	2	2	2
K. Gangamma	4	2	3	1	4
H..Shujatha	2	2	2	2	2
G. H. Nagaveni	4	2	3	2	3
B.S. Pushapalatha	3	3	3	2	3
B.S. Bagyamma	3	3	3	3	3
G.H. Sharadamma	3	3	2	2	2
G.S. Kallamma	2	3	3	3	2
B.Veeramma]	3	2	3	2	4
G.V. Mugamma	2	2	2	2	2
H.Nagaveni	3	2	3	2	2
G.Rathanamma	2	3	2	2	3

SHG: Vinayaka (Women) **Village: B. T. Guddi**

Level	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	H.M. Premamma	Malikarjuna	H. M. Maralushidaiah	Chanabasavaiah	Parameswarappa
4	Kotremma	M. Veerabhadrappa	K.Maralushiddappa	K.Maralushiddaiah	K. Basanna
3	R.Santhamma	K.Ningappa	H.K.Ningappa	Jagadish	G.Basavaraju
2	Mpravathamma	G.Doddabasanna	K.Basavaraju	K. Sharanappa	G.Basanna
1	Ajjamma	K.Sannaveerana	G.Veeranna	Basavaraju	G.Sharanappa

SHG: Vinayaka (Women) **Village: B. T. Guddi**

Names of SHG members	*Physical*	**Social**	**Financial**	**Human**	**Natural**
Savitramma	1	4	3	2	1
Parvathamma	5	5	5	2	4
Bagyamma	2	3	3	1	3
Nagamma, K	4	3	4	1	2
Parvathamma, V	3	2	2	1	3
Shanthamma	1	1	2	1	2
Karibasmma U	1	3	2	1	1
Gangamma	2	4	3	1	3
Parvathamma, K	2	1	2	1	2
Nagammm	1	2	2	1	2
Shanthamma, R	3	2	3	1	3
Gowaramma H. K	1	1	2	1	1
Sharanamma	3	3	3	2	2
Basamma, K	1	2	2	2	1
Ajjamma	1	1	2	1	1
Kotramma	4	4	3	4	3

SHG: Shiddeshwara (Women) **Village: B. T. Guddi**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	A.M.Marulashidaiah	K.Gushiddappa	Chanabasamma	B.Prakasha	M.Siddaiah
4	G.M.Veeresh	K.Ajjappa	Maralushiddaiah	G.H.Sharanappa	B.Veerabadrappa
3	G.Sharanappa	G.Nagendrappa	M.Sharanappa	B.S. Chinagowdara	B Nagaraja
2	G.Shiddalongaiah	K.Shiddappa	M.Nagaraj	Karibasppa	B.Veeresh
1	K.T.Basavaraj	K.Sharanappa	K.Sharanappa	U.Sharanappa	Gurushiddappa

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
J. M. Veeramma	4	3	3	3	3
K. Lokamma	3	2	3	2	3
Dhurgamma	1	2	2	1	1
Chinamma	3	2	2	2	2
H. Gangamma	2	2	2	1	1
G.Gouramma	2	2	2	2	1
M.Basamma	3	2	3	2	2
K Gouramma	2	2	2	2	2
G.Kotremma	2	2	2	2	2
K.Rathanamma	2	2	2	2	2
K.Nagamma	3	3	2	2	3
K.Sharanamma	1	3	2	4	1
M.Gangamma	2	2	2	2	3
T.Basamma	1	2	2	2	1
G. Chinamma	2	2	2	2	2
B. Basamma	1	2	2	3	1

SHG: Basaveswara (men) **Village: B T Guddi**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Maralasiddappa	M.Saranappa	H.M.Mallikarjuna	T.M.Saranaiah	H.Maralasiddappa
4	H.Nagappa	B.Basavaraj	H.K.Yariswamy	H.Ningappa	K.Basappa
3	B.Viresh	M.Veerabhadrappa	K.Maralasiddappa	K.Jagadish	B.Kariyamma
2	Lakshmanachari	K,Revanna	S.Veeresh	Manjunath	K.Nagaraju
1	G.Veeramma	K.Lingappa	A.Kariyanna	B.Karibasappa	Ujjinappa

SHG: Basaveswara (men) Village: B T Guddi

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
S.M.Ujjionappa	2	3	2	3	1
Laksamanahary	2	2	2	3	1
Murigappa	4	2	2	2	2
Thippeswamy	2	3	3	3	2
Sharanaiah	3	4	3	5	3
K Jagadish	3	3	3	3	3
M.Veerasha	2	2	2	2	2
B.Veeresh	3	2	3	2	2
H.Ishappa	2	2	3	2	3
Nagaraj	3	2	3	2	2
S.Veeresha	2	2	2	3	2
O.Sharanappa	2	2	2	2	2
H.M.Malikarjun	5	4	5	3	5
Manjunatha	2	2	2	2	1
Oveerana	3	2	3	2	2
B.Kribasappa	3	2	3	2	2
B.Nagaraj	3	2	2	2	2
A.Basavaraj	2	2	1	2	1
H.GuruSwami	4	2	3	3	4

SHG: Sri.Manjunathaswany (Men) Village: B. T. Guddi

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	H.M.Marulashiddaiah	K.Lingappa	Channabasanna	B.Prakash	M.Marulasiddaiah
4	M.Sharanappa	Siddaiah	K.Marulasiddappa	G.H.Sharanappa	B.Veerabadrappa
3	H.Ningappa	Siddalingappa	Sharanappa	B.S.Channagowda	B.Nagaraju
2	Basavaraju	H.Nagaraju	H.Nagaraju	V.Korabasappa	B.Veeresh
1	Munesh.A	K.Veerabadrappa	K.Saranappa	U.Sharanappa	Gurubasu

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
K.U.Basavajja	3	4	3	4	3
K.Ajjappa	2	3	2	3	2
Asannveerappa	3	3	3	2	4
M.Veerabarappa	1	3	2	3	1
K.Basavaraju	3	2	3	4	3
H.K.Yareswamy	4	4	4	3	5
T.Revanna	3	4	3	3	4
K.T.Basavaraju	1	2	2	3	1
G.Nagaraju	3	4	3	4	3
O.Kotaresh	2	2	2	2	3
S.Satish	2	2	2	3	3
M.Veeranna	3	2	3	2	4
M.Veeresh	2	2	2	2	1
G.H.Veeresh	3	4	3	4	3
A.Basavaraju	4	3	3	3	5
B.Basavaraju	2	2	2	2	1

SHG: Dhurgambika (Women) **Village: Pujarahalli**

Level					
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Govindappa	Thippeswamy	Gpvindappa	Nil	Govindappa
4	Malikarjunappa	Gobanna	Shekarappa	Manjanna	Gangadarappa
3	Thippamma	Rajana	Rajappa	Y N Venkatesh	Basavarajappa
2	Obakka	Rudrappa	Obbanna	Maranna	Rajanna
1	Manjakka	Ningappa	Thippamma	Gangappa	Obakka

Names of the SHG members	Capitals				
	Physical	**Social**	**Financial**	**Human**	**Natural**
Thippamma	3	2	2	3	2
Durgamma	2	1	1	2	2
Obakka	2	1	1	2	2
Gangamma	3	1	2	2	2
Obakka	2	1	2	3	2
Sakamma	2	1	2	3	2
Thippamma	3	1	3	2	2
Rathanama	2	1	2	2	2
Lakkamma	1	1	1	2	2
Vijayalaksmi	1	1	1	2	2
Thippamma	2	1	2	2	1
Rudramma	1	1	1	2	1

SHG: Venayaka (Woman) **Village: Poojarhalli**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Shankarappa	Govindappa	Govindappa	NIL	G. Ninganna
4	Hanumantharayappa	Venkateshappa	Thippeswami	Manjanna	Basvarajappa
3	Mahalakshmi	Jamunath	Venkatesh	Venkatesh	Balaiah
2	Ningappa	P.Obanna	Ramachandrappa	Obbanna	Gurumurthi
1	Durgamma	K.Obanna	Gurumurthi	Gurumurthi	Mallaiah

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
Leelavatti	2	2	2	3	1
Mahalakshmi	3	2	3	3	2
Hampakka	2	2	2	2	1
Jayamma	1	2	2	2	1
Lakshmidevi	2	2	2	1	2
Chinamma	3	2	3	2	2
Basakka	2	2	2	2	2
Rathanama	2	2	2	2	1
Ningamma	1	2	2	2	2
Shanthamma	2	2	2	1	1
Siddamma	1	2	2	1	1
Durgamma	1	2	2	2	1
Gouramma	1	2	2	2	1
Obakka	2	2	2	1	1
Renukamma	1	2	2	1	1

SHG: Sushama (Woman) **Village: Pujarahalli**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Basavaraj	Basavarajappa	Govindappa	NIL	U Basavaraja
4	Govindappa	Gowdar Obanna	Rajashekarappa	N.Tippeswami	U Govindappa
3	G Basavaraj	Krishnappa	Obanna	Venkatesh Setti	Thippanna
2	Chanappa	Jambunath	Basavnni	K.M.Mangala	Anathappa
1	Sakamma	Thipeswami	G.Basavaraj	Sakamma	Chanappa

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
Gowramma	3	3	3	2	1
Basamma	2	2	2	2	1
Bagyamma	2	5	3	3	3
Mangala	2	3	2	2	1
Ananthamma	2	2	2	3	2
U.Basamma	2	2	2	2	1
Papakka	2	3	1	2	1
Chandarmma	2	2	1	1	1
NeerinJanamma	2	1	2	2	2
Sakamma	1	1	2	1	1
Renukamma	1	2	1	1	2
Hanumakka	1	2	2	2	1
Lakshmidevi	2	3	3	3	1

SHG: Basaveswara (Men) **Village: Pujarahalli**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Shankarappa	G.Obanna	Govindappa	Hanamantharaj	V.Govindappa
4	Govindappa	Y.N.Venkatesh	Basappa	N.Tippeswami	G.M.Mallikarjun
3	Gagadarappa	G.Kumaraswamy	V.Manjanna	Anjani	A. Mallikarjun
2	Kumaraswamy	G.Mallikarjun	A.Mallikarjun	G.Basavaraj	G.Kumaraswamy
1	Mallesh	K. Obaiah	G Mallan	G.Kenchanna	G.Basavaraj

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
G.Basavaraj	1	4	2	2	1
Gagadharappa	3	4	2	3	3
Kumaraswami	2	2	1	2	2
Malaiah	1	2	1	1	1
Parasanna	2	3	2	3	3
N.Basanna	2	3	2	2	2
P.Basanna	2	2	3	2	3
C Lakshman	3	2	3	2	2
A.Malikarjunappa	3	1	3	2	3
Rudrappa. K	1	2	1	1	2
G.Malikarjunappa	4	5	4	2	5
G.Channa Basappa	4	5	4	3	5
P.Nagesh	1	1	2	1	2
Y.N.Venkatesh	4	5	2	3	1

SHG: Marikamba (Women) Village: Pujarahalli

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Shankarappa	Govindappa	Govindappa	Nil	G.Ninganna
4	Hanumantharaya	Venkatesh	Thippeswamy	Manjanna	Basavarajappa
3	Mahalakshmi	Jumbunath	Venkatesh	Venkatesh	Balaiah
2	Ningappa	P.Obanna	Ramachandrappa	Obanna	Gurumurthy
1	Durgamma	K.Obanna	Gurumurthy	Gurumurthy	Mallaiah

Names of SHG members	Physical	Social	Financial	Human	Natural
Bommakka	4	1	4	3	2
N.Vishalakshmi	2	2	2	4	1
Madumathi	2	2	4	3	1
Borakka	1	1	1	1	1
Bhimanna	1	1	1	1	1
K.Bommakka	1	1	1	1	1
S.Boramma	2	1	2	2	1
Papakka	2	2	2	2	1
Gouramma	1	1	1	1	1
R.Obakka	1	2	2	2	2
Mallamma	2	1	2	2	2
Basamma	1	2	1	1	1
Jyothi	1	1	2	2	2
Muthulakshmi	4	4	5	4	4

SHG: Kalikamba (women) Village: Alur

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Revanna	Narayana Reddy	GopalaReddy	Rajanna	Narayana Reddy
4	Chikkanajja	Eswarappa	K M Thipperudrappa	Karibasava Reddy	Chikanajja
3	M.Karibasa Reddy	K Jayan	K Eswarappa	Revana Shiddappa	Nagaraj
2	B.M.Basamma	Shiva Reddy	S.Basavaraju	Shanthappa	Basamma
1	Marajji	Devendrappa	V.Ramanna	C.Shankarappa	Shanthappa

Names of SHG members	Capitals				
	Physical	**Social**	**Financial**	**Human**	**Natural**
Lakshimidevi	3	2	2	1	2
Rangamma	3	2	2	1	2
Sharanamma	2	2	2	1	1
Hanamakka	2	2	2	1	1
Kalamma	2	2	2	1	1
Rathimani	1	2	2	1	1
Halamma	3	2	2	1	1
Nagendramma	1	2	2	1	1
Shivamma	2	2	2	2	1
Parimala	2	2	2	1	1
Triveni	2	2	2	2	1

SHG: Maruthi (women) **Village: Alur**

Levels	Names of the iconised persons				
	Physical	Social	Financial	Human	Natural
5	Narayan Reddy	Thipperudrappa	K.M.Thipperudrappa	Shuveeramma	NarayanReddy
4	Malikarjunappa	Kiswarappa	Tchikkanajja	Sharanamma	Tanapurnamma
3	Ganga Reddy	Chikkanajja	Anjanappa	Nimbiyakka	Shakunhalamma
2	Chandrashekar	Sharanappa	Nabbeyakka	Puttiramma	Nimbiyakka
1	Naganna	K.Raveendra	Hanumakka	M.V.Goramma	M V Gouramma

Names of the SHG members	Physical	Social	Financial	Human	Natural
Jayamma	2	3	2	3	2
Anjanamma	2	3	1	3	1
Kamakshi	2	2	2	2	2
Kemppalamma	1	1	1	1	1
Basakka	2	1	2	1	2
Durgamma	1	2	2	2	2
Kamalamma	1	1	1	2	2
Mugamma	1	1	1	1	1
Bhagyamma	3	2	2	1	2
Hampyalamma	1	1	1	1	1
Basamma. K	2	2	2	2	2
Gangamma	2	2	1	2	1
Papakka	2	2	2	2	2
Lakshimi Devi	1	1	1	2	1
Thippamma	1	1	1	1	1

SHG: Digamma (women) **Village: Alur**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Narayan Reddy	NarayanReddy	Gopalappa	Jaganna	NarayanReddy
4	Eswarappa	Gopalappa	Sharanappa	Thippeswami	D.Anjanappa
3	Nagendrappa	Rajanna	Basavaraj	Ananda	Hanumantha Reddy
2	Ramappa	Gangappa	Thippanna	Nagamma	Kenchamma
1	Chandrappa	Adiveppa	Durgamma	Gangamma	Gangamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Kamalamma	1	1	2	1	2
Musturamma	1	1	1	1	1
Gowaramma	2	2	2	2	1
Uligamma	2	1	2	1	1
Marakka	2	1	2	1	1
Chandramma	2	2	2	2	1
Musturamma. A	2	2	2	1	1
Chinakka	1	1	1	1	1
Lakshmamma	1	1	1	1	1
Manjamma	1	1	2	2	1
Yellakka	1	1	2	1	1
Sakamma	2	1	1	1	1
Marakka	2	2	3	2	2
Hanumakka	2	2	3	2	1

SHG: Shivashakthi (woman) **Village: Alur**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Shakunthalamma	K.M.Thipperudrappa	K. M. Thipperudrappa	Suvarnamma	Narayana Reddy
4	K.Triveni	Keshwarappa	Chikkanajj	Sharanamma	T.Anapurnamma
3	Nimbakka	Chikkananja	Anjanappa	Nimbayakka	Shakunthalamma
2	B.Nagamani	Sharanappa	B.G.Nambayakka	Puttiramma	Nimbiyakka
1	Puttakka	K.Ravindra	Hanamakka	M.V.Gouramma	M.V.Gouramma

Names of SHG members	Physical	Social	Financial	Human	Natural
K.Bagyamma	3	3	3	3	4
K. Puttiramma	3	2	2	3	3
G.Rajeswari	3	3	2	3	2
G Anasuya	2	2	3	2	2
K.Savithramma	4	4	2	3	4
B.G.Nimbayakka	3	2	2	3	3
S.Suvarnamma	4	3	3	5	3
G.Nirmalamma	3	2	2	2	3
K.Thriveni	4	2	3	2	4
K.Skunthala	5	5	2	2	4
K.Sujatha	3	3	2	4	3
K. Sarojamma	3	2	2	3	3
T.Annapurnna	4	2	3	3	3
S.D.Sharanamma	2	2	2	2	2
B.Manjula	1	2	2	2	2
B.Nagamani	3	2	2	4	3
M.E.Gouramma	1	3	2	2	1
H.Msharanamma	2	2	2	4	2
R.Aruna	4	3	2	3	4

SHG: Sharana Basaveswara (Women) **village: Alur**

Level	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Narayana Reddy	Narayana Reddy	Gopalappa	Jaganna	Narayan Reddy
4	K.Thrveni	Goplappa	Sharanappa	Thippeswami	D.Anjanappa
3	Nagendrappa	Rajanna	Basavaraju	Ananada	HanamanthaReddy
2	Ramappa	Gangappa	Thippanna	Nagamma	Kenchamma
1	Ganga Reddy	Adiveppa	Duragamma	Gangamma	Gangamma

SHG: Sharana Basaveswara (Women) **village: Alur**

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
Kalamma	1	2	2	2	1
Anasuya	3	2	2	2	1
Basamma	2	2	3	2	2
Anjanamma	2	3	2	4	2
Karabasamma	2	2	2	2	1
Rathanamma	3	2	3	2	2
Sulochanamma	2	3	3	3	2
Veerabasamma	2	2	3	3	2
Kamalamma	2	3	3	4	3
Omkaramma	2	3	3	1	2
Mugamma	2	2	2	1	1
Bhimakka	2	3	3	2	2
Pramilamma	2	2	2	2	2
Sharanamma	4	4	4	3	4
Kamalamma	2	2	2	2	1
Shiddamma	3	4	3	2	2
Ambujamma	2	3	3	2	2

SHG: Yallama Devi (Women) **Village: Alur**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Bhimanna	Narayan Reddy	Gopalappa	Jagganna	Narayan Reddy
4	Narayana Reddy	Gopalappa	Sharanappa	Thipaswamy	D.Anjanappa
3	Nagendrappa	Rajanna	Basavaraj	Ananda	Hanamantha Reddy
2	Rammappa	Gangappa	Thippanna	Nagamma	Kenchamma
1	Ganga Reddy	Adiveppa	Duragamma	Gangamma	Gangamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Basamma	1	1	2	1	1
Kenchamma	1	2	2	2	2
Kalamma	2	2	3	1	1
Hanumakka	1	1	2	3	2
M. Santhamma	1	2	3	1	1
Gangamma	2	1	2	1	1
Maramma	3	2	2	3	1
Shanthamma	2	2	2	2	1
Rathanamma	1	2	3	2	1
Yellakka	2	2	2	3	2
Vasantha	2	2	3	3	2
H.Duragamma	1	1	2	2	2
A.Duragamma	2	3	3	2	1
K.Yallkka	1	1	2	2	1
Bhagyamma	2	2	2	2	1
Marakka	1	2	2	1	1
B Basamma	2	2	2	2	1
Nagamma	1	1	2	2	2

SHG: Vinayaka (Women) **Village:Alur**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Bimanna	Gopalappa	Narayana Reddy	Jaganna	Narayana Reddy
4	Narayna Reddy	Narayana Reddy	Gopalappa	Thipeswamy	D.Anjanappa
3	Nagendrappa	Gopalappa, G.	Rajanna	Ananda	Hanamantha Reddy
2	Ramappa	Rajanna	Gangappa	Nagamma	Kenchamma
1	Ganga Reddy	Adiveppa	Adiveppa	Gangamma	Gangamma

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
Gouramma	2	1	3	1	1
Sarvamangala	1	1	2	2	1
Parvathamma	1	1	2	3	1
Eswaramma	2	1	2	2	1
Sharanamma	3	1	3	3	2
Rathanamma	3	2	2	2	2
Chidanandamma	2	2	2	2	1
Anapuranamma	3	2	3	4	3
Minakahamma	3	2	2	3	2
Ramalakshamma	4	4	3	4	3
Lilavathi	1	2	2	2	2
Basamma	2	4	4	2	2
Nagarthnamma	2	2	2	2	2

SHG: Sangeetha (Women) **Village: Alur**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	Narayana Reddy	Narayana Reddy	Gopalappa	Jayanna	Narayana Reddy
4	Thippeswamy	Gopalappa	Sharanappa	Thippeswamy	D.Anjanappa
3	Ganga Reddy	Rajanna	Basavaraju	Ananda	HanumanthaReddy
2	K.Nellappa	Gangappa	Thippanna	Nagamma	Kenchanna
1	Marajji	Adiveppa	Marajj(B.Durgamma)	Gangamma	Gangamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Nagamma	2	2	2	1	1
Jayamma	2	3	2	1	1
Gangamma	2	2	2	1	1
Durgamma	2	2	3	1	1
Kamalamma	2	2	2	1	1
Obakka	2	2	2	1	1
Rathanamma	2	2	2	1	2
Sunitha	2	2	2	2	1
M.Durgamma	3	2	4	1	3
Lalitha	3	2	2	1	2
Veena	2	2	2	2	1
Sharadamma	2	2	2	1	1
Manjamma	2	3	3	1	2
Marakka	2	2	3	1	1
Durgamma	2	2	2	1	1

SHG: Kaveri (Women) **Village: Alur**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Gopala Reddy	NarayanReddy	Gopalappa	Jayanna	Narayana Reddy
4	Thippeswamy	Gopalappa	Saranappa	Thippeswamy	Anjanappa
3	Ganga Reddy	Rajanna	Basavaraju	Ananda	Hanumantha Reddy
2	K.Neelappa	Gangappa	Thippanna	Nagamma	Kenehanna
1	Marajji	Adiveppa	Marajji	Gangamma	Gangamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Anusuya	2	1	1	2	2
Saroja	2	1	2	2	2
Manjamma	2	2	2	3	3
Achamma	1	1	2	2	2
Anusuyamma	3	1	2	2	2
Gangamma	3	1	2	2	3
Thippamma	2	1	2	2	1
Meenakshamma	2	1	2	1	2
Hanumakka	1	1	1	1	1
Kamalamma	2	1	1	1	1
Parvathamma	2	1	2	1	2
Govindamma	2	1	1	1	1
Yallakka	2	1	2	1	2
Giriyamma	2	1	1	1	1
Krishnamma	1	1	2	1	2
Marakka	1	1	2	1	2
Besakka	2	1	1	1	1
Mangalamma	2	1	1	3	1

SHG: Dandammadevi (Women) **Village: Alur**

Levels	**Names of Iconised persons**				
	Physical	Social	Financial	Human	Natural
5	Narayana Reddy	Narayana Reddy	Gopalappa	Jayanna	Narayana Reddy
4	Thippeswamy	Gopalappa	Sharanappa	Thippeswamy	D.Anjanappa
3	Ganga Reddy	Rajanna	Basavaraju	Anand	Hanumantha Reddy
2	K.Neelappa	Gangappa	Thippanna	Nagamma	Kenchanna
1	Marajji	Adiveppa	Marajji Durgamma	Gangamma	Gangamma

SHG: Dandammadevi (Women) **Village: Alur**

Names of SHG members	Physical	Social	Financial	Human	Natural
Hulugamma	2	2	2	1	2
Nagamma	3	2	3	2	2
Gangamma	2	1	3	1	1
Kamalamma	2	1	2	1	1
Puttamma	2	1	2	1	1
Maliyamma	1	1	2	1	1
M.Durgamma	2	2	2	1	1
K.Durgamma	2	2	2	1	1
B.Durgamma	1	2	1	1	1
Chandramma	1	1	1	1	1
Goniyamma	2	2	1	1	1
Thippamma	1	1	2	1	1
Basamma	2	2	2	1	1
Nagamma	2	2	1	2	1
Mahanthamma	2	2	2	1	1
Nilamma	2	1	2	1	1
Marakka	2	2	1	1	1
C.Mahanthamma	2	2	2	1	1

SHG: Kamadhenu (Women) **Village: K.K. Hatti**

Levels	**Names of iconised persons**				
	Physical	Social	Financial	Human	Natural
5	SwamyDeva	Markandaiah	Manjunath	Tukaram	Markandaiah
4	Thippeswamy	Narasinhamurthy	Beemaraj	Palaksha	Manjunath
3	Chandrashekar	Thippeswamy	Mohandas	Krishnamurthy	Ramanna
2	Gopal	Chandrashekar	Krishnamurthy	G.Raman	G.S.Chandrahas
1	None	K.Thippeswamy	None	None	Krishnaiah

Names of SHG members	Physical	Social	Financial	Human	Natural
G.S.Chandrahas	3	2	2	4	2
K.L.Gopalkrishna	2	2	2	3	1
Krishnamurthy	3	2	2	3	1
Narayanaswamy	3	2	2	3	1
Mallikarjuna	3	2	2	3	1
M.Yariswamy	3	2	2	3	1
J.Krishnaiah	2	2	2	2	1
Ramanna	2	2	2	2	1
Ramadas	2	2	2	3	1
K.S.Ramesh	3	2	2	3	1
K.Palaksha	3	2	2	4	1
J.Eranna	3	2	2	2	1
M.Siddappa	2	2	2	2	1
B.Gurunath	3	2	2	2	1
P.Jayanna	2	2	2	3	1
J.E.Arjun	3	2	2	3	1

SHG: Banashankari **Village: K. K. Hatti**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	G.Swamydeva	Markandaiah	A.Mallikarjuna	Gayathri	Markandaiah
4	P.M.Chandrashekar	Srinivasa	Somashekara	Lakshmidevi	Mallikarjuna
3	G.A.Nagamma	Thippeswamy	Mallywara	Krishnakumar	Ranganna
2	Chandramma	Subhadra	G.A.Nagamma	Chandramma	Thippeswamy
1	Shanthamma	Nil	Girish	Marakka	Lakshmi

Names of SHG members	Physical	Social	Financial	Human	Natural
Parvathibai	2	2	2	2	1
Nagamma	3	2	3	4	2
Keerthanakumari	3	2	2	3	1
Honnuramma	2	2	2	3	1
Thippamma	2	2	2	3	1
Rathnamma	2	2	2	3	1
Maniyamma	2	2	2	3	1
parvathi	2	2	2	2	1
Marakka	2	2	1	2	1
Chandramma	2	2	2	2	1
Nagarathnamma	2	2	2	1	1
Subhadra	2	2	2	3	1
Girija	2	2	1	3	1
Lakshmi	2	2	3	4	1
Gayathri	2	2	2	5	1
Shanthamma	1	2	1	1	1
Padmavathi	2	2	1	3	1

SHG: Maliyamma (Women) **Village: K.K.Hatti**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	Thippeswamy	Markandaiah	Srinivasa	Boraiah
4	Ramdev	Chandrashekar	Saraswathamma	Madhusudhan	A.K.Ramanath
3	Guruswamy	Sarojamma	Prabhakar	Shyamasundar	Ragavendra
2	Durgamma	Prabhakar	Mallikarjuna	Thimmakka	Muruli
1	Girijamma	Bommakka	Jayamma	Bommanna	Basavaraj

SHG: Maliyamma (Women) **Village: K. K. Hatti**

Names of SHG members	Physical	Social	Financial	Human	Natural
Thimmakka	3	3	3	1	3
N.Thippamma	1	2	1	1	1
T.Thippamma	1	2	1	1	1
Akkamma	1	3	3	2	2
Siddamma	1	2	1	2	1
Bhimakka	1	3	1	1	1
Chitamma	3	3	3	1	1
Rudramma	2	2	1	1	1
Marakka	3	3	3	1	4
Veeramma	1	3	1	1	1
Sanjeevamma	1	3	1	1	1
Nagamma	1	2	1	1	1
Lakshmidevi	2	3	2	1	2
Shanthamma	1	2	1	1	1
Girijamma	1	2	1	1	1
Papamma	1	2	1	1	1
Prabavathi	1	3	1	1	1
Gangamma	1	2	1	1	1
Manjula	1	3	2	1	1
Shilpa	5	4	5	3	5

SHG: Dhanalakshmi (Women) **Village: K K Hatti**

Levels	**Names of iconised persons**				
	Physical	Social	Financial	Human	Natural
5	Seenappa	Sarojamma	Markandaiah	Raghavendra	Nil
4	Rukminamma	Ragavendra	Sarojamma	Anand	Thippeswamy
3	Jayalakshmi	Ashok	Rukminamma	Satyavathi	Raganna
2	Rukminamma	Satyavathi	Lalithamma	Jayalakshmi	Viswanath
1	Parvathamma	Hampamma	Parvathamma	Hampamma	Shanthamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Rukminamma	2	2	3	2	1
Shanthamma	3	3	3	2	1
Sidlingamma	4	2	3	2	1
Satyavathi	4	2	3	4	2
Rukminamma	2	2	3	2	1
Parvathamma	1	2	1	2	1
Gayathri	2	2	2	4	1
Lalilthamma	1	2	2	2	1
Jayalakshmi	1	2	3	3	1
Hampamma	1	1	1	1	1
V.Lalitha	4	2	3	3	2
Sudhabai	1	2	2	2	1
Rajeshwari	1	2	4	4	1
Anuradha	1	2	2	2	1
Chandraprabha	4	2	2	2	1
Jayalakshmma	1	2	2	2	1
Duggamma	1	1	1	1	1

SHG: Subhodhaya **Village: K.K. Hatti**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	Thippeswamy	Markandaiah	Srinivash	Boraiah
4	Ramadas	Chandrashekar	Saraswathamma	Madhusudhan	Ramnath
3	Guruswamy	Sarojamma	Prabhakar	Shyamasundar	Ragavendra
2	Durgamma	Prabhakar	Malikarjuna	Thimmakka	Muruli
1	Girijamma	Bommakka	Jayamma	Bommanna	Basavaraj

Names of SHG members	Physical	Social	Financial	Human	Natural
Shanthamma	4	3	2	2	1
Nasirbanu	1	2	2	1	1
Siddamma	3	2	2	2	1
Kamalamma	3	3	2	2	1
Eramma	1	2	2	1	1
Lakshmidevi	2	2	2	2	2
Vanajamma	1	2	2	1	1
Parvathamma	1	2	2	1	1
Honnamma	2	2	2	2	2
Sharanamma	1	2	2	2	1
Rathanamma	1	2	2	1	1
Manjamma	1	2	2	2	1
Gowribai	2	2	2	2	1
Yashodhamma	2	2	2	2	4
Gangamma	2	2	2	2	1
Lakshmidevi	2	2	2	2	1
Shankramma	2	2	2	2	1

SHG: Navodhaya **Village: K. K. Hatti**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	R.Veerabadrappa	Swamydev	Mallikarjuna	K.Boraiah
4	Satyanarayana	Chandranna	P.M.Chandrashekar	Rukmini	K.V.Ramnath
3	Ravi	Basanna	S.Thippeswamy	N,G.Thippeswamy	Prasadappa
2	Nagarathna	Thippeswamy	M.Thippeswamy	Obamma	Basanna
1	Bommanna	Nil	Thippakka	Bommanna	Honnuramma

SHG: Navodhaya **Village: KK Hatti**

Names of SHG members	Physical	Social	Financial	Human	Natural
Saraswathi	2	2	3	2	1
Thippakka	2	2	3	2	2
Nunkamma	1	2	2	2	1
Shanthamma	2	2	2	2	1
M.Lakshmi	2	2	3	2	1
Rathanamma	2	2	2	2	1
Maheshamma	1	2	2	2	1
Honnuramma	1	3	1	2	1
Nagarathnamma	2	2	1	3	2
Chamundi	1	2	3	3	2
Siddamma	1	2	2	2	1
Nagamma	2	2	2	2	2
Durgamma	2	3	2	2	2
K.Gangamma	2	3	2	2	1
Jyothamma	2	3	3	2	2
Gangamma	2	3	2	2	1
Lakshmamma	2	3	2	2	1

SHG: Panchavruksha (Women) **Village: KK Hatti**

Levels	**Names of iconised persons**				
	Physical	Social	Financial	Human	Natural
5	Markandaiah	Sarojamma	Markandaiah	Suresh	Nil
4	Vijayamma	Thippesamy	Seenappa	Nagaraj	Thippeswamy
3	Thippamma	Amarnatha	Rathnamma	Venkatesh	Raganna
2	Chandrakala	Chandrashekar	Bhagyamma	Jayalakshmi	Viswanath
1	Bommakka	Nil	Chandrakala	Maniyamma	Shanthanna

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
Vijamma	4	2	4	2	2
Meenakshi	3	2	2	2	1
Yashodhabai	3	2	1	2	1
Eramma	3	2	4	2	2
Shakunthala	3	2	2	2	1
Nilavathi	3	2	2	2	1
Rathanamma	3	2	3	2	1
Ramabai	3	2	2	2	1
Thippamma	3	2	2	2	1
Jayalakshmi	2	2	2	2	1
Chandrakala	1	2	1	2	1
Bhagyamma	3	2	1	2	1
Manjamma	1	2	2	2	1
K.Shakunthala	4	2	4	2	2
Yashodhamma	3	2	4	2	1
Sharadamma	3	2	1	2	1
H.Manjula	2	2	1	2	1
Rajeshwari	2	2	1	2	1

SHG: Ekalavya **Village: K.K. Hatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	Veerabhadrappa	Swamydev	Mallikarjuna	Boraiah
4	Satyanarayana	Chandramma	Chandrashekar	Rukminaiah	K.V.Ramanna
3	Ravi	Basanna	Thippeswamy	N.G.Thippeswamy	Prasadappa
2	Nagarathnamma	Thippeswamy	M,Thippeswamy	Obanna	Basanna
1	Bommanna	Nil	Thippakka	Bommanna	Honnuramma

Names of SHG members	Physical	Social	Financial	Human	Natural
M.Thippeswamy	2	3	2	4	1
N.G.Thippeswamy	2	2	2	3	1
Siddappa	2	2	2	2	1
Shivanna	2	2	2	3	1
H.Bommanna	2	2	2	3	1
G.Mahathesh	2	2	2	4	1
Nagaraj	2	2	2	3	1
Basavaraj	2	2	2	3	1
M.G.Prasanna	2	2	2	3	1
N.Maranna	2	2	2	3	1
Nagaraj	2	2	2	3	1
Obanna	2	2	2	3	1
Badraiah	2	2	2	1	1
Bommanna.M	2	2	2	1	1
B.Nagaraj	2	2	2	3	1
P.Obanna	2	2	2	3	1

SHG: Kamakshi **Village: K. K. Hatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	Markandaiah	Anand	Babu	Nil
4	Anand	Ramamurthu	Ravi	Shaila	Thippeswamy
3	Parvathamma	Manjunath	Thippeswamy	Parvathamma	Raganna
2	Shaila	Radha	Shaila	Jayamma	Viswanath
1	Padma	Nil	Nagendramma	Kanthamma	Shanthamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Jayamma	2	2	2	2	1
Parvathamma	3	2	2	3	2
Lakshmi	1	2	2	1	1
Kanthamma	1	2	1	1	1
Rathanamma	2	2	1	1	1
Nagendramma	1	2	1	1	1
Durgamma	3	2	1	1	1
Renukamma	1	2	1	1	1
Shaila	2	2	1	4	2
Radha	2	2	1	4	1
Padmamma	1	2	1	1	1
Marakka	2	2	1	1	1
Jayalakshmi	2	2	1	1	1
P.Lakshmi	1	2	1	1	1
Shanthamma	1	2	1	1	1
Gundamma	2	2	1	1	1

SHG: Prakruthi **Village KK Hatti**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	Markandaiah	Chandranna	Panduragappa	Eranna	K.V.Ramulu
4	Krishna Murthy	Sanna Eranna	Krishna Murthy	Kengirappa	Sanna Eranna
3	Kariyappa	Sanna Beyanna	Nirmala	Gopal	Nagaraj
2	Sanna Nagaraj	Chitamma	Anuradha	Lakshmidevi	Ningamma
1	Bhagyamma	Shivashankar	Siriyamma	Siddamma	K.Chitappa

Names of SHG members	Physical	Social	Financial	Human	Natural
Shakunthala	2	3	4	3	3
Kanthamma	1	2	1	2	1
Gangamma	3	2	3	1	3
Giddamma	3	2	3	2	3
Kamakshi	2	2	2	2	1
Ningamma	2	2	3	2	2
Gundamma	2	2	1	2	1
Tamakka	1	2	1	1	1
Umadevi	1	2	3	2	2
V.Tammajji	2	2	2	1	1
Rathanamma	2	2	1	2	1
K.Rathnamma	1	2	1	2	1
Bommakka	1	2	1	1	1
Chithamma	1	2	1	2	1
Shanthamma	1	2	1	2	1
Manjula	2	2	1	3	1
Anuradha	2	2	2	4	1
Siddamma	1	2	1	1	1
Bhagyamma	1	2	1	1	1
Thamakka	1	2	1	1	1

SHG: Prakruthi (Women) **Village: K.K. Hatti**

Levels	Names of Iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	Veerabhadraiah	Swamydevi	Mathappi	K.Boraiah
4	Satyanarayana	G.Chandranna	P.M.Chandrashekar	Rukumani	K.V.Ramanath
3	Ravi	Basanna	Thippeswamy	N.G.Thippeswamy	Prasadappa
2	Nagarathna	Thippeswamy	M.Thippeswamy	Obanna	Basanna
1	Bommanna	Nil	Thippakka	Bommanna	Honnuramma

SHG: Prakruthi (Women) **Village: K.K. Hatti**

Names of SHG members	Physical	Social	Financial	Human	Natural
Kallamma	3	3	2	1	2
Gangamma	2	2	2	1	1
Siddamma	2	2	2	1	1
Lakshmidevi	2	2	2	1	1
G.Gangamma	2	2	2	1	1
Mahadevi	2	2	2	2	1
Thimmakka	2	2	1	1	1
Kariyamma	2	2	2	1	2
Thippamma	2	2	2	1	1
Honnuramma	2	2	3	1	1
Manjamma	2	2	2	1	2
Manjula	2	2	2	2	2
Nagarathna	2	2	2	2	2
Rukmini	3	3	3	4	2
C.Bhagyalakshmi	2	2	2	2	1

SHG: Chaitanya (Women) **Village: K.K.Hatti**

Levels	**Names of Iconised persons**				
	Physical	Social	Financial	Human	Natural
5	Markandaiah	Chandranna	Pandurangappa	Eranna	K.V.Ramulu
4	Pandappa	Sanna Eranna	Krishnamurthy	Kengirappa	Pandurangappa
3	Doddakariyappa	Sannna Bayanna	Nirmala	Gopal	Sanna Eranna
2	Sannanagappa	Kengiranna	Anuradha	Lakshmidevi	Nagaraj
1	Bhagyamma	Shivashankar	Siriyamma	Siddanna	Chitanna

Names of SHG members	Physical	Social	Financial	Human	Natural
Nirmala	2	4	3	5	2
Jayalakshmi	1	2	2	2	1
Basamma	2	2	2	1	1
Yashodhamma	2	2	1	1	1
Lakshmidevi	2	2	1	2	1
Siriyamma	1	2	1	1	2
Gangamma	4	2	5	2	4
Tuppadamma	2	2	2	2	1
Basamma	2	2	2	1	3
Kengamma	2	2	2	1	3
Jayamma	1	2	1	2	1
Padmamma	2	2	2	2	1
Puttamma	2	2	1	2	1
Jyothi	3	2	2	2	3
Gangamma	1	2	1	1	1
Bhagyamma	2	2	1	2	1
Jayamma.C	2	2	1	1	1
Chikkamma	3	2	3	1	1
Rathnamma	1	2	1	1	1

SHG: Navayuga (Men) **Village: K. K. Hatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	Thippeswamy	Markandaiah	K.Srinivash	Boraiah
4	Ramdas	P.M.Chandrashekar	Saraswathi	Madhusudan	A.K.Kantamma
3	Guruswamy	Sarojamma	Prabhakar	Shyamasundar	Raghavendra
2	Durgamma	Prabhakar	Mallikarjuna	Thimmakka	Muruli
1	Girijamma	Bomakka	Jayamma	Bommanna	Basavraj

Names of SHG members	Physical	Social	Financial	Human	Natural
B.J.Hampanna	3	4	3	4	3
M.T.Prabhakar	3	2	3	3	1
M.R.Jayaprakash	3	2	2	2	1
U.S.Keshav	4	2	2	2	1
B.H.Ranjit	3	3	3	2	3
B.B.Satish	3	2	2	4	2
G.Basavaraj	4	2	2	2	1
P.K.Chandrashekar	3	2	2	4	2
B.H.Madhusudhan	3	2	2	4	2
M.Chinna	4	3	3	3	3
N.P.Guruswamy	4	2	2	4	1
T.V.Mallikarjun	3	2	2	2	1
Shyamasundar	3	3	2	3	1
B,B.Raghavendra	3	3	2	3	1
T.P.Chandrappa	2	2	3	3	1
R.R.Shivaprasad	2	2	2	3	3
C.Shanmukappa	2	2	2	3	1
N.P.Muruli	2	3	2	3	2
K.Nagaraj	3	3	2	2	1

SHG: Yamuna (Women) **Village K.K. Hatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Manjunath	Mallikarjuna	Swamydevi	Mallikarjuna	Mallikarjuna
4	Satyanna	Chandranna	Chandrashekar	Veerabhadrappa	Rukmini
3	Krishnappa	Bayanna	Thippeswamy	Boraiah	N.G.Thippeswamy
2	Ramakka	Thippeswamy	M.Thippeswamy	Ranganath	Obanna
1	Honnuramma	Nil	Thippakka	Thimmakka	Bommanna

SHG: Yamuna (Women) **Village: K.K. Hatti**

Names of SHG members	Physical	Social	Financial	Human	Natural
Hanumakka	1	2	2	2	2
Bannuramma	3	2	3	2	3
Manjamma	3	2	2	2	2
Thippakka	1	2	2	2	2
Vanajakshi	3	2	3	3	2
Durgamma	2	2	2	2	2
Bakulamma	2	2	2	1	3
Shanthamma	2	2	2	2	2
Kamalamma	2	2	2	2	2
Lakshmidevi	2	2	2	2	2
Rudramma	2	2	3	2	2
Gangamma	2	2	2	2	2
Kamalamma	2	2	2	2	2
Jayamma	1	2	1	2	1
Gangamma	2	2	2	2	2
Lingamma	3	2	2	2	2
Durgamma	2	2	3	2	3

SHG: Gadripalaiah **Village: Tumkurlahalli**

Levels	**Names of iconised persons**				
	Physical	Social	Financial	Human	Natural
5	Nil	Papaiah	M.Mallaiah	T.S.Palaiah	Shivanna
4	KalilSuraiah	T.S.Palaiah	Sannapapaiah	K.R.Sridevi	Kalil Suraiah
3	S.Lakshmidevi	S.Lakshmidevi	Jungli Papamma	Kalil Suraiah	Jungli Papanna
2	T.G.Vanalakshmi	T.G.Vanalakshmi	Lakshmidevi	M.Thippeswamy	Suramma
1	Borakka	Giddamallaiah	Siddalingaiah	Papamma	Palamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Boramma	1	2	2	2	1
Maddanamma	1	1	2	2	2
Obakka	1	1	2	2	1
Nagamma	1	2	2	2	1
Palamma	1	2	1	2	1
Y.Palamma	2	2	2	2	2
Pamakka	1	1	1	2	2
Papamma	2	1	2	2	2
Manjanna	2	2	2	2	3
Shivanna	2	3	3	2	5
Obanna	1	4	1	3	2
Papaiah	1	2	1	2	1
Kamaiah	1	3	2	2	1
Kalil Suraiah	4	2	4	3	4
Thippeswamy	2	2	2	2	3
Tayamma	1	1	1	2	1
Shemem	1	3	1	2	1

SHG: Kaveri **Village: Tumkurlahalli**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Nil	Papaiah	Mugla Mallaiah	T.S.Papaiah	Shivanna
4	Kalil Suraiah	T.S.Palaiah	Sanna Papaiah	K.R.Sridevi	Kalil Suraiah
3	S.Lakshmidevi	S.Lakshmidevi	Jungli Papanna	Kalil Suraiah	Jungli Papamma
2	Varalakshmi	Varalakshmi	Lakshmidevi	M.Thippeswamy	Suramma
1	Borakka	Giddamallaiah	Siddalingaiah	Papamma	Palamma

Names of SHG members	Physical	Social	Financial	Human	Natural
Obamma	1	1	2	2	1
Thippamma	3	2	2	2	2
Gangamma	1	2	2	2	1
Sharadamma	2	2	2	2	2
B.Gangamma	3	2	2	2	2
Palamma	1	1	2	2	1
Ningamma	1	2	2	2	1
Boramma	2	2	2	2	2
Rudramma	1	1	2	2	2
T.Obakka	3	2	2	2	2
Suramma	3	2	2	2	2
Sushilamma	3	2	2	2	3
Padmamma	1	2	2	3	1
T.Lakshmi	2	2	2	2	2
M.Obamma	1	2	2	2	1

SHG: Suramma (Women) **Village: Tumkurlahalli**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Nil	Papaiah	M.Mallaiah	T.S.Palaiah	Shivanna
4	Kalil Suraiah	T.S.Palaiah	Sanna Papaiah	K.R.Sridevi	Kalil Suraiah
3	Lakshmidevi	Lakshmidevi	Jungli Papamma	Kalil Suraiah	Jungli Papamma
2	Varalakshmi	Varalakshmi	Lakshmidevi	Thippeswamy	Suramma
1	Borakka	Giddamallaiah	Siddalingaiah	Papamma	Palamma

Names of SHG members	**Physical**	**Social**	**Financial**	**Human**	**Natural**
S.Lakshmi	3	3	2	3	3
Palakka	2	2	2	3	2
Varalakshmi	2	2	2	3	2
Sannapapamma	2	2	2	1	1
P.L.Lakshmi	2	2	2	3	2
P.L.Shanthamma	2	2	2	3	2
Sanna Obakka	2	2	2	2	2
Borakka	2	2	2	1	1
Suvrna	2	2	2	3	2
Jungliapalamma	2	3	3	3	3
Sridevi	3	3	3	4	3
Badapalamma	1	2	2	1	1
Sakamma	2	2	2	2	1
Obamma	2	2	2	1	2

SHG: Ranganath **Village: Devarahatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Nil	Member Boraiah	T.Papaiah	Papanna	Nil
4	Thippeswamy	Gowdru Byanna	D.Palaiah	P,G.Naik	D.Papaiah
3	Nagabhushan	Dasana Oberaiah	M.Boraiah	Chinnaiah	Boraiah
2	Papamma	D.Papaiah	Boraiah	Boraiah	Thippeswamy
1	Siddaiah	Enmalatti Boraaiah	Siddaiah	Mallamma	Siddaiah

Names of SHG members	Physical	Social	Financial	Human	Natural
P.Chinnaiah	2	2	1	3	2
K.Obaiah	3	2	1	3	2
Siddappa	1	2	1	2	1
Hampamma	1	2	1	3	1
Malikamma	1	2	1	2	1
Palamma	2	2	1	1	2
G.Suramma	2	2	1	1	2
Mallamma	1	2	1	1	1
Nagendrappa	3	2	2	2	3
Papaiah	2	2	1	2	2
Virupakshaiah	2	2	1	2	2
Janpamma	2	2	1	2	1
M.Mallesh	2	2	1	3	2
Sannapalamma	1	2	1	1	1
P.Papaiah	2	5	3	5	3

SHG: Madakari **Village: Devarahatti**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	None	M.Boraiah	Daddi Kamaiah	Mallikarjuna	Yajaman Mallaiah
4	Nagabhushanappa	Bayanna	Tippalapalaiah	Veerabhadrappa	Nagabhushanappa
3	Veerabhadrappa	Dasana Obaiah	Chinnaiah	Chinnaiah	Veerabhadrappa
2	Chinnaiah	Veerabhadrappa	Malamma	Mallanna	Sanna Mallaiah
1	Siddaiah	K.Mallaiah	Sanchiboraiah	Palamma	Mallamma

SHG: Madakari **Village: Devarahatti**

Names of SHG members	Physical	Social	Financial	Human	Natural
Padmamma	1	2	2	3	1
Boramma	1	2	2	3	1
Gangamma	1	2	2	2	1
Mallamma	1	2	2	1	1
Parvathamma	1	2	1	1	1
Boramma	1	2	1	2	1
Bhagyamma	1	2	3	3	1
Chandramma	1	2	2	1	1
M.Bhagyamma	1	2	1	1	1
M.Palamma	1	2	1	1	1
Channappa	1	2	1	2	1
Palamma	1	2	2	1	1
Shankaramma	1	2	2	1	1
Chinnaiah	2	2	3	1	2
Boramma	1	2	2	3	1
Biraiah	1	2	1	3	1
Karamma	1	2	2	2	1
Doddapapaiah	1	2	1	4	1
boraiah	1	3	2	5	1

SHG: Ekalavya **Village: Devarahatt**

Levels	**Names of iconised persons**				
	Physical	Social	Financial	Human	Natural
5	Nil	M.Boraiah	Doddi Kamaiah	Mallikarjuna	Mallaiah
4	Nagabhushanappa	Bayamma	Thippala Papaiah	Veerbhadraiah	Nagabhushanappa
3	Veerabhadrappa	Dasara Obaiah	Chinnaiah	Chinnaiah	Veerbhadrappa
2	Chinnaiah	Veerbhadrappa	Mallamma	Mallamma	Sanna Mallajja
1	Siddaiah	Kivudu Mallaiah	Sanchi Boraiah	Palamma	Mallamma

Names of SHG members	Physical	Social	Financial	Human	Natural
P.Nagesh	2	2	2	4	1
P.Chandranna	1	3	2	3	1
Umesh	2	2	2	3	1
G.P.Basaiah	1	3	2	2	1
K.P.Dhanajaya	2	2	2	4	1
G.B.Nagesh	2	2	2	3	2
Sanna Obaiah	2	2	2	3	2
M.B.Sanna Obaiah	2	2	1	2	1
K.O.Basanna	2	2	2	2	2
B.P.Obanna	2	2	2	3	2
S.b.Boraiah	2	2	1	2	1
O.Purushaiah	2	2	2	4	2
P.Thippeswamy	2	4	2	3	1
P.Boraiah	2	3	2	5	2
B.P.Balaram	2	2	2	2	2
D.Palaiah	2	2	2	4	2
Gosula Palaiah	1	3	2	2	2
GuruObanna'	1	2	2	1	2
M.Obanna	2	2	2	2	2
O.B.Basanna	1	2	2	2	2

SHG: Kote Guddada Maramma **Village: Chikkumthi (Devarahatti)**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Nil	Boraiah	T.Papaiah	Papanna	Nil
4	Thippeswamy	Gowdra Byanna	D.Paraiah	P.G.Naik	D.Papaiah
3	Nagabhushan	D.Obaiah	S.Boraiah	Chinnaiah	Boraiah
2	Papanna	D.Papaiah	Daparapapaiah	Boraiah	Thippanna
1	Siddaiah	Boraiah Enumalatti	Siddaiah	Malamma	Siddaiah

Names of SHG members	Physical	Social	Financial	Human	Natural
Hampamma	2	2	2	3	2
Palamma	2	2	1	2	1
Thippamma	2	3	2	2	2
Sanna Boramma	1	2	2	2	2
Halamma	1	2	2	2	2
Boramma	1	2	2	1	2
T.Sanna Boramma	1	2	1	2	1
Sharadamma	1	2	1	2	2
M.Sanna Boramma	1	2	1	2	1
H.Papamma	1	2	1	2	2
Tayamma	1	2	2	2	1
P.Mallamma	2	2	2	2	2
K.Boramma	1	2	1	2	2
T.Mallamma	2	2	1	2	2
B.Tayamma	2	2	1	2	2
Eramma	1	2	1	2	1
Obamma	1	2	2	2	2
M.Obanna	2	3	2	2	2
P.Papamma	1	2	1	1	1

SHG: Yallavva **Village: Jigajeevani**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Appasahibgowda Patil	Tukaram N Ankalagi	Tukaram Ankalagi	Pundalika H Koli	Siddappa Ankalagi
4	Jaligeri Ramagowda	Ramagonda.V Bandaragatti	Balappa B.Koli	Basu, H.Koli	Kashiram Biradhar
3	Lakshmibai Karabatti	Lakshmibai Karabatti	Bhimappa S Koli	Suresh, T. Ankalagi	Pandaragote Ankalagi
2	Gagabai Ankalagi	Dundamma Bandaragatti	Gangabai Ankalagi	Muddanna Bandaragatti	Lakshmibai Karagote
1	Srimantha Naykavadi	Basavaraj Ningappa	Sangeetha Naykode	Sayibanna Ankalagi	Hanumantha Koli

Names of SHG members	Physical	Social	Financial	Human	Natural
Mahadev, H. Koli	4	2	3	2	1
Gangaravva Ankalagi	4	2	4	2	2
Lakshmibai Karabatti	3	3	3	2	2
Dundavva Bandaragatti	2	2	2	2	2
Kasthuri ,S.Ankalagi	2	3	2	2	2
Sunanda, R.Bandaragatti	2	2	2	2	3
Sangeetha, S.Naykode	1	2	2	2	1
Shayabi M Mathandar	2	3	2	2	2

SHG: Dattathreya **Village: Jigajeevani**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	S.B.Patil	Hanumantha Baliganur	Bhimappa,G.Vali	Amasidda Kouli	S.B.Patil
4	Channabasappa Halashetti	Veerabhadrappa Halashetti	Shekappa Gowda Patil	Veerabhadrappa Halashetti	Mallappa Halashetti
3	Bhimappa Wali	Basappa Kapse	Veerabhadrappa Halashetti	Mallappa Halashetti	Bhimappa vali
2	Basappa, S.Kapse	Siddappa,H.Hore	Tukaram, N. Chawan	Kallappa Pattanashetti	Kasajayappa Hore
1	Tukaram,N.Chawan	Soma Lambani	Valku Lambani	Babu.J.Hore	Shivaray Rathod

Names of SHG members	Physical	Social	Financial	Human	Natural
Basavaraj Halshetti	3	2	3	2	4
Veerabhadrappa Halshetti	3	4	3	4	4
Channabasappa,R.Halshetti	3	2	3	1	4
Mallikarjuna,R.Halshetti	3	4	3	3	4
Gurappa Hoore	1	2	2	2	2
Kashinath, H. Hoore	1	2	2	2	2
Babaray, J.Hoore	1	2	2	1	2
Siddappa,H.Hoore	1	2	3	2	3
Bhimaray Wali	4	4	4	2	3
Kallappa.S.Pattanashetti	3	2	3	2	2
Tukaram Chawan	1	2	3	2	2
Basappa Kapse	2	3	3	2	3
Shanthabai Kapse	2	2	3	2	3
Shanthbai Pattanashetti	1	2	2	1	1

SHG: MarigammaDevi (Woman) **Village: Jigajeevani**

Levels	Names of iconised persons				
	Physical	**Social**	**Financial**	**Human**	**Natural**
5	Apasaba Gouda	Babu Chavan	Nathugangaram	Lakshman D.Rathod	Darmu Tukaram
4	Bimu Gudad	Vasntha Gangaram	Vasanth.G. Chavan	Baliram Gangaram	Danabai,L.. Chavan
3	Bali Raji Chavan	Darammal Rathad	Baliram Gangaram	Pandith G.Chavan	Rathobai G.Chavan
2	Candabai Chavan	Gamma,L.Chavan	Gamabai Chavan	Kasibai C. Rathod	Vasanth Gangadar
1	Thanabai,T.Chavan	Valabai Rathod	Sathabai Jadav	Solabai Rathod	Chandabai Chavan

Names of SHG members	Physical	Social	Financial	Human	Natural
Rathanabaiah Chavan	2	2	3	3	2
Phitabai Gopu	2	2	3	2	2
Kashibai,C.Rathod	3	3	3	4	1
Chandabai P Chavaan	2	2	2	1	2
Parubai Rathod	3	2	2	1	2
Chandubai Rathod	1	2	2	1	1
Salubai, T.Rathad	3	2	2	1	1
Sonabai R Rathod	2	2	2	3	1
Gamabai, D.Chavan	2	2	2	1	3
Chitrabai, C.Chavan	1	2	2	1	1
Chandubai, R.Rathod	1	2	2	1	1
Thanabai,T.Chavan	1	2	1	1	1
Danabai, L.Chavan	2	2	3	2	5

SHG: Dhanammadevi **Village: Jigajeevani**

Levels	**Names of iconised persons**				
	Physical	Social	Financial	Human	Natural
5	Shivanna Gowda B.Patil	Shivanna Gowda B.Patil	Shivanna Gowda B.Patil	Beemarai Guddad	Shivanna Gowda B.Patil
4	Surakka B.Halshetti	H.S.Balegar	Siddagowda Biradar	Sangappa C.Hore	Mallappa R.Halshetti
3	Nirmala V.Halshetti	Veerbhadrappa R.Halshetti	Bheemarai B.Guddad	Jayshree M.Halshetti	Kamalabai C.Halshetti
2	Subha Gurappa Hore	Beemarai vali	Nirmala V.Halshetti	Nirmal V.Halshetti	Kamalabai Hore
1	Suvarna S.Duggani	Nirmala V.Halshetti	Subha Gopsl Hore	Gangabai B. Hore	Subha Gurappa Hore

Names of SHG members	Physical	Social	Financial	Human	Natural
Subbagurappa Hore	2	2	2	2	1
Kamala Halashetti	4	2	2	1	3
Sunitha M.Halashetti	3	2	2	3	4
Jayasree M.Halashetti	3	2	2	3	4
Surakka B.Halashetti	4	2	2	2	3
Meenabai K.Hore	2	1	2	1	1
Dundabai, M.Vaali	2	2	2	2	2
Geetha Namdev	1	1	2	2	2
Gurubasappa Pattanshetti	4	2	2	1	3
Shivagangava Valli	2	1	2	1	2
Gangabai B.Valli	4	1	2	1	3
Suvarna S.Duggani	1	2	2	2	1
Nirmala Halashetti	3	1	2	2	3
Bayakka V.Kavale	4	1	2	1	1
Kamalabai P.Hore	2	1	2	1	2
Gangabai B.Hore	1	1	2	1	2

SHG: Samakka Devi **Village: Jigajeevani**

Levels	Names of iconised persons				
	Physical	Social	Financial	Human	Natural
5	Shivanagowda B.Patil	Babananu Chavan	Lakshamana D.Rathod	Gamu L.Chavan	Shivangowda B.Patil
4	Laksamana D.Rathod	Ramulal Rathod	Tukaram N.Ankalagi	Goraknathrao Chavan	Beemarai B.Guddad
3	Lallabai B.Chavan	Vasanth G.Rathod	Beemarai B.Guddad	Anil B.Rathod	Darmabai C.Rathod
2	Tarubai B,Chavan	Kamalabai Rathod	Kamalabai R.Chavan	Kamalabai Rathod	Tarabai B.Chavan
1	Mothabai B.Chavan	Lalabai C. Rathod	Darmabai G.Rathod	Mothabai Chavan	Kamalabai Chavan

SHG: Samakka Devi **Village: Jigajeevani**

Names of SHG members	Physical	Social	Financial	Human	Natural
Kamalabai R.Chavan	2	2	2	2	1
Dharamabai C.Rathod	2	2	2	1	3
Motbai B.Chavan	1	1	2	1	1
Tarabai D.Chavan	1	2	2	1	1
Lalabai B.Rathod	3	1	2	2	2
Sunitha S.Rathod	3	2	2	2	2
Sunithabai K .Chavan	2	2	2	2	2
Parubai M. Rathod	1	2	2	1	1
Susilabai M.Rathod	2	2	2	2	2
Javoobai D.Rathod	2	2	2	2	2
Parubai B.Rathod	2	2	2	2	2
Tarabai V.Rathoda	2	2	2	1	2
Ramesh L.Rathod	2	2	2	2	2
Tharubai B.Chavan	2	2	2	2	2
Gorakanath R,Chavan	2	2	2	3	2
Lalitha A.Rathod	2	2	2	1	2

SHG: Saraswathi **Village: Inchigere**

Levels	**Names of iconised persons**				
	Physical	Social	Financial	Human	Natural
5	**Mallanna Sakri**	**Mallanna Sakri**	**Mahadev Banni**	**Mahadev Banni**	**Villa Kulkarni**
4	Ningappa Maithri	Manadev Banni	M.S.Sakri	Gurusiddappa Banni	Gaibisab Vallikar
3	Villas Kulkarni	Mahadev Maithri	G.G.Banni	Erappa Valli	Malakari Madar
2	Ramachandra Kambar	Gurusiddappa Banni	Shivashankar Kambar	Gurubai Maithri	Boramma Aralimar
1	Bhimaray Bhiradar	Pandu Kambar	Baramma Aralimar	Kalla Gowdthi	Erappa Valli

Names of SHG members	Physical	Social	Financial	Human	Natural
Shivamma A Banni	1	3	2	3	1
Veerappa K.Valli	2	4	3	3	2
Parvathi M.Kalasanavar	2	2	2	2	3
Drupathi P.Kambar	1	1	2	2	1
Baramma K.Aralimar	2	1	2	2	2
Parvathi Banni	2	1	2	2	1
Itabai R.Kambar	2	2	2	2	1
Gurunbai Maithri	2	2	3	2	1
Sanjeev S.Sakri	5	4	3	3	5
Dhamayantha N.Valli	2	2	2	2	2

CHAPTER IV

HOUSEHOLD LEVEL SAMPLE SURVEY

4.1 Introduction

In Karnataka, initial attempts towards Watershed Development Programme were made with a focus to bring rainfed areas into mainstream growth. The objectives were mainly land-based activities, non-land based activities, promotion of community based organisations, and capacity-building and networking. Land based activities included soil and water conservation measures, land treatment and demonstration of new technologies. The non-land-based activities included income generation activities and enterprises for the landless, poor and people belonging to vulnerable groups. Promotion of community based organisations were promoted at various levels for ensuring community participation in the management of the project and sustaining the impact of the project beyond the project life, whereas, the capacity building and networking included strengthening the capacity of community based organisations and government to take up livelihoods related activities and networking and advocacy especially with the government, based on the focus of the projects.

The expected output and impact of the KAWAD project are community empowerment to develop natural resources through participatory manner for sustainability, enhancement of livelihood options especially for women and marginalised groups in the rural areas, sensitisation of all the stakeholders to address the needs of the community for the present and also for the future, and finally, replication of the approach to watershed development tested elsewhere in the country. The main philosophy of KAWAD project is to improve productivity, stability in income flow, adoption of technology, conservation and rational use of natural resources and minimising the environmental externalities. The programme has a large number of components and each of the components had varied impact and such impacts could be assessed only with the benefits accrued to the stakeholders as well as by comparing the pre- and post- project situation. In the household level sample survey, we first covered the socio-economic characteristic features, viz., literacy level, family size, caste, occupational pattern, change in income due to change in occupation, and productive assets of the sample households in the study area. Cropping pattern and crop economy by seasons, income from agriculture and allied activities, formed

the second component. Third, the initiation of non-land based activities and services available for non-land based activities, loans taken for different purposes, and services accessed by the sample households during last year were covered. Lastly, the benefits derived from KAWAD projects and suggestions for improvement by the respondents in the study area were included. We have presented the results of the survey in these four components with a focus on identifying the impact parameters and expected outputs. In addition to drawing a benchmark we also intend to analyse the current impact/output situation.

4.2 Socio-Economic and Assets Profile

Table 4.1 indicates the distribution of respondents in the selected districts, taluks, and villages covered under the KAWAD project by the respective Partner Non-Government Organisations (PNGOs). There are three PNGOs executing the KAWAD project in Molakalmur taluk of Chitradurga district, and four each in Kudaligi taluk of Bellary district and Indi taluk of Bijapur district. The selected households against each of the PNGOs have been given in the Table 4.1. The sample size in each village varies according to the number of farm households' in the respective micro- watershed committees. The number of respondents covered in three watersheds viz., Chinnahagari (Molakalmur), Upparahalla (Kudaligi) and Doddahalla (Indi) account for 345, 555, and 273 respectively, and the total number of households surveyed comes to 1,173 in the study area.

Table 4.1: Distribution of Respondents by District, Taluk, Watershed, PNGO and Village

District	Taluk	Name of the watershed	PNGOs	Village Names	No. of respondents	Per cent
Chitradurga	Molakalmur	Chinnahagari	RSC	K.K.HATTI	108	31
			MYRADA	D.HATTI	139	40
			GUARD	T.HALLI	98	28
				Sub-Total	**345**	29
Bellary	Kudaligi	Upparahalla	DPG	B.T.GUDDI	164	30
			MYRADA	ALUR	187	34
			GUARD	P.HALLI	119	21
			LORDS	S.K.G.HATTI	85	15
				Sub-Total	**555**	47
Bijapur	Indi	Doddahalla	BIRDS	INCHIGERE	36	13
			ISEER	JIGAJEEVANI	53	19
			VISHALA	DEVERNIMBARGI	70	26
			SEEDA	JEERANKALAGI	114	42
				Sub-Total	**273**	23
Grand Total	3	3	11	11	***1,173***	100

Table 4.2 shows the distribution of respondents by gender in the watersheds. Out of 1,173 respondents, 92 per cent were male headed households and only 8 per cent were female headed households. Across the three districts, Bijapur accounted for larger share of male households (96 per cent) compared with the other two watersheds, whereas, female respondents were about 12 per cent in Chitradurga district and lower in Bijapur district.

Table 4.2: Gender of the Respondents

Gender	Watersheds			Total
	Chinnahagari	**Upparhalla**	**Doddahalla**	
Male	303	518	263	1,084
	(88)	(93)	(96)	(92)
Female	42	37	10	89
	(12)	(7)	(4)	(8)
Total	345	555	273	1,173
	(100)	(100)	(100)	(100)

Table 4.3 gives a picture of the family size in the study area. Interestingly, the average family size came to 6.5 in these districts, while the selected villages in Bijapur district had the family size of about seven which was higher than the other two districts. The number of children in the sample households in these villages did not vary much. The number of male and female members involved in agriculture account for 1.6 and 1.2 in the selected villages, respectively.

Table 4.3: Family Size of Respondents by District

Watersheds	No. of male members	No. of female members	No. of Children	Total family size	Male agriculturist	Female agriculturist
Chinnahagari	2.0	1.8	2.9	6.6	1.7	1.2
Upparahalla	2.0	1.8	2.6	6.4	1.6	1.2
Doddahalla	2.2	2.0	2.7	6.9	1.6	1.3
Total	2.0	1.8	2.7	6.5	1.6	1.2

Distribution of sample households by social group is given in Table 4.4. About 38 per cent of the total sample households were households belonging to SC/ST while OBCs and others accounted for 40 per cent and 22 per cent, respectively. Among the districts, Chitradurga had more SC/ST sample households (69 percent) than the other two districts. This was due to the presence of sizeable ST sample households in the selected villages in Molakalmur taluk of Chitradurga district.

Table 4.4: Distribution of Households by Social Group

Social group	Watersheds			Total
	Chinnahagari	Upparhalla	Doddahalla	
SC	38 (11.0)	100 (18.0)	61 (22.3)	199 (17.0)
ST	200 (58.0)	34 (6.1)	12 (4.4)	246 (21.0)
OBC	72 (20.9)	305 (55.0)	89 (32.6)	466 (39.7)
Others	35 (10.1)	116 (20.9)	111 (40.7)	262 (22.3)
Total	345 (100.0)	555 (100.0)	273 (100.0)	1173 (100.0)

Table 4.5 exhibits the education status of respondents in the study area. Out of the total respondents i.e., 1,173 a little over 50 per cent were illiterates in the selected villages in the three districts. Further, 25 per cent and 17 per cent of the respondents were educated up to primary and higher secondary school, respectively. Graduates accounted only for 5 per cent. Around 53 per cent of the respondents were educated up to primary school (31 per cent) and higher secondary school (22 per cent).

Table 4.5: Educational Status of the Respondents

Educational Status	Watersheds			Total
	Chinnahagari	Upparhalla	Doddahalla	
Illiterate	216	235	157	608
	(62.6)	(42.3)	(57.5)	(51.8)
Primary	71	171	53	295
	(20.6)	(30.8)	(19.4)	(25.1)
Higher secondary	40	121	40	201
	(11.6)	(21.8)	(14.7)	(17.1)
Graduate	17	27	18	62
	(4.9)	(4.9)	(6.6)	(5.3)
P.G & above	1	1	5	7
	(0.3)	(0.2)	(1.8)	(0.6)
Total	345	555	273	1173
	(100.0)	(100.0)	(100.0)	(100.0)

Note: Figures in Parenthesis represent percentages

Table 4.6 indicates the changes observed in income structure of the respondents now and before three years in the study area. The major source of income of the respondents came from agriculture, followed by services, wage labour and livestock now as well as before three years in the three watersheds. However, income from agriculture declined marginally (from 53 per cent to 50 per cent) and was compensated by the income from wage labour, livestock rearing and other skilled occupation. It is clear from the table that pressure on agriculture had slightly reduced and diversification of occupation was taking place in the study area. By and large, the income had increased from all sources and the increase was about 30 per cent. The changes in the occupational pattern/income of the respondent were observed in the study area. This is presented in Table 4.7. The major changes were associated with KAWAD (39 per cent), self-enterprises (NLBA's) (9 per cent) and the influence of the NGOs (7 per cent). The role of KAWAD seemed to be quite significant (71 per cent) in Chinnahagari watershed, and moderate in Doddahalla watershed (41 per cent) and low in Upparhalla watershed (28 per cent). Self-enterprises were increasing substantially in Chinnahagari watershed as compared with the other two. While NGO's role in motivating the people, promoting them for participating in the programmes/schemes and changing the latitudinal behaviour of the rural masses seemed to be quite significantly prevalent in the area. KAWAD, self-enterprises and other NGOs emerged as the major change agents.

Table 4.6: Change in Income Pattern of the Respondents (now and before 3 years)

(Value in Rs.)

Source of income	Chinnahagari			Upparhalla			Doddahalla			Total		
	Before	Now	% Change	Before	Now	% Change	Before	Now	% Change	Before	Now	% Change
Agriculture on own land	10,512	12,950	23	13,030	16,133	24	12,210	14,642	20	12,099	14,850	23
Agriculture on leased land	22	34	55	255	612	140	612	821	34	270	491	82
Wage labour	1,318	2,088	58	1,265	1,717	36	4,735	7,354	55	2,088	3,138	50
Livestock	3,369	5,865	74	751	984	31	3,331	5,459	64	2,122	3,461	63
Petty business	131	145	10	365	515	41	1,269	1,637	29	507	667	32
Artisan	184	308	67	73	95	31	356	524	47	171	257	50
Govt. service	2,236	2,563	15	2,525	2,733	8	8,218	10,364	26	3,765	4,459	18
Private service	1,112	1,500	35	632	879	39	830	1,743	110	819	1,262	54
Others	1,242	1,664	34	884	1,222	38	515	641	25	903	1,217	35
Total	20,126	27,117	35	19,780	24,890	26	32,076	43,185	35	22,744	29,802	31

Table 4.7: Change in Occupational Pattern / Income of the Respondents Observed in the Study Area

(No of HH)

Change agents	Chinnahagari			Upparhalla			Doddahalla			All		
	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
KAWAD	245	100	345	101	454	555	111	162	273	457	716	1173
	(71)	(29)	(100)	(18)	(82)	(100)	(41)	(59)	(100)	(39)	(61)	(100)
Other Govt. projects	10	335	345	5	550	555	0	273	273	15	1158	1173
	(3)	(97)	(100)	(1)	(99)	(100)	(0)	(100)	(100)	(1)	(99)	(100)
Other NGOs	36	309	345	5	550	555	45	228	273	86	1087	1173
	(10)	(90)	(100)	(1)	(99)	(100)	(16)	(84)	(100)	(7)	(93)	(100)
CBOs	28	317	345	1	554	555	1	272	273	30	1143	1173
	(8)	(92)	(100)	(0)	(100)	(100)	(0)	(100)	(100)	(3)	(97)	(100)
Self enterprise	57	288	345	35	520	555	10	263	273	102	1071	1173
	(17)	(83)	(100)	(6)	(94)	(100)	(4)	(96)	(100)	(9)	(91)	(100)
Individuals in the community	1	344	345	4	551	555	2	271	273	7	1166	1173
	(0)	(100)	(100)	(1)	(99)	(100)	(1)	(99)	(100)	(1)	(99)	(100)
Any other	5	340	345	7	548	555	15	258	273	27	1146	1173
	(1)	(99)	(100)	(1)	(99)	(100)	(5)	(95)	(100)	(2)	(98)	(100)

Note: Figures in the Parentheses indicate percentages

Table 4.8 provides the details of the type of houses of the respondents in the study area. About 1 per cent of the total respondents did not have a house, 57 per cent and 39 per cent of the respondents had houses in the category of thatched roof and tiled houses, respectively. The proportion of RCC houses was only about 2 per cent.

Table 4.8: Type of House of the Respondents

Type of house	Watersheds			Total
	Chinnahagari	Upparhalla	Doddahalla	
No house	2	6	4	12
	(0.6)	(1.1)	(1.5)	(1.0)
Thatched roof	206	229	238	673
	(59.7)	(41.3)	(87.2)	(57.4)
Tiled house	125	315	21	461
	(36.2)	(56.8)	(7.7)	(39.3)
RCC	12	5	10	27
	(3.5)	(0.9)	(3.7)	(2.3)
Total	345	555	273	1173
	(100.0)	(100.0)	(100.0)	(100.0)

Note: Figures in Parentheses indicate Percentages

Table 4.9 gives the distribution of respondents by the size of holdings across the watersheds. Marginal and Small farmers constituted 59 per cent of the total respondents in the three watersheds, while medium and large farmers were about 23 and 18 per cent, respectively. When we compare the three watersheds, small and marginal farmers were more (63 per cent) in Chinnahagari watershed and Upparhalla watershed than Doddahalla watershed (45 per cent).

Table 4.9: Distribution of Respondents by Size of Holdings and Watersheds

Size of holding	Chinnahagari	Upparhalla	Doddahalla	Total
Marginal	78	118	36	232
	(22.6)	(21.3)	(13.2)	(19.8)
Small	134	233	87	454
	(38.8)	(42.0)	(31.9)	(38.7)
Medium	100	109	65	274
	(29.0)	(19.6)	(23.8)	(23.4)
Large	33	95	85	213
	(9.6)	(17.1)	(31.1)	(18.2)
Total	345	555	273	1173
	(100.0)	(100.0)	(100.0)	(100.0)

Note: Figures in Parentheses indicate percentages

The value of the productive assets and percentage distribution across assets per household is presented in Tables 4.10 and 4.11. It is clear from the tables that land had the highest value among the productive assets. It accounted for 86 per cent of the total in the study area, followed by value of machinery (9 per cent) and livestock (4 per cent). It is interesting to note that the major asset value owned by the marginal and small farmers was land across the Watersheds in the study area. Then came the value of livestock and value of machinery. In the case of medium and large farmers category, though land dominated the value of assets, machinery seemed to be slightly higher than the livestock which took the second place. In other words, tractor and other machinery owned by the higher size of holdings seem to be clear and smaller holdings depended more on livestock in the study area.

Table 4.10: Per Household Value of Productive Assets

(In Rupees)

Watersheds	Size Class	Total land value	Value of livestock	Total value of machinery	Total value of other assets	Total value of assets
Chinnahagari	Marginal	53,112	4,269	3,205	769	61,356
	Small	127,976	11,785	7,093	149	147,004
	Medium	243,015	18,842	21,045	200	283,102
	Large	464,485	25,415	12,364	0	502,264
	Total	176,583	13,435	10,762	290	201,070
Upparhalla	Marginal	44,886	3,695	2,907	1,131	52,618
	Small	107,521	5,217	5,529	515	118,783
	Medium	204,050	7,478	9,174	1,220	221,922
	Large	579,516	20,977	152,384	3,616	756,493
	Total	193,954	8,035	30,825	1,315	234,129
Doddahalla	Marginal	65,958	4,328	7,722	2,653	80,661
	Small	125,493	7,252	7,170	441	140,356
	Medium	187,718	8,825	5,885	1,192	203,620
	Large	513,075	19,522	27,488	3,068	563,154
	Total	253,133	11,061	13,263	1,730	279,187
Total	Marginal	50,921	3,986	3,754	1,246	59,907
	Small	117,002	7,546	6,305	393	131,246
	Medium	214,397	11,945	12,726	841	239,909
	Large	535,180	21,084	80,850	2,837	639,951
	Total	202,618	10,328	20,837	1,110	234,893

Table 4.11: Percentage Distribution of Productive Assets Per Household

Watersheds	Size Class	Land	Livestock	Machinery	Other assets	Total assets
Chinnahagari	Marginal	87	7	5	1	100
	Small	87	8	5	0	100
	Medium	86	7	7	0	100
	Large	92	5	2	0	100
	Total	88	7	5	0	100
Upparhalla	Marginal	85	7	6	2	100
	Small	91	4	5	0	100
	Medium	92	3	4	1	100
	Large	77	3	20	0	100
	Total	83	3	13	1	100
Doddahalla	Marginal	82	5	10	3	100
	Small	89	5	5	0	100
	Medium	92	4	3	1	100
	Large	91	3	5	1	100
	Total	91	4	5	1	100
Total	Marginal	85	7	6	2	100
	Small	89	6	5	0	100
	Medium	89	5	5	0	100
	Large	84	3	13	0	100
	Total	86	4	9	0	100

4.3 Land Use, Cropping Pattern and Crop Economy

Cropping pattern indicates the direction of the crop economy. In the rainfed areas it emerges after decades of trial and errors and stablilises with consideration to four factors, viz., self-sufficiency, risk spreading, optimisation of net income and diversification for ensuring income flow. Any intervention in the form of land based activity or operating the market forces, induces changes in cropping pattern. Here, we have analysed the landuse pattern in the three watersheds and the results have been presented in Tables 4.13, 4.14 (a), 4.14 (b) and 4.14 (c). But before getting into the analysis of cropping pattern we have presented the cropping intensity across the watersheds and size of holdings. The average size of holdings per household was about 7.36 acres in the study area. The gross cropped area, however, came to be 7.21 acres, little lower than the average size of holding. This could be because of the wastelands (12 households) and leased out lands (18 households) were included in the analysis. The intensity of cropped area use was 98 per cent in the study region (Gross cropped area as per cent of holding size). The average size of holding per household in the case of marginal farmers, small farmers, and medium farmers' showed little higher in Chinnahagari and

Upparhalla watersheds (Southern Karnataka), whereas, medium and large farmers average holdings per household revealed higher intensity in Upparhalla and Doddahalla compared to Chinnahagari watershed.

Table 4.12: Intensity of Land Use (Per HH) in the Selected Watersheds
(In acres)

Watersheds	Size of holdings	Average holding	Gross cropped Area	Land use Intensity (%)
Chinnahagari	Marginal	1.83	1.98	108
	Small	4.01	4.22	105
	Medium	7.54	7.56	100
	Large	14.83	14.91	102
	Total	5.59	5.73	103
Upparhalla	Marginal	1.84	2.47	134
	Small	3.96	4.14	105
	Medium	7.57	7.57	100
	Large	21.07	21.07	100
	Total	7.46	7.46	100
Doddahalla	Marginal	1.74	3.57	205
	Small	3.99	5.19	130
	Medium	7.31	7.92	108
	Large	14.84	14.84	100
	Total	8.60	8.60	100
Total	Marginal	1.82	2.49	137
	Small	3.98	4.36	110
	Medium	7.55	7.65	101
	Large	17.68	17.68	100
	Total	7.21	7.21	100

The percentage distribution of the area under different crops is given in Table 4.13 in the study area. The area under various crops differed distinctly in the three selected watersheds. For example, area under Groundnut crop dominated in all the three watersheds accounting for little less than 50 per cent of the total area, followed by, Jowar (16 per cent), Ragi (7 per cent), and Bajra (5 per cent). Similarly, the proportion of number of sample households who cultivated the above crops was also in the same order. Across the size of holdings, the area under groundnut crop was slightly higher in the case of smaller holdings then the larger holdings.

The crop pattern in the three watersheds is given in tables 4.14(a), (b) and (c). It is noted that 75 per cent of the total cultivated area and 52 per cent of the households had taken to groundnut in Chinnahagari watershed. The second highest cropped area was under ragi. This could be because the staple food in most part of the district was Ragi. More than 60 per cent of the cropped area came under groundnut crop in the case of marginal and small farmers in the watershed. By and large, similar trends were observed in Upparhalla watershed. The area under

Jowar crop shared equally with Ragi in the above Upparahalla watershed. However, in Doddahalla watershed, .Jowar crop dominated the area share (38 per cent), followed by Bajra (18 per cent), Groundnut (9 per cent) and Wheat (6 per cent). Area under commercial crops like Onion, Cotton, Sericulture, Oil seeds etc., was picking up in the study area.

4.4 Crop Economy in the Selected Watersheds

Per acre cost of cultivation and returns for Paddy, Ragi, Jowar, Groundnut, Sunflower, Sericulture, Onion, Sugarcane, Cotton crops are shown in Tables 4.15 (a) to (i) in three watersheds. The total cost of cultivation per acre varied from crop to crop and also across the watersheds and size of holdings. For example, the total cost of cultivation per acre of Paddy was Rs. 3,450, Ragi Rs 1,066, Jowar Rs 1,175, Groundnut Rs 1,915, Sunflower Rs 1,459, Sericulture Rs 12,780, Onion Rs 9,788 Sugarcane Rs 9,870, and Cotton Rs 2,580. The net returns were as follows for the above crops Rs 4,830, Rs 697, Rs 956, Rs 1,614, Rs. 2,214, Rs 17,709, Rs 5,691, Rs 8,227 and Rs 3,382 in the same order. The yield per acre reported for Paddy crop was 12.31 quintals, Ragi 3.40 qtls, Jowar 2.99 qtls, Groundnut 2.48 qtls, Sunflower 2.26 qtls, Sericulture 1.08 qtls, Onion 25.56 qtls, Sugarcane 23.89 tonnes and cotton 3.33 qtls. The details of the cropping pattern in the three watersheds have been given in Appendix Tables from 4.1(a) to 4.1(d).

Table 4.13: Cropping Pattern in the Study Area: Combined for All Watersheds

Crop	Marginal	Small	Medium	Large	All
	%	%	%	%	%
Paddy	0.52	1.44	3.03	1.15	1.65
Ragi	10.14	7.77	6.49	5.63	6.65
Jower	12.31	13.73	16.62	16.24	15.49
Maize	2.17	0.81	1.38	1.73	1.46
Bajra	4.01	5.08	3.21	7.58	5.66
Groundnut	51.76	54.43	52.62	42.87	48.61
Sunflower	4.39	3.34	2.63	6.66	4.72
Cotton	5.60	1.78	2.03	3.45	2.85
Onion	3.46	2.23	2.86	1.35	2.08
Navane	0.18	0.95	0.98	0.97	0.92
Horsegram	0.18	1.41	1.21	2.04	1.56
Sugarcane	0.72	1.31	0.41	2.30	1.49
Wheat	1.85	1.95	1.33	1.59	1.63
Other crops*	2.72	3.77	5.22	6.43	5.25
Total	100.00	100.00	100.00	100.00	100.00

- Other crops include seasamum, Tur ,green/Black/Bengal/Horse Gram, coconut, Arecanut, Fruits, Vegetables and safflower.

Table 4.14(a) : Cropping Pattern in Chinnahagari Watershed

Crop	Marginal	Small	Medium	Large	All
	%	%	%	%	%
Paddy	1.97	3.12	5.85	2.51	3.94
Ragi	7.77	8.47	8.55	11.94	9.31
Jower	0.69	1.38	3.07	1.89	2.11
Groundnut	78.51	76.43	70.90	75.01	74.09
Sunflower	5.70	2.67	1.34	1.68	2.14
Cotton	1.21	2.36	3.47	0.94	2.36
Onion	2.42	3.30	5.41	1.68	3.65
Navane	0.00	1.02	0.33	1.68	0.84
Other crops*	1.73	1.25	1.07	2.67	1.57
Total	100.00	100.00	100.00	100.00	100.00

*Other crops include Maize, bajra, coconut, Vegetable crops, sericulture, horsegram and flower crops

Table 4.14(b): Cropping Pattern in Upparhalla Watershed

Crop	Marginal	Small	Medium	Large	All
	%	%	%	%	%
Paddy	0.00	1.11	2.32	1.52	1.48
Ragi	16.03	11.00	8.63	7.54	9.15
Jower	8.92	12.96	12.36	8.54	10.36
Maize	3.76	1.46	2.81	3.05	2.68
Groundnut	59.82	60.43	61.79	57.18	59.05
Sunflower	5.02	4.56	4.22	9.91	7.18
Sericulture	0.72	1.37	2.66	1.10	1.45
Cotton	0.00	0.11	0.98	4.80	2.61
Onion	3.22	2.21	0.46	1.90	1.77
Navane	0.36	1.35	2.17	1.40	1.47
Other crops	2.15	3.45	1.59	3.06	2.79
Total	100.00	100.00	100.00	100.00	100.00

* Other crops include, bajra, tur, redgram sesamum, fruits crops, Vegetable crops, bengalgrams, horsegram and sugarcane, wheat and sunflower

Table 4.14(c) : Cropping Pattern in Doddahalla Watershed

Crop	Marginal	Small	Medium	Large	All
	%	%	%	%	%
Jower	32.74	31.26	43.48	34.53	35.79
Bajra	16.44	17.60	12.13	21.50	18.40
Groundnut	4.15	13.39	10.85	6.70	8.75
Sunflower	1.56	1.61	1.97	3.29	2.58
Tur/Redgram	0.00	1.15	3.55	1.85	1.99
Greengram	2.33	2.64	2.45	1.64	2.05
Cotton	22.71	4.59	1.58	2.22	3.68
Onion	5.13	0.92	2.96	0.33	1.29
Horsegram	0.00	4.38	4.66	5.38	4.73
Bengal gram	2.33	2.75	1.78	2.18	2.21
Sugarcane	3.11	5.78	1.68	6.82	5.28
Wheat	7.94	8.37	5.33	4.76	5.75
Other Crops*	1.56	5.59	7.58	8.79	7.51
Total	100.00	100.00	100.00	100.00	100.00

* Other crops include maize, blackgram, vegetable crops, and fruits crops.

Table 4.15(a): Cost and Returns Per Acre of Paddy Crop - Irrigated

(Value in Rs)

Watersheds	Landsize class	No of HHs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & electricity	Others	Total cost	Main product	By-Product	Gross Return	Net return	Yield/per Acre
Chinnahagari	Marginal	3	35	667	807	228	663	947	0	3,347	6,105	1,123	7,228	3,881	7.02
	Small	13	651	911	560	323	822	177	240	3,685	7,411	834	8,246	4,561	9.71
	Medium	25	594	827	611	338	596	233	265	3,465	9,113	791	9,904	6,439	14.12
	Large	5	158	525	379	354	418	192	146	2,172	6,996	675	7,671	5,499	11.00
	Total	46	517	793	570	333	622	240	231	3,307	8,275	795	9,070	5,763	12.35
Upparhalla	Small	10	951	376	780	302	660	195	0	3,265	5,283	478	5,761	2,496	9.95
	Medium	14	503	558	618	358	885	224	26	3,172	6,651	895	7,546	4,374	11.87
	Large	22	559	534	854	499	1,116	480	0	4,042	6,876	734	7,611	3,569	13.26
	Total	46	608	515	767	420	964	350	8	3,632	6,531	741	7,273	3,641	12.25
Total	Marginal	3	35	667	807	228	663	947	0	3,347	6,105	1,123	7,228	3,881	7.02
	Small	23	762	714	641	315	762	184	151	3,530	6,625	703	7,328	3,798	9.80
	Medium	39	566	746	614	344	684	230	193	3,377	8,368	822	9,190	5,814	13.44
	Large	27	446	532	720	458	919	399	41	3,514	6,910	718	7,628	4,114	12.62
	Total	92	557	671	657	371	773	289	133	3,450	7,508	771	8,280	4,830	12.31

Table 4.15(b): Cost and Returns Per Acre of Ragi Crop - Rainfed **(value in Rs)**

Watershed	Landsize Class	No of H Hs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By-product	Gross return	Net return	Yield/ per Acre
Chinnahagari	Marginal	12	364	9	326	58	93	0	18	868	1,089	613	1,702	834	2.84
	Small	30	286	168	261	54	151	19	93	1,031	1,325	588	1,913	882	3.26
	Medium	32	303	151	264	64	149	1	108	1,038	1,368	623	1,991	953	3.38
	Large	17	196	125	216	52	79	11	21	699	1,276	572	1,848	1,149	3.09
	Total	91	268	138	252	57	124	9	71	918	1,310	597	1,907	989	3.22
Upparhalla	Marginal	35	317	82	372	53	190	0	0	1,014	1,162	355	1,517	504	3.05
	Small	84	287	176	411	54	277	0	2	1,207	1,090	411	1,502	295	2.88
	Medium	48	328	160	415	68	271	12	0	1,254	1,384	437	1,820	566	3.74
	Large	51	257	189	282	49	289	8	0	1,075	1,464	351	1,815	739	3.97
	Total	218	286	167	355	54	270	6	1	1,138	1,308	385	1,693	555	3.51
Total	Marginal	47	327	67	363	54	171	0	4	984	1,147	407	1,555	570	3.01
	Small	114	286	173	363	54	237	6	31	1,151	1,165	468	1,632	482	3.00
	Medium	80	316	156	343	66	213	7	51	1,151	1,376	526	1,902	750	3.57
	Large	68	240	172	264	50	232	9	6	972	1,412	412	1,824	852	3.73
	Total	309	280	157	321	55	222	7	24	1,066	1,309	454	1,763	697	3.42

Table 4.15(c): Cost and Returns Per Acre of Jower Crop – Rainfed **(Value in Rs)**

Watersheds	Landsize class	No of HHs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By-Product	Gross return	Net return	Yield/per Acre
Chinnahagari	Marginal	1	500	500	250	30	0	0	0	1,280	5,000	500	5,500	4,220	10.00
	Small	6	332	226	301	119	302	58	168	1,505	3,258	665	3,923	2,417	6.84
	Medium	14	295	197	341	142	149	137	252	1,513	1,900	493	2,393	880	4.43
	Large	6	391	267	322	172	206	56	0	1,413	3,317	478	3,794	2,381	8.33
	Total	27	328	226	327	141	187	101	174	1,484	2,547	523	3,070	1,586	5.89
Upparhalla	Marginal	26	394	160	524	203	374	0	0	1,654	1,937	397	2,333	679	4.60
	Small	100	337	220	490	184	353	21	2	1,607	2,031	478	2,509	903	4.69
	Medium	60	322	190	421	158	270	2	0	1,362	1,934	418	2,352	989	4.43
	Large	94	222	195	384	166	317	44	7	1,335	2,161	341	2,503	1,168	5.10
	Total	240	290	199	432	171	319	25	3	1,439	2,055	403	2,458	1,019	4.79
Doddahalla	Marginal	26	454	217	338	76	135	91	37	1,348	1,539	688	2,227	879	2.22
	Small	57	366	255	327	60	111	91	52	1,262	1,636	694	2,330	1,067	2.22
	Medium	54	235	240	246	67	113	46	43	989	1,369	477	1,846	856	1.86
	Large	69	215	203	223	51	106	35	1029	935	1,316	475	1,790	855	1.86
	Total	206	258	222	252	58	110	50	75	1,025	1,395	523	1,917	892	1.94
Total	Marginal	53	432	201	405	122	221	56	23	1,459	1,736	578	2,314	855	3.20
	Small	163	352	238	401	118	227	58	32	1,426	1,863	595	2,458	1,032	3.47
	Medium	128	264	222	304	99	161	39	44	1,134	1,570	461	2,031	897	2.78
	Large	129	219	202	270	86	167	38	74	1,056	1,587	437	2,023	967	2.88
	Total	473	270	215	313	98	181	43	54	1,175	1,647	483	2,131	956	2.99

Table 4.15(d): Cost and Returns Per Acre of Groundnut Crop – Rainfed

(Value in Rs)

Watershed	Landsize class	No of H Hs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By-product	Gross return	Net return	Yield/ Per Acre
Chinnahagari	Marginal	67	367	248	285	599	256	3	190	1,949	3,429	462	3,891	1,942	2.69
	Small	123	270	298	286	640	248	3	133	1,878	3,170	418	3,588	1,711	2.50
	Medium	97	274	334	284	677	264	4	107	1,943	3,463	367	3,829	1,886	2.69
	Large	32	132	299	326	650	215	0	134	1,756	3,249	414	3,662	1,906	2.52
	Total	319	245	307	295	653	246	2	128	1,877	3,319	401	3,720	1,843	2.59
Upparhalla	Marginal	82	378	282	485	738	288	0	4	2,175	2,889	389	3,279	1,104	2.33
	Small	193	284	267	424	722	335	1	6	2,038	3,357	388	3,745	1,707	2.66
	Medium	103	276	312	329	717	322	2	22	1,981	3,154	345	3,499	1,518	2.49
	Large	95	254	326	258	673	330	0	0	1,841	2,940	298	3,238	1,397	2.33
	Total	473	275	306	328	698	326	1	6	1,941	3,080	336	3,416	1,475	2.44
Doddahalla	Marginal	3	600	432	488	544	184	0	0	2,248	3,452	938	4,390	2,143	2.25
	Small	25	458	421	350	423	163	72	42	1,929	3,178	546	3,725	1,796	2.03
	Medium	17	295	631	363	505	167	32	40	2,032	2,834	531	3,365	1,332	2.01
	Large	22	366	468	267	449	121	56	6	1,733	2,920	498	3,419	1,685	2.20
	Total	67	380	498	324	459	147	52	26	1,886	2,986	533	3,519	1,633	2.10
Total	Marginal	152	378	271	406	679	273	1	78	2,086	3,114	428	3,542	1,456	2.47
	Small	341	288	288	363	672	290	6	60	1,966	3,270	409	3,680	1,713	2.56
	Medium	217	276	339	309	687	286	4	64	1,965	3,288	365	3,653	1,688	2.56
	Large	149	233	327	274	656	293	3	31	1,816	3,009	334	3,343	1,527	2.37
	Total	859	269	316	316	670	289	4	51	1,915	3,161	369	3,530	1,614	2.48

Table 4.15(e): Cost and Returns Per Acre of Sunflower Crop- Rainfed **(Value in Rs)**

Watershed	Landsize class	No	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By-product	Gross return	Net return	Yield/ Per Acre
Chinnahagari	Marginal	6	356	121	245	325	153	61	12	1,273	4,552	0	4,552	3,279	3.09
	Small	6	200	257	143	103	175	0	73	951	2,213	0	2,213	1,263	1.73
	Medium	5	342	406	278	235	265	50	50	1,626	4,540	0	4,540	2,914	3.50
	Large	2	100	163	244	100	0	0	0	606	5,738	0	5,738	5,131	3.38
	Total	19	246	248	216	179	158	24	41	1,112	3,928	0	3,928	2,816	2.75
Upparhalla	Marginal	8	193	279	543	268	321	0	0	1,604	3,579	0	3,579	1,975	2.39
	Small	25	359	239	535	292	446	59	0	1,930	3,159	0	3,159	1,228	2.34
	Medium	16	281	225	441	260	350	29	9	1,594	3,337	0	3,337	1,743	2.49
	Large	33	211	221	243	234	347	53	9	1,318	3,957	0	3,957	2,639	2.10
	Total	82	240	227	324	248	361	48	7	1,454	3,748	0	3,748	2,294	2.20
Doddahalla	Marginal	2	750	500	350	250	350	250	0	2,450	3,850	0	3,850	1,400	2.50
	Small	6	771	1364	486	364	1337	43	143	4,509	4,660	257	4,917	409	2.94
	Medium	4	360	190	220	195	98	0	50	1,113	1,540	0	1,540	427	1.00
	Large	10	321	299	205	249	161	100	19	1,354	3,108	63	3,170	1,816	2.38
	Total	22	396	414	246	253	296	81	38	1,724	3,051	73	3,124	1,400	2.21
Total	Marginal	16	294	243	426	286	266	41	4	1,561	3,932	0	3,932	2,371	2.64
	Small	37	367	366	438	256	480	44	33	1,982	3,101	28	3,129	1,147	2.27
	Medium	25	307	252	370	243	288	28	24	1,512	3,228	0	3,228	1,717	2.40
	Large	45	225	232	237	232	306	59	10	1,300	3,877	10	3,887	2,586	2.19
	Total	123	264	257	300	241	330	51	16	1,459	3,661	11	3,672	2,214	2.26

Table 4.15(f): Cost and Returns Per Acre of Sericulture Crop-Irrigated

(Value In Rs)

Watersheds	Landsize class	No of H Hs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By-product	Gross return	Net return	Yield/ per Acre
Chinnahagari	Large	2	1,200	4,747	2,400	1,653	1,600	187	1,867	13,653	33,333	533	33,867	20,213	134.93
	Total	2	1,200	4,747	2,400	1,653	1,600	187	1,867	13,653	33,333	533	33,867	20,213	134,93
Upparhalla	Marginal	3	8,750	6,750	2,500	2,350	2,500	0	1,000	23,850	30,875	0	30,875	7,025	166.25
	Small	11	2,863	4,039	1,906	1,639	2,541	641	486	14,116	32,430	39	32,469	18,353	73.03
	Medium	12	2,149	3,228	1,775	1,407	2,347	85	322	11,313	33,860	55	33,915	22,602	164.36
	Large	12	2,639	3,541	1,000	1,468	2,253	582	818	12,301	25,071	273	25,343	13,043	61.28
	Total	38	2,715	3,643	1,537	1,513	2,359	390	568	12,724	30,141	132	30,272	17,549	105.75
Total	Marginal	3	8,750	6,750	2,500	2,350	2,500	0	1,000	23,850	30,875	0	30,875	7,025	166.25
	Small	11	2,863	4,039	1,906	1,639	2,541	641	486	14,116	32,430	39	32,469	18,353	73.03
	Medium	12	2,149	3,228	1,775	1,407	2,347	85	322	11,313	33,860	55	33,915	22,602	164.36
	Large	14	2,429	3,717	1,204	1,495	2,158	524	971	12,498	26,274	311	26,585	14,087	72.01
	Total	40	2,623	3,709	1,589	1,521	2,314	378	646	12,780	30,333	156	30,489	17,709	107.51

Table 4.15(g): Cost and Returns Per Acre of Onion Crop – Irrigated **(Value in Rs)**

Watersheds	Landsize class	No of H Hs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By product	Gross return	Net return	Yield/per Acre
Chinnabagari	Marginal	3	1,000	0	257	543	443	443	0	2,686	7,429	0	7,429	4,743	27.14
	Small	10	516	695	316	408	679	343	43	3,000	7,962	0	7,962	4,962	19.95
	Medium	26	721	820	682	645	556	232	193	3,849	10,084	25	10,109	6,260	26.02
	Large	4	413	600	306	475	306	219	375	2,694	9,850	0	9,850	7,156	21.50
	Total	43	646	721	522	559	554	270	165	3,437	9,369	14	9,383	5,946	23.97
Upparhalla	Marginal	7	1,022	600	922	767	1,000	167	0	4,478	7,528	0	7,528	3,050	19.11
	Small	14	829	1,239	763	676	1,037	165	0	4,709	9,495	24	9,520	4,810	27.76
	Medium	3	987	1,387	987	1447	1,147	667	0	6,620	8,560	0	8,560	1,940	28.00
	Large	21	999	2,042	883	824	1,239	292	145	6,424	16,362	0	16,362	9,938	39.63
	Total	45	952	1,594	859	807	1,146	259	77	5,695	12,860	7	12,867	7,172	33.01
Doddahalla	Marginal	6	1,000	576	424	326	323	174	0	2,823	5,053	152	5,205	2,382	14.09
	Small	3	1,075	1,875	450	675	1,063	0	0	5,138	12,250	500	12,750	7,613	33.75
	Medium	2	200	67	33	53	147	27	0	527	667	0	667	140	2.67
	Large	2	0	1,625	375	625	700	0	0	3,325	2,000	500	2,500	-825	17.50
	Total	13	470	635	223	275	384	52	0	2,040	3,390	169	3,559	1,519	11.42
Total	Marginal	16	1,010	482	628	573	664	220	0	3,577	6,654	52	6,707	3,129	18.85
	Small	27	717	1,064	542	561	885	226	19	4,014	9,092	58	9,150	5,136	24.95
	Medium	31	606	665	537	546	489	208	132	3,183	7603	17	7,620	4,437	20.24
	Large	27	825	1,778	750	753	1,047	257	170	5,579	14,171	40	14,211	8,632	34.96
	Total	101	743	1,070	611	613	771	228	100	4,135	9788	38	9,826	5,691	25.56

Table 4.15(h): Cost and Returns Per Acre of Sugarcane Crop – Irrigated **(value in Rs)**

Watersheds	Landsize class	No of H Hs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By product	Gross return	Net Return	Yield/ Per Acre
Upparhalla	Large	1	2,000	0	500	2,000	1,500	0	1,000	7,000	6,250	0	6,250	-750	5.00
	Total	1	2,000	0	500	2,000	1,500	0	1,000	7,000	6,250	0	6,250	-750	5.00
Doddahalla	Marginal	3	3,625	1,825	1,250	2,500	1,950	750	500	12,400	21,750	1,750	23,500	11,100	27.50
	Small	8	1,540	3,274	532	2,202	1,607	647	258	10,060	16,250	377	16,627	6,567	22.42
	Medium	6	1,588	2,600	1,106	2,529	2,694	971	294	11,782	19,271	729	20,000	8,218	31.29
	Large	17	1,136	2,169	1,234	1,770	2,072	449	734	9,564	18,006	367	18,373	8,809	23.86
	Total	34	1,335	2,418	1,079	1,938	2,015	537	596	9,918	17,853	441	18,293	8,375	24.20
Total	Marginal	3	3,625	1,825	1,250	2,500	1,950	750	500	12,400	21,750	1,750	23,500	11,100	27.50
	Small	8	1,540	3,274	532	2,202	1,607	647	258	10,060	16,250	377	16,627	6,567	22.42
	Medium	6	1,588	2,600	1,106	2,529	2,694	971	294	11,782	19,271	729	20,000	8,218	31.29
	Large	18	1,156	2,118	1,217	1,775	2,059	439	740	9,504	17,729	359	18,088	8,584	23.41
	Total	35	1,346	2,379	1,070	1,939	2,007	529	602	9,870	17,663	434	18,097	8,227	23.89

Table 4.15(i): Cost and Returns Per Acre of Cotton Crop –Rainfed **(Value in Rs)**

Watersheds	Landsize class	No of H Hs	Family labour	Hired labour	Bullock & Tractor	Seeds	Fertilizers & Chemicals	Water & Electricity	Others	Total cost	Main product	By product	Gross return	Net return	Yield/Per Acre
Chinnahagari	Marginal	2	1,714	0	400	386	886	714	0	4,100	15,429	0	15,429	11,329	8.57
	Small	12	823	1,170	404	589	919	211	367	4,482	8,891	0	8,891	4,409	4.83
	Medium	16	1,104	1,090	542	594	1,038	185	242	4,796	14,446	0	14,446	9,650	8.62
	Large	3	478	611	440	567	500	100	444	3,140	6,444	0	6,444	3,304	3.56
	Total	33	984	1,024	486	582	945	204	289	4,514	12,075	0	12,075	7,561	7.01
Upparhalla	Small	1	500	100	500	150	800	0	0	2,050	4,200	0	4,200	2,150	3.00
	Medium	3	425	188	375	94	219	0	0	1,300	2,350	0	2,350	1,050	1.50
	Large	8	229	241	167	108	281	0	0	1,025	2,190	0	2,190	1,164	1.35
	Total	12	247	235	186	107	281	0	0	1,056	2,221	0	2,221	1,165	1.38
Doddahalla	Marginal	5	182	171	94	58	89	82	0	677	1,411	27	1,438	762	0.74
	Small	14	875	1,610	610	395	723	320	0	4,533	9,915	365	10,280	5,748	5.10
	Medium	4	950	1,325	500	478	294	563	0	4,109	10,750	0	10,750	6,641	6.75
	Large	10	1015	1,822	370	647	676	285	593	5,408	10,463	22	10,485	5,077	5.15
	Total	33	686	1,152	344	367	447	249	190	3,436	7,221	103	7,324	3,888	3.76
Total	Marginal	7	268	162	111	77	134	118	0	870	2,204	26	2,229	1,359	1.18
	Small	27	844	1,396	527	462	801	269	142	4,440	9,352	213	9,565	5,125	4.93
	Medium	23	945	963	502	476	740	221	150	3,999	11,438	0	11,438	7,439	6.90
	Large	21	404	589	219	238	372	64	141	2,028	4,092	5	4,096	2,068	2.24
	Total	78	547	717	301	292	469	129	124	2,580	5,925	37	5,962	3,382	3.33

4.5 Allied Agricultural Sector

Agriculture and allied activities were undertaken by the respondents and the data have been presented in Table 4.16. Here, allied activities indicate milch animals, sheep and goats. Around 40 per cent of the respondents reported that they had undertaken allied activities. Across the size of holdings, 26 per cent and 39 per cent of the respondents had taken up allied activities, respectively. Intensity of allied activities had inverse relationship with the size of holding. Among the three watersheds, Chinnahagari and Upparhalla showed similar trends than Doddahalla.

Table 4.17 gives the details of returns from allied activities for those who were having activities. The average investment per household was Rs 17,020 in the study area. Across the size of holdings, the medium farmers and large farmers ranked higher than the other categories of farmers. Smaller the size of holdings, lower the average investment per household on the livestock. Among the watersheds, Chinnahagari showed highest investment of Rs 27,453 on the livestock than Upparhalla Rs 12,828 and Doddahalla Rs 11,333. The returns in the form of value of main product and by-product showed 83 per cent and 17 per cent, respectively. Chinnahagari watershed recorded considerably higher returns from allied activities than other two watersheds. The net returns also showed similar trends across the watersheds. The net returns from allied activities for total sample households in three watersheds is indicated in appendix Table 4.2.

Table 4.16: Allied Activities Undertaken by the Sample Farmers

(No. H Hs)

Size Class	Yes/No	Watersheds			Total
		Chinnahagari	Upparhalla	Doddahalla	
Marginal	Yes	20.00 (25.64)	20.00 (16.95)	21.00 (58.33)	61.00 (26.29)
	No	58.00 (74.36)	98.00 (83.05)	15.00 (41.67)	71.00 (73.71)
	Total	78.00 (100.00)	118.00 (100.00)	36.00 (100.00)	232.00 (100.00)
Small	Yes	70.00 (52.24)	62.00 (26.61)	46.00 (52.87)	178.00 (39.21)
	No	64.00 (47.76)	171.00 (73.39)	41.00 (47.13)	276.00 (60.79)
	Total	134.00 (100.00)	233.00 (100.00)	87.00 (100.00)	454.00 (100.00)
Medium	Yes	47.00 (47.00)	29.00 (26.61)	38.00 (58.46)	114.00 (41.61)
	No	53.00 (53.00)	80.00 (73.39)	27.00 (41.54)	160.00 (58.39)
	Total	100.00 (100.00)	109.00 (100.00)	65.00 (100.00)	274.00 (100.00)
Large	Yes	20.00 (60.61)	42.00 (44.21)	71.00 (83.53)	133.00 (62.44)
	No	13.00 (39.39)	53.00 (55.79)	14.00 (16.47)	80.00 (37.56)
	Total	33.00 (100.00)	95.00 (100.00)	85.00 (100.00)	213.00 (100.00)
All	Yes	157.00 (45.51)	153.00 (27.57)	176.00 (64.47)	486.00 (41.43)
	No	188.00 (54.49)	402.00 (72.43)	97.00 (35.53)	687.00 (58.57)
	Total	345.00 (100.00)	555.00 (100.00)	273.00 (100.00)	1173.00 (100.00)

Note: Figures in bracket denote percentage to total

Table 4.17: Returns from Allied Activities Among the Sample Households for Those Who are Having Activity

(Value inRs)

District	Size class	Number of animals	Total investment	Average no. of persons engaged	Value of main product	Value of by-product	Total value	Total cost	Net returns
Chinnahagari	Marginal	12.35	17,155.00	1.15	8,055.00	947.50	9,002.50	2,273.00	6,729.50
	Small	14.40	20,967.14	1.13	12,109.43	1,375.43	13,484.86	2,409.57	11,075.29
	Medium	29.11	38,136.49	1.36	18,655.32	2,023.62	20,678.94	3,700.85	16,978.09
	Large	22.50	35,585.00	1.55	17,281.25	2,855.00	20,136.25	4,571.00	15,565.25
	Total	19.57	27,483.54	1.25	14,211.37	1,703.44	15,914.81	3,054.08	12,860.73
Upparahalla	Marginal	5.15	7,597.50	1.05	3,337.20	598.75	3,935.95	1,565.00	2,370.95
	Small	4.35	8,730.65	1.02	3,256.77	996.77	4,253.55	1,647.37	2,606.18
	Medium	4.41	12,275.86	1.03	4,016.77	1,137.93	5,154.70	2,234.48	2,920.22
	Large	8.29	21,750.00	1.10	5,907.64	1,947.62	7,855.26	3,029.52	4,825.74
	Total	5.55	12,828.43	1.05	4,139.03	1,232.52	5,371.55	2,127.30	3,244.24
Doddahalla	Marginal	1.38	5,547.62	1.05	4,367.14	907.14	5,274.29	2,604.76	2,669.52
	Small	3.11	10,354.35	1.15	6,450.65	1,535.65	7,986.30	3,614.13	4,372.17
	Medium	3.50	12,065.79	1.18	6,091.50	1,990.79	8,082.29	4,767.11	3,315.18
	Large	4.48	13,285.92	1.23	7,547.03	2,411.27	9,958.30	5,263.38	4,694.92
	Total	3.54	11,332.95	1.18	6,566.80	1,912.16	8,478.95	4,407.95	4,071.00
Total	Marginal	6.21	10,025.41	1.08	5,238.59	819.26	6,057.85	2,155.08	3,902.77
	Small	7.98	13,962.36	1.10	7,563.54	1,284.94	8,848.48	2,455.38	6,393.11
	Medium	14.29	22,867.68	1.22	10,743.54	1,787.37	12,530.91	3,683.25	8,847.66
	Large	8.39	19,312.03	1.23	8,493.12	2,331.58	10,824.70	4,453.83	6,370.86
	Total	9.35	17,021.12	1.16	8,272.04	1,630.77	9,902.81	3,252.61	6,650.21

Non-Land Based Activities (NLBAs) provided good support to the crop economy. Farmers as well as others undertook the NLBAs in the three watersheds. The number of households initiated non-land based activities (NLBAs) in the study area have been shown in Table 4.18. Among these, the self initiated activities like dairy, vegetable vending, petty shop etc. accounted for about 19 per cent. These were slightly higher than the project supported NLBAs (12 per cent) in the three watersheds. Across the watersheds, Doddahalla watershed showed higher percentage of NLBAs (both project supported and self-initiated) when compared with other two watersheds. However, self-initiated NLBAs were present in Chinnahagari watershed than project supported NLBAs. Among the NLBAs, dairy (both project supported and self-initiated activities) recorded the highest share, followed by sheep/goat rearing. It is clearly visible that different types of NLBAs were undertaken by the respondents in Chinnahagari and Upparhalla watersheds as compared to Doddahalla watershed. All those who had undertaken the NLBAs would like to continue these in future also. Respondents reported their willingness to continue independently, through the created assets under NLBAs.

Table 4.18: Households Participating in NLBA in the Study Area

(Percentage)

Name of the activity	Chinnahagari		Upparhalla		Doddahalla		All Watersheds	
	PS	SI	PS	SI	PS	SI	PS	SI
Yes	5	39	5	7	36	21	12	19
No	95	61	95	93	64	79	88	81
Total no. of HHs	100 (345)	100 (345)	100 (555)	100 (555)	100 (273)	100 (273)	100 (1,173)	100 (1,173)
Dairy	12	37	27	28	66	73	51	44
Business*	18	5	7	25	1	2	4	8
Sheep/goat	41	54	53	31	33	25	38	43
Handloom/ Weaving	6	1	-	-	-	-	1	1
Tailoring/ Carpentry	23	1	10	5	-	-	5	2
Others@	-	-	3	11	-	-	1	2
Total Actuals	100 (17)	100 (135)	100 (30)	100 (36)	100 (97)	100 (56)	100 (144)	100 (227)

Notes: PS = Project Supported, SI = Self Initiated

* Business includes cloth, flowers, tamarind, flour mill, jelly making, ration shop. hotel, petty shop and mike set.

@ Others includes bullocks, fishery and vegetable vernding

The availability of services for NLBAs in the three watersheds has been shown in Tables 4.19, 4.20 and 4.21. Out of 17 NLBAs, 14 availed transport, market access, credit and the training and remaining NLBAs did not avail any services. Again among them, a few reported that under transport, market access, credit and training the criteria like availability, accessibility, cost of services and quality of services were average to good. Most of them expressed mixed views about the quality of services. Regarding accounts/audits and technical services none of the NLBAs expressed any qualitative ranking of the services or probably these NLBAs did not require such services.

In Upparhalla watershed, out of 58 NLBAs, a majority had availed transport and credit services (Table 4.20). However, other services were marginally availed. Regarding the quality of services under different criteria, the respondents expressed that all the services were good or average in quality. Nevertheless, a few of them reported mixed opinion like very good and poor, similar to that in Chinnahagari watershed.

While in Doddahalla watershed, out of 63 NLBAs, 95 per cent had availed transport and market services and to some extent, credit (46 per cent). As far as other services were concerned not many had availed these services. The quality of services classified under four criteria indicated that a majority of the NLBAs had very poor opinion about the services and around 20 to 30 per cent opined good to average quality.

Table 4.19: Availability of Services for NLBAs - Chinnahagari Watershed

(Percentage)

Services	Availability (Nos)		Quality of service					
	Yes	No	Criteria	V.Good	Good	Average	Poor	V.Poor
Transport	14 (82)	3 (18)	Availability	15	50	7	14	14
			Accessibility	7	43	29	21	-
			Cost of service	-	43	28	29	-
			Quality of service	7	21	50	21	-
Accounts/Audits	–	17 (100)	Availability	-	-	-	-	-
			Accessibility	-	-	-	-	-
			Cost of service	-	-	-	-	-
			Quality of service	-	-	-	-	-
Technical	–	17 (100)	Availability	-	-	-	-	-
			Accessibility	-	-	-	-	-
			Cost of service	-	-	-	-	-
			Quality of service	-	-	-	-	-
Market access	13 (76)	4 (23)	Availability	31	39	15	-	15
			Accessibility	15	23	59	8	-
			Cost of service		38	54	8	-
			Quality of service		42	42	16	-
Training	7 (41)	10 (54)	Availability	29	43	29	16	-
			Accessibility	14	29	57	-	-
			Cost of service	14	14	29	14	29
			Quality of service	29	29	29	13	-
Credit	14 (82)	3 (18)	Availability	29	50	14	7	-
			Accessibility	7	57	29	7	-
			Cost of service	-	36	43	14	7
			Quality of service	-	57	29	7	7
Insurance	–	17 (100)	Availability	-	-	-	-	-
			Accessibility	-	-	-	-	-
			Cost of service	-	-	-	-	-
			Quality of service	-	-	-	-	-

Note: Figures in bracket denote percentage

Table 4.20: Availability of Services for NLBAs : Upparahalla Watershed

(Percentage)

Services	Availability (Nos)		Quality of service					
	Yes	No	Criteria	V.Good	Good	Average	Poor	V.Poor
Transport	54 (93)	4 (7)	Availability	4	41	24	20	11
			Accessibility	2	35	30	28	6
			Cost of service	2	35	43	19	2
			Quality of service	2	19	32	32	15
Accounts/Audits	4 (7)	54 (93)	Availability	-	100	-	-	-
			Accessibility	-	100	-	-	-
			Cost of service	-	100	-	-	-
			Quality of service	-	80	20	-	-
Technical	3 (5)	55 (95)	Availability	-	100	-	-	-
			Accessibility	-	67	33	-	-
			Cost of service	-	67	33	-	-
			Quality of service	-	100	-	-	-
Market access	11 (19)	47 (81)	Availability	27	27	37	9	-
			Accessibility	18	36	27	18	-
			Cost of service	9	27	46	18	-
			Quality of service	9	27	27	27	10
Training	7 (12)	51 (88)	Availability	_	86	14	-	-
			Accessibility	_	71	29	-	-
			Cost of service	_	43	57	-	-
			Quality of service	_	14	57	29	-
Credit	40 (69)	18 (31)	Availability	5	70	25	-	-
			Accessibility	2	40	55	3	-
			Cost of service	-	58	35	7	-
			Quality of service	-	48	36	8	8
Insurance	4 (7)	54 (93)	Availability	25	50	-	25	-
			Accessibility	25	50	-	25	-
			Cost of service	25	50	-	25	-
			Quality of service	20	40	-	40	-

Note: Figures in bracket denote percentage

Table 4.21: Availability of services for NLBAs - Doddahalla Watershed

(Percentage)

Services	Availability (Nos)		Quality of service					
	Yes	No	Criteria	V.Good	Good	Average	Poor	V.Poor
Transport	62 (98)	1 (2)	Availability	7	16	26	29	23
			Accessibility	-	10	32	19	39
			Cost of service	-	5	40	27	28
			Quality of service	-	10	35	24	31
Accounts/Audits	7 (11)	56 (89)	Availability	-	14	29	-	57
			Accessibility	-	-	-	14	86
			Cost of service	-	-	-	14	86
			Quality of service	-	-	-	-	100
Technical	9 (14)	54 (86)	Availability	-	22	45	-	33
			Accessibility	-	22	22	-	56
			Cost of service	-	11	22	-	67
			Quality of service	11	22	11	-	56
Market access	59 (94)	4 (6)	Availability	3	15	42	25	14
			Accessibility	-	3	49	21	27
			Cost of service	-	3	48	20	29
			Quality of service	-	5	49	22	24
Training	10 (16)	53 (84)	Availability	-	40	10	10	40
			Accessibility	-	40	-	10	50
			Cost of service	20	10	-	-	70
			Quality of service	10	10	20	-	60
Credit	29 (46)	34 (54)	Availability	59	31	7	3	_
			Accessibility	21	17	3	4	55
			Cost of service	21	17	14	3	45
			Quality of service	21	24	7	7	41
Insurance	3 (5)	60 (95)	Availability	-	-	-	-	100
			Accessibility	-	-	-	-	100
			Cost of service	-	-	-	-	100
			Quality of service	-	-	-	-	100

Note: Figures in bracket denote percentage

4.7 Credit Particulars

Table 4.22 shows the sources of credit taken by the respondents in the study area. About 84 per cent of the respondents had availed the credit from different sources. It is interesting to note that little less than 50 per cent of the loans taken by the respondents were from SHGs. The role of banks and co-operatives in advancing loans to the respondents had reduced with the presence of SHGs and only 23 per cent availed loan from institutional sources. Even now about 25 per cent of the respondents depended on moneylenders and commission agents. Across the size of holdings, SHGs were playing a vital role (more than 50 per cent) in sanctioning loans to the marginal and small farmers. Role of financial institutions in advancing credit to small and marginal farmers were quite low and they depended upon the moneylenders and private financial institutions (30 per cent).

Table 4.22: Sources of Loan Taken by the Respondents: All Watersheds

(No of HHs)

Source	Size class				Total
	Marginal	Small	Medium	Large	
Moneylender	18 (11.7)	52 (13.9)	33 (13.4)	14 (6.7)	117 (11.9)
Commission agent	29 (18.8)	63 (16.9)	27 (11.0)	22 (10.5)	141 (14.3)
Banks	13 (8.4)	36 (9.7)	48 (19.5)	49 (23.3)	146 (14.9)
Co-operatives	5 (3.8)	22 (5.9)	19 (7.7)	41 (19.5)	87 (8.9)
Relatives/friends	4 (2.6)	13 (3.5)	12 (4.9)	5 (2.4)	34 (3.5)
SHGs	85 (55.2)	185 (49.6)	105 (42.7)	77 (36.7)	452 (46.0)
Others		2 (0.5)	2 (0.8)	2 (1.0)	6 (0.6)
Total	154 (100.0)	373 (100.0)	246 (100.0)	210 (100.0)	983 (100.0)

Note: Figures in bracket denote percentage to total

Purpose-wise credit availed by the respondents has been given in Table 4.23. About 64 per cent of the respondents had availed crop loan. Credit for purchasing sheep/goat for rearing and domestic consumption loans accounted for about 7 per cent of the total**.**

Table 4.23: Purpose-wise Credit Availed by the Respondents

(No of HHs)

(Purpose	Size class				
	Marginal	Small	Medium	Large	Total
Crop loan	89	217	167	154	627
	(57.8)	(58.2)	(67.9)	(73.3)	(63.8)
Dairying	4	14	10	17	45
	(2.6)	(3.8)	(4.1)	(8.1)	(4.6)
Housing loan	1	10	2	3	16
	(0.6)	(2.7)	(0.8)	(1.4)	(1.6)
Sheep/goat rearing	18	26	11	9	64
	(11.7)	(7.0)	(4.5)	(4.3)	(6.5)
Domestic consumption	14	28	18	4	64
	(9.1)	(7.5)	(7.3)	(1.9)	(6.5)
Irrigation		4	4	3	11
		(1.1)	(1.6)	(1.4)	(1.1)
Marriage	3	8	5		16
	(1.9)	(2.1)	(2.0)		(1.6)
Land development	1	11	9	6	27
	(0.6)	(2.9)	(3.7)	(2.9)	(2.7)
Others	24	55	20	14	113
	(15.6)	(14.7)	(8.1)	(6.7)	(11.5)
	154	373	246	210	983
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Note: Figures in bracket denote percentage to total
Others include education and health care

Table 4.24 gives the average loan amount per respondent in the study area. Although more number of respondents had availed crop loans, the average loan amount came to about Rs 11,900. The loans for irrigation, education and health care accounted for Rs 19,000. Between the size classes of holdings, marginal and small farmers availed loans for land development, education and health care purposes.

Table 4.24: Average Loan Amount by Purpose

(In rupees)

Purpose	Marginal	Small	Medium	Large	Total
Crop loan	5,579	7,452	12,495	21,225	11,912
Dairying	3,625	6,036	5,190	19,971	10,898
Housing loan	500	8,480	20,000	12,000	10,081
Sheep/goat rearing	3,122	5,062	3,409	3,578	4,023
Domestic consumption	5,779	4,879	6,194	8,375	5,664
Irrigation	--	7,000	14,450	43,600	19,691
Marriage	4,667	5,750	46,000	---	18,125
Land development	15,000	12,455	11,950	9,708	11,770
Others	8,396	11,445	8,865	83,857	19,312
Total	5,709	7,761	11,789	24,157	11,951

Note: Others include education and health care

The duration of credit by size classes has been presented in Table 4.25. Around 95 per cent of the respondents took loan for a period of one year. And the rest of the respondents availed it for 1 to 2 years (3 per cent). There were not many cases who had availed long term loans.

Table 4.25: Duration of Credit by Size Classes

(No of HHs)

Duration	Size class				
	Marginal	Small	Medium	Large	Total
Up to I year	147 (95.5)	351 (94.1)	233 (94.7)	197 (93.8)	928 (94.4)
1to 2 years	4 (2.6)	10 (2.7)	8 (3.3)	6 (2.9)	28 (2.8)
2 to 3 years	1 (0.6)	7 (1.9)	4 (1.6)	3 (1.4)	15 (1.5)
> 3 years	2 (1.3)	5 (1.3)	1 (0.4)	4 (1.9)	12 (1.2)
Total	154 (100.0)	373 (100.0)	246 (100.0)	210 (100.0)	983 (100.0)

Note: Figures in bracket denote percentage to total

Table 4.26 provides the details of rate of interest to loans per annum and size class. About 70 per cent of the respondents paid interest between 12 to 24 per cent towards the loan There were about 25 per cent of the respondents, who had paid interest rate between 24 to 36 per cent per annum.

Table 4.26: Rate of Interest of Loan Per Annum and Size Class (No of HHs)

Interest rate	Size Classes				
	Marginal	Small	Medium	Large	Total
Up to 12%		5	3	7	15
		(1.3)	(1.2)	(3.3)	(1.5)
12% to 24%	109	261	193	150	713
	(70.8)	(70.0)	(78.5)	(71.4)	(72.5)
24 to 36%	43	100	45	52	240
	(27.9)	(26.8)	(18.3)	(24.8)	(24.4)
> 36%	2	7	5	1	15
	(1.3)	(1.9)	(2.0)	(0.5)	(1.5)
All	154	373	246	210	983
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Note: Figures in bracket denote percentage to total

4.8 Negative Externalities

The negative effects of the land-based activity as perceived by the respondents in the three watersheds have been presented in Table 4.27. Only 2.4 per cent of the respondents perceived negative effects due to land based activities in the KAWAD project. Among the three watersheds, the respondents from Upparhalla and Doddahalla watersheds indicated negative effects. Similarly, when asked about the perceptions of such effects they indicated only a few components. Table 4.28 presents these components. Almost 16 respondents indicated reduced land productivity.

Table 4.27 : Negative Effects Due to Land Based Activity(No of HHs)

Effected or not	Watersheds			
	Chinnahagari	Upparhalla	Doddahalla	Total
Yes	6	12	10	28
	(1.7)	(2.2)	(3,7)	(2.4)
No	339	543	263	1145
	(98.3)	(97.8)	(96.3)	(97.6)
Total	345	555	273	1173
	(100)	(100)	(100)	(100,0)

Note: Figures in parenthesis denote percentage to total

Table 4.28: Perceptions of Respondents and Nature of Negative Effect

(No of HHs)

Effect	Chinnahagari	Upparhalla	Doddahalla	Total
Land submerged	-	2	-	2
Common structure built on own land	-	1	-	1
Productivity of land reduced	2	5	9	16
Any other	4	4	1	9
All	6	12	10	28

Note:Any others includes after leveling the land salinity witnessed which has reduced the productivity

4.8 Programmes and Services Accessed by the Respondents

Programmes/services accessed by the respondents have been given in Table 4.29. About 63 per cent of the respondents accessed one or other services in the selected watersheds. Out of 743 respondents who had accessed programme/services, 66 per cent had taken advantage of land development, 22 per cent of the respondents had approached for training programme for different NLBA activities. Animal husbandry, horticulture, government programmes etc., were occasionally accessed by the respondents.

Table 4.29: Programmes/Services Accessed by the Respondents

(No of HHs)

Service	Watersheds			Total
	Chinnahagari	Upparhalla	Doddahalla	
Land development	218 (92.8)	245 (69.2)	28 (18.2)	491 (66.1)
Animal husbandry	1 (0.4)	1 (0.3)	1 (0.6)	3 (0.4)
Horticulture	2 (0.9)	6 (1.7)	- (00)	8 (1.1)
Training	12 (5.1)	31 (8.8)	123 (79.9)	166 (22.3)
Exposure visit	- (00)	- (0.0)	2 (1.3)	2 (0.3)
Govt. programmes	2 (0.9)	65 (18.4)	- (00)	67 (9.0)
Jungle clearing	- (00)	6 (1.7)	- (0.0)	6 (0.8)
Total	235 (100.0)	354 (100.0)	154 (100.0)	743 (100.0)

Note: Figures in parenthesis denote percentage to total

Table 4.30 provides the type of agency providing services to the respondents. Government (KAWAD) had played a major role in providing services. About 76 per cent of the respondents indicated this. Secondly, partner NGOs and also other agencies like AWAKE, BAIF etc. had also participated in providing services to the respondents.

Table 4.30: Agencies Providing Support to the Respondents

(No of HHs)

Type	Watersheds			
	Chinnahagari	Upparhalla	Doddahalla	Total
Govt.	207 (88.1)	328 (92.7)	28 (18.2)	563 (75.8)
NGO	26 (11.1)	22 (6.2)	126 (81.8)	174 (23.4)
Private	2 (0.9)	4 (1.1)	(0.0)	6 (0.8)
Total	235 (100.0)	354 (100.0)	154 (100.0)	743 (100.0)

Note: Figures in parenthesis denote percentage to total

The level of access and the respondents satisfaction about the agency have been given in Tables 4.31 and 4.32. About 63 per cent of the programmes/services were accessed by the individual respondents and 23 per cent had accessed this for the entire community. Across the districts, access to individual programmes/services was higher (92 per cent) in Chinnahagari watershed when compared with Upparhalla (81 per cent) and Doddahalla (25 per cent). However, community benefits through programmes/services were reported to be maximum and the respondents expressed full satisfaction with the responsiveness of the agency in providing the programme/services to them in the study area (Table 4.32).

Table 4.31: Level of Access by the Respondents (No. of HHs)

Level	Watersheds			
	Chinnahagari	Upparhalla	Doddahalla	Total
Individual	215 (91.5)	287 (81.1)	38 (24.7)	540 (72.7)
Community	20 (8.5)	67 (18.9)	116 (75.3)	203 (27.3)
Total	235 (100.0)	354 (100.0)	154 (100.0)	743 (100.0)

Note: Figures in parenthesis denote percentage to total

Table 4.32: Satisfaction with the Responsiveness of the Agency

(No. of HHs)

Satisfied or not	Watersheds			
	Chinnahagari	Upparhalla	Doddahalla	Total
Yes	235 (99.6)	352 (99.7)	154 (100.0)	741 (99.7)
No	1 (0.4)	1 (0.3)		2 (0.3)
Total	236 (100.0)	353 (100.0)	154 (100.0)	743 (100.0)

Note: Figures in parenthesis denote percentage to total

4.9. Perceived Benefits and Sustainability

The benefits gained from the KAWAD project perceived by the respondents have been shown in Table 4.33. Among the benefits perceived by the respondents, land based activities were considerably more (68 per cent) than the non-land based activities (32 per cent) in the study area. The major benefits under land based activities involved soil conservation, horticultural development, awareness about modern agriculture and increase in the groundwater table. Establishment of MWSDCs and SHGs, creation of self-employment, availability of credit facility, inculcating saving habits and thereby improvement in economic conditions of the respondents were witnessed under non-land based activities.

Table 4.33 : Major Benefits derived from the KAWAD Project

Sl. No.	Benefits	Doddahalla	Upparhalla	Chinna-hagari	Total
Land based activities					
1	Land has become cultivable	27	11	71	109
2	Horticulture has been introduced	27	12	43	82
3	Erosions of soil stopped	1	61	49	111
4	Levelling done in the field	79	42	0	121
5	Irrigation made easy due to land levelling	22	25	9	56
6	Bunding done in the field	46	91	11	148
7	Groundwater table Increased	25	9	23	57
8	Got more awareness on modern agriculture	66	68	35	169
9	Value of the land increased	32	0	0	32
10	Yield increased	17	37	86	140
11	Waste-land cultivation improved	5	4	23	32
12	Check dam constructed	4	45	5	54
13	Silt application	1	72	1	85
14	Jungle clearance	0	11	0	11
15	Other benefits	6	2	2	7
	Sub Total	**358**	**490**	**365**	**1,217**
Non-land based activities					
1	Loan is available at any time	38	102	15	155
2	Economic condition improved	38	9	18	85
3	Benefited through savings	9	147	0	156
4	Organization of SHG's and MWSDCs become helpful towards Self-employment	30	87	57	174
5	Self-employment	9	3	3	15
	Sub Total	**144**	**348**	**93**	**585**
	Grand Total	**502**	**838**	**458**	**1802**

Note: Other benefits includes Warmiculture programme was started (5). Drip irrigation (4). and Fishericulture in the farm pond

For the sustainability of the KAWAD project, the perceptions of the respondents and their suggestions received during the fieldwork have been given in Table 4.34. Respondents felt that the farmers' contribution for both land based and non-land based activities in the above project should be either reduced or eliminated. They strongly suggested that soil conservation works should continue under the KAWAD project. They pleaded for more financial assistance to the SHGs, for horticultural development and irrigation facilities. The drip irrigation method was favoured by them.

Table 4.34: Suggestions for Improvement

(Per cent)

Sl. No.	Suggestions	Chinnahagari	Upparhalla	Doddahalla	All
1	Removal and reduction of farmers contribution	26	17	53	28
2	Tank silt removal and application	7	16	11	12
3	More financial support to SHGs	12	10	26	14
4	Project should continue and cover all people	3	5	29	10
5	Horticulture development	5	2	27	9
6	Land development (levelling)	29	14	11	18
7	Bunding, Nala bunds, Check Dams etc.,	18	31	30	27
8	Loans to buy sheep, buffalo, bullocks. Cow	6	10	2	7
9	Irrigation facility/drip irrigation	13	10	29	15
10	Seeds, fertiliser need to be given under subsidy	10	2	2	4
11	More awareness on agriculture/ self employment	3	3	15	6
12	Proper guidance and co-operation of NGOs	1	3	19	6
13	Basic amenities (housing, road, school, community hall)	(neg)	4	4	3
14	Supply of Harvesting Mechines, Tractor etc., to overcome labour problem during harvesting	(neg)	1	-	1

Note: The figures in the table refer to per cent to the total households.

4.10 Conspectus

The household sample survey was undertaken with twin objectives. First, we tried to bring out the profile of the sample households in the three watersheds. The profile essentially covered the presently existing conditions of the sample households. Therefore, this profile served as a benchmark for sample households which can be utilised effectively, if a resurvey is done of the same households after a few years. This can be undertaken to understand the progress as well as the impact of the project. Second, this chapter also brought out the views of the respondents about the implementation process as perceived by them. It comes out very clearly that the respondents had a sizeable proportion of schedule caste households that supplemented the equity aspect in the impact parameters. The change in income position and value of productive asset have been analysed here in order to understand the present economic condition of the households. Largely, the respondents were farm based families having agriculture as the main source of income and assets. The section on cropping pattern and credit economy in the selected watersheds served as the best benchmark in order to test these parameters at the time of impact study. The cropping pattern was well diversified and had many crop combinations.

KAWAD model is not focussed only on the agriculture sector alone and it has non-land based activities connected with the allied agricultural sector as one of the major components. These are operationalised through SHGs. We have made note of all these allied agricultural activities and highlighted their income augmenting role. The sources of credit and the services availed by the respondents have been analysed to understand their dependence on the financial markets as well as on the service sector. Overall, it was noted that the service sector has been supporting the respondents in their economic activities as well as the financial market is providing larger benefits through the SHGs, an institution promoted under the KAWAD Model. The respondents expressed their views about various parameters pertaining to the implementation of the programme. It came out very clearly that the respondents were quite adoptive to the suggested model and perceived a large number of benefits that would flow from the project. They, of course, had a good number of suggestions and a few might probably go against the philosophy of the project (like reducing or eliminating the farmers' contribution towards land-based activities). But the suggestions were the solutions for the actual difficulties

faced by the farmers. A few important issues emerging out of the analysis are highlighted here. First, the beneficiaries adopted and participated in the KAWAD Model of implementing the watershed development programme. Their information base and exposure to the technical details were quite noteworthy. Second, the project created a definite participating spirit among the beneficiaries and probably sustained institutional structures in the form of MWSDCs and SHGs. Finally, the project had impacted equity, efficiency, empowerment to the rural poor and supplementary economic activities. All of these contribute towards the sustenance of the created institutions.

Annexure 4.1(a) : Cropping Pattern – Chinnahagari Watershed

Crop	No. of HHs	Per cent	Total area (in Acres)	% area
Paddy	46	7.52	76.10	3.94
Ragi	91	14.87	179.75	9.31
Jower	27	4.41	40.75	2.11
Maize	7	1.14	10.00	0.52
Bajra	8	1.31	11.50	0.60
Groundnut	319	52.12	1,430.95	74.09
Sunflower	19	3.10	41.25	2.14
Coconut	2	0.33	1.00	0.05
Vegetables	2	0.33	2.00	0.10
Sericulture	2	0.33	3.75	0.19
Cotton	33	5.39	45.50	2.36
Onion	43	7.03	70.50	3.65
Navane	8	1.31	16.25	0.84
Horsegram	2	0.33	1.50	0.08
Flower crop	1	0.16	0.50	0.03
Total	612	100.00	1,931.30	100.00

Annexure 4.1(b): Cropping Pattern – Upparhalla Watershed

Crop	No. of HHs	Per cent	Total Area (In acres)	% Area
Paddy	46	3.51	59.75	1.48
Ragi	218	16.64	368.25	9.13
Jower	240	18.32	417.15	10.35
Maize	46	3.51	108.00	2.68
Bajra	17	1.30	34.00	0.84
Groundnut	473	36.11	2,377.00	58.96
Sunflower	82	6.26	289.00	7.17
Sesamum	7	0.53	8.50	0.21
Tur/Redgram	2	0.15	6.50	0.16
Coconut	3	0.23	2.10	0.05
Arecanut	2	0.15	7.00	0.17
Fruits	2	0.15	2.00	0.05
Vegetables	7	0.53	14.75	0.37
Sericulture	38	2.90	58.50	1.45
Cotton	12	0.92	105.00	2.60
Onion	45	3.44	71.25	1.77
Navane	44	3.36	59.25	1.47
Horsegram	5	0.38	19.00	0.47
Bengalgram	1	0.08	4.00	0.10
Sugarcane	1	0.08	2.00	0.05
Chilly	2	0.15	2.00	0.05
Betel-nut	1	0.08	0.75	0.02
Wheat	3	0.23	2.50	0.06
Lime	1	0.08	1.00	0.02
Banana	1	0.08	1.50	0.04
Safflower	1	0.08	1.00	0.02
Others crops*	10	0.76	9.60	0.24
Total	1,310	100.00	4,031.35	100.00

* Other crops include greengram and blackgram

Annexure 4.1 (c) : Cropping Pattern – Doddahalla Watershed

Crop	No. of HHs	Per cent	Total Area In acre	% Area
Jower	206	28.57	818.89	35.58
Maize	2	0.28	2.00	0.09
Bajra	115	15.95	421.01	18.29
Ground nut	67	9.29	200.21	8.70
Sunflower	22	3.05	59.00	2.56
Tur/Redgram	20	2.77	45.50	1.98
Greengram	19	2.64	46.90	2.04
Blackfgram	1	0.14	1.00	0.04
Vegetables	1	0.14	1.00	0.04
Cotton	33	4.58	84.20	3.66
Onion	13	1.80	29.60	1.29
Horsegram	29	4.02	108.18	4.70
Bengal gram	25	3.47	50.50	2.19
Sugarcane	34	4.72	120.70	5.24
Drumstick	1	0.14	1.00	0.04
Chilli	6	0.83	5.50	0.24
Wheat	71	9.85	131.63	5.72
Pomegranate	3	0.42	7.00	0.30
Lime	4	0.55	11.00	0.48
Other crops	44	6.10	143.30	6.23
Total	721	100.00	2301.32	100.00

Other crops include sericulture and flower crops

Annexure 4.1(d) : Cropping Pattern – All Watersheds

Crop	No.of HHs	Per cent	Total Area (In acres)	% Area
Paddy	92.00	3.48	135.85	1.64
Ragi	309.00	11.69	548.00	6.63
Jower	473.00	17.90	1276.79	15.45
Maize	55.00	2.08	120.00	1.45
Bajra	140.00	5.30	466.51	5.65
Ground nut	859.00	32.50	4008.16	48.50
Sunflower	123.00	4.65	389.25	4.71
Sesamum	7.00	0.26	8.50	0.10
Tur/Redgram	22.00	0.83	52.00	0.63
Greengram	39.00	1.72	121.90	1.07
Black Gram	31.00	1.04	76.00	0.51
Coconut	5.00	0.19	3.10	0.04
Arecanut	2.00	0.08	7.00	0.08
Fruits	2.00	0.08	2.00	0.02
Vegetables	10.00	0.38	17.75	0.21
Sericulture	40.00	1.51	62.25	0.75
Cotton	78.00	2.95	234.70	2.84
Onion	101.00	3.82	171.35	2.07
Navane	52.00	1.97	75.50	0.91
Horsegram	36.00	1.36	128.68	1.56
Bengal gram	26.00	0.98	54.50	0.66
Sugarcane	35.00	1.32	122.70	1.48
Drumstick	1.00	0.04	1.00	0.01
Flower crop	12.00	0.34	16.60	0.02
Chilli	8.00	0.30	7.50	0.09
Betel nut	1.00	0.04	0.75	0.01
Wheat	74.00	2.80	134.13	1.62
Pomegranate	3.00	0.11	7.00	0.08
Lime	5.00	0.19	12.00	0.15
Banana	1.00	0.04	1.50	0.02
Safflower	1.00	0.04	1.00	0.01
Total	2643.00	100.00	8263.97	100.00

Annexure 4.2: Net Returns from Allied Activities : All Watersheds

Watersheds	Size class	Number of animals	Total investment	Average no. of persons engaged	Value of main product	Value of by-product	Total value	Total cost	Net returns
Chinnahagari	Marginal	3.17	4398.72	0.29	2065.38	242.95	2308.33	582.82	1725.51
	Small	7.52	10952.99	0.59	6325.82	718.51	7044.33	1258.73	5785.60
	Medium	13.68	17924.15	0.64	8768.00	951.10	9719.10	1739.40	7979.70
	Large	13.64	21566.67	0.94	10473.48	1730.30	12203.79	2770.30	9433.48
	Total	8.91	12507.00	0.57	6467.20	775.19	7242.39	1389.83	5852.57
Upparhalla	Marginal	0.87	1287.71	0.18	565.63	101.48	667.11	265.25	401.86
	Small	1.16	2323.18	0.27	866.61	265.24	1131.85	438.36	693.49
	Medium	1.17	3266.06	0.28	1068.68	302.75	1371.43	594.50	776.94
	Large	3.66	9615.79	0.48	2611.80	861.05	3472.85	1339.37	2133.48
	Total	1.53	3536.49	0.29	1141.03	339.77	1480.80	586.45	894.36
Doddahalla	Marginal	0.81	3236.11	0.61	2547.50	529.17	3076.67	1519.44	1557.22
	Small	1.64	5474.71	0.61	3410.69	811.95	4222.64	1910.92	2311.72
	Medium	2.05	7053.85	0.69	3561.18	1163.85	4725.03	2786.92	1938.11
	Large	3.74	11097.65	1.02	6303.99	2014.12	8318.11	4396.47	3921.64
	Total	2.28	7306.23	0.76	4233.54	1232.75	5466.29	2841.76	2624.53
Total	Marginal	1.63	2635.99	0.28	1377.39	215.41	1592.80	566.64	1026.16
	Small	3.13	5474.23	0.43	2965.44	503.79	3469.23	962.68	2506.55
	Medium	5.95	9514.29	0.51	4469.94	743.65	5213.59	1532.45	3681.14
	Large	5.24	12058.69	0.77	5303.22	1455.87	6759.08	2781.03	3978.05
	Total	3.87	7052.23	0.48	3427.29	675.66	4102.96	1347.63	2755.33

CHAPTER V

SUMMARY AND CONCLUSIONS

5.1 Introduction

The experience of watershed development in India began with soil conservation department established prior to independence. Around the same time four dry farming research stations were established in the country. Even though some of the treatments recommended by these broadly came under watershed development, the first nomenclature of the Watershed Development Programme came after the mid-term review of the Seventh Five Year Plan. The attempts began with four World Bank sponsored watershed projects undertaken in Haryana, Andhra Pradesh, Maharashtra and Karnataka. In addition to this, Karnataka State took the first initiative to establish a multi-disciplinary team and identified 19 watersheds in the districts of Karnataka for the purpose of development. These were administered by the Dryland Development Board, a specially constituted institution for the purpose. Simultaneously, the National Watershed Development Programme for Rainfed Agriculture was being implemented in the State. From these varied experiences, it distilled out clearly that watershed development is a “Resource Region Concept” and that it will require full participation of the stakeholders. In the absence of such participation the programme can neither be efficient nor sustainable.

While tracing the institutional history of the watershed development programme in India we located four distinct phases characterising the implementation. The first phase was state sponsored programmes with the line-departments in the forefront for the programme. Naturally, the Soil Conservation and Department of Agriculture had predominated the institutional structure. This gave a technical outlook to the programme and the soil and water conservation structures acquired prominent position in the debates. The population falling in the watershed was taken for granted in terms of their participation and their support to the programme was assumed as given. The second phase began with some of the NGO led watershed development initiatives in the State and elsewhere. The success of these experiments made it very clear that any `Resource-Region’ programme can be ineffective if the software of people's participation is not considered seriously. The NGO led programmes were close to the people and the

participation was achieved through commitment. The third phase was characterised by hybridisation between the State-run programme like NWDPRA accommodating people's participation through watershed level committees and community organisers named as `Mitra Kisan' and 'Gopal'. These two did not yield exemplary and secular results across the country. There began the fourth phase in which the partnership between State and NGO. was thought as an essential ingredient. Here the funding organisation approached the NGOs through the State government for implementing a proper watershed development programme. The KAWAD experiment comes in this phase of institutional intervention in watershed development programme.

In an institutional arrangement wherein the funding agency approaches the State Government to organise the `Resource Region' centered Watershed Development Programme with the help of Non-Governmental Organisations, it combines the best features of the State and the NGOs. One can visualise four distinct advantages in such an approach. First, the closeness of the NGOs with the people and their skills to organise the community can be effectively utilised to seek participation in the implementation process of the programme. Second, the involvement of the State provides full responsibility for identifying the NGOs and implementing the programme effectively through the NGOs with the State support. In such a case, erring institutions can be effectively eliminated. This avoids fishing out for a creditable NGO from among a large list of NGOs and in such a case the funding agency cannot be fully assured of the credentials of such organisations. Third, this approach combines the technical competence of the State as an essential hardware in the implementation of Watershed Development Programme along with the people friendliness as software provided by the NGOs. The ground realities are understood better by the NGOs whereas, the technical competence can be borrowed from the State officials. Lastly, this approach combines the flexibility, democracy, equity and ease in decision-making of the NGO, with the technology, administrative skills and accountability of the Government. KAWAD has followed exactly this approach and therefore, the success was assured by the design. The programme focussed on providing equity, efficiency and sustainability to the watershed development programme in the State.

5.2 Focus of the Study

Karnataka State was one of the priority states identified by DFID in 1994 to launch a project on Watershed Development in collaboration with the State and under a given institutional framework. The central focus of the KAWAD project was on ensuring livelihood security in the drought-prone areas of Karnataka and the project was taken on a pilot basis in three watersheds identified in three core drought-prone districts of the State. The project also aims at development of the replicable approaches and tested models for watershed development with an emphasis on group equity, gender equity and poverty amelioration. The project involved land-based as well as non-land based activities to develop agriculture as well as allied agricultural sectors. The emphasis was on generating the cash flow in the economy. The institutional structure has four layers viz., the Implementing Agency, the partner Non-Governmental Organisation, Micro-Watershed Development Committees and Self-Help Groups. The Self-Help Groups and MWSDSs are mutually supporting and undertake the activities based on the community meetings within the villages. The institutional structure is vertically integrated and social equity, choice of economic projects, identification of the projects, participation by all the members and strict accountability are built into the process by design of the institutions.

The project is being implemented in three districts, viz., Chitradurga, Bellary and Bijapur. All these districts are traditionally drought-prone areas of the State and one watershed was identified in each of these districts for the purpose of treatment. Chinnahagari Watershed was selected coming under Molakalmur block of Chitradurga district, Upparhalla Watershed belongs to Kudligi block of Bellary district and Doddahalla Watershed is from Indi Block of Bijapur district. These watersheds covered 62 villages spread over 13 Gram Panchayats and 13,400 households. The area covered under these watersheds is about 54,000 hectares. The project involves four types of activities viz., (i) Land based activities: Soil and water conservation measures, land treatment and agriculture demonstration activities such as planting of fruits orchards, propagation of drip irrigation, etc. (ii) Non land-based activities: Income generation activities and enterprises for the landless, poor and vulnerable group of people; (iii) Promotion of Community Based Organisations: Community based organisations are promoted at various levels for ensuring community participation in management of the project and sustaining the project impacts beyond the project life; and (iv) Capacity building and networking: Capacity building of community based organisations and

government to take up livelihoods related activities. Also networking and advocacy especially with the Government on the approaches of the project. The expected outputs and impact of KAWAD project are: (i) Communities were empowered to develop and manage natural resources in a participatory manner, through the use of appropriate and sustainable measures; (ii) Poor people (especially women and marginalised groups) became empowered to access and sustain new and enhanced livelihood options; (iii) All stakeholders sensitised and their capacities enhanced to address the needs of the community (especially the poor, women and marginalised groups) now and in future; and (iv) Replicable approaches to watershed development tested, documented and their uptake promoted to influence relevant stakeholders.

5.3 Objectives and Methodology

The main objective of the study was to identify the output indicators and arrive at the livelihood status in the project area. It is specifically attempted here to understand the project document, its outputs and impact on the rural economy in the three selected watersheds. Measurement of livelihood and group assessment were formed an important objective of the study. We have used four components for the purpose of delineating the methodology of the study. In the first component, we have selected 10 per cent MWSDCs taking care that each of the PNGO is represented in the process. This was achieved by first segregating the MWSDCs by PNGOs and taking a random sample from each of the list of MWSDC provided by PNGOs. Second, we had taken a sample of 70 SHGs spread over the three watersheds with probability proportion to the number of SHGs in each of these watersheds. Here again, care was taken for proportional representation to the PNGOs. The sample of the households was taken randomly based on the list provided by the Implementing Agencies. The total number of households selected were 1,170. Four types of tools were used for the analysis viz., MOL Tool. GSA Tool, Household Survey Tool and Interviews of Service Providers Tool.

5.4 KAWAD: An Institutional Analysis

The institutional structure of KAWAD goes through different layers. The design of the project and the State administration has undertaken at the State headquarters of the project. In each of the districts, the watershed implementation was assigned to an Implementing Agency. Karnataka Watershed Development Department, represented by an Assistant Director of Agriculture, was the Implementing Agency for Doddahalla

Watershed in Indi Taluka of Bijapur District. Naturally, the State Watershed Development Department's perspective was super-imposed on the works carried out as well as implementing process. Zilla Parishad through its officer administering agriculture, was the Implementing Agency for Upparhalla Watershed in Bellary district. Here, the closer interaction with the public representatives representing Zilla Parishad was quite visible. The third Implementing Agency was an experienced NGO represented by MYRADA who was given the task of implementing the project in Chinnahagari Watershed coming under Molakalmuru block of Chitradurga district. There were 11 PNGOs spearheading the project in the three watersheds helping to form MWSDCs and SHGs. They had differential experience and therefore, their performance indicators also indicated varied performance. The staff engaged by PNGOs differed across the organisations and probably there were weak and strong organisations as well as skill development was concerned. There were quite a few cases where the female community organisers were not present whereas subject specialists were missing in a few. These needed to be taken note of.

Micro-Watershed Development Committee is a hub of the implementation process. There are 110 MWSDCs organised in the three watersheds. By design, these committees have incorporated a representation of all the social and economic groups in the community. Therefore, equity in decision-making and sharing of gains comes automatically. The members contribute towards land based activities and only after that the activity is undertaken on their fields. The payment is made after the work is discussed in the committee and thus, there is an automatic process of accounting. The MWSDCs had undertaken a large number of activities and these were successfully carried out. The performance indicators of MWSDCs as given by the GSA tool include: Group consensus and equity in decision-making, the group and fund management, maintenance of records, the group norms and their implementation, development of skills, the resource persons in the group, planning and ability of the group to resist external threats. These indicators were assigned scores in terms of percentages from zero to hundred based on the level of performance. It was found that Upparhalla Watershed had the lowest score. Doddahalla Watershed scored highest in the comparison under performance indicators.

In the three watersheds 700 Self-Help groups had been organised and these groups together had 12,184 members. The largest membership was in Upparhalla

watershed, followed by Doddahalla and Chinnahagari. On an average, each of the SHG has about 17 members. The selected 700 SHGs had together generated savings of about Rs. 15.6 lakhs whereas they had provided Rs. 78.00 lakhs as loans to the members. Out of this, the outstanding amount is about Rs. 35.9 lakhs but over dues were not high. There were about 45 different non-land based activities undertaken by the members of SHGs and these activities had supported the livelihood system of the households. SHGs had also provoked community participation and significantly sensitised the villagers to organise themselves into groups. The performance indicators of SHGs have shown that Chinnahagari with an average performance score of 79.8 had the lowest performance as against the other two watersheds. Upparhalla and Doddahalla watersheds came very close to this.

We also analysed the performance of PNGOs in a separately developed scale based on 16 indicators representing four different facets of a successful institution. First, within the organisation structure it made a lot of difference in the effectiveness of the work undertaken by the PNGOs. This incorporated cohesion within the organisation, hierarchy in the organisational structure, and within the organisation inter-personal relationship. These three indicators represented the force with which the organisation could impact the existing village institutions. Second, the relationship of institutions with other institutions was an important determinant of their functioning. The functioning was smooth if this relationship was perfect in tandem with horizontal as well as vertical institutions. We looked into the relation of PNGOs with other PNGOs as well as other organisations existing in the village. Similarly, we also assessed the interface of PNGOs with the implementing agencies. The third complement indicating the performance of the PNGOs related to their commitment to the work. This was indicated by the non-bureaucratic attitude, commitment indicated by the members to the work assigned, ease with which they mixed with the beneficiaries and the hours of work they put in for the assigned work. All these together indicated their commitment to the task undertaken as PNGOs. The fourth facet dealt with the quality of the workers involved in the task in terms of their training, understanding and accessing the work. All these four facets together indicated the performance of the PNGOs in the field. An index was formulated in order to judge the performance of the PNGOs and it was found that the performance index ranged from 0.30 to 0.94. The performance index had 0 and 1 as limiting values and therefore, one could easily get to know the relative performance of different PNGOs. SEEDA working in Doddahalla watershed, RSC working in Chinnahagari watershed and

GUARD in Upparhalla watershed had relatively lower performance compared to their peers.

5.5 Monitoring of Livelihoods (MoL)

Monitoring of Livelihoods (MoL) is a participatory monitoring tool for assessing the livelihood of the stakeholders using a sustainable rural livelihood framework. The tool was developed by Catalyst Management Services specially for KAWAD. The tool encompassed five assets/capitals covering the major livelihood functions. These included: (i) Physical Capital, (ii) Social Capital, (iii) Financial Capital, (iv) Human Capital, and (v) Natural Capital. All these indicate, five aspects of the rural livelihood system. The exercise was conducted with the members of the MWSDCs and SHGs. The members were asked to identify an icon based on pre-identified levels of the capital indicators. It was found that a large number of members clustered in the bottom two categories, whereas the top two categories had very little representation among the members of the MWSDCs and SHGs. This clearly indicated the weak financial position of the households in the watershed area. Among the three watersheds, Doddahalla watershed seem to be predominated by lower values of the five capital indicators. Upparhalla watershed performed slightly better on this scale. We found that between watersheds variations were much higher than between watershed variations. In other words, there was homogeneity across watersheds in the levels of capital ownership but there was significant heterogeneity among the members within the watersheds. The poverty levels were higher in the Doddahalla watershed as compared to Upparhalla or Chinnahagari.

5.6 Household Level Survey

The household sample survey was undertaken with twin objectives. First, we tried to bring out the profile of the sample households in the three watersheds. The profile essentially covered presently existing conditions of the sample households. Therefore, this profile served as a benchmark for sample households which could be utilised effectively, if a re-survey was done of the same households after a few years. This could be undertaken to understand the progress as well as the impact of the project. Second, our analysis also brought out the views of the respondents about the implementation process as perceived by them. It was found that the respondents included sizeable proportion of Schedule Caste households that supplemented equity aspect in the impact parameters. The change in income position and value of

productive asset has been analysed here in order to understand the present economic condition of the households. Largely, the respondents were farm based families having agriculture as the main source of income and assets. The cropping pattern and credit structure in the selected watersheds can serve as the best benchmark in order to test these parameters at the time of impact study.

KAWAD model is not focussed only on the agriculture sector alone and it has non-land based activities connected with the allied agricultural sector as one of the major components. These are operationalised through SHGs. We have made note of all these allied agricultural activities and highlighted their income augmenting role. The sources of credit and the services availed by the respondents have been analysed to understand their dependence on the financial markets as well as on the service sector. Overall, it is noted that the service sector has been supporting the respondents in their economic activities and the financial market is providing larger benefits through the SHGs, an institution promoted under the KAWAD Model. The respondents have expressed their views about various parameters pertaining to the implementation of the programme. It comes out very clearly that the respondents are quite adoptive to the suggested model and perceived a large number of benefits that will flow from the project. They, of course, have a good number of suggestions and a few may probably go against the philosophy of the project (like reducing or eliminating the farmers' contribution towards land-based activities). But the suggestions are the solutions for the actual difficulties faced by the farmers. A few important issues emerging out of the analysis are highlighted here. First, the beneficiaries adopted and participated in the KAWAD Model of implementing the watershed development programme. Their information base and exposure to the technical details were quite noteworthy. Second, the project created a definite participating spirit among the beneficiaries and probably sustained institutional structures in the form of MWSDCs and SHGs. Finally, the project has impacted equity, efficiency, empowerment to the rural poor and supplementary economic activities. All of these will contribute towards the sustenance of the created institutions.

5.7 Conclusions

- The performance of MWSDCs and SHGs was quite satisfactory and it provided an extremely good ground for community action. It is by the design of these

institutions that the community involvement in the form of equity across social groups and democracy in decision making are ensured.

- In some of the cases we located that still the process of formation of SHGs was going on, since this is a dynamic activity it can feature continuously in the rural areas but the connection between new SHGs and MWSDCs becomes fresh and therefore, a few members are likely to suffer in the process.

- The relationship between the implementing agencies and the PNGOs have varied experience in the three watersheds. In Doddahalla watershed, the relationship between implementing agency and the PNGOs does not seem to be as comfortable as that in the Chinnahagari watershed. But this did not affect the performance of the MWSDCs and SHGs in Doddahalla watershed.
- Among the PNGOs, we have indicated the necessity of boosting up of the morale of a few and getting them serious on to the work. Any laxity on this part might prove detrimental to the project. Some of the PNGOs did not have equal skills as the others. That affected the performance and therefore, differential performance across watersheds was an expected outcome.

- Doddahalla watershed seems to have a larger concentration of poor judged from the sustainable livelihood measurement. In that case, it is be prudent to concentrate slightly more on this watershed.

- MWSDCs and SHGs have proved as empowering institutions to the communities and it has also provided substantial opportunities to the members of weaker sections and female members of the committees. The decisions were taken democratically and most of the members were well aware of the technical components of watershed management as well as managing the group. This added to the positive gains of the project.

- Sustainability has been in-built in the process of formation of the institutions in the KAWAD Project. The NLBA activities, undertaken with the support of the SHGs, have substantially changed the income and employment profile of the households. Women and Scheduled Castes and Scheduled Tribes have benefited significantly from this initiatives.

- The stakeholders have been sensitised about the project and the MWSDCs as well as SHGs in their meetings addressed specifically to the problems of the poor and marginalised groups. Women have a significant share in the decision-making process of the MWSDCs.

- Training and skill enhancement was one of the important requirements felt by the stakeholders. They asked for training in the non-land based activities in order to supplement the farm income through diversification. They also required intensification of activities.

- The non-land based activities have become popular and support the weaker sections and the poor farmers in the watershed region. However, the service sector has not been developing at the same speed as that of the NLBA activities. Some new initiative is needed in this direction.