ECONOMIC PERFORMANCE OF KUDUMBASHREE MICROENTERPRISES AND WOMEN EMPOWERMENT: A CASE STUDY OF PATHANAMTHITTA DISTRICT

Thesis Submitted to

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in

Applied Economics

under the Faculty of Social Sciences

by

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Certificate

This is to certify that this thesis entitled **"Economic Performance of Kudumbashree Microenterprises and Women Empowerment: A Case Study of Pathanamthitta District"** is an authentic record of research work carried out by Smt. Remya Mohandas S. (Reg. No. 3610) under my supervision and guidance, at the Department of Applied Economics, Cochin University of Science and Technology, Cochin-22 in partial fulfil lment of the requirements for the award of the degree of Doctor of Philosophy in Social Science of Cochin University of Science and Technology under the Department of Applied Economics and no part of this work has been presented for the award of any degree in any other University. All the relevant corrections and modifications suggested by the audience during the pre-submission seminar and recommended by the Doctoral Committee have been incorporated in the thesis.

Place: Kochi-22
Date: 18/09/2018

Dr. Meera Bai M.
Supervising Guide

Declaration

I do hereby declare that the Thesis titled **"Economic Performance of Kudumbashree Microenterprises and Women Empowerment: A Case Study of Pathanamthitta District"** is the outcome of the original work done by me under the guidance of Dr Meera Bai M. at the Department of Applied Economics, Cochin University of Science and Technology. I also state that this work has not been part of any dissertation and that it has not been submitted for the award of any degree, diploma, associateship or any other title or recognition from any University or Institution.

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Abbreviations

AABY	-	Aam Admi Bima Yojana
ADS	-	Area Development Societies
APL	-	Above poverty line
BPL	-	Below Poverty Line
BPL	-	Below Poverty Line
CDS	-	Community Development Societies
CDS	-	Community Development Society
DFID-	-	Department for International Development
DMC	-	District Mission Coordinator
DTPC	-	District Tourism Promotion Council
EDP	-	Entrepreneurship Development Programme
EKSAT	-	Education, Knowledge, Skill Aptitude and Training
EMG	-	Event Management Groups
FLPR	-	Female Labour Participation Rate
GNP	-	Gross National Product
GOT	-	General Orientation Training
GOT	-	General Orientation Training
IDRC	-	International Development Research Centre
IT	-	Information Technology
JLG	-	Joint Liability Group
KAASS	-	Kudumbashree Accounts and Audit Service Society
KME	-	Kudumbashree Micro Enterprises
LED	-	Local Economic Development
LED	-	Local Economic Development
LFPR	-	Labour Force Participation Rate
LPR	-	Labour Participation Rate
LSG	-	Local Self Government
LSG	-	Local Self-Government
MEC	-	Micro Enterprise Consultant

MEC	-	Micro Enterprise Consultants
MFI	-	Micro Finance Institutions
MPP head	-	Monthly Profit Per head
MP	-	Monthly Profit
NABARD	-	National Bank for Agricultural and Rural Development
NABARD	-	National Bank for Agriculture and Development
NGO	-	Non Governmental Organisation
NHG	-	Neighbourhood Group
NIC	-	National Industrial Classification
NSS	-	National Sample Survey
OECD DAC	-	The Organisation for Economic Co-operation and Development Assistance Committee
OME	-	Owner, Manager and Employee
P	-	Profit
PDR	-	People's Democratic Republic
PIP	-	Performance Improvement Programme
PIP	-	Performance Improvement Programme
RBI	-	Reserve Bank of India
RG	-	Rural Group
RGM	-	Rural Group Manufacturing
RGNM	-	Rural Group Non-Manufacturing
RI	-	Rural Individual
RIM	-	Rural Individual Manufacturing
RINM	-	Rural Individual Non- Manufacturing
RME	-	Rural Micro Enterprises
RME	-	Rural Micro Enterprises
RSBY	-	Rashtriya Swasthya Bima Yojana
SD	-	Standard Deviation
SHG	-	Self Help Group
TC	-	Total cost
TR	-	Total Revenue

UG	-	Urban Group
UGM	-	Urban Group Manufacturing
UGNM	-	Urban Group Non-Manufacturing
UI	-	Urban Individual
UIM	-	Urban Individual Manufacturing
UINM	-	Urban Individual Non-Manufacturing
UNDP	-	United Nations Development Programme
UNICEF	-	The United Nations Children's Fund
WPR	-	Work Participation Rate

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Chapter 1

INTRODUCTION

Contents

1.1 Introduction

Women below poverty line constitute a disempowered, discriminated, marginalized, excluded section of society. Efforts are on to empower women by granting them opportunities to develop their entrepreneurial skills to make them part of the income generating activities. It was found that though the literacy level among women of Kerala was high, their work participation rate is lower than the national average. This indicated that the potential of women remained untapped. Keeping this in view efforts were made to bring women into income generating activities which would finally lead to financial inclusion. The Kerala Kudumbashree is an effort in this direction. It envisages poverty alleviation through mustering and mobilizing the potential of women by providing them with opportunities for enterprise development.

Poverty can be conceptualized in narrower terms around the core concept of resources and income. But as lived experience it is a complex, diverse and dynamic condition stemming out of deprivation spanning social, economic life. Poverty is frequently given the face of a woman. Women below poverty line constitute a disempowered, discriminated, marginalized, excluded section of society. They lack the adequate productive resources like capital, technology and support systems like credit, and favourable laws which recognize the vulnerabilities of women's labour both inside and outside households. Modern thinkers have brought ideas of social exclusion and lack of sustainable livelihood into the ambit of poverty. Social exclusion is a multi-dimensional and ubiquitous phenomenon. It is a "systematic exclusion of individuals and groups from one or more dimensions of society such as power, privilege, opportunities and resources" (Rao, 2013). The concept of social exclusion helps us broaden the conceptual terrain by covering important additional dimensions like the denial of choices and opportunities, a violation of human dignity, exclusion from a certain *standard of living* in economic, political, cultural and social dimensions which lead to disempowerment

The understanding of poverty in the study covers the core concept of resources and income and the idea of social exclusion and has at its base Amartya Sen's notion of poverty also as "capability deprivation" (Sen,1985). The perspective of "capability poverty" acknowledges the view that low income is a major cause of poverty, since lack of income can be the main reason for a person's capability deprivation. "Capabilities," according to Sen are constituted by 1) resources and 2) agency. Sen speaks about resource –based dimensions of capability poverty such as

material deprivation and non-resource –based dimensions of capability such as health, education, employment, individual, family, social relationships, physical security, voice, identity, self- expression, self-esteem and legal security. One requires agency to overcome capability poverty. "Agency" according to Sen is the potential that people have to live the lives they want to, of achieving "valued ways of being and doing." He uses the word "functionings" to refer to all possible valued ways of "being and doing" in a given context. He uses the term "functioning achievements" to individual realizations of valued ways of "being and doing." When failure to translate functionings to functioning achievements can be traced back to some deep-seated constraint on the ability or power to choose, then it is a clear manifestation of disempowerment (Sen, 1985). Hence eradication of poverty in all its dimensions could be achieved through empowering and capabilities building. We are reminded of Mohammed Yunus' statement that it is definitely not lack of skills which make poor people poor, but the lack of opportunities to utilize them (Yunus, 2003).

Traditionally it was believed that the benefits of growth in overall per capita GNP would gradually "trickle down" to all the strata of society resulting in equitable distribution of the economic, social benefits of growth and up gradation in living standards of all sections of society. But during the 50s and 60s many Third World countries realized that the bulk of the population especially the disadvantaged sections of society have been bypassed in terms of benefits of economic growth and that growth itself has not been sufficiently inclusive for many groups. Growth has to include the powerless and the disadvantaged as partners in the process to be inclusive. High growth, however, is not a sufficient condition for

poverty reduction; the pattern and source of growth, the manner in which its benefits are distributed and safeguarding resources and entitlements of the poor to reduce possibilities of deprivation are equally important. India now has a fast expanding upper class and middle class on the one hand and a large population without minimum incomes on the other. There has been rising concern over the fact that the benefits of economic growth have not been equitably shared. The flow of benefit ought to be sufficiently widespread in order to correct historical inequities. Hence there emerged a growing interest in 'bottom up' development as opposed to the earlier 'top-down' approach which saw wealth generated trickle down to the poor sections of society.

Of late, the strategy of "inclusive growth" has emerged to make poverty reduction efforts more effective through "empowering." The aim is to ensure that "everyone is included in development regardless of their gender, sex, disability, religion" (Dipna and Puja, 2013). The focus here is on creating productive economic opportunities for the poor and vulnerable sections of society rather than on income distribution as a means of increasing incomes of the excluded groups. In the short run governments could use income distribution schemes to increase the income level of the poor but that cannot be a solution in the long run. In inclusive growth since the focus of is on productive employment it takes a long term perspective. While income distribution schemes allow people to benefit from economic growth in the short run, inclusive growth allows people to "contribute to and benefit from economic growth." (Chakraborty, K.C, 2010) We need to expand the productive base of our economy if we want to provide broad based improvement in

the material condition of our people (Chakraborty, 2010). Inclusive growth is inherently more sustainable than income distribution schemes aimed at reducing in the short run disparities which might have come up due to policies intended to jumpstart growth (Chakraborty, 2010). Inclusive growth encompasses all hitherto excluded population. This can benefit the economy as well. The concept of inclusion is seen as a process of including the excluded "as agents whose participation is essential in the very design of the development process, not as just welfare targets of developmental programmes" (Planning commission, 2007).

Women's marginalization can hold back poverty reduction, productivity and growth in an economy. Disparities between women's and men's access to and control over resources relates to systematically lower access to health and education facilities among women, which leads to less than optimal levels of participation in economic activities (World Bank, 2001). Women's engagement in labour is a mantra for empowerment. Interventions to reduce gender based constraints (at household level, community level, individual choice etc) leads to increased participation of women in definable sectors of labour market including self-employment /enterprises, wage work, agriculture and allied activities, services etc (International Development Research Centre, 2013). It will increase their ability to manage risk. .

Runiyar and Kanbur (2010) point to the need of distinguishing between inclusive growth and inclusive development. "Development" brings into play dimensions of well-being beyond simply income, like

health and education. "Inclusive" according to them, focuses attention on the distribution of well-being in society. Inclusive development thus refers to the improvement of the distribution of well-being along these dimensions at the same time as the average achievement improves.

The Kerala Kudumbashree "a new paradigm of participatory development" can be broadly seen as an inclusive development strategy. Empowerment of women, marginalized for long is central to its vision which envisages lower incidence of poverty and rise in the involvement of women in the growth process. Its vision encompasses equality of opportunity as well as social and economic mobility for women with affirmative action for them.

The Government of Kerala launched the Kudumbashree Project in1998 under the leadership of Local Self Governments with this in view. It has today developed into the largest women-empowering project in India and has emerged as a massive poverty eradication programme in contemporary history. It is a revolution aimed at making women (hither to excluded) come out of poverty with dignity and improve their standard of living by providing them the right environment and opportunities. It has three constituent elements—micro-credit, entrepreneurship, and empowerment. Micro Finance Institutions could play a significant role in facilitating inclusion, as they are uniquely positioned in reaching out to the poor. Kudumbashree envisages" generating dynamic and productive self-employment to empower women economically, socially and politically - and making them informal agents of development and social change" (Kudumbasshree Mission and Hope, 2011).

1.1.1 Kudumbashree: -- Vision, Structure, aims

Kudumbashree, a holistic, participatory, women oriented innovative poverty reduction approach is implemented through Local Self Governments formed and empowered by the 73rd & 74th Constitutional Amendments. (Kudumbashree Mission and Hope, 2011). The Government of Kerala launched the State Poverty Eradication Mission, on 1st April 1999 with the active support of the Central Government, Local Governments and the National Bank for Agriculture and Rural Development (NABARD). So goes the Kudumbashree Mission statement:

> *"To eradicate absolute poverty in ten years through concerted community action under the leadership of local governments, by facilitating organization of the poor for combining self-help with demand- led convergence of available services and resources to tackle the multiple dimensions and manifestations of poverty holistically."* (http://.www.kudumbashree.org)

Kudumbashree manifests a "bottom up" development to change the situation of the poor by giving support and possible incentives for action on grass root level through a participatory approach. The idea of decentralization implemented in the state as part of Panchayati Raj permeates the structure of the Kudumbashree. It attempts to secure participation at grass root level through division of the project into three levels namely, Neighbourhood Groups (NHG), Area Development Society (ADS) and Community Development Society (CDS). Neighbourhood Groups send representatives to the ward level Area Development Societies (ADS). The ADS sends its representatives to the Community Development

Society (CDS).This forms the unique three-tier structure of Kudumbashree. Innovations in participatory development in Kerala in the early 1990s inspired the conception and scaling-up of Kudumbashree. Policy initiatives like participatory planning, decision-making, and implementation, combined with fiscal devolution, are the integral parts of this new approach. The motto of Kudumbashree is "from women to families and from families to community." The organizational structure of kudumbashree is planned in such a way that local self governments are its promoters. Eg. The Panchayati Raj model defines the roles and responsibilities of the three tiers and their activities focus on poverty alleviations. A collective effort could generate significant results by maximizing the use of available local resources.

At the center of the Kudumbashree empowerment initiatives, are microenterprise promotion, and capacity building through organizing women below poverty line who had been thus far excluded from productive economic activities. The aim of course has been to secure women's participation in economic activities which will prove beneficial to their families first and to community ultimately.

Women below poverty line constitute an excluded group outside the coverage of formal banking system. Microfinance institutions are uniquely positioned to reach out to the unbanked so as to extend banking services similar to those dispensed from banks. Kudumbashree Microenterprises help women engage in productive labour that allows them to "contribute to and benefit from economic growth" and to overcome poverty in its various dimensions through capacity building.

The basic assumption is that women's engagement in economically productive activity reduces economic dependency, giving them financial autonomy which goes a long way in developing self-confidence and self-efficacy and in creating their own space in family and society.

Kudumbashree, identified livelihood development as one of the main objectives for economic empowerment. Thrift and credit operations, at the base of Kudumbashree helped to meet the working capital needs of women who wanted to start new enterprises. Thrift and credit societies encourage saving among poor women to enable them meet their social and personal needs. (http://www.kudumbashree.org/storage//files/ctdr1_kudumbashree%20and%20livelihood%20development%202015.pdf). The savings of the women are pooled together and given out as loans to the most deserving. They provide cost-effective and easy credit for purposes like covering hospital expenses and meeting working capital requirements for microenterprises. The Community Development Societies facilitate bank linkages for farming, micro housing and micro insurance. They also serve as the delivery point for skill up gradation and market development support to microenterprises. The stratagem behind Kudumbashree is that entrepreneurship development is expected to increase the per-capita income of beneficiaries and inturn leads to an improvement in their living standards (Kudumbashree Mission Hope 2011).

1.1.2 Kudumbashree Microenterprises

There is a clear definition of Kudumbashree microenterprises "------ -- those that are having an investment ranging from ₹ 5000 to ₹ 2.5 lakh, owned, run and managed by the entrepreneurs themselves. It could be

individual or group enterprises having an annual return of rupees one lakh to rupees five lakh. A potential to generate a minimum of ₹ 1,500 per member a month and an owner, manager and employee (OME) concept is envisaged in the model. (http://www.kudumbashree.org/storage//files/ctdr1_kudumbashree%20and%20livelihood%20development%202015.pdf) Many government departments, agencies and NGOs promote microenterprises under their respective schemes. Interestingly, these departments and agencies use the kudumbashree network for their programmes. 2002-03 onwards special allocation was made in the kudumbashree budget for setting up of microenterprises in rural areas (RME). Kudumbashree microenterprise interventions are aimed at Local Economic development (LED). *Participation* of community in satisfying the *needs/demands* of the community and the *utilization* of local resources –natural, human and financial are incorporated in every project. The convergence of various departments, LSGs, Kudumbashree networks and private partners ensures convergence of funds and leads to Local Economic Development benefitting a large section of the community (Kudumbashree and Livelihood Development, 2015).

It is to be noted that capacity building is essential for successful development and effective implementation of microenterprises. Competence of the delivery mechanism is to be ensured for the effective utilization of opportunities. Capacitating entrepreneurs becomes crucial and inevitable. Expected results could be had by assimilating human and other available resources at the proper time. With this in view Kudumbashree started training groups like:

1) Education, Knowledge, Skill Aptitude and Training (EKSAT) groups which provides entrepreneurship development training;
2) Kudumbashree Accounts and Audit Service Society (KAASS) which provides training in book keeping;
3) Event Management Groups (EMGs) which offers training in managing events of the mission like Kudumbashree fairs and festivals
4) Microenterprise Consultants (MECs) which provides training in Business counseling.

Successful entrepreneurs are pooled to training groups to become the Mission's Master Trainers.

Kudumbashree operations tend to convert social needs into business opportunities. Every enterprise is designed to meet a local demand, a social demand or some other opportunity that emerges in the process. Many government departments, agencies, LSGs and NGOs which promote microenterprises under their respective schemes (Women welfare funds Panchayat funds etc) use the Kudumbashree network. The ultimate beneficiaries here are those in the kudumbashree network. The benefits of economic empowerment and capability building of women under Kudumbashree will accrue first to their families and will then finally reach society through families. Society becomes the ultimate beneficiary as the outcome of effective utilization of opportunities will lead to LED that benefits a large number of people.

Women's participation in income generating activities through Kudumbashree serves to expand the productive base of our economy. Women's economic empowerment, has been defined as "Capacity of women to *participate* in, *contribute* to and *benefit* from growth processes in ways that recognize the value of their contribution, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth" (OECD DAC Gender Equality Network, 2011, Kabeer 2012, Eyben et al. 2008). This is in line with IDRC's working definition of inclusive growth which emphasizes growth that ensures economic opportunities for all segments of the population, with a special emphasis on the poor, particularly women and young people who are most likely to be marginalized.

Women's economic empowerment can foster economic growth and economic growth (supported by government policies and action) can in turn benefit the poor women. Increased participation in income generating activities improves efficiency, productivity, competitiveness and measurably raises average income and in turn raises long run growth, or improves the conditions for a surge in growth. Removal of constraints on economic participation creates a larger supply of workers and more potential growth. Economic growth in turn promotes gender equality and increase in women's participation in economically productive activities. Transformational growth can produce social change which modifies gender based constraints (International Development Research Centre, 2013).

1.2 Statement of the problem

The side-lining of women in the development process has drawn significant attention in recent years. Though women constitute 48.5 percent of the India's population (Census 2011) their contribution to economic activity is far below than that of men. As per the survey of Employment and Unemployment situation in India (NSS 68thRound) area wise data shows that the unemployment rate is higher in rural areas as compared to urban areas. Among the major states Kerala has the highest unemployment rate of 12.5 percent as against the all India level of 5 percent (Economic Review, 2016). In Kerala Unemployment rate is much higher among females as compared to males despite remarkable women empowerment and poverty alleviation initiatives. Though Women in Kerala outperform their male counterparts in many development indicators, their exists a wide gap between male and female LPR (Economic Review, 2016). State average is 40.3 percent FLPR (per 100 persons) is 24.8 percent and male LPR is 57.8 percent. While the female work participation rate in India increased from 19.7 percent to 22.7 percent between 1981 and 1991(Census data), in Kerala it declined from 16.6 percent to 15.9 percent during the same period. As per 2001 census data WPR in Kerala fell to 15.3 percent. 2011 Census data shows the WPR of women in the all India level is 25.5 percent and in Kerala it is 18.3 percent. It is also noted that LFPR of Women in rural areas at the state level (Kerala) is lower than that at the national level. But in Urban areas LFPR of women at the state level (Kerala) is better than that of their counterparts at the all India level. (Economic Review, 2016) Less Women in the labour force indicates underutilization of human resources

that holds back productivity and economic growth. Women lack access to credit and other financial services. Though they are literate their knowledge and skill on how to manage their work is generally low. They need to acquire the ability to control capital to rise out of poverty. Finance is an extraordinarily effective tool in spreading economic opportunity and fighting poverty (World Bank, 2006). Credit is one door through which people can escape from poverty (Yunus, 2007). Micro finance services provide women the start up and working capital, training, insurance and savings. It is expected that with this women will engage themselves in income generating activities where they will experience increase in productivity which will lead to a positive outcome (cited by Kato Paul, 2013).

Promoting various income generating activities especially among rural women by providing the necessary "opportunity structure" is perceived as one of the most powerful ways out of poverty leading to their empowerment. Greater participation in income generating activities and greater decision making power strengthens their innate abilities individually and will have an impact on the group and societal levels. Empowerment can thus be seen as interconnected and mutually reinforcing phenomenon that brings growth and development at the individual, familial and societal levels. Even with large number of opportunities for self-employment, the share of female self-employed workers seems to be significantly lower in Kerala than many other states in Kerala. So the role of self-employment in enhancing the share of economically active women is important in Kerala where female literacy is high (Economic Review, 2016).

Kudumbashree, envisions provision of "opportunity structure" for empowerment of women and making them participants in productive economic activity. As per 2011 census Pathanamthitta District has the highest female literacy (96.26 %) among all districts of Kerala but WPR of women is lower than the state average of 18.2 percent. The data of Kudumbashree mission of the year 2009 assessed Pathanamthitta District as the least performing on the basis of number of microenterprises, NHGs and activities. Marked improvement is visible in their performance after 2010. The service of Microenterprise Consultants was made available by the Kudumbashree mission. It is noteworthy that Nutrimix micro enterprise in Pathanamthitta bagged the award for the best unit. Micro enterprise development through Kudumbashree is expected to have brought in a change to the previous situation. It was realized that micro credit alone will not end poverty and empower. Women needed to be provided adequate productive resources like capital and technology, support systems like credit, and favourable laws. The Mission developed particular strategies for analysing the needs of enterprises like trainings, partial financial support, marketing support etc. These kinds of supports are applicable for both existing microenterprises and new ones. The Mission gives priority on the concept of Local Economic Development (LED) – local production, catering to local consumption to increase the economic activity within the local areas for microenterprise development. The project seeks to strengthen women's self-organizational capacity. The act of organizing infuses a synergy that can be constructive; every member in the network is at once a "participant, information provider and knowledge creator" Hence it is worthwhile examining the economic performance

of Kudumbashree microenterprises to assess the influence on economic empowerment which it is assumed in turn leads to social/cultural, and political/legal empowerment of women.

1.3 Research questions

- How far Kudumbashree has succeeded in promoting income generating activities through microenterprises.
- How far income generating activities under Kudumbashree microenterprises have improved the economic conditions of women.
- How far improved economic conditions have led to women empowerment in its various dimensions – social, political/ legal.

1.4 Objectives of the study

1) To evaluate the economic performance of Kudumbashree microenterprises in terms of total revenue, profit and employment generation.
2) To make comparative evaluation of performance of enterprises across various categories such as rural, urban, group, individual, non- manufacturing and manufacturing.
3) To examine the level of women empowerment across various categories of Kudumbashree microenterprises.

1.5 Methodology

The present study is explanatory and analytical. The period of study is from 2008-09 to 2015-16.

1.5.1 Concepts used

a) Kudumbashree Microenterprises

As defined by the Kudumbashree Mission, Kudumbashree microenterprises are those that have an investment between ₹ 5000 and ₹ 2.5 lakhs, owned, run and managed by the entrepreneurs themselves. It could be individual or group enterprises. It should have an annual return of rupees one lakh to five lakh and a potential to generate a minimum of ₹ 1,500 per member a month. An owner, manager and employee (OME) concept is envisaged in the model.

b) Group and individual units

The microenterprises group will be given a subsidy of ₹ 10000 per member or 50 percent of total project cost whichever is less. The number of members in the group is 5 -10.

Individual units have investment up to. ₹ 50000. The scheme of Kudumbashree envisages providing subsidy of ₹ 7500 per member or 30 percent of the total project cost whichever is less. (Kudumbashree Livelihood Development, 2015)

c) Manufacturing and non –manufacturing units

For the sake of the study Kudumbashree microenterprises have been broadly classified under two heads:

- Manufacturing

- Non- Manufacturing (compiled from National Industrial Classification, 2008)

Manufacturing includes activities which come in the secondary sector.

Following are the activities taken under Manufacturing

1) Toiletries (soap, lotion, washing powder etc).

2) Utilities (candle, umbrella, agarbatti, bag etc.)

3) Food products (pickles, bakery, curry powder, honey extraction, nutrimixetc)

4) Paper products (Carry bags, book binding etc)

5) Cloth products (readymade garments, tailoring etc.)

6) Handicraft (ornament making, arunmulakannadyetc)

- Under Non- Manufacturing agriculture allied activities and services have been included (farming initiatives come under JLG, hence the study restricts itself to agriculture allied activities). The present study concentrates only on agriculture allied activities. Following are the activities taken under Non-Manufacturing

1) Agriculture allied activities --- (Animal husbandry --poultry farming, cow rearing, goat rearing etc)

2) Services (catering, auto, IT,) (Details are given in Appendix 1.1)

1.5.2 Data base

The study is based on secondary and primary sources. Secondary Information has been collected from Government publications, NABARD, RBI, books and journals, and Kudumbashree mission publications. The study is basically based on primary information. They have been collected from Kudumbashree microenterprises through pre-tested schedules, group discussions and interviews with beneficiaries, officials of Kudumbashree state mission and district mission, Microenterprise consultants etc.

1.5.3 Sampling design

a) Area of the study.

The area of study is Pathanamthitta District. The data of Kudumbashree mission of the year 2009 assessed Pathanamthitta District as the least performing on the basis of number of micro enterprises, NHGs and activities. Marked improvement in the number micro enterprises, NHGs activities and their performance is visible 2010 onwards. The service of Microenterprise Consultants was made available by the Kudumbashree mission. It is noteworthy that Nutrimix micro enterprise in Pathanamthitta bagged the award for the best unit.

b) Sampling

Two phase methodology has been used for the study.

Phase 1 ***selection of CDS***

Since the units have to be selected based on criteria, to get adequate sample size (as per sample size formula) the study is

compelled to select 34.5 percent CDS randomly by lottery method. There are 58 CDS in total, out of which 54 are in rural area and 4 are in urban area. Since the study makes a comparative study of rural and urban units too the study have selected 17 rural CDS and 3 urban CDS. Since the number of units satisfying the condition in urban units are limited it is compelled to take 3 CDS from urban area.

Phase 2 ***selection of sample units***

The study has been conducted on Microenterprises that were started on or before 8/5/2012 and are still operating. The DMC level report of Kudumbashree (8/5/2012) shows that there are 1023 such enterprises satisfying this condition. Proportionate sampling has been used for the study. Though the study intends to make a detailed analysis of various categories, the sampling frame does not contain such information. Hence by applying the sample size formula, the sample size is determined as 14 percent * / (14.07 percent). This comprises 145 microenterprises. They are selected by using systematic random sampling. The selected samples are classified into manufacturing (77units) and non-manufacturing (68 units) (based on National Industrial classification 2008) for the purpose of performance analysis and further into rural (106 units), urban (39 units), individual (60units) and group (85 units) categories for the purpose of comparative analysis.

**To get a confidence level of 99 percent and a confidence interval of 10, the sample size needed is 143. Hence it has been rounded to 145*

Classification of units based on industry, location and type

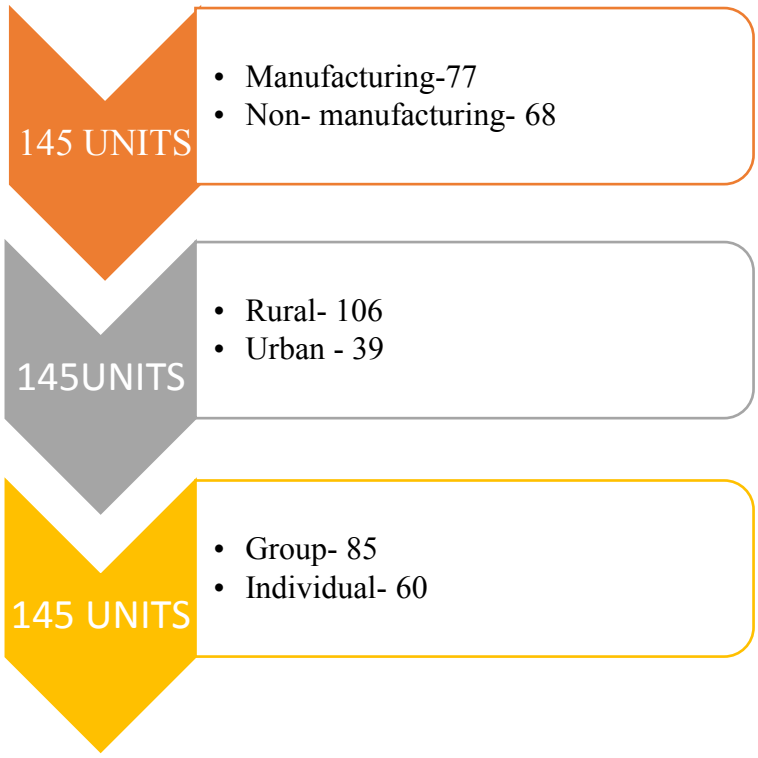


Figure 1.1: Classification of units based on industry, location and type

Selected microenterprises have been then divided into four strata considering their heterogeneity. Stratified random sampling could not be applied as the information was weak and hence the researcher is compelled to classify the selected samples into four strata, recognising the significance of the study. The respective strata are rural individual, rural group, urban individual, urban group. The sample size from each strata are 30, 76, 30, and 9 respectively.

Categorization of units into four strata

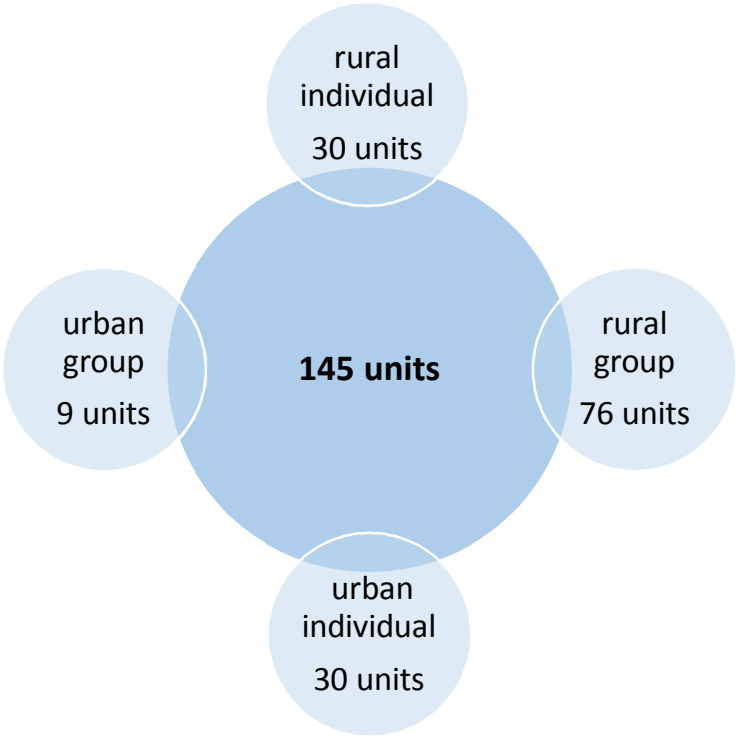


Figure 1.2: Categorization of units into four strata

Again units are classified into 8 sub-groups such as rural-individual-manufacturing, rural-group-manufacturing, urban-individual-manufacturing, urban-group-manufacturing, rural-individual-non-manufacturing, rural-group-non-manufacturing,urban-individual-non-manufacturing,urban-group-non manufacturing. The sample size from each group are 13, 46, 13,5,17,30,17 and 4 respectively.

Categorization of units into eight strata

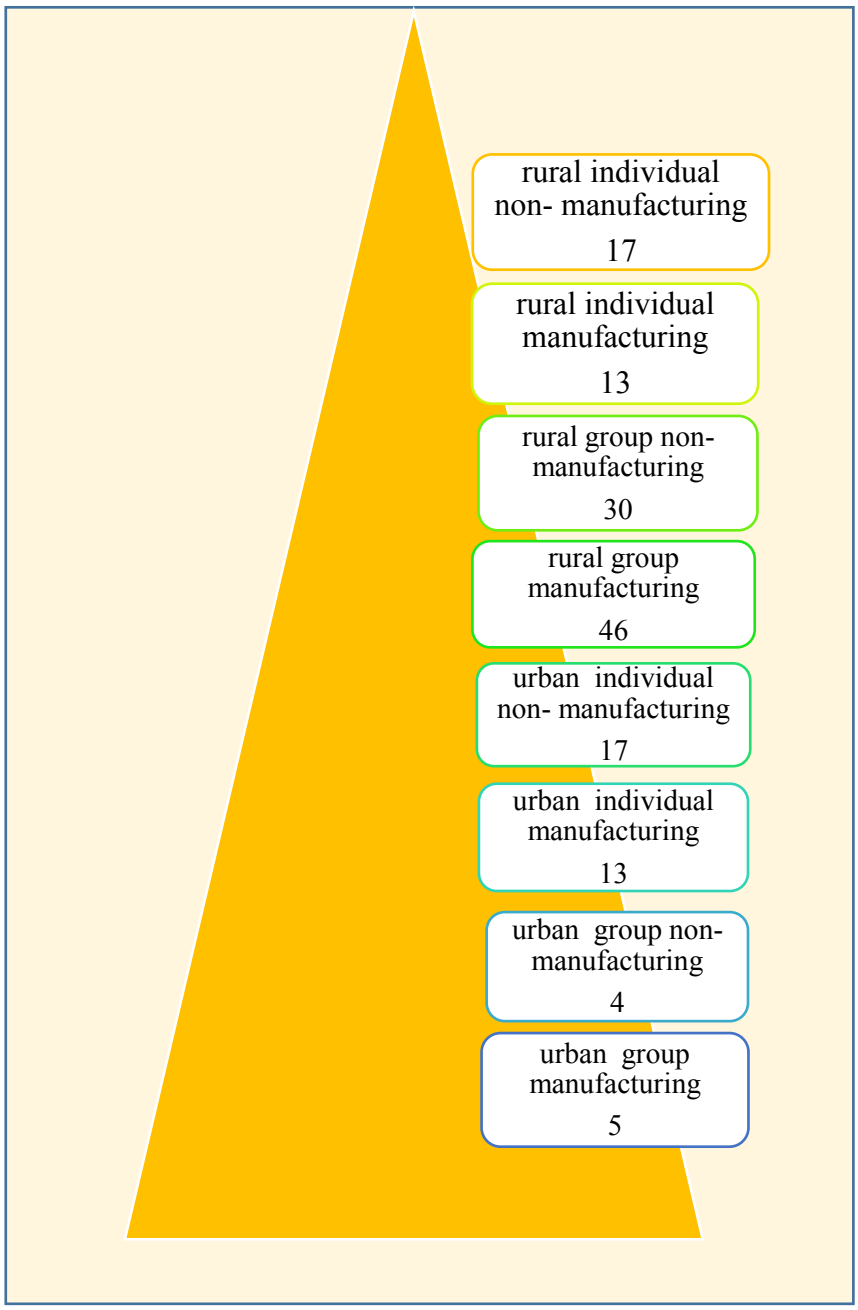


Figure 1.3: Categorization of units into eight strata

There are two sets of interview schedule one pertaining to performance of microenterprises and the other to women empowerment. For evaluating performance each microenterprise whether individual or group, is taken as a single entity. For measuring women empowerment all the individual units are covered and in the case of group units one beneficiary from each unit is randomly taken as sample.

1.5.4 Tools used for the study

For evaluation of economic performance the average of yearly total revenue, total cost, total profit and monthly profit, monthly profit per head since its inception have been taken. Women empowerment has been defined and measured on the basis of three aspects agency, resource, and outcome. Empowerment has been classified under three heads---economic empowerment, social / cultural empowerment and political / legal empowerment. A women empowerment index has also been calculated.

For the analysis of data, various methods of data summarization, descriptive statistics and tools to study relationship between various variables such as cross tabulations, analysis of variance, chi square test, multiple regression, have been employed. Women Empowerment Indices have also been computed within the framework of human development index by UNDP. Details of same has been given in chapter 6 and appendix 6.1.

1.6 Limitations of the study

The study is confined to a particular district so generalisation is not possible .Some members had inhibitions to reveal the actual data. The data given by some of the respondents especially on financial matters were based on their estimates and guess. It may affect the result. There is no uniformity in the index to be used for deflation. There is no index to deflate the income for non-manufacturing sector especially auto, catering etc. Considering these difficulties analysis is done on the basis of absolute value.

1.7 Chapterisation

The study is organized in seven chapters

Chapter 1 Introduction

Chapter 2 Review of literature

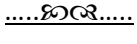
Chapter 3 Kudumbashree microenterprises - An Overview

Chapter 4 Economic performance of Kudumbashree Microenterprises

Chapter 5 Comparative Evaluation of Kudumbashree Micro Enterprises

Chapter 6 Women Empowerment achieved through Kudumbashree Micro Enterprises

Chapter 7 Summary and Conclusion



Chapter 2

REVIEW OF LITERATURE

Contents

The chapter presents a review of literature on Microfinance and its impact on women empowerment. Literature on the measuring of economic performance of microenterprises has also been reviewed. This is done to identify the variables for measuring economic performance. Literature on women empowerment has been reviewed in order to understand the concept and its outcome in the developmental process in the socio-economic sphere. This is done with the view to identifying the indicators of economic, social/cultural, political/legal empowerment. This helps us explore the link between microenterprise development and women empowerment.

2.1 Microfinance and Women Empowerment

Beijing Platform for Action1995 noted that women suffer the direct cost of inequalities in terms of lack of access to and control of resources, discrimination in power, voice and economic opportunities. Women have limited access to financial services. They are not bankable because of lack of collateral and a verifiable credit history. To make the development process more inclusive it is inevitable to have a serious approach on

poverty among women. We cannot lift them up from the vicious circle of poverty by mere income distribution schemes. Yunus speaks of the need to unleash energy and creativity in human beings as a solution to poverty (Yunus, 2003). We must let them participate in the process of growth. Ability to control capital gives the people the power to come out of poverty (Yunus, 2003). Strategies to tackle poverty and problems among women are linked to women empowerment. Credit can be considered a mantra for getting out of poverty in all its dimensions. It helps women to identify their potential, their role in family and society, awareness on health, sanitation, education, improve autonomy, self-confidence, skill development, leadership quality etc. Providing credit to the unbankable category-women through Microfinance will have direct reflections in society *women--family --society*. Giving women access to micro credit loans generates a multiplier effect that increases the impact of a microfinance institution's activities, benefiting multiple generations (www.micro financeinfo.com).They are not mere beneficiaries of income distribution schemes ,but they become the partners in the process of growth. They become productive assets. Money entering through women brings more benefits to the family as a whole. Many studies have found that credit programs have had significant effect on different dimensions of women's empowerment like increase in own asset holdings, increase in capacity to use purchasing power, increase in political and legal awareness, awareness on health care, increase in house hold expenditure, increase in women's ability to exercise influence in intra-household decisions, increase in women's welfare, self-confidence, better co-operation with neighbours. Kabeer (2005) stated that "it becomes apparent that while access to financial services can and does make vital

contributions to the economic productivity and social wellbeing of poor women and their households, it does not "automatically" empower women (cited in Kato paul, 2013). Microfinance can be a potential agent of social change. Microfinance programmes like the Self Help Bank Linkage Program in India are said to have positive economic impact and are believed to empower women.

Microfinance Institutions (MFIs) play a significant role in facilitating inclusion, as they are uniquely positioned in reaching out to the rural poor. Many of them operate in a limited geographical area, have a greater understanding of the issues specific to the rural poor, enjoy greater acceptability amongst the rural poor and have flexibility in operations providing a level of comfort to their clients. Greater legitimacy, accountability and transparency will not only enable MFIs to source adequate debt and equity funds, but also eventually enable them to take and use savings as a low cost source for on-lending. (Mandira Sarma, 2007)

As has been noted, at the centre of poverty alleviation programmes there has been a shift from welfare schemes to schemes for generation of employment leading to generation of income. Microenterprise development programmes are an effort in the direction. Microfinance has come to be perceived as an effective tool that facilitates "financial inclusion" of the marginalized sections of society. Financial Inclusion has the potential to improve the financial condition and standards of life of the poor and the disadvantaged. Financial services permit individuals and households to manage the risk and uncertainties to save on better terms, to invest in a

business venture or property or to cope with unforeseen expenses. Task Force on Microfinance has defined Microfinance as provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-rural or urban areas to enable them to increase their income levels and improve living standards (NABARD,2000) Microfinance includes microcredit. Microcredit is purely 'credit' while microfinance is 'credit plus.' Microfinance can lead to effective inclusive growth where by men and women can earn enough from their work.

Studies that rigorously examine the link between microfinance and women's empowerment are very few:

Dhakal (2001-2002) sees a direct link between microfinance and at least five of the millennium development goals—reduction in poverty, increase in income, building assets and reducing vulnerability, improving nutrition, spending more on children's education etc. Khan and Rahman (2007) find that Microfinance has a positive impact on the standard of living of the poor people and on their life style. It has not only helped the poor to come over the poverty line, but also helped them to empower themselves. Rajendran.k (2012) looks at Microfinance as an effective instrument and tool of poverty eradication, empowerment and inclusive growth by contributing to the development of core poor in terms of economic well-being, alleviating poverty and empowerment leading to overall development of rural poor.

Sinclair, Hugh (2012) states that well- designed, targeted Microfinance to a subset of the poor can have a positive impact. Microfinance is not suitable for all poor people and it needs to complement rather than replace

other development strategies. Microfinance touches on the core values of entrepreneurial vision of teaching a man how to fish rather than handing him a fish on a plate.

Sharir and Lerner (2006). identify eight variables as contributing to the success of the social ventures, arranged in the order of their value: (1) the entrepreneur's social network; (2) total dedication to the venture's success; (3) the capital base at the establishment stage; (4) the acceptance of the ventures idea in the public discourse; (5) the composition of the venturing team, including the ratio of volunteers to salaried employees; (6) forming cooperation in the public and non-profit sectors in the long-term; (7) the ability of the service to stand the market test; and (8) the entrepreneurs' previous managerial experience. Microfinance has aided women in terms of mobilization of micro savings, utilization of microcredit and the organization, management and performance of income. Christabel, P.J. (2009) says entrepreneurship points the way out from poverty. Capital derived from credit and savings helps the poor seize market opportunities. She has looked into the factors leading to women's participation, the group dynamics that influence participation, successful performance and sustainability. Kato Paul & Jan Kratzer (2013) find that women members of MFIs have more control over savings and income generated from business, greater role in decision – making , greater self-efficacy and self-esteem and greater freedom of mobility and increased activities outside home than non-members.

S. Sarumathi and Dr. K. Mohan (2011), consider empowerment under three dimensions namely psychological, social and economic. Their

study of the performance of SHGs in rural Pondicherry showed that there is a gradual increase in the all the three factors among rural women. They said that some respondents expected the NGOs to come up with more training sessions to develop their skills and talents inorder to participate in income generating activities. They conclude that there is visible improvement in social and psychological empowerment of rural women as a result of participating in Microfinance through SHG programme.

Shaheen, Imrab and et al (2013, 2016) studied the role of microenterprises in achieving economic empowerment of women in three districts of Azad, Jammu & Kashmir. The results of their study indicated that women were economically empowered after up grading their skills and also empowered in managing business related matters.. Diversity in skills acquired made them more successful.

There are a few studies showing the impact of microfinance on Kerala Kudumbashree

M.A.Oommen (2008) identified Kudumbashree microenterprises (supported by bank loan or thrift loan) as the most important instrument for creating employment and income to the poor.

Tia Mathews (2014) in her study on financial inclusion through Kudumbashree in Mutholygrama Panchayat says Kudumbashree units perform the primary functions of banks by way of credit creation and deposit acceptance and also making available services at the doorstep of its members. SHG-Bank linkage model has induced financial discipline among members and improved their standard of living. John, Annie's

(2017) study of Kudumbashree at Mukkam looks at economic development as the basis for all other development. Economic development leads to empowerment in terms of improved confidence in banking transactions, improved communication skills and skills in planning and implementing projects, participation in social programmes, enhanced entrepreneurship and leadership and capacity to work and earn together.

2.2 Factors influencing performance of microenterprises

Gerba and Vishwanathan (2016) cite Wiklund and Shepherd, Blackburn et.al to say that performance of microenterprises involves multidimensional aspects hence a single overarching model cannot be used to measure performance. The variables that can be used to measure performance depend upon the objectives pursued. Hybrid factors – financial and non-financial are widely recommended tools to incorporate its multi-dimensional aspects. Growth and success can be used alternatively to measure performance. Growth is a "proxy measure" of small firms' performance (Wiklund and Shepherd 2005), "and growth is synonymous with success. Growth can be seen in increase in employment rate and increase in number of products and services, financial factors include-Sales revenue/turn over/ turnover growth, number of employees/growth in employment/ membership strength, number of members engaged as full time in the enterprise, access to finance, amount of initial capital, operating income, amount borrowed, significant relation between average amount of loan and net profit, age of business, net profit, years of experience.

Non –financial factors-Environmental influence on performance— location, training and development of entrepreneurship and business

management, employees' performance customer relationship, network to achieve sustainability, age, educational level of operators.

Table 2.1: Performance indicators—chart

Chang (2008)	Profit before tax, turnover, customer satisfaction, employees turnover
Forsman (2008)	Sales growth, market share, cost reduction
Emanuel et.al. (2013)	Survival, sales volume, growth, profit margin, capital employed, number of employees
ReitzandHeurkson (2000)	Profit, sales, number of employees and order or commission
Alasadi (2007)	Owner/ manager satisfaction
Blackburn et.al.	employment, turnover, profitability
Wood (2006)	Return in investment, profits, turnover, number of customers
March and Sulton (1997)	Profit ,sales, market share, productivity, debt ratio and stock prices
Brown et.al(2005) Burtlett (2012)	as the basic aim is to maximise profit, basis of performance should be on profit

Source: Gerba 2016

Several studies have shown that growth either in sales/revenues/ turnover or the number of employees or both influence the future and potential of enterprises. Ilavarsan and Levy have taken monthly turnover growth as a measure of enterprise growth. In group enterprises, the income generated from the enterprise to individual members is a measure of performance. Performance is determined by many factors like demand for product, cost of production, turnover, total sales receipts, and group size. In 2003 Sandburg defined small business performance as the ability

of small business to contribute to job and wealth creation i.e. to have "acceptable outcomes and actions"

Dimple Therese Abraham (2013) has identified a total of 16 factors positively impacting performance of group enterprises---- equal share of work by members of the group, segregation of work, full time engagement of members in the enterprise, support of family members, broad sector of enterprise. If an enterprise has operated for more than three years it indicates that the loans have been completely repaid. She has also identified reasons for enterprises becoming inactive -- lack of demand for product, water shortage, low income, drop out of members, unequal participation of members in the work. Onphandala and Suruga (2010) examined the determinants of performance of 1776 microenterprises representing all sectors and geographical regions in Lao PDR It was found that the impact of business experience is small and insignificant. The difference between urban and rural has narrowed down in the younger generation, but still remains large. The difference between male and female is rejected regardless of region groups and generations.

Abraham, Ababiya (2013) examines the benefit cost ratio of Microenterprises as related to financial flow and its management to measure the performance. A regression model analysis model was used to identify the determinant factors that affect the performance of the enterprises the results showed that the age of the operators, their education, their entrepreneurial skill, experience of the manager access to training , access to market, the number of employees, the amount of initial capital – all had positive relationship with performance of enterprises. He

offers suggestions to improve the level of performance. Microenterprises should be transformed into higher level of enterprise. For this there should be facilities to initiate and update entrepreneurial skill, to upgrade educational level, to create alternative market demand. Sufficient capital should be allocated. Better monitoring and evaluation of benefits generated and cost incurred and effective utilization of employees should be ensured.

He has employed benefit cost ratio to measure the performance of Microenterprises. It analyses, estimates and totals up the equivalent money value of benefits and costs of the enterprise.

$$Banefit\ coast\ ratio = \frac{\text{annual total benefit}}{\text{annual total coast}}$$

where total benefit is the sum of the benefits earned from performing different activities to sustain the business. The higher the total benefit of the enterprises, the higher benefit –cost ratio is likely to be. Total cost is made up of fixed cost and variable cost. If the benefit cost ratio of enterprise is greater than one, the enterprise performance is good (survived) and if the benefit cost ratio of enterprise is less than one, the enterprise performance is bad (failed).

He has used a multiple linear regression to analyse factors affecting the performance of microenterprises.

Non-financial factors influencing performance:

Location has been identified as a factor influencing performance. Pukar K.C.'s study (2010) of microenterprises in rural Nepal finds

performance of those trained by UNDP is different in different locations of rural Nepal. This disparity in performance has been attributed to differences in socio-economic and market conditions among locations. The influence of such factors on performance diminishes over time. Training and development of entrepreneurship and business management ((Momangue 2014, Ababiya et al., 2015), access to market, age and educational level of operator (Ababiya et al., 2015), contribution to joband wealth (Sandberg 2003) age of enterprise (Blackburn et.al 2013) Number of employees/growth in employment/membership strength (Oommen 2008, Dimple 2013), Number of members engaged full time, years of experience (Yusuf 2002) number of employees and customer relationship -- are identified as factors influencing performance.

This study seeks to evaluate the economic performance of Kudumbashree microenterprises. From the literature reviewed, the researcher has identified the following variables for measuring economic performance of Kudumbashree microenterprises:

Total revenue, total cost (disaggregation of cost), annual profit, monthly profit, monthly profit per head, access to finance, man days generated and additional employment generated.

2.3 Empowerment

2.3.1 Women and Disempowerment

It is a sad fact that women remain largely excluded from the development process in socio –economic spheres. Gender constructs have led to sexual division of labour which allocates tasks and occupations

between men and women both within public economy and the domestic economy of the household. A horizontal division occurs. Some occupations often associated with domestic activities like cleaning and nursing are allocated to women. Women are excluded from occupations treated as supposedly male occupations. E.g. Manufacturing. A vertical or hierarchical division exists where women's occupations themselves occupy lower status, lower pay, and less power than male occupations and women get employed in lower ranks of many professions. A World Bank position paper highlights this issue: "If women continue to be left out of main stream of development and deprived of opportunities to realize their full potential, serious inefficiencies in the use of resources will persist" (cited by Kabeer 1999). What is required in equity in life outcomes for men and women, recognizing their different needs and interests which requires a redistribution of power and resources (cited in Malhotra et.al, 2002). Heidi Hartman has specified that if women are to attain equal social status with men and if women and men are to attain the full development of their human potential not only the hierarchical division of labour but the very division of labour between the sexes must be eliminated (Humm, 1992). Women constitute a disempowered group which cuts across and overlaps with all other disadvantaged groups. Moreover the family and familial relations constitute the main locus of her disempowerment. Patriarchy shapes women's perceptions, cognitions and preferences conditioning them into accepting their subordinate role in the existing system which seems divinely ordained hence natural.

Besides lack of financial resources, women face "capability deprivation" a wide range of social and ideological constraints in society

lead to unequal opportunities in education, employment and asset ownership, unequal situation in the labour market, unfair treatment under social welfare systems and subordinate status and lack of power within family. Women regard the well-being of the family as their mandate.

Empowerment begins where women come to realize that gender differences are social cultural constructs intended to hold them down. Considerable progress has been achieved in recent decades in developing women's capabilities, but their participation in economic and political decision making remain limited. "Empowerment" is central to poverty reduction and is a primary development assistance goal. It has multiple interrelated dimensions – economic, social, political and cultural. It has to be understood in relation to resources, perceptions and relationships of power.

2.3.2 Empowerment as a process

"Empowerment' indicates a process, a progression from a condition of disempowerment to *"becoming powerful."* It is a process by which disempowered individuals, groups and communities are able to take control of the circumstances and achieve their goals. Becoming powerful would mean having "control over material assets, intellectual resources and ideology" (GaneshmurthyV.S, 2008), McWhirter (1991) defines empowerment as the process by which the powerless become aware of the power dynamics at work in their life context, develop the skills and capacity for achieving control over their lives, exercise control without affecting the rights of others and support the empowerment of others in the community (cited by Rowlands,1997; Kurubi, 2006).

Naila Kabeer looks at empowerment as a process by which those who have been denied the ability to make strategic life choices gain that ability (Kabeer, 2001). Empowerment involves moving from insight to action; it is related to the idea of human agency, the ability to make "strategic life choices" and acquiring of self-efficacy. Women's empowerment is related to aspects like gaining a voice, having mobility and establishing a public presence. Besides these empowerment also suggests the need to gain some control over power structures or to change them. Many definitions draw attention to the fact that empowerment requires, "a shift in perceptions", an "inner transformation", "a thinking outside the system." and challenging the status quo (Kabeer cited in Malhotra, 2002). Naila Kabeer asserts that empowerment is about change and expansion of the ability to make strategic life choices where this ability was previously denied. Moreover she distinguishes between "strategic life choices" (critical for people to live the lives they desire). and "second order choices" which determine the quality of life but are not constitutive of its defining parameters (Kabeer, 1999).

Empowerment develops from the root concept of power. Jo Rowlands identifies the different forms of power one should be aware of for an understanding of the process of empowerment. Using the sense of power over, empowerment would mean efforts to draw people outside the decision making process into it, ensuring participation in political structures, acquiring the ability to obtain an income that enables participation in economic decision –making. Rowlands says empowerment results when people are able to "maximize the opportunities available to them without constraints" (Rowlands, 1997). It is not about gaining the

power to dominate others. It should not be power which involves domination but which is generative, the type of power that can stimulate activity in others and raise their morale (Rowlands, 1997)). Within the generative "power to" and "power within", empowerment would mean acquiring awareness regarding their own interests, relating it to those of others and gaining the ability to influence decision making (Rowlands 1997). Feminist understanding of empowerment encapsulates "power to" and "power within" -- the power to undo negative social constructions and effects of social conditioning and generating a vision of oneself as having the capacity and the right to act and influence decisions (Rowlands, 1997). This involves the concept that power cannot be bestowed, it must come from within. Hence going by the "power to' and "power within" interpretations, women empowerment would mean giving scope to a full range of women's abilities and potential (Rowlands, 1997).

Women empowerment is connected to various separated but related concepts -- women's autonomy, agency, gender equality, gender equity, etc. Gender equality is achieved when women and men enjoy the same rights and opportunities in aspects like economic participation and decision-making, and when the different aspirations and needs of women and men are equally valued. Gender equality implies that men and women have equal value and should be accorded equal treatment. Gender equality indicates also the equality in life outcomes for women and men recognizing their different needs. This may require a redistribution of power and resources (Reeves and Baden 2000; Malhotra et al, 2002). Gender equality is fundamentally related to sustainable development and is globally accepted as a necessity for promotion of human rights. Gender

equity on the other hand recognizes that women and men have different needs, preferences and interests and hence equality of outcomes may necessitate different treatment of men and women (Reeves and Baden, 2000 cited in Malhotra et al., 2002).

Empowerment of women signifies altering of relations of power that constrain women's options and autonomy, and making decisions of importance to themselves and their families. Control over resources becomes important for acquiring self-efficacy and becoming self-reliant. This sort of empowerment would require a shift in perceptions (i.e. "thinking outside the system") and also 'an inner transformation" which will lead to definition of self-interest and formulation of choices (A. Sen1999; G Sen 1993; Nussbaum 2000 in Malhotra, Anju 2002). The stress here is on the point that women should go beyond defining self-interest and making choices to consider themselves not only able but entitled to make choices.

Though autonomy and empowerment are considered fairly similar, the former according to Jejebhoy (2000) is a static and hence measurable by most indicators while empowerment concerns itself progression from one state to another and is not easily measurable. Keller and Mbwewe's (1991) description of women empowerment as "a process whereby women become able to organize themselves to increase their self-reliance, to assert their independent right to make choices and to control resources which will assist in challenging and eliminating their own subordination" (cited in Malhotra .et. al, 2002) becomes relevant here . Caroline Moser's definition of empowerment is similar. She sees control of resources as

more central: She identifies empowerment as the right to determine choices in life and to influence the direction of change, through the ability to gain control over material and non-material resources (Moser 1989).

'Agency' can be treated as the essence of empowerment, 'resources' as enabling conditions and 'achievements' as outcomes of empowerment (Kabeer, 1999; Malhotra et al., 2002). The concept of agency looks at women as actors in the process of change rather than as mere recipients of change. It is about women's ability to take decisions, make "strategic life choices" and affect outcomes, beneficial to themselves and their families. Agency which comes in various forms and under various names (control, awareness, voice, power, freedom of choice) and resources are the two most common components of empowerment. Alsop and Heinsohan (2005) describe agency as the capacity to make meaningful choice.

The World Development Report 2012 specifies certain outcomes or expressions of agency: Control over resources, Ability to move freely, Ability to decide on family formation, Freedom from risk of violence--Ability to have voice in society and influence policy. .

The World Development Report 2012 further finds four core aspects that enable or constrain women's agency:

1) Economic growth can boost material conditions for exercising agency through higher incomes, access to services and expanded infrastructure. Women with own income enjoy greater bargaining power within households and acquire autonomous assets.

2) Expanding women's rights can promote agency

3) Social norms can shape women's agency. They determine opportunities that women have, and whether they have exercise their choice in using them.

4) Women's collective agency can transform society. Collective agency both determines and depends on individual agency.

The World Development Report 2012 further specifies why agency matters: Women's ability to influence their own lives is important in itself as a key dimension of well-being, Women's ability to influence their own lives influences other matters of well-being like education, health, mobility etc., Women's exercise of agency improves their children's welfare and shapes their children's future, Women's collective agency is transformative, promotes changes in society and policy.

Janet Price is of the view that empowerment should move beyond personal growth and change to participation in the broader field of politics and needs-identification. She raises the question of the link between an individual's internal sense of power and broader structures of society. She views women defining their own needs as crucial to empowerment. Crucial to women empowerment is the development of critical consciousness regarding common sense propositions of culture that have led to women internalizing their subordinate status. They should on their own acquire awareness of the underlying arbitrariness of the social order (cited in Rowlands, 1997).

Dr. Amita Pandey (2012) cites Women's Empowerment Framework study by UNICEF to identify five levels of empowerment Welfare, Access, Conscientisation, Mobilization and Control. Welfare means improvement in socio-economic status through welfare schemes. Access to resources and services leads to improvement in women's status (relative to men) by their own effort and organization. Conscientisation is the level empowerment where women organize to act against discriminatory practices and underline strategies for achieving gender equity. Mobilisation is the action level of empowerment. Links are forged with larger women's movements to draw lessons from their successes and to connect with the wider struggle. Control is the level of empowerment where action for gender equality in decision making over access to resources is taken so that they have direct control over resources.

Presser and Sen (2000) are of opinion that empowerment indicates control over both resources and ideology. It signifies not only greater extrinsic control but also growing intrinsic capacity – e.g. a transformed consciousness, greater self confidence in overcoming barriers to accessing resources or changing traditional ideology. Genuine empowerment cannot be sustained without both.

Amartya Sen considers empowerment as "enhanced freedom." Empowerment through employment opportunities, educational arrangements, property rights can give women freedom to influence a variety of matters such as intra-family decisions, health care, work arrangements etc but exercise of that enhanced freedom is ultimately a matter of the person herself (Sen 1999).

Tinku Paul and Prahladkumar in their paper, make an attempt to develop conceptual clarity of the term empowerment delineating it with several other overlapping concepts of gender equality, social inclusion, power etc and suggest and advocate an inclusive approach of policy measures to develop ways of enabling women themselves to critically review their own life situation and participate in creating and shaping the society as agents of change themselves.

The review of literature on empowerment examined in this study reveals that the concept of power is central to an understanding of women empowerment. Empowerment is to be understood in relation to resources, perceptions and relations of power. Women empowerment would require structural changes in power relations. The interdependence of individual and structural change in achieving valued ways of "being and doing" has been pointed out.

2.3.4 Measuring empowerment

Based on the notions expounded above the researcher tries to seek out indicators for measuring empowerment. The formulations of Naila Kabeer, Malhotra and Schuler, M.A Chen, Alsop & Heinsohn have been reviewed.

Naila Kabeer:

Naila Kabeer defines empowerment as "expansion" or "change" in people's ability to make strategic life choices where previously such an ability was denied .She specifies three interdependent dimensions of this change in ability to choose : resources (the conditions under which

choices are made); agency (capacity to make choices); and achievements (the outcomes of choices). *Resources* can be material, social or human and involves increase in access to resources and change in the terms on which resources are acquired. *Agency* includes collective, as well as individual, reflection and action. There are less measurable manifestations of agency like analysis, bargaining, negotiation, deception, manipulation, subversion, resistance and protest. *Achievements* are the well-being outcomes of agency and resources.

According to Kabeer a change becomes effective in terms of its transformative value i.e. whether it challenges gender inequities, whether it evokes any change in social constructs that denigrate women. Kabeer says that the indicators should be triangulated for a methodologically pluralist approaches to measuring empowerment. For example the validity of a resource measure as an indicator of empowerment rests on validity of the potential agency embodied in the resource. Likewise the validity of an achievement depends upon evidence of whose agency is involved and the extent to which it has been able to transform prevailing inequalities in resource and agency. The same considerations apply to evidence on agency we have to understand it in terms of strategic life choices and their transformational potential. Kabeer ends the article on a note that merely giving access to credit or granting equality in educational opportunities and political participation cannot automatically empower women but they necessarily provide a vantage point for alternatives, leading to the functioning of a transformatory consciousness. The translation of these resources into "functioning achievements" signals empowerment (Kabeer, 1999. 2005)

Malhotra and Schuler

. Most of the indicators of empowerment put forward by Malhotra and Schuler (2005) refer to women's ability to make strategic decisions that affect their well-being and their families (Kabeer,1999,2005). The dimensions of empowerment in their framework are economic, social and cultural, legal, political and psychological. Economic empowerment can be measured in terms of women's control, access to credit, contribution to family support and increased household ownership of properties and assets. Social and cultural empowerment is a measure of freedom of movement, commitment to or discrimination against daughters, participation in domestic decision making, control over spouse selection and timing of marriage and freedom from violence. Legal empowerment includes awareness of legal rights and mechanisms for exercising rights. Political empowerment refers to the knowledge of political system and means of access to it, political engagement and ability to exercise right to vote. Psychological empowerment would include women increased self-esteem, self-efficacy and psychological well-being.(cited in Kato, 2013)

M. A. Chen (1997)

The consolidated framework developed by M.A Chen details four broad pathways through which individuals experience change which signals empowerment, The first is the material pathway through which changes in access to or control over material resources, in level of income, in satisfaction of basic needs, or in earning capacity are experienced. The second is the cognitive pathway through which changes in level of knowledge, skills, or awareness of the wider environment are

experienced. The third is the perceptual pathway through which changes in self-esteem, self-confidence, and vision of the future as well as changes in recognition and respect by others are experienced. And the fourth is the relational pathway through which changes in decision making roles, bargaining power, participation in non-family groups, dependence on others, and mobility are experienced.

Alsop & Heinsohn (2005)

According to them empowerment is the measure of the capacity to translate choices into desired actions and outcomes i.e to make *effective* choices. It is assumed that it is possible to measure degrees of empowerment. Agency and opportunity structure influence the capacity to make effective choices. Agency is a person's ability to make meaningful choices; that is, she should be able to envisage options and make a choice. Opportunity structure refers to the formal and informal contexts within which people operate. Different degrees of empowerment evolve when these factors operate together.

The framework proposed for measuring empowerment is a simple one. It comprises three core concepts: agency, opportunity structure, and degree of empowerment. These are further refined into clusters of indicators. A broad range of assets are used as indicators of agency. They cover psychological, informational, organizational, material, financial, and human assets. Measurement of the presence and operation of formal and informal institutions provides indicators of opportunity structure. The existence of choice, the use of choice, and the effectiveness of choice are used as indicators of the degree of empowerment a person or group

experiences. Four groups of empowerment indicators have been identified. They fall into the following categories: (1) women's autonomous decision making within the household, (2) participation in public or political affairs, (3) taking action to improve one's situation, and (4) making decisions to improve one's health.

Drawing from Malhotra and Schuler (2005) and Chen (1997) and Alsop & Heinsohn (2005) it can be understood that the most used indicators of women empowerment are control over savings and income, ownership of assets, decision-making, mobility, self-efficacy, and self-esteem.

The literature reviewed identifies the reasons for disempowerment as lack of resources and income, social exclusion covering additional aspects like denial of choice and opportunities, violation of human dignity, "capability poverty" (Sen, 1999) "denial of choice" (NailaKabeer, 2007), inability to make "effective" choices (Alsop and Heinsohn, 2005) due to "capability deprivation" (.Sen, 1999) lack of "opportunity Structure" (Alsop and Heinsohn,2005) ie. structural constraints – social, cultural, economic, political, legal, lack of power to translate choices and skills to actions and outcomes. Empowerment would then mean acquiring the ability to overcome structural constraints and exercise choice. The act of empowering would mean providing the "opportunity structure" to make these choices "effective." Choices become effective in relation to their transformational potential. Empowerment results when people acquire the power to translate resources and skills (Kabeer, 2007:" (Alsop and Heinsohn, 2005)), i.e. functionings (Sen, 1999) into functioning achievements.

The following indicators have been derived to measure empowerment.

Economic empowerment-

Increase and control over income and savings

Increase in asset holdings

Participation in decision making

Prompt Loan repayment

Acquirement of Additional skills

Social and cultural empowerment

Increased co-operation with the peer group

Increase in communicative skills

Increase in self-confidence, self-efficacy

Increase in self –esteem, leadership quality

Increase in mobility for personal/ others' needs

Participation in activities outside home

Membership in social organization

Change in attitude of own children towards you

Taking up social issues

Awareness about their role in society

Political /legal empowerment

Regular participation in Gramasabha

Contesting in elections

Awarness about the development projects in the panchayat

Awarness about the group bylaws

Awarness about gender discrimination

Participation in legal literacy classes

Awareness on rights and duties of women

General awareness of need for sanitation and health care

Awareness that women can turn valuable human resource for the transformation of society

Pride in being member of Kudumbashree, contributing to welfare of family, community and society

The literature reviewed helps develop a framework to explore the link between microenterprise development under Kudumbashree and women empowerment.

Chapter 3

KUDUMBASHREE MICROENTERPRISES: AN OVERVIEW

Contents

Microenterprises play a key role in creating sustainable livelihood opportunities, in poverty alleviation and in employment generation. The chapter gives an overview of Kudumbashree Microenterprises with special reference to Pathanamthitta district**.** The chapter is based on information drawn from the publications of Kudumbashree Mission and interviews with officials.

3.1 Kudumbashree Microenterprises

Kudumbashree views Microenterprise development as an important tool for poverty reduction and economic empowerment of the poor. Supporting entrepreneurship development within low income communities is a possible development strategy to combat poverty. If economic development is to be effective, new businesses in low income

areas must be started through local initiatives. "Entrepreneurship is the process of uncovering or developing opportunity to create value through innovation and seizing that opportunity without regard to either resource (human and capital) or the location of the entrepreneur" (Slaughter,1996 in Khari, 2009). Small enterprises serve as seed buds of entrepreneurship.

In 1999 when the concept of developing enterprises by poor women so as to make them economically active came up, the response from various stakeholders including banks was not that encouraging. Certain factors acted as deterrents-- previous experience of failures in group enterprises under various government programmes, the notion that women lack entrepreneurial abilities. Moreover, banks were reluctant in associating with ventures of the poor. The lack of any successful enterprises model worth adopting was a crucial factor. (http://Kudumbashree.org/pages/56)

Kudumbashree took up the challenging task of creating a model for enterprise development. The mission of the Kudumbashree programme was to strengthen both local governments and the women's community network to take on these challenges and develop their own unique, sustaining model of local economic development. Kudumbashree went about creating a model, and the results are clearly visible. The 18969 enterprises across the state covering urban and rural areas, ranging from "traditional" enterprises like Goat rearing and Dairy, Catering units to Multi-Purpose job clubs, Health care enterprises, Computer hardware and data entry units and innovative enterprises like Clean Kerala Business in

solid waste collection are a testimony to the resolve of women to succeed in enterprises.

Microenterprise, as defined by Kudumbashree, is an enterprise that has:

- Investment ranging from ₹ 5000 to ₹ 2.5 lakhs
- Turnover ranging from over of ₹ 1 lakh to ₹ 10 lakhs.
- Potential to generate a net income of at least ₹ 1,500 per member per month.
- Fully owned, managed and operated by members themselves. (Kubumbashree Mission and Hope 2011)

Kudumbashree enterprise programme seeks to encourage innovative business ideas rather than the "tried and tested" ones. A simple and practical way for identifying enterprises was devised; any idea that could solve a problem existing in the society (Problem Solving), fill the gap that existed (Gap filling) or cater to new opportunity (Emerging Opportunities) was converted into an enterprise. Social needs identification was the starting point. The fact that most of the entrepreneurs were first generation entrepreneurs from their families was kept in mind while implementing the RME programme. The microenterprise development was seen as an emerging process, which will start with low capital, low risk and low profit in the initial stage that will gain momentum and later scale up to greater capital, risk and profit (http://www.Kudumbashree.org/pages/500).

Kudumbashree aims at local economic development (LED) while promoting economic activities. LED is defined as "a process in which local government identifies the needs of the public, identifies the available local resources, namely, human and natural resources, and effectively integrates them to increase production, thereby stimulating economic growth and reducing poverty."

Local government attains this goal by

- Identifying the needs of the public;
- Identifying the various local resources—human and natural;
- Using local resources effectively;
- Integrating various departments and institutions; banks, training institutes, research organizations, local self-governments (LSGs)
- Promoting the creation of new jobs; and
- Managing public funds effectively.

Community participation is ensured in Kudumbashree's microenterprises and in all the livelihood opportunities it promotes.

Kudumbashree plan for Entrepreneurship development is as follows:

- Entrepreneurship instincts are identified through micro plan at NHG level.
- Entrepreneurs are selected by the Community after considering their skill and exposure.

- Selected entrepreneurs are given training on various aspects of Microenterprises Development.
- Suitable projects are prepared with the help of experts at community level.
- Timely and adequate finance is arranged with the help of Neighbourhood Groups (NHG) promoted by Kudumbashree and linked with NABARD.
- Monitoring is done by Community through trained Income Generation
- Activity Volunteer.
- Kudumbashree ensures involvement of Community Resident Management Experts (CRM) through proper linking with Management Institutes/Management Development Agencies.
- Kudumbashree ensures formation of business counselling centres at district level by incorporating experts in the respective fields to tackle the various problems faced by women entrepreneurs. (National Institute of Public Co-operation & Child development. 2008)

3.2 Enterprise Support schemes

Following are the Enterprise Support schemes under Kudumbashree

Table 3.1: Enterprise Support schemes

Rural Micro Enterprise (RME) scheme	Loan-cum-Subsidy scheme for women entrepreneurs in rural areas
Yuvasree	Loan-cum-Subsidy scheme for men and women in the 18-40 age group
Support for strengthening existing enterprises	*Revolving Fund* – Revolving fund is provided for meeting urgent requirements of working capital. Enterprises are eligible for revolving funds @ 15% of the total project cost subject to a maximum of INR 35000 per group *Technology Fund* – for upgradation of technology *Innovation Fund* –This fund helps enterprises with innovative ideas and technology needs. Special technology needs can be met through the technology fund. *Second Dose Assistance*– It is provided for enhancing capital base of the enterprise. *Crisis Management Fund* – It is to overcome short term crisis situation. CMF is meant to meet urgent fund crisis out of a calamity, unexpected delay in release of due funds, need for urgent working capital to manage a spike in demand etc

Source:http://www.kudumbashree.org/storage//files/ctdr1_kudumbashree%20and%20livelihood%20development%202015.pdf

3.3 Innovative Programmes under KME

Solid Waste Management

'Clean Kerala Units' is an innovative enterprise initiated by Kudumbashree. Under this enterprise Kudumbashree members are engaged in door to door household waste collection and transport to the transit points fixed by Urban Local Bodies.

Nature fresh

Kudumbashree implemented the Microenterprise project for utilizing the enterprise opportunity of producing and marketing fresh milk to urban customers. As a part of this project, cows were distributed to women entrepreneurs, the milk produced is delivered to the houses within one hour in bottles by a four member women marketing group.

Amrutham food supplement

The Amrutham unit produces a baby food supplement developed by Central Plantation Groups Research Institute (CPCRI) Kasargod. Kudumbashree has 400 units in the state. Food for "The Take Home Ration Scheme is provided to the anganwadi network by the Amrutham Units (Kudumbashree Mission Hope).

IT & ITES

Government departments are outsourcing many of their data entry works to these units. It provides employment to over 2500 women. In 2009-10. The IT units were taken up mostly with digitizing the BPL data and ration cards for the State Government, RSBY, AABY, related works. Hospital kiosks for birth registration were also taken up by various IT units.

Café Kudumbashree

Café Kudumbashree was started in 2009-10 with the objective of improving the existing condition of canteen/catering units. Thrissur district mission's intervention in the canteen and catering sector has been with the formation of a management and marketing group called AIFRHMC (Adebha Institute for Food Research and Hospitality Management).

Integration of subsidy with trainings, technology upgradation, market interventions, support, procurement support, quality improvement and standard settings are essential for survival and enhanced return from the enterprises. (http://www.Kudumbashree.org/pages/653)

3.4 Steps in starting KME

1) MEC should prepare the project.
2) Each member should get the recommendation of NHG, ADS, and CDS
3) Each member should start account
4) Banks should give willingness
5) Final approval should be attained.

If it is under RME scheme approval should be given by state mission with the recommendation of DKM. If it is under Yuvashree there is no need to get approval from state mission, District mission can release subsidy. In the case of urban area subsidy is given from central government to municipalities and then municipality to municipal CDS.

Source of capital

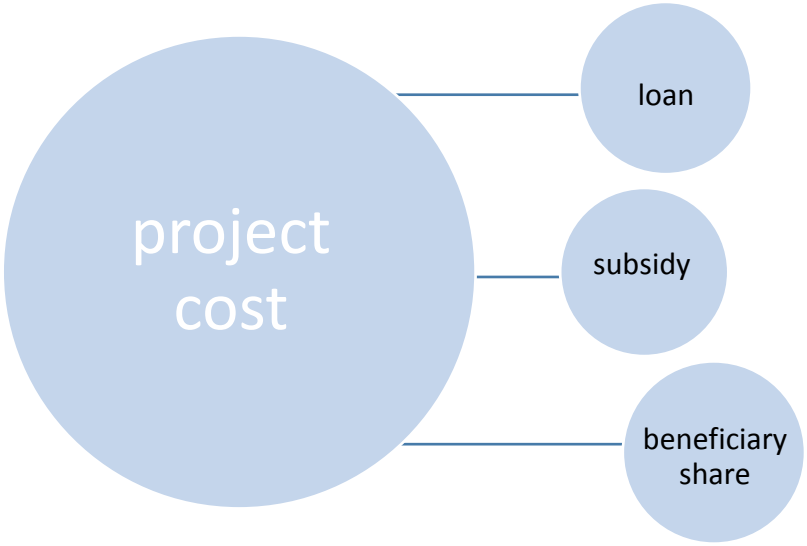


Figure 3.1: Source of capital

The seed capital of Kudumbashree microenterprises include own fund, thrift loan, loan (bank loan and subsidy). 5-15 percent of total project cost must be the beneficiary contribution (own fund). Micro finance adopts a comprehensive approach towards financial empowerment of women. Thrift and micro credit and bank linkage are important corner stones of Kudumbashree. The small regular savings of NHGs are collected together and given as loan (thrift loan) to the deserving member of NHGs. It helps them face immediate economic shocks of the unbankable location. The bank linkage provides easy access to credit without collateral security (Kudumbashree, 2017). Here group forms the collateral. Till 2015 they got subsidy. After the implementation of NRLM and NULM. (National Rural Livelihood mission and National Urban livelihood mission), Kudumbashree is not providing subsidy, they just provide funds for initial capital and offer free training like GOT, EDP, PIP etc.

Under the RME scheme individual units get ₹ 7500 or 30 percent of project cost, whichever is less as subsidy. In the case of group units having 5-10 member, 10,000 per member or a maximum of one lakh rupee or 50 percent of project cost whichever is less is given as subsidy. The subsidy is limited to BPL members only. GOT and EDP are compulsory for getting bank loan and subsidy.

3.4.1 Microenterprises coordinating responsibility at different levels

Table 3.2: Microenterprises coordinating responsibility at different levels

State Mission	Microenterprise Team headed by Programme Officer
District Mission	ME team led by Assistant District Mission Coordinator
CDS	ME sub-committee, Microenterprise Consultants (MEC)
ADS	Income Generation Volunteer
NHG	Income Generation Volunteer

Activities at different levels

NHG	Formation of activity groups; support to enterprises
ADS	Formation of activity groups spanning more than one NHG; support to enterprises
CDS	Formation of activity groups spanning more than one ADS; Financial assistance to ME; liaison with banks and Kudumbashree Mission; liaison with LSG for financial and infrastructure support; monitoring of enterprises; organising daily/weekly/monthly markets
District Mission	Forwarding applications for subsidy; training and capacity building of enterprises; monitoring of enterprises; formation and support of special enterprises; support for marketing
State Mission	Sanction of subsidy; design of schemes and capacity building programmes; support for marketing initiatives; feasibility assessment and troubleshooting for Samagra projects

Source:http://www.kudumbashree.org/storage//files/ctdr1_kudumbashree%20and%20livelihood%20development%202015.pdf

3.5 Training programmes under KME

Creating productive employment through capacity building is an important highlight of KME. Following are the training programmes associated with KME

Table 3.3: Training programmes under KME

GOT	General Orientation Training for all prospective entrepreneurs
EDP	Entrepreneurship Development Programme for prospective entrepreneurs completing GOT
Skill Building	Sector/business specific skill building training for entrepreneurs completing EDP and willing to take up enterprises
PIP	Performance Improvement Programmes for entrepreneurs who have completed at least six months in business

Source: Kudumbashree mission, Thiruvananthapuram

3.6 Kudumbashree microenterprises in Pathanamthitta District

3.6.1 Profile of Pathanamthitta District

Pathanamthitta is the youngest district of Kerala which came into existence on 1st November 1982. It is bounded by Kottayam and Idukki on the north, Alappuzha and Kollam districts on the west and Kollam district on the south. Tamil Nadu comes in the eastern side. It consist of three natural divisions' viz. the low land, the midland and high land (Panchayat level Statistics, 2011)

Figure 3.2: Map of Pathanamthitta District

Table 3.4: Profile of Pathanamthitta District

Area sq.km	2652
Density of population	452 per sq km
Sex ratio(per 1000)	1132
Actual population	1,197,412
male	5,61,716
female	6,35,696
Rural population	89.01 %
Urban population	10.99 %
Literacy rate	96.93%
Literacy rate -rural	96.87%
Literacy rate- urban	96.93%
Literacy rate-male	97.70%
Literacy rate-male-rural	97.64%
Literacy rate-male-urban	98.15%
Literacy rate-female	96.26%
Literacy rate-female- rural	96.19%
Literacy rate-female- urban	96.79%

Source: Compiled from Panchayat level statistics 2011,Census data 2011, Economic Review, 2016.

Pathanamthitta district constitutes 3.58 percent of the state population. The district occupies highest female literacy of 96.26 where as it is 91.98 percent at state level. At state level female literacy in rural area is 90.74 percent and in urban area it is 93.33 percent. But in Pathanamthitta in rural and urban area it is almost same.

3.6.2 KME in Pathanamthitta District

Table 3.5: Pathanamthitta Kudumbashree CBO details (as on 31/8/2018)

Total CDS	58
Total ADS	920
Total NHG	9976
Total number of women engaged	162457

Source: Kudumbashree mission, Thiruvananthapuram

Pathanamthitta constitute 3.77 percent of total beneficiaries of Kudumbashree and 3.59 percent of NHGs

Table 3.6: Details regarding KME–group, individual (as on 31/8/2018) at all kerala level

District	Total number of individual microenterprises	Total number of group enterprises	Total number of enterprises in the district
Thiruvananthapuram	738	1971	2709
Kollam	871	1528	2399
Pathanamthitta	1256	1371	2627
Alappuzha	576	1900	2476
Kottayam	1417	1120	2537
Idukki	579	1006	1585
Ernakulam	1038	2145	3183
Thrissur	1643	1385	3028
Palakkad	739	1427	2166
Malappuram	610	1313	1923
Kozhikode	1208	1764	2972
Wayanad	196	484	680
Kannur	505	1496	2001
Kasaragod	401	574	975
Total	11,777	19,484	31,261

Source: http://www.kudumbashree.org/pages/219

Pathanamthitta occupies 5th position regarding the number of enterprises at all Kerala level. 8.4 percent of total KME is in Pathanamthitta. Out of the total group units 7.03 percent and out of the total individual units 10.66 percent are in Pathanamthitta**.**

Table 3.7: Details regarding rural and urban microenterprises in Pathanamthitta from 2009-10 to 2015-16

Year	Rural Microenterprises	Urban Microenterprises	Total Microenterprises
2009-10	2158	82	2240
2010-11	2265	130	2395
2011-12	2696	150	2816
2012-13	2337	290	2627
2013-14	2368	347	2715
2014-15	2365	355	2750
2015-16	2435	385	2820

Source: Kudumbashree mission,Pathanamthitta

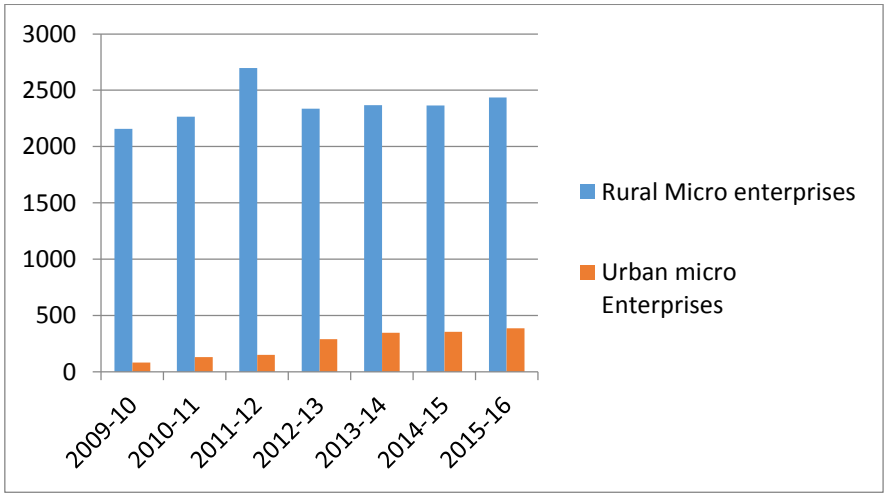


Figure 3.3: Details regarding rural and urban microenterprises in Pathanamthitta from 2009-10 to 2015-16

Kudumbashree microenterprises in Pathanamthitta District have various programmes in convergence with panchayats and other departments like tourism promotion council, District administration, sanitary mission, forest department etc. Pathanamthitta Kudumbashree is unique in certain initiatives like "pravasimitram", "streesakteekaranam sinimayiloode" and vanitha film festival 2016.

It has taken DTPC building on rent for starting restaurants and a training centre which can provide facilities to any department to conduct training to 60 members at a time. It has a permanent food court. The peculiarity is that any unit in Kerala can come to the permanent food court and conduct restaurants for a period of one month.

Pathanamthitta has many model microenterprises like PWD rest house canteen, five café Kudumbashree units, eight nutrimix units. For reducing the use of plastic bags in Sabarimala 4 cloth bag making units are in operation. In the health sector there is a "geriatric care "unit, they offer cancer care and awareness programme 'swasthya" in collaboration with RCC, District cancercentre. In 2009 a study based on number of NHGs , number of microenterprises and number of activities Ernakulam was judged best performing and Pathanamthitta least performing. In the period from 2009-2015 we observe a marked change in Pathanamthitta. The reasons behind this are better availability of staff, convergence with other departments, strengthening of the community based organization and doing over time jobs.

Pathanamthitta district has been characterized as industrially backward according to the Panchayat level statistics 2011. However, the

high female literacy of the district broadened the scope for tapping and mobilizing women's potential by generating productive employment through concerted action to improve this situation. A detailed analysis of the economic performance of KMEs becomes necessary to assess the extent to which women's participation in productive employment improved their lives in terms of livelihood opportunities and their empowerment in all its dimensions.

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Chapter 4

ECONOMIC PERFORMANCE OF KUDUMBASHREE MICROENTERPRISES

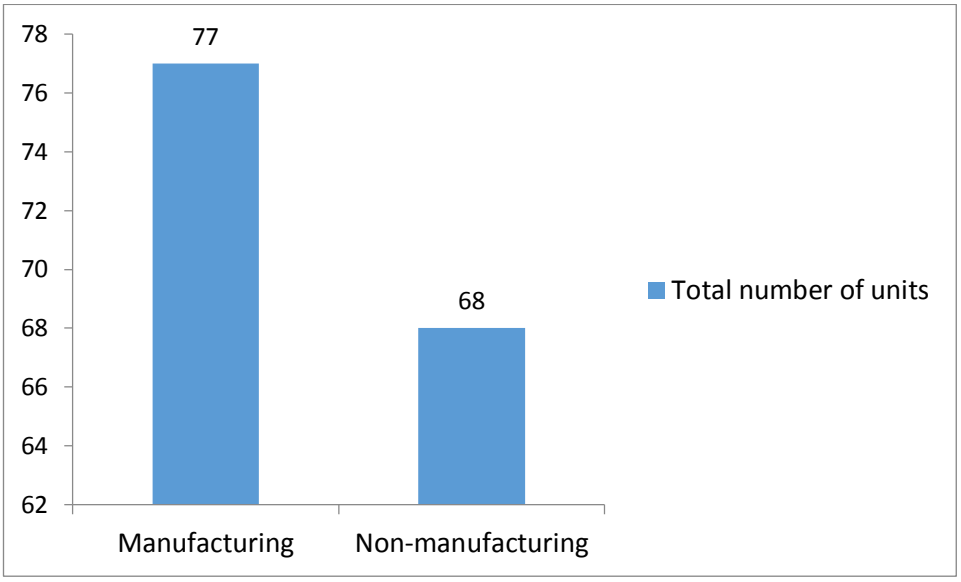
Contents

The enterprise performance can be looked at from many points of view like technical performance, economic performance, social performance and performance management, (Carmen, 2013). There is no single model to measure the performance of microenterprises since performance is a multi-dimensional concept which includes both financial and non-financial measures. There are various studies which focus on a single measure of performance like turnover / sales, growth in employee, profit (Maduekwe, 2016; Dawkin et al., 2007). Both financial and non-financial measures have been taken up for the study to capture the different aspects of KME. The chapter analyses the economic performance of 145 Kudumbashree Microenterprises based on the primary data. Revenue, cost, profit and employment generation are the factors considered. It analyses KMEs based on the nature of enterprise (industry wise)

manufacturing, non-manufacturing; area of enterprise (location wise) - rural, urban - organisational status (type wise) - individual, group; and product wise categorisation.

4.1 General profile of the KME

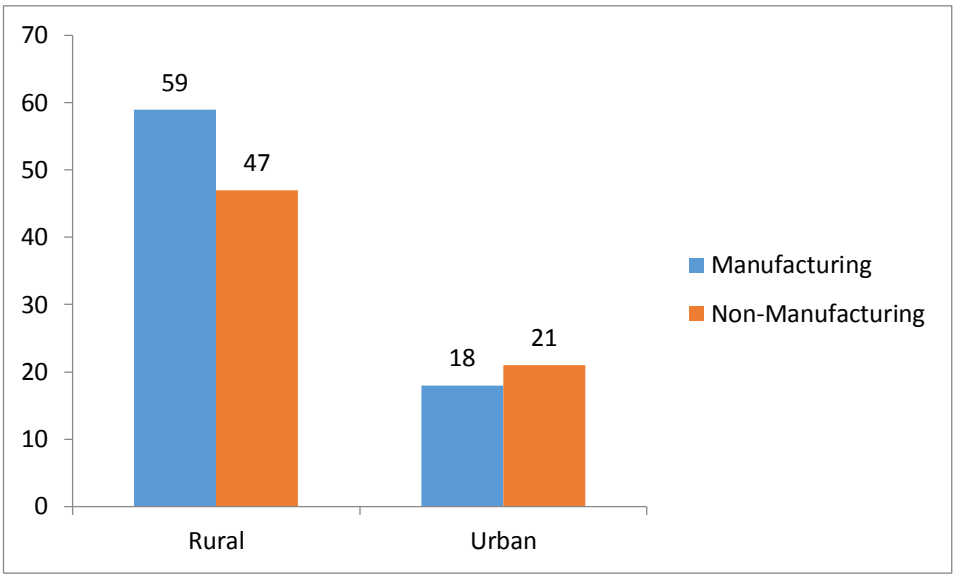
Industry wise classification is depicted in Figure 4.1



Source: Survey data

Figure 4.1: Industry wise classification of Enterprises

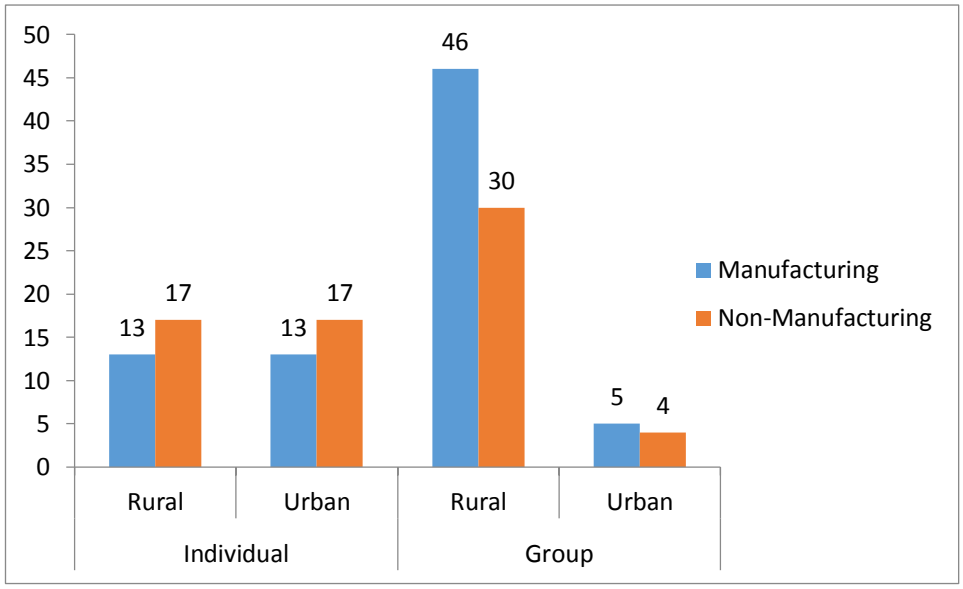
It is made clear from Figure 4.1 that 53.1 percent are manufacturing units and 46.9 percent are non-manufacturing units.



Source: Survey data

Figure 4.2: Location wise classification of Enterprises

Location wise classification (Fig. 4.2) shows that 73.10 percent of KMEs operate in rural area and the rest 26.90 percent belong to urban area. Almost same result has been visible in the sixth Economic census as is given in the fact that 34.8 million establishments (59.48 percent) were found in rural areas and 23.7 (40.52 percent) million were located in urban areas out of 58.5 million establishments. Among rural KME 55.66 percent are manufacturing and 44.34 percent are non-manufacturing. As far as the urban units are concerned 46.16 percent are manufacturing and 53.84 percent are non-manufacturing.

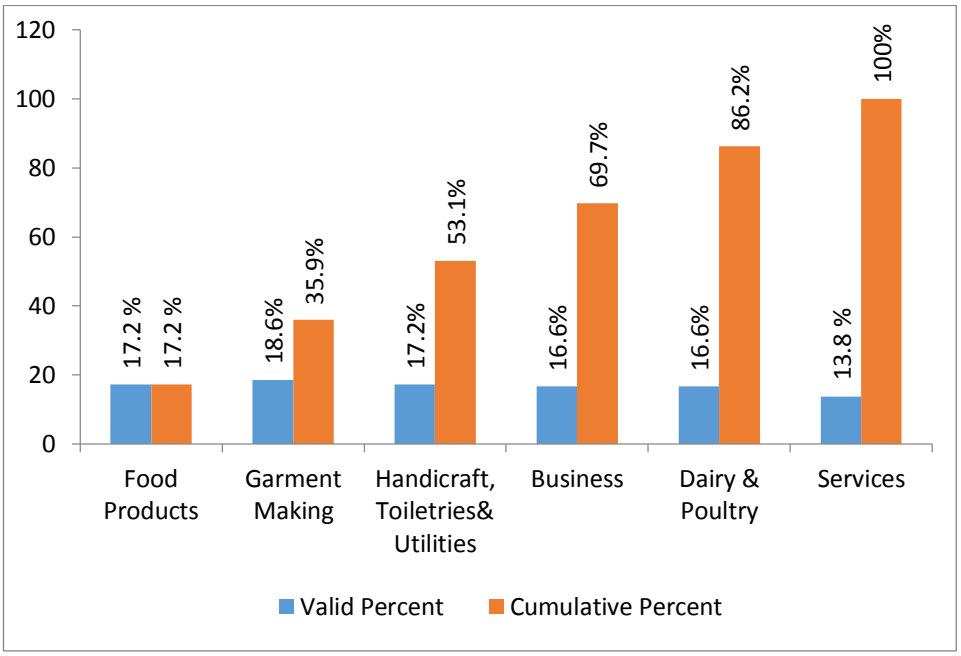


Source: Survey data

Figure 4.3: Type wise classification of Enterprises

20.68 percent are rural individual units and 20.68 percent are urban individual units. 52.41 percent are rural group units and 6.21 percent are urban group units. In the rural areas the number of group units is greater than individual units. The discussion with Kudumbashree officials in Pathanamthitta revealed that mission promotes group units rather than individual units in rural areas (Fig. 4.3). At the all Kerala level 62.33 percent are group units and 37.67 percent are individual units. In the case of Pathanamthitta, 52.18 percent are group units and 47.81 percent are individual units.

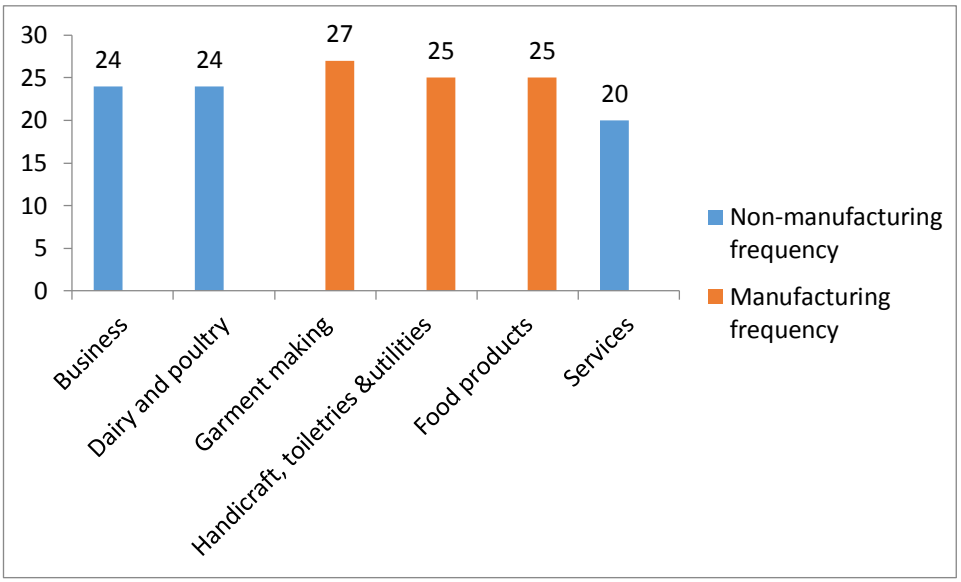
For deriving further details the activities are classified under six heads



Source: Survey data

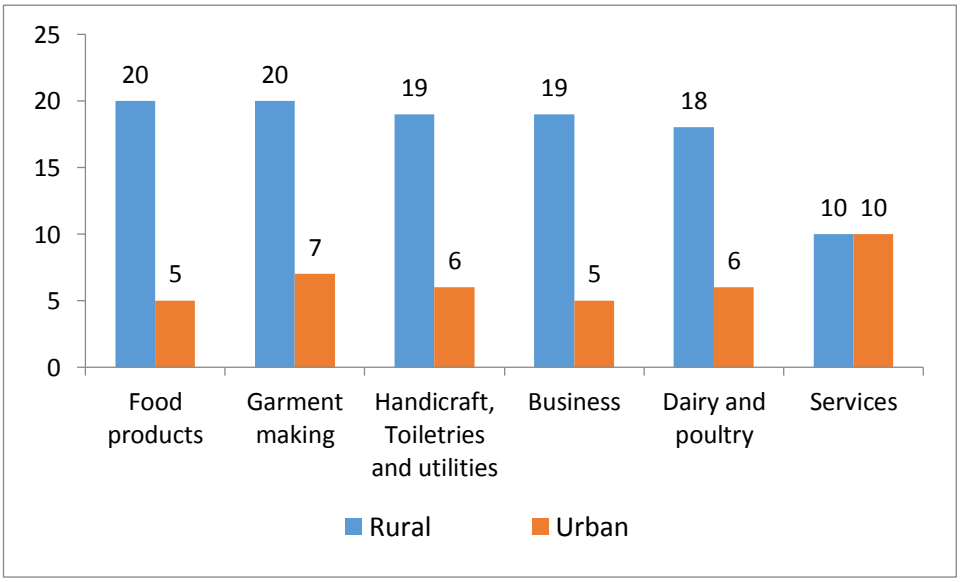
Figure 4.4: Product-wise classification of Enterprises

Product group specifies the nature of the product. Products were categorised under 6 heads- food products, garment making, handicraft, toiletries and utilities, business, dairy and poultry, services .18.6 percent of the units belong to garment making. Food products, handicraft, toiletries and utilities constitute 17.2 percent each. 13.8 percent belong to service sector.16.6 percent constitute business, dairy and poultry each. (Fig. 4.4)



Source: *Survey data*

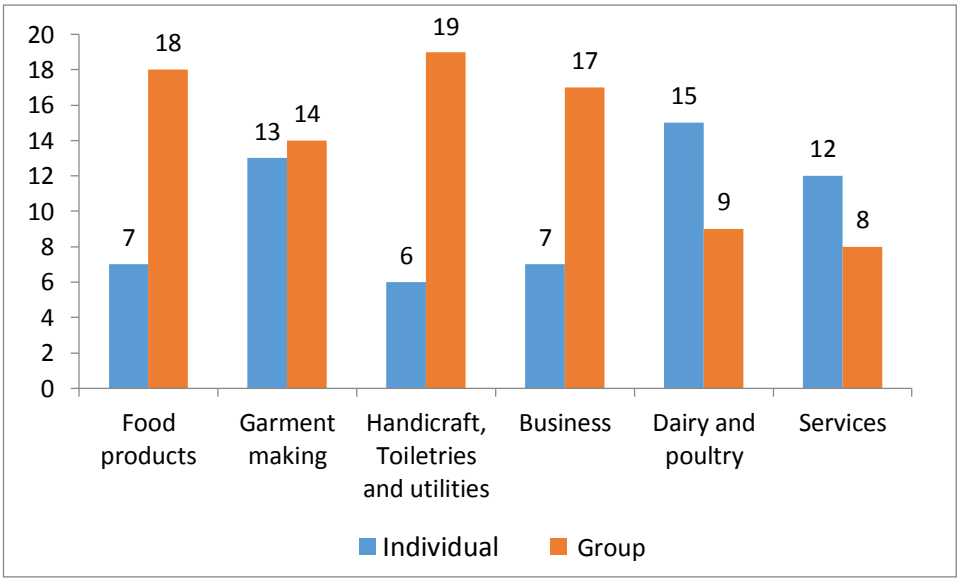
Figure 4.5: Industry wise product classification



Source: Survey data

Figure 4.6: Location wise product classification

Figure 4.6 shows that food products and garment making units constitute the highest number in rural area and service units constitute the highest number in urban area.



Source: primary data

Figure: 4.7: Type wise product classification

Figure 4.7 depicts the type wise product classification. Dairy and poultry constitute the highest number among individual units .Handicraft, toiletries and utilities constitute the highest number in group units

4.2 Total Revenue

Table 4.1: Industry wise total revenue

Industry	Mean (in ₹)	SD	Min	Max
Non-Manufacturing	299194.9	201481.0	49340	990900
Manufacturing	349349.3	297507.7	61368	1519140
Total	325828.6	257357	-	-

Source: Survey data

Mean total revenue is ₹ 3, 25,828.6 The total revenue of the manufacturing units (₹ 3,49,349.3) are higher than the non-manufacturing (₹ 299194.9) but the difference is not statistically significant. It may be because of the fact that manufacturing units comprise of petty units which require low capital, low technology and low skill. Test of homogeneity of variance assumption is not violated.

Table 4.2: Location wise total revenue

Location	N	Mean (in ₹)	SD	Min	Max
Rural	106	342059.4	264733.8	49340	15199140
Urban	39	281714.2	233669.9	92650	1398789
Total	145	325828.6	25735.7		

Source: Survey data

Mean total revenue is ₹ 325828.6. The annual revenue of rural area (₹ 342059.42) is higher than that of urban area (₹ 281714.18) (Table 4.2). It is also higher than the mean total revenue. In rural area number of group units are higher than individual units. Door to door delivery market is more active in rural area than in urban area. In the urban area brand name is very important and here people have more other outlets like margin free shops.

Table 4.3: Type wise total revenue

Type	Mean (in ₹)	SD
Individual	169937.28	102602.1
Group	435869.57	276650.8
Total	325828.6	257357.0

Source: Survey data

Total revenue of group units is 2.56 times higher than that of individual units (Table 4.3). The difference is statistically significant[1]. Production and sales of group units are higher than that of individual units. It may be due to the presence of Nutrimix units in the group unit. They don't face any marketing problem. They are not facing the problem of excess supply. Test of homogeneity of variance assumption is violated[2]. The difference is statistically significant at one percent level with robust equality means.[3]

Table 4.4: Product wise total revenue

Product	TR (in ₹)
Food product	451428.8
Garment making	261139.6
Handicraft, Toiletries & Utilities	342536.3
Business	335333.2
Dairy and Poultry	226427.4
Services	343150.0

Source: Survey data

[1] (t = - 8.108, df= 113.775; P = .000).

[2] (Levene statistics = 16.222, $df_1 = 1$, $df_2 = 143$, p = .000).

[3] (Welch statistics = 65.73, $df_1 = 1$, $df_2 = 113.77$, P = .000).

Table 4.4 depicts that food products earn high total revenue (number of members in each unit is comparatively low, door to door delivery is possible so excess supply problem does not arise, customer satisfaction is an important factor influencing the sales of the product). Dairy and poultry units earn low revenue (It is a skilled activity which is expensive and competitive in nature, it cannot be supplied according to the demand, marketing is an important problem faced by them). In the case of TR also difference between groups is significant at five percent level (p = .040). In the case of TR, the difference exists between dairy and poultry (1) and food products (2) in the Hochberg post hoc test.(details are given in Appendix 4.1)

Table 4.5: Location wise product –total revenue

	Product	**TR (in ₹)**
Rural	Food product	503243.05
	Garment making	271660.20
	Handicraft	317687.53
	Business	379079.89
	Dairy and poultry	227237.78
	Services	343137.20
Urban	Food product	244171.60
	Garment making	231080.71
	Handicraft	421224.00
	Business	169095.80
	Dairy and poultry	223996.33
	Services	343162.90

Source: Survey data

In the case of business difference in TR is significant at one percent level[4].

Table 4.6: Type wise product -total revenue

Type		**TR (in ₹)**
Individual	Food products	230049.57
	Garment making	140856.38
	Handicraft	129722.83
	Business	131216.57
	Dairy and Poultry	125967.87
	Services	264032.17
Type		**TR (in ₹)**
Group	Food products	537520.67
	Garment making	372831.14
	Handicraft	409740.53
	Business	419381.24
	Dairy and Poultry	393860.00
	Services	461826.50

Source: Survey data

In the case of dairy and poultry[5], handicraft, toiletries and utilities[6], services[7] business[8] TR is higher in group units than individual units. The difference is statistically significant at five percent level (Table 4.6).

[4] (t=3.509, df= 15.441, p=.003)

[5] (t= 4.049, df = 22, p = .001),

[6] (t = -2.220, df = 23, p = .037),

[7] (t = -2.347, df = 9.915, p = .041),

[8] (t = -6.198, df = 21.438, p = .000),

4.3 Total Cost

Table 4.7: Industry wise total cost

Industry	Mean (in ₹)	SD	Min	Max
Non-Manufacturing	210758.7	111848.3	49000	528225
Manufacturing	233075.9	165194.1	60250	900500
Total	222609.9	142646.8		

Source: Survey data

Cost is an important factor which determines the level of profit. Acquah (2007) identified start up fund and total cost incurred in business as significant in having a positive influence on the performance. An independent sample t test has been conducted to compare the annual total cost of non-manufacturing and manufacturing units. The mean total cost is ₹ 2,22,609.9. Though the total cost of manufacturing units is higher than that of non-manufacturing units, the difference is not statistically significant. It is also higher than mean total cost. (Table 4.7). It is observed that this may be due to the fact that manufacturing units comprises petty units which require low capital, low technology and skill as in case of non-manufacturing.

Table 4.8: Industry wise total cost disaggregation

Category	Industry	Mean (in ₹)	SD
Land and building	Non-manufacturing	3672.1	7588.9
	manufacturing	4152.8	8033.3
	total	3927.3	7804.7
Plant and Machinery	Non-manufacturing	24036.2	32978.5
	manufacturing	15074.9	16336.8
	total	19271.9	25827.7
Other equipments	Non-manufacturing	16319.2	16375.7
	manufacturing	11547.0	7599.6
	total	13785.00	12687.14
Inventory	Non-manufacturing	485.14	1225.91
	manufacturing	1974.31	7284.54
	total	1275.94	5416.50
Raw material	Non-manufacturing	72505.88	62959.59
	manufacturing	93053.01	75799.79
	Total	83417.12	70587.49
Marketing and distribution	Non-manufacturing	56420.29	34466.90
	manufacturing	59718.14	46111.07
	total	58171.57	40958
Wages	Non-manufacturing	4310.52	5637.18
	manufacturing	10419.75	25797.74
	total	7554.73	19375.07
Loan repayment	Non-manufacturing	34403.22	20021.21
	manufacturing	37079.82	24880.11
	Total	35824.59	22693.78

Source: Survey data

Total cost comprises cost on land and building, plant and machinery, other equipment, inventory, raw material, marketing and distribution,

wages, loan repayment. Industry wise total cost disaggregation shows that overall cost incurred is high in raw material (₹ 83,417.12) and low in inventory (₹ 1275.94) .It is same in the case of manufacturing and non-manufacturing. Though expenditure of manufacturing is high in all costs except cost on plant and machinery and other equipment, the difference is not statistically significant. (Table 4.8)

Difference in cost on plant and machinery[9] and other equipments[10] is significant at one percent level. Hotels and IT units, poultry etc incur high cost under these heads. Cost on inventory is significant at five percent level[11] and cost on wages is significant at one percent level[12]. Manufacturing units include handicraft and garment making whose inventory cost is high. In the case of wages additional man days generated is higher in manufacturing than non-manufacturing. Since the test of homogeneity of variance assumed is violated, the robust test of equality of means is significant at five percent level in the case of other equipments, plant and machinery and wages. (Details are given in appendix 4.2)

Industry wise sources of capital

Access to and use of financial resources are crucial factors affecting the performance of microenterprises (Kamunge.2014; Fadahunsis 2012.Acquah (2017) finds that easy access to finance improves firms

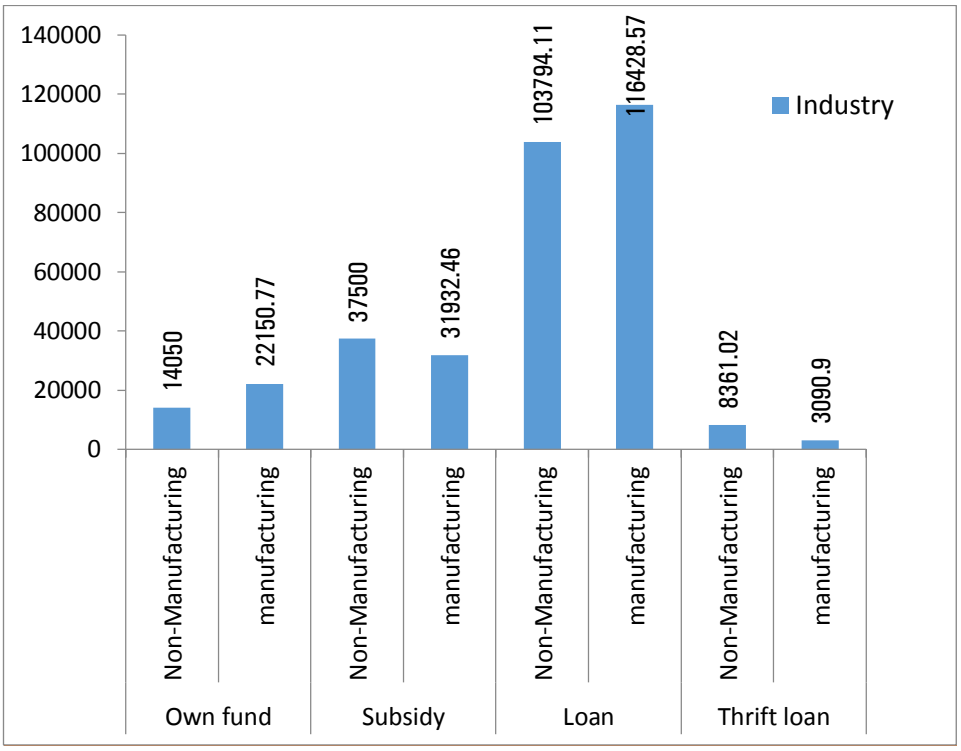
[9] (Levenes statistics = 17.25, $df_1 = 1$, $df_2 = 143$, $p = .000$)

[10] (Levenes statistics = 25.96, $df_1 = 1$, $df_2 = 143$ $p = .000$)

[11] (Levenes statistics = 5.189, $df_1 = 1$, $df_2 = 142$, $p = .024$)

[12] (Levenes statistics = 10.84, $df_1 = 1$, $df_2 = 143$, $p = .001$).

profitability , efficiency, solvency, increase of assets, quality and prevent liquidity problems.



Source: Primary data

Figure 4.8: Industry-wise own fund, subsidy, loan and thrift loan

Though the own fund (₹ 22150.77), and loan (₹116428.57) of manufacturing units are higher than that of non-manufacturing, the difference is not statistically significant. In the case of thrift loan non-manufacturing units are taking higher thrift loan than manufacturing units and it is statistically significant at one percent level.[13] This may be

[13] (t = 2.613, df= 97.67, p = .010)

because of the reason that the number of manufacturing units is greater in rural area than urban area. Thrift amount collected in the rural area is comparatively lower than that in the urban area. In the case of thrift loan test of homogeneity of variance assumption is violated[14]. The difference is statistically significant at 10 percent level with robust test of equality of means. (Details are given in Appendix 4.3) A post hoc test has been conducted to find where the difference in thrift loan is significant between groups. The study finds that difference in thrift loan between groups having 6-10 years' experience and 11-20 year experience are significant according to Hochberg statistics for unequal group of variance. Experience in Kudumbashree is an important factor influencing the thrift loan taken from NHGs

Table 4.9: Location wise total cost

	Mean (in ₹)	SD	Min	Max
Rural	226886.4	144620.3	49000	900500
Urban	210986.6	138302.1	60250	807549
Total	222609.9	142646.8		

Source: Survey data

Mean total cost is ₹ 222609.9. Annual total cost of rural area (₹ 226886.4) is higher than that of urban area (₹ 210986) (Table 4.9). The difference is not statistically significant. Transportation cost is high in rural area and the quality of product will affect the total cost. Food products incur high total cost in rural area. All cost except cost on plant and machinery of food products is higher in rural area than urban area.

[14] (Levenes statistics = 6.059, df= (2,142), p = .003).

Table 4.10: Location wise cost disaggregation

Expenditure	Location	Mean (in ₹)	SD
Land and Building	Rural	2885.56	5350.201
	Urban	6758.84	11852.46
	Total	3927.34	7804.72
Plant and machinery	Rural	14542.38	20427.73
	Urban	32126.31	33805.73
	Total	19271.85	25827.74
Other equipment	Rural	13201.46	10236.54
	Urban	15371.03	17801.51
	Total	13785.00	12687.14
Inventory	Rural	738.58	2438.05
	Urban	2736.46	9579.06
	Total	1275.94	5416.50
Raw materials	Rural	98095.66	71766.73
	Urban	43521.59	49145.75
	Total	83417.12	70587.49
Marketing and distribution	Rural	60016.75	43698.15
	Urban	53156.46	32337.77
	Total	58171.57	40958.99
Wages	Rural	6662.57	20399.33
	Urban	9979.59	16261.83
	Total	7554.73	19375.07
Loan repayment	Rural	31691.13	21462.99
	Urban	47059.10	22395.01
	Total	35824.59	22693.78

Source: Survey data

Disaggregation of location wise total cost shows that expenditure on all things except on raw material and marketing and distribution is higher in urban area than rural area (Table 4.10). The test of homogeneity of variance is violated in the case of land and building[15], plant and machinery[16], Inventory[17]. It may be because of the reason that 47.6 percent of the non-manufacturing units in urban area belong to services. The difference in raw material[18] is also significant. High transportation cost is an important factor affecting raw material procurement in rural area. Normally cost of production is higher in urban area than rural area. The study found that there are differences in annual expenditure on land and building between rural and urban area. It is significant at 10 percent level with robust equality of means. Difference in expenditure on plant and machinery is significant at five percent level. Difference in expenditure on raw material is significant at one percent level with robust equality of means (see Appendix 4.4)

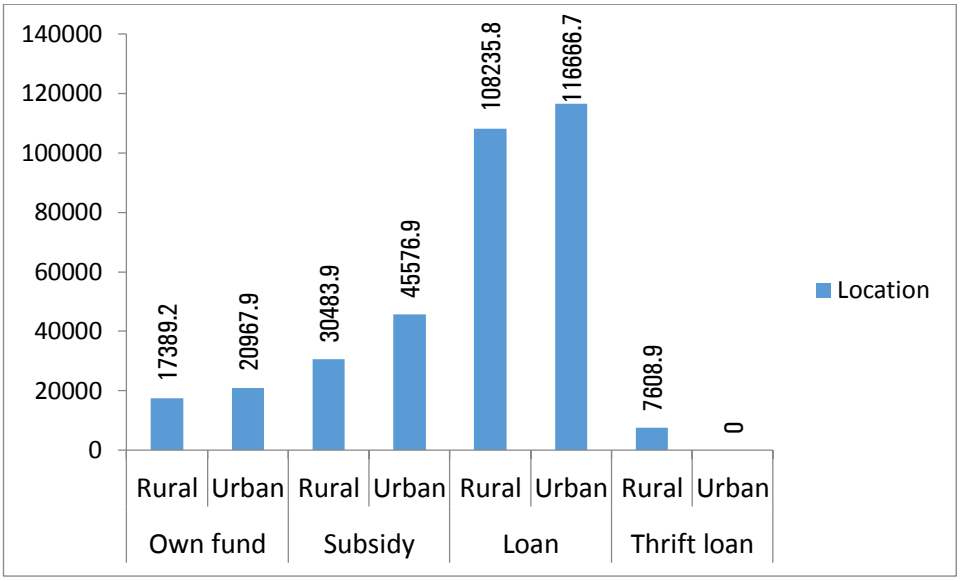
[15] (Levene statistics = 44.193, df_1= 1, df_2 = 143, p = .000)

[16] (Levene statistics = 14.17, df = 1, df2 = 143, p = 0.000)

[17] (Levene statistics = 7.065, df_1= 1, df_2= 143, p = .009),

[18] (Levenes statistics = 10.886, df_1 = 1, df_2 = 143, p = .001)

Sources of capital



Source: Survey data

Figure 4.9: Location wise own fund, subsidy, loan and thrift loan

Figure 4.9 depicts the location-wise source of finance. Though the urban area (₹ 20967.94) has high own fund the difference is not statistically significant. Respondents in urban area are more financially sound than that of rural area. Subsidy is high in urban area (₹ 45576.92) and the difference is statistically significant at five percent level[19]. Urban units are getting loans sanctioned more easily than rural area. The loan taken by members is the higher in the urban area (₹ 116666.67) than rural area. People in urban area are more willing to take risk than that of in rural area. The difference is not statistically significant. The thrift loan

[19] (t = -2.576, df= 143, p = .011).

taken by members is higher among rural units. In the case of urban area it is zero. Thrift amount normally varies between 5-45 rupees per week. It is higher in rural area than in urban area. It shows that the difference is statistically significant at one percent level[20]

Table 4.11: Type wise total cost

Type	N	Mean (in ₹)	SD	Min	Max
Individual	60	136404.3	78705.5	49000	454100
Group	85	283460.9	146548.6	89000	900500
Total	145	22609.9	142646.8	49000	900500

Source: Survey data

Groups units incur higher annual total cost (₹ 283460.9) than individual units (₹ 136404.3) (Table 4.11). An independent sample t test was conducted to compare the annual cost. The difference is statistically highly significant.[21] Test of homogeneity of variance assumption is significant at five percent level[22]. The difference is statistically significant at one percent level with robust tests of equality of mean[23]. It may be because of the reason that loans sanctioned to individual units are comparatively lower than that of group units. Group units get 35 percent of total project cost as subsidy, but individual units get only 25 percent of total project cost as subsidy they won't get any other support like revolving fund, technology fund etc. from Kudumbashree.

[20] (t = 5.841, df =105, p = .000).

[21] (t = -7.795, df = 134.7, P = .000).

[22] (Levene statistics = 6.244, $df_1 = 1$, $df_2 = 143$, p = .014).

[23] (Welch statistics = 60.762, $df_1 = 1$, $df_2 = 134.662$, P = .000).

Table 4.12: Type wise cost disaggregation

Sl No.	Cost Disaggregation	Mean cost of Group units (in ₹)	SD	Mean cost of Individual units (in ₹)	SD	Total cost (in ₹)
1	Expenditure on land and building	4759.6	8142.2	2748.3	7202.1	3927.3
2	Expenditure on plant and machinery	18189.1	25708.69	20805.7	26134.87	19271.8
3	Expenditure on other equipments	16857	14783.43	9432.9	6989.07	13785
4	Expenditure on Inventory	1661.9	6692.44	729.1	2705.5	1275.9
5	Expenditure on raw materials	127431.5	61332.81	21063.3	7769.78	83417.1
6	Expenditure on marketing and distribution	68707.04	43774.66	43246.3	31304.13	58171.6
7	Expenditure on wages	9513.18	23811.16	4780.2	9779.89	7554.7
8	Expenditure on loan repayment	37282.6	25736.45	33759.0	17508.23	35824.6

Source: Survey data

Annual total cost on land and building are higher among group units than individual units. It is observed that group units are functioning in rented buildings and in the case of individuals units most of them are functioning in their own houses. Expenditure on plant and machinery is higher among individual units but the difference is not statistically significant. Annual expenditure on other equipments is high in group units than individual units. The difference is statistically significant at one

percent[24]. The study found that the annual expenditure on other equipments is different for individual and group units and is significant at five percent level with robust test of equality of means.[25] Majority of the group units are food products, toiletries and utilities which require more equipments. Annual expenditure on inventory is higher in the case of group units than individual units. Majority of the units are producing output on a small scale. So the need of inventory is very low. Annual expenditure on raw material is high among group units than individual units. The difference is statistically significant at one percent level[26]. It may be due to the reason that group units include Nutrimix units which require large scale raw materials expenditure on raw material is different for individual and group units and is significant at five percent level with robust test of equality of mean[27] Production in group units is higher than that of individual units and majority of group units belong to rural area. Another reason may be high transportation cost, lack of knowledge regarding the quality of the product and the availability of raw material at low cost. Though the annual expenditure on marketing and distribution is higher in group units than individual units, the test of homogeneity of variance assumption is not violated. ANOVA test shows that difference between groups is significant. (The details are given in Appendix 4.5) Kudumbashree envisages that MEs should generate a monthly wage of ₹ 1500. Group units are generating more monthly wages than individual

[24] (Levene statistics = 17.72, df_1= 1, df_2 = 143, p = .000)

[25] (Welch F statistics = 16.29, df (1,127.4), p=.000).

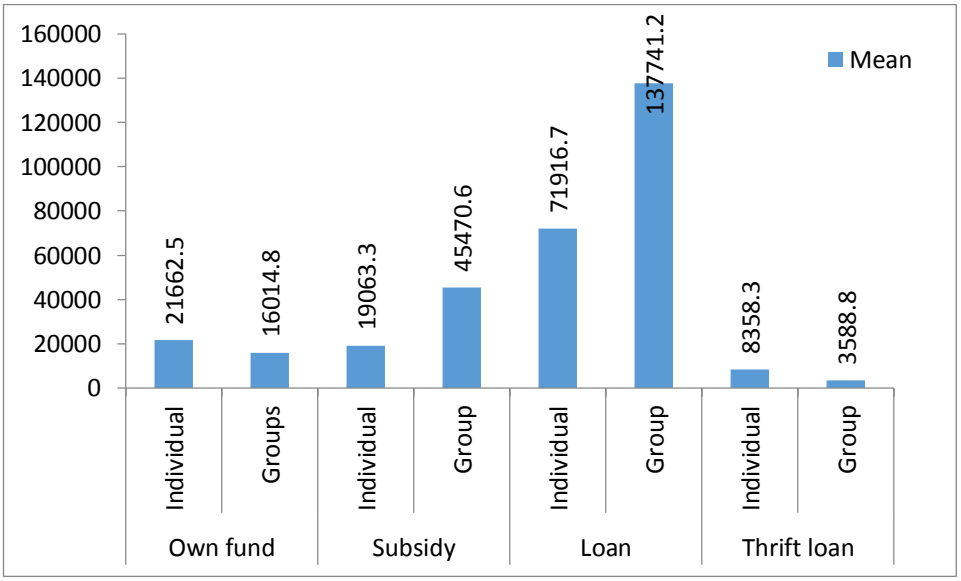
[26] Levenes statistics = 137.7, df $_1$= 1, df_2= 143, p = .000).

[27] (Welch F statistics = 249.97, df (1, 87. 7), p = .000).

units. The difference is not statistically significant. Group units consist of 5-10 members as the number of members increases the expenditure on wages also increases.

Annual expenditure of group units on loan repayment is higher than that of individual units, but the difference is not statistically significant This may be because group units are getting more loan and subsidy than individual units. Banks provide loans without any collateral security, here group forms the collateral. They will get 35 percent of total cost as subsidy. In the case of individual units they get only 25 percent of the project as subsidy.

Sources of capital



Source: Survey data

Figure 4.10: Type wise own fund, subsidy, loan and thrift loan

Though the own fund of individual units is higher the difference is not statistically significant. The subsidy[28] and loan[29] of group units are higher than that of individual units, the difference in both cases is statistically significant at one percent level (Fig. 4.10). This is because of the reason that group units are getting more loan and subsidy than individual units. Banks provide loans without any collateral security, here group forms the collateral. They will get 35 percent of total cost as subsidy. In the case of individual units they get only 25 percent of the project as subsidy. In the case of thrift loan individual units are taking more thrift loans than group units. The difference is statistically significant at five percent level[30]. 63.66 percent of members have more than 6 years of experience in Kudumbashree. It shows the proper functioning of NHGs. In the case of group units members belong to different NHGs.

Table 4.13: Product wise total cost

Product	TC(in ₹)
Food product	293142.5
Garment making	164987.1
Handicraft, Toiletries & Utilities	246545.1
Business	237513.8
Dairy and Poultry	154515.4
Services	246144.4

Source: Survey data

[28] (t= -5.826, df = 139.49, p = .000).

[29] (t = -5.505, df = 143, p =.000).

[30] (t = 2.161, df = 78.75, p = .034).

Food products incur high total cost especially on raw material and other equipment and then others and dairy and poultry units incur low cost, low total revenue, profit, monthly profit (Table 4.13). ANOVA test shows that in the case of TC, difference between groups is significant at one percent level (p = .003). The difference between groups is significant between dairy and poultry (1) and food products (2) (p=.007) food products (2) and garment making (3) (p = .013) in the Hochberg post hoc test. (details are given in Appendix 4.6)

Table 4.14: Product wise cost disaggregation (in ₹)

Product	Food product	Garment making	Handicraft Toiletries & Utilities	Business	Dairy and poultry	Services
Land and Building	3040	3730	5722.20	4104.17	762.50	6645
Plant and machinery	18808	15530.67	10817.20	833.33	36373	37075.40
Other equipments	9588.64	16056.89	8634.76	24188.75	5493.50	19866.50
Inventory	1368	1563.41	3024.40	703.75	0	805
Raw materials	110613.60	64762.96	106045.68	111666.67	52250	49820
Marketing	76586.80	36416.48	68015.28	63742.46	30851.25	78316.55
Wages	21728.68	1979.26	8226.56	4868.25	1517.67	6992.70
Loan repayment	47016.80	29220.41	35631.00	27490.63	30383.33	47522.20

Source: Survey data

In the case of Land and building high cost is incurred by services (It consists of IT units and hotels which are functioning in rented buildings) and low cost by the diary units (75 percent of dairy units are in

rural area so most of the units are attached to their houses). In the case of plant and machinery high cost is incurred by services which require huge one time investment e.g. sinkarimelam, IT units, hotels) and low cost by business. In the case of other equipment business incurs high cost and dairy and poultry incur low cost. For Inventory, handicrafts Toiletries & Utilities incur high cost and dairy has no cost on this account. For raw material business incur high cost (they procure raw materials at whole sale price) and services incurs low cost. In the case of marketing services, incur high cost and dairy and poultry incur low cost. (majority of units prefer door to door delivery). In the case of wages, food products incur high cost (additional employment is necessary during festival seasons) and dairy and poultry incur low cost on this account. In case of loan repayment services incur high cost (total capital is comparatively high in service) and business low (it requires only low investment) (Table 4.14).

Test of homogeneity of variance assumption is violated on all costs except cost on loan repayment. All of them are significant at one percent with robust test of equality of means.(details are given in Appendix 4.7) A post hoc analysis has been carried out to find out in between which products the cost difference is significant. In the case of cost on plant and machinery, difference in the cost between dairy and poultry and garment making ($p = .021$) dairy and poultry and handicraft ($p = .002$) dairy and poultry and business ($p = .000$) Garment making and service ($p = .025$), handicraft, toiletries, and utilities and services ($p = .003$). Business and services ($p = .000$) are significant at 5 percent level. In the case of other equipment difference in cost between dairy and

poultry and garment making (p = .013), dairy and poultry and services (p = .000) dairy and poultry and business (p = .000), food products and services (p=.034), food products and business (p=.000), handicraft and services (p=.013), handicraft and business (p=.000) are significant at 5 percent level. Regarding wages, significant difference in cost exist between dairy and poultry and food products (p = .003), food products and garment making (p = .025), food products and business (p=.025). Regarding loan repayment significant difference in cost exist between food products and business. (p = .028). Services and business (p = .038). Food products and services (p = .000), food products and business p = .000). Handicraft and services (p = .013), handicraft and business (p = .000). All of them are significant at 5 percent level. In the case of raw materials difference in cost exist between dairy and poultry and food products (p = .037), dairy and poultry and business (p = .039), services and business (p = .037), services and food products (p=.025). All of them are significant at five percent level.

Regarding marketing significant difference in cost exists between dairy and poultry and food products (p = .000), dairy and poultry and handicraft (.009), dairy and poultry and services (p = .001) dairy and poultry and business (p = .037) garment making and food products (p = .002), garment making and handicraft and toiletries and utilities (p =.038), garment making and business (p=.009).

Source of Capital

Table 4.15: Product wise source of capital **(in ₹)**

Product	Own fund	Subsidy	Loan	Thrift loan	Total capital
Food product	25150	33300	142200	1280	201930
Garment making	19074.07	23566.67	93333.33	1777.78	137751.85
Handicraft	22474.40	39600	115600.00	6320	183994.40
Business	9975	36250	98541.61	7418.75	152185.42
Dairy and poultry	15458.33	30625	82208.33	13145.83	141437.50
Services	17250	47250	136000	3750	204250.00

Source: Survey data

Table 4.15 shows the product wise source of capital. Own fund is high in food products and low in business. Subsidy received is high in handicraft, Toiletries and utilities. It may be because of the reason that a large portion of members engaged in it are APL and members who are in APL category did not get subsidy. The units which availed highest loans are food products and lowest are dairy and poultry. Regarding thrift loan dairy and poultry has taken highest amount and food products lowest amount. Total capital is high for services and low for food products. Assumption of homogeneity of variance assumption is not violated in the case of own fund, subsidy, loan and total capital but the difference between groups is significant in the case of loan at five percent level. Test of homogeneity of variance assumption is violated in the case of thrift loan. The difference is statistically significant with robust test of equality of mean[31]

[31] (Welch F statistics = 3.216, $df_1 = 5$, $df_2 = 59.678$, $p = .012$).

A post hoc analysis has been carried out to find in which groups the difference is significant. The result shows that the difference in thrift loan between dairy and poultry and food products (p=.006), and dairy and poultry and garment making (p = .008) is significant. (see Appendix 4.8)

Table 4.16: Location- wise product total cost

	Product	**TC (in ₹)**
Rural	Food product	318681.25
	Garment making	167717.95
	Handicraft	233814.05
	Business	259404.63
	Dairy and poultry	149029.78
	Services	226828
Urban	Food product	190987.60
	Garment making	157184.71
	Handicraft	286860
	Business	154328.00
	Dairy and poultry	170972.33
	Services	265460.70

Source: Survey data

In the case of business only location wise TC is significant at five percent level[32]

[32] (t=2.263,df=22,p=.034)

Location wise product cost disaggregation

TC of food products, garment making, and business is higher in rural area than urban area. It may be because of the reason that rural areas incur high cost of production.TC of handicraft, business, dairy and poultry and services are high in urban area than rural area. So in order to find why the TC of same products differs in two locations disaggregation of TC has been done. (see Appendix 4.9)

Product- Dairy and Poultry

In dairy and poultry all cost except cost on raw material, and land and building is higher in urban area than in rural area. In urban area mean expenditure on land and building is nil and both rural and urban areas incur no cost for inventory. The difference in cost incurred on land and building[33] and the difference in expenditure incurred on marketing and distribution are also statistically significant at five percent level[34]. It may be because of the reason that in rural area door to door delivery is possible.

Product- food product

Regarding food products, all the costs except cost on plant and machinery and loan repaymemt are high in rural area than urban area. The difference in cost is statistically significant at five percent level in the case of plant and machinery [35] and at one percent level in raw material[36].

[33] (t = 2.592, df = 17, p = .019)

[34] (t = - 3.548, df = 22, P = .002)

[35] (t = 2.350, df = 19, p = .03)

[36] (t = 5.638, df = 19.133, p = .001).

Product - Garment

All cost except cost on raw materials, marketing and distribution are high in urban area than rural area. The difference in marketing and distribution[37] and wages [38] are statistically significant at five percent level. In garment making units, additional employment generation is high particularly in urban area.

Product-Handicraft, Toiletries and Utilities

Here all the costs except cost on other equipment, raw material, marketing and distribution are higher in urban area than rural area. The difference is not statistically significant.

Product -Services

In the case of services all the costs except cost on raw materials and on marketing and distribution are higher in urban area than rural area. The difference is significant in the case of loan repayment [39] at five percent level.

Product- Business

All cost except cost on other equipment, raw materials and marketing and distribution are higher in urban area than rural area. The

[37] (t =3.349; df =20.613, p= .019)

[38] (t = -2.359, df =25, p = .026),

[39] (t = -2.515, df= 18, p = .022),

difference in cost of raw material [40], marketing and distribution. [41] In the case of loan repayment too it is significant at five percent level[42].

Conclusion of location wise product cost disaggregation

TC of food products, garment making, and Business are high in rural area and TC of handicraft, dairy and poultry and services are higher in urban area. Cost on land and building, plant and machinery are higher in urban area than rural area. It may because of high rent in urban area and plant and machinery are used more in urban area than rural area. Cost on other equipments is comparatively same for both locations. Cost of inventory is high in urban area. Cost of raw material and cost of cost of marketing and distribution are high in rural area. It may be because of high transportation cost in rural area. Cost on wages and loan repayment are high in urban area than rural area. It may be because of the reason that man days, additional man days generated and total capital are higher in urban area than rural area.

4.4 Total Profit

Table 4.17: Industry wise profit

Industry	N	Mean (in ₹)	SD	Min	Max
Non-Manufacturing	68	92980.4	103023.8	-36000	540000
Manufacturing	77	118870.1	146484.3	-25800	793800
Total	145	106728.72			

Source: Survey data

[40] (t = 4.791, df = 13.955, p = .000),

[41] (t = 2.890, df = 22; p = .012),

[42] (t = -2.798, df = 22, p = .010)

Industry wise profit shows that profit of manufacturing unit (₹118870.1) is higher than that of non-manufacturing (₹ 92980.4) but it is not statistically significant (Table 4.17).

Table 4.18: Industry wise monthly profit

Industry	M	Mean (in ₹)	SD
Non-manufacturing	68	7736.3	8567.1
Manufacturing	77	99461.1	12198.1
Total	145	8909.8	10672.6

Source: Survey data

The mean monthly profit is ₹ 8909.8. The monthly profit of manufacturing units (₹ 99461.1) is higher than that of non-manufacturing units (₹ 7736.3), the difference is not statistically significant (Table 4.18).

Table 4.19: Industry wise monthly profit per head

Industry	N	Mean (in ₹)	SD	Min	Max
Non-manufacturing	68	2281.4	1869.9	-525	9000
Manufacturing	77	2410.6	2400.1	-500	12500
Total	145	2350.0	2161.3		

Source: Survey data

The mean monthly profit per head is ₹ 2350.4 The difference in the monthly profit per head among manufacturing (₹ 2410.63) and non-manufacturing units (₹ 2281.42) is not statistically significant (Table 4.19).

Table 4.20: Location wise annual profit

Location	M	Mean (in ₹)	SD	Min	Max
Rural	106	119979.1	134368.9	-36000	793800
Urban	39	70715.1	102745.1	-12000	591240

Source: Survey data

Annual profit of rural area units (₹ 1, 19,979.05) is higher than that of urban area units (₹ 70715.1) the difference is statistically significant[43] (Table 4.20). 71.77 percent of units in the rural area are group units. It includes one of the profit making units -Nutrimix unit which bagged best microenterprise award in 2009-10. Participation in training programmes may have a location –wise influence on profit. This may be because of their participation in training programmes conducted by kudumbashree. In the rural area 50.9 percent participated in Periodical skill development programme and 39.6 percent (higher percentage when compared with urban area) participated in skill development programmes.

Table 4.21: Location wise monthly profit

Location	N	Mean (in ₹)	SD	Min	Max
Rural	106	10019.8	11182.8	-3000	66150
Urban	39	5892.8	8562.1	-1000	49270
Total		8909.76	10672.57		

Source: Survey data

Mean monthly profit is ₹ 8909.76. Location wise monthly profit is higher among rural units (₹10019.8) than urban units. Rural area comprises more manufacturing units than non-manufacturing. The difference is significant[44]. Test of homogeneity of variance assumption is

[43] (t = 2.35, df = 88.22, p = 0.021).

[44] (t= 2.4, df = 88.107, p = .021,)

violated[45]. It is significant at five percent level with robust equality of mean[46].

Table 4.22: Location wise monthly profit per head

Location	N	Mean (in ₹)	SD	Min	Max
Rural	106	1977.9	1767.45	-525	10200
Urban	39	3361.3	2763.1	-345	12500
Total	145	2350.04	2161.343		

Source: Survey data

Mean monthly profit per head is 2350.04. It is higher in urban area (₹ 3361.3) than rural area (₹ 1977.9). In urban area monthly profit per head of service is high and its total cost is low. The difference in the average monthly profit per head is significant at one percent level[47]. Test of homogeneity of variance assumption is violated.

Table 4.23: Type wise total profit

	Mean (in ₹)	SD
Individual	33800.4	29229.6
Group	158207.6	145215.0

Source: Survey data

Total yearly profit of group units are 4.68 times higher than that of Individual units (Table 4.23). Units having high profit are food products, business, handicraft, toiletries& utilities, in all these products group units have higher yearly profit than individual units .The difference is highly

[45] (Levene statistics = 4.058, df_1=1, df_2 = 143, p=.046)

[46] (Welch statistics = 5.567, df_1= 1, df_2 = 88.107, p = .021)

[47] (t = -2.915,df =49.893, P = .005)

statistically significant[48]. It may be because of the following reasons. Group units are getting more benefits than individual units. In addition to subsidy they get other funds like revolving fund (which is not refundable), crisis management fund, second dose assistance which are to be refunded without interest.

Table 4.24: Type wise monthly profit

Type	Mean (in ₹)	SD
Individual	2818.4	2433.7
Group	13209.6	12078.55
Total	8909.76	10672.57

Source: Survey data

Monthly profit of group units is higher than that of individual units. (Table 4.24). The difference is statistically significant[49]. Test of homogeneity of variance assumption is violated. The difference is significant at one percent level with robust test of equality of means[50].

Table 4.25: Type wise monthly profit per head

	Mean (in ₹)	SD
Individual	2818.36	2433.62
Group	2019.45	1892.35

Source: Survey data

Average yearly monthly profit per head is higher in individual units than group units (1.39 times) (Table 4.24). The difference is statistically

[48] (t = -7.681, df = 93.481, p = .00)

[49] (t = -7.713, df = 93.499; p = .000)

[50] (Welch statistics = 59.489, df_1= 1, df_2= 93.499, p = .000)

significant at five percent level[51]. Though the monthly profit is high among group units, individual units are incurring more monthly profit than group units because group units consist of 5-10 members and the total profit is shared. Another reason is that individual units are generating more man days than group units Test of homogeneity of variance assumption is not violated. ANOVA test shows that difference in monthly profit per head is significant between groups at five percent level (details are shown in Appendix 4.10).

Table 4.26: Product wise profit and monthly profit **(in ₹)**

Product	Profit	Monthly profit
Food product	164566.1	13713.84
Garment making	92950.7	7745.89
Handicraft, Toiletries & Utilities	101167.2	8554.60
Business	110721.5	9192.50
Dairy and Poultry	71912.90	5992.67
Services	96973.20	8081.10

Source: Survey data

Food products earn high profit and monthly profit and monthly profit per head than others and dairy and poultry units earn low profit, monthly profit (table 4.26). Test of homogeneity of variance assumption is violated in the case of profit[52], monthly profit[53], monthly profit per head [54].

[51] (t = 2.222, df=143, p = .028).

[52] (Levene statistics 2.396, $df_1 = 5$ $df_2 = 139$, p = .040)

The difference in average monthly profit per head is significant at one percent level with robust test of equality of means[55]. The difference between groups is significant at five percent level between Handicraft, Toiletries & Utilities (4) (It includes hand made products whose cost and profit are high eg: arummulakannadi), they are time consuming and labour intensive in nature) and services (5) (P=.045) and between services (5) (It requires huge one time investment) and business (6) (p = 0.12). (It requires less investment and procures raw materials from wholesale dealers, NHG members are there main customers) (details are given in Appendix 4.11)

Table 4.27: Location wise product P, MP, MP per head **(in ₹)**

	Product	**Profit**	**Monthly profit**	**Monthly profit per head**
Rural	Food product	192411.60	16034.30	2697.95
	Garment making	99619.80	8301.65	2364.35
	Handicraft	90684	7720.16	1252.00
	Business	135972.63	11287.89	1589.21
	Dairy and poultry	78208	6517.33	1666.11
	Services	116293.20	9691.10	2444.70
Urban	Food product	53184	4432	4432.00
	Garment making	73896	6158.00	2700.86
	Handicraft	134364	11197	3253.17
	Business	14767	1230	946.80
	Dairy and poultry	53024	4418.67	3026.67
	Services	77653.20	6471.10	4761.10

Source: Survey data

[53] (Levene statistics = 2.397,df (5,139);p=.040)

[54] (Levene statistics = 3.605, df, 5, 139, p = .004).

[55] Welch statistics = 4.204, df = (5, 62.480), p = .002).

In the case of services MP per head is significant at five percent level[56]. In the case of business, profit[57] and MP is significant at one percent level[58]

Table 4.28: Type wise Product P, MP, MP per head (in ₹)

Type		**Profit**	**Monthly profit**	**Monthly profit per head**
Individual	Food products	44674.29	3722.86	3722.86
	Garment making	32002.15	2666.85	2666.85
	Handicraft	28860	2421.67	2421.67
	Business	18029.14	1502.43	1502.43
	Dairy and Poultry	24127.20	2010.60	2010.60
	Services	53167	4430.58	4430.58
Group	Food products	211190.67	17599.22	2781.06
	Garment making	149545.71	12462.14	2251.71
	Handicraft	124001.05	10491.32	1514.58
	Business	148888.88	12359	1436
	Dairy and Poultry	151553.33	12629.44	1999
	Services	162682.50	13556.88	2361.38

Source: Survey data

In the case of food product all others except monthly profit per head are higher in group units. The difference is statistically significant in the

[56] (t=-2.559, df =18, p=.020).

[57] (t=4.805, df=21.08, p=.000)

[58] (t=4.809, df =21.104, p=.000).

case of yearly profit.[59] and monthly profit[60]. In the case of garment making all others except monthly profit per head are higher in group units than urban units. The difference is statistically significant at one percent in the case of profit and monthly profit[61]. In the case of services only monthly profit per head is higher in individual units. The difference is significant at five percent level in monthly profit per head [62].

4.5 Employment Generation

Kudumbashree views micro-enterprise development as an opportunity for providing gainful employment to the marginalised section--women and thereby improving their income and living standards.

Table 4.29: Industry wise man days generated

Industry	N	Mean	SD
Non-manufacturing	68	299	80.63
Manufacturing	77	265	50.20

Source: Survey data

Table 4.29 shows that the number of man days generated by the Non-manufacturing units is higher than that of manufacturing. The difference is statistically significant at one percent level[63]. It may because of the reason that non-manufacturing units comprises units like dairy and

[59] (t = -3.075, df = 20.447, p = .006)

[60] (t = -3.075, df = 20.447, p = .006).

[61] (t = -4.573, df = 13.442, p = .000).

[62] (t = 2.150, df = 18, p = .045).

[63] (t = 3.195; df = 143, p = .002).

poultry which are labour intensive in nature and it operates on all 365 days. This finding falls in the same line with the findings of Sandberg (2003); Blackburn et al. (2013) Fadahunsi, (2012); Chong, (2008); Wiklund and Shepherd, (2005).

Table 4.30: Industry wise additional man days generated

Industry	N	Mean	SD
Non-manufacturing	68	4	10.76
Manufacturing	77	7	16.64

Source: Survey data

Additional man days generated is higher in manufacturing units (7) than non-manufacturing (4) but the difference is not statistically significant (Table 4.30).

Table 4.31: Location wise man days generated

Location	N	Mean	SD	Min	Max
Rural	106	274	70.02	72	365
Urban	39	297	61.10	30	365
Total	145	280	68.31		

Source: Survey data

It is clear that units in urban (297 days) area are generating more man days than those in rural area (274 days). Kudumbashree promotes more individual units than group units in urban area, Individual units normally get more time for overtime work than group units. Already skilled persons are there in urban area .The difference is significant at 10 percent level[64].

[64] (t = -1.945, df = 77.07, p = .055).

Table 4.32: Location wise additional employment generated

Location	N	Mean	SD	Min	Max
Rural	106	5	15.52	0	84
Urban	37	6	9.60	0	50
Total	143	6	14.2		

Source: Survey data

The location wise additional employment generated is higher in urban area (6) than rural area (5). Individual units generate more additional employment than group units. Urban area comprises more individual units than group units. But the difference is not statistically significant. This result is also in agreement with the findings of Bouazza (2015) that SMEs in Algeria are too fragile and do not contribute effectively to creating employment opportunities especially among youth.

4.5.1 Training programmes

Participation in training programmes and its influence of on TC, TR, P, MP

Table 4.33: Participation of respondents in training programmes

Training programme	Participated	Not participated	Total
periodical skill development programme	87	58	145
skill development programme	56	89	145
PIP	17	128	145

Source: Survey data

Kudumbashree conducts various training programmes as a part of their capacity building. 60 percent participated in periodical skill

development programme. 38.5 percent participated in skill development programme and only 11.7 percent participated in performance improvement programme. It is necessary to find whether the training programmes have any influence on TC, TR, yearly profit, monthly profit. (Table 4.33)

Table 4.34: Periodical skill development programme and its influence on TC, TR, P, and MP

periodical skill development programme	**Participation**	**Mean (in ₹)**	**SD**
total cost	No	219191.82	124228.91
	Yes	224888.56	154367.75
total revenue	No	319028.06	229576.96
	Yes	330362.33	275529.26
total profit	No	104166.39	122444.6
	Yes	108436.96	132546.60
monthly profit	No	8718.06	10180.89
	Yes	9039.56	11044.56

Source: Survey data

The total cost, total revenue, total profit and monthly profit of members who got periodical skill development programme training is higher than that of who did not get it. But the difference is not statistically significant (Table 4.34).

Table 4.35: Influence of skill development programme on TC, TR, P and MP

Periodical skill development programme	Participant	Mean (in ₹)	SD
total cost	No	201115.43	112445.77
	Yes	256770.66	176376.85
total revenue	No	285538.20	217161.05
	Yes	389861.62	301915.81
total profit	Yes	89927.44	118388.88
	No	133430.78	139327.30
monthly profit	Yes	11121.01	11608.81
	No	7518.42	9853.44

Source: Survey data

The total cost, total revenue and total profit and monthly profit of units who got skill development training is higher than that of those who didn't get it. (Table 4.35). The difference is statistically significant at five percent level in the case of total cost[65], total revenue[66], total profit[67] and in the case monthly profit[68] it is significant at 10 percent level.

[65] (t =- 2.107; df = 83.323, p = .038),

[66] (t =- 2.246, df = 90.634, p = .027),

[67] (t = -2.011, df = 143, p = .046)

[68] (t = -1.926, df = 102.94, p = .057)

Table 4.36: Performance improvement programme (PIP) and its influence on TC, TR, P and MP

periodical skill development programme	participation in pip programme	Mean (in ₹)	SD
total cost	No	215218.94	129024.06
	yes	278259.17	217413.04
total revenue	No	315077.17	237895.12
	yes	406780.70	372814.16
total profit	No	103118.523	123431.56
	yes	133911.5294	161438.61
monthly profit	No	8611.0	16275.28
	yes	11159.29	13453.21

Source: Survey data

There exists difference in the total cost and total revenue and monthly profit between units who have got performance improvement training. The difference is not statistically significant. This may be because of the reason that only 11.7 percent units got PIP training.

- **Industry wise influence of periodical skill development programme on total revenue**

In the case of non-manufacturing units training programme is not effective but in the case of manufacturing units total revenue is high among those who got training, the difference is not statistically significant (see Appendix 4.12). Interaction between Industry and periodical skill development programme shows the joint effect of both upon TR. The interaction variable is not significant. It implies that Periodical skill

development programme has an equal effect upon industry and dependent variable TR.

- **Industry wise influence of periodical skill development programme on total cost**

The mean cost of units who got training is ₹ 224888.6. In the case of non-manufacturing units only total cost incurred by units which have participated in periodical skill development programme (₹ 206629.2) is lower than that of units that didn't get periodical skill development training (see Appendix 4.13). The difference is not statistically significant. Interaction between periodical skill development programme and industry shows joint effect of industry and periodical skill development programme upon TC. Relation between periodical skill development programmes and TC is not significant, and the relation between industry and TC is not significant, the interactive variable is not significant. Periodical skill development programmes have an equal effect upon the industry and the dependent variable TC. Here it can be inferred that periodical skill development programmes are not effective in reducing cost of production so cost management classes must be given to them. This finding does not agree with the findings of Ababiya, (2013) and Fadahunsi, (2012) where access to training has a positive effect on the performance of microenterprises.

Table 4.37: Location wise participation in training programme

Location		Periodical skill development programme	Skill development programme	PIP
Rural	Not participated	52 (49.1)	64 (60.4)	98 (92.5)
	Participated	54 (50.9)	42 (39.6)	8 (7.5)
Urban	Not participated	6 (15.4)	25 (64.1)	30 (76.9)
	Participated	33 (84.6)	14 (35.9)	9 (23.1)

Source: Survey data

** Bracketed values are in percentage*

Regarding Periodical skill development programme more than 50 percent of units actively participated in the programme. It is highest among the urban units. In the case of skill development programme participation, it is in between 35-40 percent and it is highest among the rural area units. Participation in PIP is comparatively low. It is only 7.5 percent in rural area and 23.1 percent in urban area.

- **The location wise influence of PIP on monthly profit**

The location wise influence of PIP on monthly profit shows that in the case of rural area monthly profit of unit who got PIP is higher than who did not get it and in the case of urban area monthly profit of units who didn't get PIP is higher than who got it. Participation of respondents in training programmes is higher in rural area than in urban area. It can be inferred that PIP is more effective in rural area than urban area.(see appendix 4.14).

- **Location wise influence of periodical skill development programme on total cost**

The units who got periodical skill development training in urban area are incurring less cost than in rural area. It is less than the mean total cost of units who got training. It is evident that the total cost of units who got periodical skill development training in rural area is higher than mean total cost of units who got training. It shows that periodical skill development programme has more impact on urban area than rural area. So programme should be more effective in rural area (see Appendix 4.15).

Interaction between periodical skill development programme and location shows the effect of location and periodical skill development programme upon TC. Relation between periodical skill development programme and TC is not significant and relation between location and TC is not significant. So the interactive variable is not significant. Periodical skill development programme has equal effect upon the location and the dependent variable TC.

- **Location wise influence of periodical skill development programme on total revenue**

The mean revenue of units who got periodical skill development training is ₹ 330362.3.Though the total revenue earned by units in rural areas who got periodical skill development programme is higher than that of the other, the difference is not statistically significant. Interaction between periodical skill development programme and location shows joint effect of location and periodical skill development programme upon TR. Relation between periodical skill development programme and TR is

not significant, and relation between location and TR is not significant. Periodical skill development programme has equal effect upon the location and the dependent variable TR. (see Appendix 4.16)

Table 4.38: Descriptive statistics on type wise influence of PIP on TC
Dependent variable – Total cost

Type	PIP	N	Mean(in ₹)	SD
Individual	didn't get PIP	51	125489.2	63173.7
	Got PIP	9	198257.0	125212.8
	Total	60	136404.3	78705.5
Group	Didn't get PIP	77	274650.4	127323.5
	Got PP	8	368261.6	269513.4
Total	Didn't get PIP	128	215218.9	129024.1
	Who got PIP	17	278259.2	217413.0
	Total	145	22609.9	142646.8

Source: Survey data

Table 4.39 shows that individual units participate more in PIP than group units. In the case of both individual and group units, the mean total cost of units which got PIP is higher than those that didn't get PIP and their SD is also higher. Levene's test of equality of Error variances shows that it is significant at one percent level.[69]

[69] (F =8.705, df1 = 3, df2 = 141, p = .000).

Interaction variables

Test of between – subjects effects

Dependent variable: Total cost

Source	df	F	Sig
Corrected model	3	19.675	.000
Intercept	1	237.391	.000
Type	1	25.879	.000
Performance	1	7.033	.009
Type of performance	14	.110	.740
Error	145		
Corrected total	144		

Relation between Type and total cost is significant and relation between total cost and PIP is also significant at 1 percent level, but the interaction between type and PIP shows the joint effect of type and PIP upon TC, the interaction variable is not significant. This implies that PIP has an equal effect upon type of the unit and dependent variable total cost.

- **Type wise influence of skill development programme on TC**

Total cost of individual and group units which got skill development training is higher than that of those that didn't get training. Levene's test of equality of error variance is significant at one percent level[70] *Relation between type and total cost is significant and the relation between total cost and skill development is not significant*. The interaction between type and skill shows the joint effect of type and skill development upon TC,

[70] (F = 5.526, df= (3, 141); P = .001)

the interaction variable is not significant, it implies that skill development programme has an equal effect upon type of the unit and dependent variable total cost. This shows that intensive training should be given in cost reducing methods of production (see Appendix 4.17).

- **Type wise influence of periodical skill development programme on TC**

The type wise difference in total cost among those who got periodical skill development programme and who didn't get periodical skill development programme is statistically significant at one percent level[71]. (see Appendix 4.18)

The relation between type and total cost is significant[72]. The interaction between type and periodical skill development programme shows the joint effect of type and periodical skill development programme upon TC, the interaction variable is not significant. This implies that periodical skill development programme has an equal effect upon type of the unit and dependent variable total cost.

- **Type wise influence of periodical skill development programme on Total revenue**

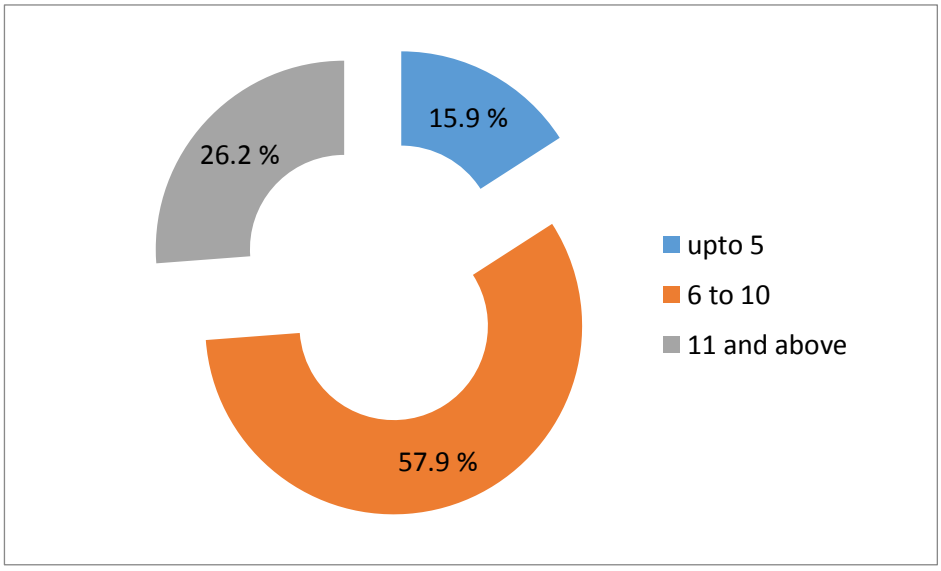
The Total revenue of both individual and group units has increased after attending periodical skill development programme. The difference in the mean is statistically significant (see Appendix 4.19)

[71] (F = 4.117, df (3,141) p = .008).
[72] (F = 50.32, p = .00).

Interaction between type and periodical skill development programme shows the joint effect of type and periodical skill development programme upon total revenue. The relation between periodical skill development programme and TR is not significant and the relation between type and TR is significant. The interactive variable is not significant. Periodical skill development programme has an equal effect upon the type and the dependent variable TR

4.5.2 Experience (as member of Kudumbashree) and performance

The microenterprises were started by the members of the Kudumbashree, either as an individual unit or as a group unit. Their experience as member of the Kudumbashree can influence the working of these microenterprises concerned.



Source: Survey data

Figure 4.11: Experience in Kudumbashree

57.9 percent of units have 6 to 10 years of experience. 26.2 percent units have 11and above years of experience. Majority of the group units are having 6-10 years of experience. 52.41 percent of enterprises were started after 2009 (Fig. 4.11).

Table 4.39: Monthly profit and year of experience

Year of experience	N	Mean (in ₹)	SD	Min	Max
upto-5	23	9176.18	5941.0	-256	25000
6-10	84	9600.14	12047.5	-2150	66150
11and above	38	7222.4	9626.7	-3000	49270
Total	145	8909.8	10672.6	-3000	66150

Source: Survey data

Table 4.39 shows the relation between average monthly profit and year of experience in Kudumbashree. It is a notable fact that units having 6-10 years' experience are getting higher monthly profit than other units. It is seen that performance of units become stable only after 5 years of experience.

The table depicts influence of experience on monthly profit. The mean monthly profit is high among members having 6-10 years of experience in Kudumbashree. Levenes test of homogeneity has been conducted [73]. Here it can be concluded that the monthly profit of units are not influenced by the experience of members in Kudumbashree.

[73] (Levenes statistics = 2.539, $df_1 = 2$, $df_2 = 142$, $p = .08$)

Table 4.40: Total revenue and year of experience

Year of experience	N	Mean(in ₹)	SD
Up to 5	23	327601.78	128599.41
6-10	84	344276.53	282285.48
11and above	38	283975.81	258089.64
total	145	325828.62	257356.98

Source: Survey data

The mean total revenue of units having 6-10 years' experience is higher than that of all other units, but the difference is not significant (p = .063). ANOVA shows that Levenes test of homogeneity of variance is not significant and the difference in total revenue of units having different years of experience is not significant. So it can be inferred that experience of members has no influence on annual total revenue.

In rural area and urban area units majority of members have 6-10 years of experience. Number of members having up to 5 years' experience is higher than that of 11and above years' experience in urban area. In the case of rural area the number of members having 11and above years' experience is higher than that of members having up to 5 years' experience.(See Appendix 4.20)

A chi square analysis has been carried out to find the association between experience and location.

H_0: There is no association between experience and location

Table 4.41: Association between experience and location

	chi-square tests		
	value	**df**	**asymp.sig (2 sided)**
Pearson chi-square	11.568[a]	2	.003
likelihood ratio	13.15	2	.001
no. of valid cases	145		

[a.] 0 cells (0 percent) have expected countless than 5. the minimum expected count is 6.19.

Source: computed from primary data

*5 percent level of significance

From the Table 4.41 it is clear that Pearson chi-square p value .003 which is less than that of 0.05 at 5 percent level of significance, thus the null hypothesis is rejected. Therefore there is significant association between the experience and location.

A chi square analysis has been carried out to find the association between experience and type (Appendix 4.21).

H_0 : There is no association between experience and type

Table 4.42: Association between experience and type

	chi-square tests		
	value	**df**	**asymp.sig (2 sided)**
Pearson chi-square	1.391[a]	2	.499
Likelihood ratio	1.430	2	.489
No. of valid cases	145		

[a.] 0 cells (.0 percent) have expected count less than 5. The minimum expected count is 9.52.

Source: computed from primary data

*5 percent level of significance

From the Table 4.42 it is clear that Pearson chi-square p value .499 is greater than 0.05 so the null hypothesis is accepted. It can be inferred that there is no significant association between the experience and type.

Majority of members in manufacturing (58.4 percent) and non-manufacturing (57.4percent) have 6-10 years of experience in Kudumbashree. In the case of manufacturing units the number of members having 11and above years' experience is higher than that of members having up to 5 years' experience (see Appendix 4.22).

A chi square analysis has been carried out to find the association between experience and industry.

H_0: There is no association between experience and industry

Table 4.43: Association between experience and industry

	chi-square tests		
	Value	**df**	**asymp.sig (2 sided)**
Pearson chi-square	1.066[a]	2	.587
Likelihood ratio	1.071	2	.585
No. of valid cases	145		

[a] 0 cells (.0 percent) have expected count less than 5. The minimum expected count is 9.52.

Source: computed from primary data

*5 percent level of significance

From the Table 4.43 it is clear that Pearson chi-square p value .587 is greater than 0.05 so the null hypothesis is accepted. It can be inferred that there is no significant association between the experience and industry.

Table 4.44: Total cost and year of experience

Years of experience	Mean (in ₹)	SD
upto 5	211746.7	85076.33
6-10	233922.6	150213.1
11and above	204177.8	153491.7
total	222609.9	142646.8

Source: Survey data

Table 4.44 shows that the mean total cost of units having 6-10 years' experience in Kudumbashree is higher than that of others. The difference in total cost is statistically significant at 5 percent level that is homogeneity of variance assumption is violated[74], the robust test of equality of means is not violated.

Table 4.45: Yearly expenditure on loan repayment and year of experience

Years of experience	Mean (in ₹)	SD	Min	Max
Up to 5	37661.91	19463.02	12000	86000
6-10	37989.37	23395.91	7000	121000
11and above	29927.21	22422.73	12000	129537
total	35824.59	22693.78	7000	129537

Source: Survey data

[74] (Levene statistics = 3.284, df (2,142) p= .040)

Table 4.45 shows yearly expenditure on loan repayment and year of experience. It is the highest among units having 6-10 years' experience, but the difference is not statistically significant.

- **Sources of finance and years of experience**

In the case of own fund and subsidy mean amount is higher among units having 6-10 years' experience in Kudumbashree. Test of homogeneity of variance assumption is not violated so there is no difference in own fund taken by members having different years of experience. Loan and thrift loan are higher among units having 11and above years' experience in Kudumbashree. In the case of thrift loan test of homogeneity of variance assumed is violated[75] It is significant at 10 percent level with robust test of equality of mean.[76] A post hoc test has been conducted to find where the difference in thrift loan is significant between units having different years of experience. The study finds that units having 6-10 years and 11and above years' experience are significant according to Hochberg statistics for unequal group of variance. (see Appendix 4.23)

- **Influence of periodical skill development programme on total cost**.

Total cost of units which didn't get periodical skill development programme having 6-10 years' experience is higher than that of others. But in the case of units whose members got periodical skill development training, it is lowest among units having 6-10 years' experience. But in

[75] (Levene statistics =6.059; df(2,142);p=.003)

[76] (brown-forsythe statistics =3.085, df_1= 2, df_2= 74.283, p = .052)

the case of units having up to 5 years and 11and above years' experience total cost of units which didn't get periodical skill development training is lower than those whose members attended periodical skill development programmes. Though there is difference in total cost between groups which got training and which didn't get training, the difference is not statistically significant.(see Appendix 4.24)

Test of between-subjects effects

Dependent variable-total cost

Source	**df**	**F**	**sig**
Corrected Model	5	1.454	.209
Intercept	1	201.98	.000
q.Tr.EDP.A	1	.952	.331
q.ExperienceCat	2	.938	.394
q.Tr.EDP.A * q.ExperienceCat	2	2.961	.055
Error	139		
Total	145		
Corrected total	144		

Source: computed from survey data

Test of between-subjects effects shows that periodical skill development programme is not influencing the dependent variable TC and experience is not influencing the dependent variable TC. Interaction between periodical skill development programme and experience upon TC is not significant at 5 percent and it is weakly significant at 10 percent level.

4.6 Factors influencing profit

Regression Model-1

4.6.1 Model-1 -Location as a factor influencing profit

To find out the determinants of the annual total profit generated by the microenterprises a regression analysis has been carried out. Annual profit is taken as the dependent variable and annual revenue, own fund, experience, loan, man days, thrift loan are independent variables. The dummy variables are location and type.

The regression model has been specified as

$$\gamma_i = \beta o + \beta_1 X_{Ii} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_1 D_{1i} + \beta_2 D_{2i} + U_i$$

where

y_i = annual profit

X_{Ii} = Annual revenue

X_{2i} = Mandays generated

X_{3i} = Thrift loan

X_{4i} = Own fund

X_{5i} = Experience

X_{6i} = Loan

D_{Ii} = Location

D_{2i} = type

U_i = Stochastic disturbance term

	Coefficient	Std Error	t rate	t value
Instant	-33979.7	34129	-0.9956	0.32120
AR	0.438897	0.0335348	13.0878	0.00001
man days	179.384	63.0086	2.8470	0.00510
Thrift loan	0.119563	0.2170	0.5508	0.58264
location code	-33355.7	10411.1	-3.2030	0.00169
Type code	-8727.55	11094.9	-0.7866	0.43287
Own fund	0.10515	0.113922	0.9230	0.35764
Experience	-1396.03	1176.03	-1.1871	0.23727
Loan	0.12217	0.131048	0.9323	0.35286

Model summary

R squared	Adjusted R^2 squared	df	F	P	SD dependent	SE of regression
		8	97.28807	0.00	128184.9	44306.47
0.887167	0.880530	136				

* Since VIF for all the variables is less than 10, the problem of multi colinearity is absent

The model adequacy results are given below:

1) White's test of hetroskedasticity (white's LM statistics = 94.2834, p= .00, df= 41)
2) The variable inflation factor VIF for multicolinearity AR = 2.453 Mandays = 1.097 thrift loan 1.424, location – 1.603, type = 2.024, own fund 1.155, loan = 2.2315)

The variables annual revenue, and man days are significant. The fitted econometric model is significant (F = 97.28807; p value = .00;

df = (8.136), the value of adjusted R squared (0.88) implies that 88 percent of variation in annual profit is explained by the model. It is statistically significant at 1 percent level. The dummy variable used to represent the influence of location upon annual profit is also significant. This implies that when the location changes from rural to urban, the annual profit decreases by ₹ 33355.7. This implies that location of the unit is an important factor.

Regression Model -11 skill training as a factor influencing profit

To find out the factors influencing annual profit, a regression model has been carried out. Annual profit is taken as the dependent variable. The independent variables are annual revenue, Man days generated, thrift loan, loan, own fund. The dummy variable is skill training.

The regression model has been specified as

$\gamma_i = \beta o + \beta_1 X_{Ii} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_1 D_{Ii} + U_i$

where γ_i = annual profit.

X_{Ii} = annual revenue

X_{2i} = Man days generated

X_{3i} = Thrift loan

X_{4i} = Loan

$X5_i$ = Own fund

D_1 = skill training

U_i = Stochastic disturbance term

	Coefficient	Std error	t-ratio	p-value
Constant	-134589	28292.7	-4.7570	<0.00001
AR	0.426611	0.0318474	13.3955	<0.00001
Man days	183.251	60.8879	3.0096	0.00311
	23818.8	10059.8	2.3778	0.01879
Thrift loan	0.529334	0.234476	2.2575	0.02555
Loan	0.109391	0.124392	0.8794	0.38071
Own fund	0.152319	0.103776	1.4678	0.14444

Model summary

R squared	Adjusted R^2 squared	dt	F	P	SD dependent	SE of regression
		6	103.7689	0.000	128184.9	44536.79
0.884314	0.879284	138				

*Since VIF for all the variables is less than 10, the problem of multi colinearity is absent.

The model adequacy result is given below:

1) White's test of hetroskedasticity
   (LM statistics = 90.2073, P = 0.00, df = 26)

2) The variable inflation factor VIF for multicolinearity AR = 2.266, man days 1.060, skill training = 1.223, thrift loan 1.197, loan = 2.220, own fund 1.116)

The independent variables Annual revenue, man days, thrift loan, and are significant. The fitted econometric model is significant (F= 103.7689, p value = .00, df. (6.138). The value of adjusted R squared implies that

0.8792. 87 percent of variation is annual profit is explained by the model. It is statistically significant at 1 percent level. The dummy variable used to represent the influence of skill training upon annual profit is also significant. This implies that when skill development programme increases the annual profit by 23919.8. This implies that skill training is an important factor.

Regression Model 111-location as a factor influencing profit

To demarcate the factors influencing annual profit, a regression model has been carried out. Annual profit is taken as the dependent variable. The independent variables are Annual revenue, mandays, thrift loan, loan, own fund. The dummy variables are skill and location.

The regression model has been specified as

$$\gamma_i - = \beta_o + \beta i X_{Ii} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_o D_{1i} + \beta o D_{2i} + U_i$$

where

γ_1 = annual profit

X_{Ii} = annual revenue

X_{2i} = Mandays

X_{3i} = Thrift loan

X_{4i} = loan

X_{5i} = Own fund

D_{1i} = Skill training

D_{2i} = location

	Coefficient	Std error	t-ratio	p-value
Constant	-98783.9	34346.4	-2.8761	0.00467
AR	0.423695	0.0326223	12.9879	<0.00155
Man days	196.259	60.7496	3.2306	0.00155
Skill	14349.1	11915.3	1.2043	0.23057
Thrift loan	0.278483	0.246672	1.1290	0.26089
Loan	0.125971	0.129998	0.9690	0.33424
Own fund	0.145289	0.105238	1.3806	0.16966
Location code	-20126.5	10144.4	-1.9840	0.04925

Model summary

R squared	Adjusted R^2 squared	dt	F	P	SD dependent	SE of regression
		7			128184.9	44106.21
1.887362	0.881607	137	92.80451	0.000		

* Since VIF for all the variables is less than 10 the problem of multi colinearity is absent.

The model adequacy result is given below:

1) White's test of hetroskedasticity
   (LM statistics = 93.373, p =0.0, df=. 31)

2) The variable inflation factor VIF for multicolinearity, (AR = 2.278, man days= 1.076, skill = 1.659, Thrift loan = 1.376, Loan = 2.253, own fund 1;117, location code = 1.601)*

The independent variable annual revenue and man days generated are significant. The fitted econometric model is significant (F = 92.80451, p value = .00, df. (7,135). The value adjusted R^2 implies that 0.881607 that is 88 percent of variation in annual profit is explained by the model. It is statistically significant 1 percent level. The dummy variable used to represent the influence of location upon annual profit is also significant. This implies that when the location changes from rural to urban the annual profit decreases by 20126.5. This implies that location of the unit is an important factor influencing annual profit.

Summary

To identify the factors influencing profit of KME three regression models have been carried out. In model 1 the value of adjusted R squared implies that 88 percent of variation in annual profit is explained by the model. When location and type, location comes is an important factor influencing profit. In model 11 the value of adjusted R squared implies that 87 percent of variation is annual profit is explained by the model here skill training has been identified as important factor influencing profit. In model 111 the value adjusted R squared implies that 88 percent of variation in annual profit is explained by the model. When skill training and location together comes location is an important factor influencing profit.

Since location and type have emerged as significant in economic performance, the next chapter proceeds to make a comparative evaluation across various categories of enterprises.

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Chapter 5

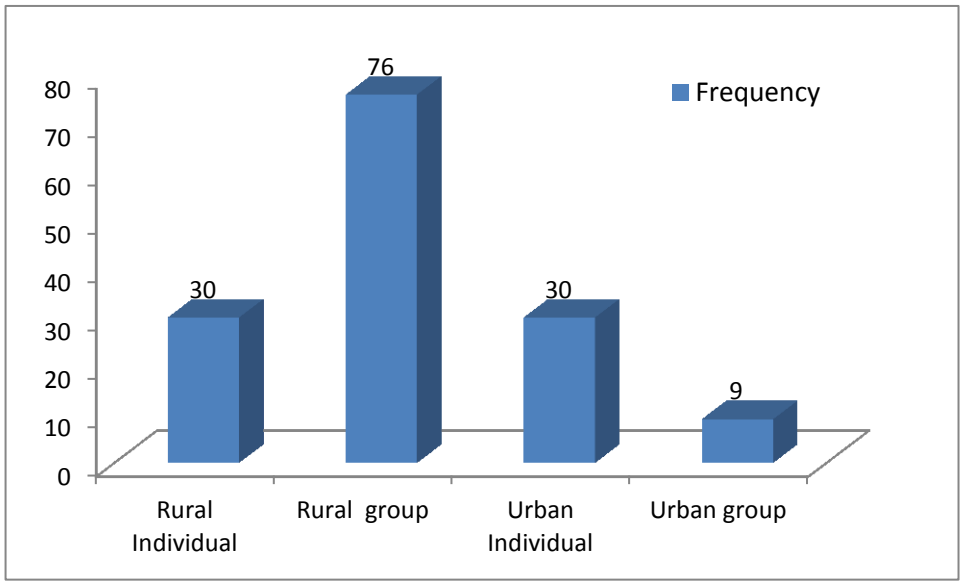
COMPARATIVE EVALUATION OF KUDUMBASHREE MICROENTERPRISES

Contents

Chapter four has made it clear that though the industry wise difference is insignificant, location wise and type wise difference in economic performance is significant. This chapter proposes a comparative evaluation of microenterprises across various categories such as rural and urban, group and individual, manufacturing and non-manufacturing. Classification on the basis of location and type includes four categories -- Rural Individual (RI), Rural Group (RG), Urban Individual (UI), and Urban Group (UG). Classification on the basis of location, type and industry includes eight categories --Rural Individual Non- Manufacturing (RINM), Rural Individual Manufacturing (RIM), Rural Group Non-Manufacturing (RGNM), Rural Group Manufacturing (RGM) Urban Individual Non-Manufacturing (UINM), Urban Individual Manufacturing

(UIM), Urban Group Non-Manufacturing (UGNM) Urban Group Manufacturing (UGM). Revenue, cost, profit and employment generation are the factors considered for comparative evaluation.

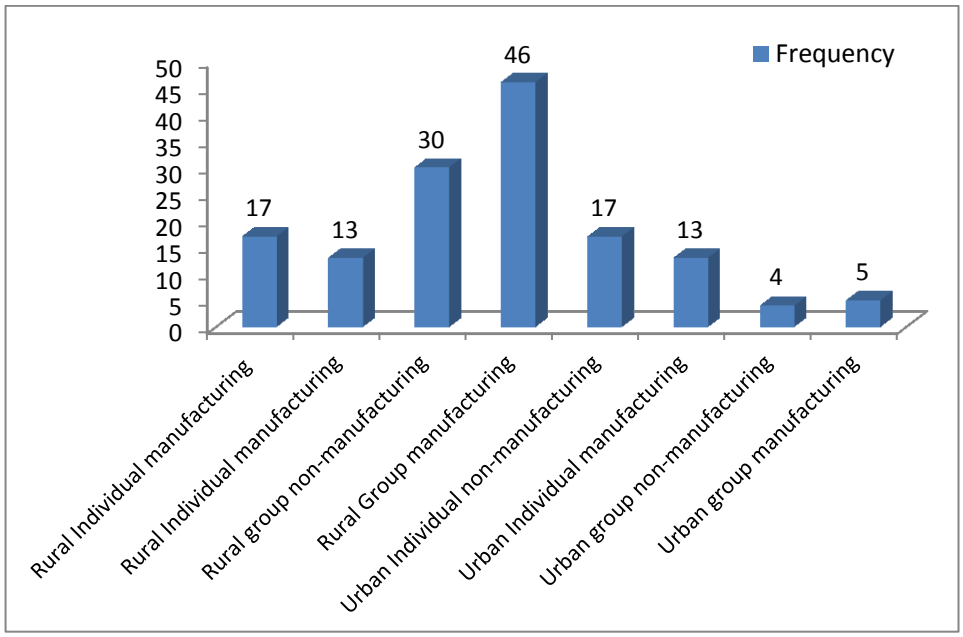
5.1 General Profile



Source: Survey data

Figure 5.1: Location and type wise nature of units

73.10 percent of units operate in rural areas and the rest 26.89 percent belong to urban area. 41.37 percent are individual units and 58.62 percent are group units. At all Kerala level, group units constitute 62.32 percent and individual units 37.68 percent of the total units. In the case of Pathanamthitta 47.81 percent of total units are individual units 52.18 percent are group units. (Fig. 5.1)



Source: Survey data

Figure 5.2: Location, type and industry-wise nature of units

Figure 5.2 makes it clear that 31.7 percent of units belong to RGNM and 2.8 percent belong to UGNM.

5.2 Total Revenue

Table 5.1: Location and type wise descriptive statistics of total revenue

Nature of unit	Mean (in ₹)	SD
RI	123887.4	64173.31
RG	428179.94	264518.24
UI	215987.16	113629.95
UG	500804.22	377295.38
Total	325828.62	257356.98

Source: Survey data

The revenue of group units in both rural area and urban area is higher than the mean total revenue. Total revenue of urban units is higher than that of rural area (Table 5.1). The study found that total revenue is different for RI, RG, UI, and UG. The assumption of homogeneity of variance assumption is violated. It is statistically significant at one percent level[1]. The difference is statistically significant with robust test of equality of means[2]. A post hoc analysis has been carried out to find in which groups the difference in total revenue is significant. The result shows that the difference in the revenue between rural Individual and rural group, rural Individual and urban group, rural group and urban individual, urban individual and urban group. (see Appendix 5.1)

Table 5.2: Location, type and industry-wise descriptive statistics of total revenue

Nature of Enterprise	Mean (in ₹)	SD
RINM	118162.1	67792.4
RIM	131374.3	60970.9
RGNM	423847	194971.5
RGM	431005.7	303476.5
UINM	233392	40635.4
UIM	193227	117867.9
UGNM	413355.5	257574.8
UGM	570763.2	470297.7
Total	325828.6	257356.9

Source: Survey data.

[1] (Levene statistics = 8.236, df (3,141) p= .00).

[2] (Welch F statistics = 31.733, p = .00)

From Table 5.2 it is clear that in the case of rural individual and rural group units manufacturing units are earning more revenue than non-manufacturing units. In the case of urban individual units, non-manufacturing are earning more revenue and in the case of urban group units manufacturing units are earning more revenue than non-manufacturing.

The study found that test of homogeneity of variance assumption is violated[3] This is significant at one percent level with robust equality of means [4] A post hoc test has been conducted to find in which all groups the difference is significant. The study finds that the difference in total revenue between RINM, and RGNM, RINM and RGM, RINM and UGM, RIM and RGM, RIM and UGM, RGNM and RIM, RGM & UIM are significant.(Details are given in Appendix 5.2)

5.3 Total Cost

Table 5.3: Location and type wise descriptive statistics of total cost

Nature of unit	Mean(in ₹)	SD
RI	102415.9	55966.93
RG	276019.45	139378.85
UI	170392.77	84144.68
UG	346299.22	195989
Total	222609.87	142646.82

Source: Survey data

[3] (Levenes statistics = 4.233, df (7,137), p = .00).

[4] (Welch statistics = 13.808, p = .000).

Table 5.3 points to the fact that urban group units are incurring higher cost than others. Total cost of urban group units is higher than the mean total cost also. Regarding the group and individual units total cost is lower in rural than urban area. It may be due to the reason that 50 percent of members in rural areas have 6 -10 years of experience in Kudumbashree. Though the location wise total cost of urban units is higher than rural units, the total cost of group units is 2.07 times higher than that of individual units. The study found that total cost is different for RI, RG, UI and UG. The test of homogeneity of variance assumed is statistically significant at one percent level[5]. The difference is statistically significant at one percent significance with robust test of equality of means[66]. A post-hoc analysis shows that difference in cost is significant between RI and RG, RI and UG, RG and UI, UI and UG (see Appendix 5.3).

Table 5.4: Location and type wise cost disaggregation **(in ₹)**

Nature	Land & Building	Plant & Machinery	Other equipments	Inventory	Raw material	Marketing	Wages	Loan repayment
RI	1680	11648.40	7585.50	804	19200	36013.33	1984.17	23981.83
RG	3361.45	15684.74	15418.29	712.76	129238.68	69491.78	8509.32	34931.69
UI	3816.67	29963.07	11280.40	654.10	22926.67	50479.27	7576.37	44036.23
UG	16566.11	39339.11	29006.44	9677.67	112171.33	62080.44	17990.33	57135.33
Total	3927.34	19271.85	13785	1275.94	83417.12	58171.57	7554.74	35824.59

Source: Survey data

[5] (Levene statistics = 5.840; df (3,141; p = .001).

[6] (Welch F statistics = 29.751, P = 0.00).

Cost on land and building is high in UG and low in RI. In plant and machinery high cost is in UG and low in RI, in other equipments high in UG and low in UI. In the case of inventory cost is high in UG and low in UI. Regarding raw material cost it is high in RG and low in RI, marketing cost is high in RG and low in RI. Wage cost is high in UG and low in RI, loan repayment cost is high in UG and low in RI. Regarding the individual units all cost except cost on Inventory is high in urban area than rural area. Regarding group units all cost except cost on raw material and marketing is high in urban area than rural area (Table 5.4).

Source of capital

Table 5.5: Location and type wise own fund **(in ₹)**

Units own fund	Mean	SD
RI	22066.66	42777.63
RG	15542.89	16874.71
UI	21258.33	41804.16
UG	20000	30000
Total	18351.79	30459

Source: primary data

The own fund taken by the individual units is higher than that of group units in both rural and urban area (Table 5.5). The assumption of homogeneity of variance assumption is violated[7]. It is significant at one percent level.

[7] (Levene statistics = 3.465; df (3,141);p= .018).

Table 5.6: Location and type wise subsidy **(in ₹)**

Nature of Unit	Mean	SD
RI	5210	10651.80
RG	40460.5	30201.29
UI	32916.66	18124.1329
UG	87777.77	37425.85
Total	34543.44	31894.97

Regarding individual and group units, urban area is receiving more subsidy than rural area. Homogeneity of variance assumption is violated[8]. It is significant at one percent level with robust test of equality of mean[9]. A post hoc test has been conducted to identity between which all groups the difference is significant. The study found that the difference in subsidy between the following groups RI and RG, RI and UI, RI and UG, UG and RG, RG and UG, UI and RI, UI and UG according to the Hochberg statistics for unequal group variance are significance at one percent level. (Details are given in Appendix 5.4)

Table 5.7: Location and type wise loan **(in ₹)**

Nature of Unit	Mean	SD
RI	39333.3	46325.93
RG	135434.21	80690.74
UI	104500	43377.85
UG	157222.2	76203.30
Total	110503.44	77795.23

Source: Survey data

[8] (Levene statistics = 9.522, df (3,141); p = .00).

[9] (Welch F statistics = 43.725; p = .00)

Table 5.7 makes it clear that in the case of both group unit and individual units urban areas are availing more loan than rural area. The test of homogeneity of variance assumed is significant at one percent level[10]. It is significant at one percent level with robust test of equality of means[11]. A post hoc test has been conducted to find out between which group the difference in loan is significant. The study finds that the difference in availing loan is significant between RI and RG, RI and UI, RI and UG, UI and RI according to the Hochberg statistics for unequal group variance at 1percent level significance level. (The details are given in Appendix 5.5)

Table 5.8: Location and type wise thrift loan **(in ₹)**

Nature of Unit	Mean	SD
RI	16716.7	19103.9
RG	4013.8	8028.4
UI	0.00	0.00
UG	0.00	0.00
Total	556241.4	11942.9

Source: Survey data

Regarding thrift loan in urban area, both individual and group units have taken no thrift loan from their Kudumbashree units. It is a clear sign of their improvement. In the case of rural area individual units thrift loans are higher than that of group units.

[10] (Levene statistics = 3.893, df (3,141); p = .01).

[11] (Welch statistics = 22.344, p = .00).

Assumption of homogeneity of variance assumed is violated[12]. It is significant at one percent level. Post hoc test shows that difference in thrift loan is significant between RI and RG, RI and UG, RI and UI, UI and RI according to Hochberg statistics.

Table 5.9: Location and type wise total capital **(in ₹)**

Nature of Unit	Mean	SD
RI	83326.7	61699.4
RG	195451.4	97475.2
UI	158675	5849.97
UG	265000	139731.9
Total	168961.1	99896.4

Source: Survey data

Table 5.9 shows that Individual and group units in the urban area are incurring more total capital than rural area. Test of homogeneity of variance assumed is violated[13]. It is significant at one percent level with robust test of equality of means[14]. A post hoc test has been conducted to find where the difference in total capital is significant between groups. The study finds that the difference in total capital between RI and RG, RI and UI, RI and UG, UI and UG are significant according to Hochberg statistics for unequal according to group of variance (details are given in Appendix 5.6).

[12] Levenes statistics = 41.094; df (3,141), p = .000).

[13] Levenes statistics = 4.512; df (3,141), f = .005)

[14] (Welch statistics = 18.643, p = .00).

Table 5.10: Location, type and industry wise total cost **(in ₹)**

Nature of unit	Mean	SD
RINM	97917.8	60119.4
RIM	108295.5	51812.2
RGNM	273828.9	86080.1
RGM	277448.0	166123.3
UINM	187362.9	84361.5
UIM	148201.2	81732.2
UGNM	316729.3	143265.9
UGM	269955.2	244654.1
TOTAL	22609.9	142646.8

Source: Survey data

The total cost is comparatively high in manufacturing units than non-manufacturing units. Assumption of equality of variance assumed is violated. It is significant at one percent level with robust tests of equality of means[15]. A post hoc analysis has been carried out to find in which all groups the total cost is different in a significant manner. It shows that the cost difference between rural individual and rural group, rural individual and urban group, urban individual and rural group, urban individual and urban group units according to the Hochberg statistics for unequal group variance is significant at one percent level. (Details are given in Appendix 5.7)

Cost disaggregation of eight categories shows that cost on land and building is highest in UGM and lowest in RINM, cost on plant and machinery is highest in UGM and lowest in RINM. Cost on other

[15] (Welch statistics =14.213, p = .000).

equipments is highest in UGNM and lowest in RINM. Inventory cost is zero for RINM and highest in UGM. Raw material cost is highest in RGNM and lowest in RIM. Marketing cost is lowest in RIM and highest in RGNM. Expenditure on wages is highest in UGM and lowest in RINM (Appendix 5.8).

5.4 Total Profit

Table 5.11: Location and type wise descriptive statistics of profit

Nature of Enterprise	Mean (in ₹)	SD
RI	22024.4	15982.4
RG	158645.4	140801.9
UI	45576.4	34581.1
UG	154510.6	188519.2
Total	106728.7	128184.9

Source: Survey data

It is a notable fact that rural group units are earning higher profit than urban group (Table 5.11). It may be because of the fact that Kudumbashree promotes more group units than individual units in urban area. In the case of individual units, urban units are earning almost double profit than urban units. This may be because urban units are promoting more individual units than group units. The assumption of homogeneity of variance assumed is violated[16]. It is significant at one percent level with robust test of equality of means[17]. A post hoc analysis has been

[16] Levene statistics = 11.546; df (3, 141); p = .00

[17] (Welch F statistics = 25.856, p = .000).

conducted to find in which all groups the total profit is different in a significant manner. It is a notable fact that profit difference is significant between rural individual and rural group, rural individual and urban group, rural group and urban individual according to Hochberg statistics for unequal group variance and is significant at five percent level (see Appendix 5.9).

Table 5.12: Location and type wise descriptive statistics of monthly profit

Nature of Enterprise	Mean (in ₹)	SD
RI	1838.7	1326.3
RG	13249.1	1707.1
UI	3798.0	2881.8
UG	12875.6	15710.2
Total	8909.8	10672.6

Source: Survey data

The monthly profit shows that it is higher in rural group than rural individual and higher in urban individual than rural individual. This may be because of the fact that Kudumbashree promotes more individual units in urban area than group units and group units in rural area than individual units. The assumption of homogeneity of variance assumption is violated[18]. It is significant at one percent level with robust test of equality of mean[19]. A post hoc analysis has been conducted to find in which all groups the difference is significant. The study finds that monthly profit difference is significant between rural Individual and rural group, rural

[18] (Levene statistics = 11.427; df (3,141); p = .00).

[19] (Welch = 26.052; p = .000).

individual and urban group, rural group and urban individual (The details are given in Appendix 5.10).

Table 5.13: Location and type wise descriptive statistics of monthly profit per head

Nature of Enterprise	Mean (in ₹)	SD
RI	1838.7	1326.30
RG	2032.96	1918.97
UI	3798.03	2881.75
UG	1905.44	1749.55
Total	2350.04	2161.34

Source: Survey data

In the case of average monthly profit per head, among group units, rural group units and among individual units, it is seen that urban individual units are earning more profit than their counterparts. Test of homogeneity of variance assumption is violated[20]. It is statistically significant at one percent level with robust test of equality of means[21] A post hoc analysis has been carried out to find out in which all groups the monthly profit per head is different in a significant manner. It shows that the monthly profit per head between rural individual and urban individual, rural group and urban individual, urban individual and rural individual are significant (The details are given in Appendix 5.11).

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[20] (Levenes statistics = 3.523, df (3.141) p = .001).

[21] (Welch statistics = 3.772, p = .020).

Table 5.14: Location, type and industry-wise Profit

Nature of Enterprise	Mean (in ₹)	SD
RINM	20244.7	15592.6
RIM	24351.7	16816.2
RGNM	160333.2	115470.3
RGM	157544.6	156352.8
UINM	45997.4	30129.3
UIM	45025.8	40975.9
UGNM	96638.8	118939.1
UGM	200808	233325.1
Total	106728.7	128184.9

Source: Survey data

Table 5.14 shows the profit earned by the groups. In case of rural individual units it is higher in manufacturing and regarding rural group units it is higher in non-manufacturing. In the case of urban individual units it is higher among non-manufacturing. In the case of urban group units it is higher among manufacturing units. The assumption of homogeneity of variance assumption is violated[22]. It is significant at one percent level with robust equality of means[23]. A post hoc analysis has been conducted to identify groups where the total profit varies. It shows that the profit variation between RIM and RGNM, RIM and RGM RINM and RGM, RGNM and RINM, RGNM and RIM, RGNM & UINM, RGM and UINM units according to the Hochberg statistics for unequal group variance is significant at one percent level except RGNM and UINM and

[22] (Levene statistic = 5.218, df (7, 137), p = .00)

[23] (Welch = 10.809, p = 0.00).

RGM and UINM (it is significant at five percent level). (The details are given in Appendix 5.12)

Table 5.15: Location, type and industry wise Monthly Profit

Nature of Enterprise	Mean (in ₹)	SD
RINM	1687.1	1299.4
RIM	2037	1387.4
RGNM	13333.8	9601.5
RGM	13193.9	13000.4
UINM	3833.1	2510.8
UIM	3752.2	3414.7
UGNM	8052.5	9912.2
UGM	16734	19443.8
Total	8909.8	10672.6

Source: Survey data

Table 5.15 depicts the monthly profit of 8 categories. In the case of rural individual units, the manufacturing unit and in the case of rural group units non- manufacturing units are earning more monthly profit. In the case of urban individual units non-manufacturing and urban group units manufacturing units are earning more monthly profit than their counterparts. The assumption of homogeneity of variance assumed is violated[24] It is significant at one percent level with robust test of equality of means[25]. A post hoc analysis has been conducted to identify the groups where difference in monthly profit is significant. The study result shows

[24] (Levene statistics = 5.173; df (7, 137); p = .000).

[25] (Welch statistics = 10.867, p= .000).

that the monthly profit variation between RINM and RGNM, RINM and RGM, RIM and RGNM, RIM and RGM, RGM and UINM, UINM and RGNM are significant at five percent level. Out of the RINM and RGNM, RINM and RGM, RIM and RGNM, RIM and RGM, RGNM and RINM, RGNM and RIM are significant at one percent level according to the Hochberg statistics for unequal group variance. (The details are given in Appendix 5.13)

Table 5.16: Location, type and industry-wise Monthly profit per head

Nature of Unit	Mean (in ₹)	SD
RINM	1687.1	1299.4
RIM	2037	1387.4
RGNM	1865.1	1236.2
RGM	2142.5	2263.1
UINM	3833.1	2510.8
UIM	3752.6	3414.7
UGNM	1335.5	1456.1
UGM	2361.4	1986.7
Total	2350.0	2161.3

Source: Survey data

Table 5.16 depicts the monthly profit per head between 8 categories of units. Manufacturing units, both the individual and group units in rural area are earning more monthly profit per head than non-manufacturing. In the case of rural group units manufacturing units are earning more monthly profit per head than non-manufacturing units.

When come to the urban area monthly per head profit of individual units is higher in non-manufacturing and regarding the group units it is higher in manufacturing. Assumption of homogeneity of variance assumed is violated[26]. It is significant at five percent level with robust test of equality of means[27]. A post hoc analysis has been carried out to find out in between which group the difference is significant. It shows that the monthly profit per head variation between RINM and UINM, RGNM and UINM are significant at 10 percent level according to Brown- forsy the statistics for unequal group variance.

5.5 Employment Generation

Table 5.17: Location and type wise man days and additional man days generated

Nature of unit	Man days generated	Additional man days generated
RI	287	6
RG	269	5
UI	302	6
UG	282	7
Total	280	6

Source: Survey data

Total man days generated is high in UI and low in RG. Except RG all units generate man days higher than the average. Additional man days generated is high in UG and low in RG (Table 5.17).

[26] (Levene statistics 2.295, df (7,137), p = 030).

[27] (Brown – Forsy statistics = 2.828, D = .014)

Table 5.18: Location, type and industry-wise man days and additional man days generated

Nature of unit	Man days generated	Additional man days generated
RINM	309	5
RIM	257	8
RGNM	289	2
RGM	256	7
UINM	315	6
UIM	285	6
UGNM	259	1
UGM	300	15
TOTAL	280	6

Source: Survey data

Man days generated is highest among UINM and lowest in RGM. Additional man days generated is highest in UGM and lowest in UGNM. (Table 5.18)

5.6 Training

- **Influence of skill development programme on TR, TC, P, MP and MP per head of location and type wise category**

Influence of skill development programme on TR, TC, P, MP and MP per head of location and type wise category shows that TR, TC, P, MP and monthly profit per head of all units are higher for units who got training than others. In the case of profit Levenes test of equality of error

variance is significant at 10 percent level[28]. A post hoc test has been conducted to see where the difference exists. This shows that differences in profit between RI and RG (p = .000), RI and UG (p = .015), RG and UI (p=.000) are significant at five percent level according to Hoch berg statistics for unequal group variance. (see Appendix 5.14)

Interaction between nature (location and type wise) and skill shows joint effect of nature and skill training upon profit. Here the interaction variable is not significant (p = .095), it implies that skill training has an equal effect upon the nature of the unit and dependent variable profit.

- **Influence of PIP on location and type wise profit**

Influence of PIP on location and type wise profit shows that Levenes test of equality of error variance is significant at one percent level[29]. Post hoc test shows that the difference in profit is significant between RI and RG, RI and UG, RG & UI, are significant at five percent level for unequal group variance (see Appendix 5.15).

Interaction between nature and PIP shows joint effect of nature and PIP upon profit. Here the interaction variable is not significant (p = .356). This implies that PIP has an equal effect upon the nature of unit and dependent variable profit.

[28] (F = 5.829, df (7, 137), p = .000).

[29] (F = 8.065, df (5.139), p = .000).

Table 5.19: Location and type wise share of employee

Nature of unit	Share of employee Mean
RI	30.59
RG	24.45
UI	28.72
UG	28.68
TOTAL	26.87

Share of employee of urban area (28.71) is higher than rural area (26.87). Share of employees is higher in individual units (29.65) than group units (24.90). Share of employee is highest in services (32.21) and lowest in business (23.04). Share of employee of food products, handicraft, and business are lower than their average. Share of employee is highest in RI and lowest in RG. In the urban area share of employee is higher than urban area.

Table 5.20: Location, type and industry wise share of employee

Nature of unit	Share of employee Mean
RINM	32.4
RIM	28.29
RGNM	20.47
RGM	27.05
UINM	32.68
UIM	23.54
UGNM	39.69
UGM	19.88
TOTAL	26.87

Share of employee is higher in UGNM and lower in UGM. Share of employee of RGNM, UIM and UGM are lower than their average. (see Appendix 5.16)

Conclusion

There is significant difference in total profit, monthly profit, and monthly profit per head, total revenue and total cost of the RI, RG, UI and UG units. Regarding source of finance also difference in own fund, subsidy, loan, thrift loan is also significant. This is same in the case of 8 categorizations too. Skill training has an equal effect upon the nature of the unit and dependent variable profit. PIP has an equal effect upon the nature of unit and dependent variable profit. Additional man days generated is the highest in UG and lowest in RG. Man days generated is highest among UINM and lowest in RGM. Additional man days generated is the highest in UGM and lowest in UGNM.

In this context the pertinent question is whether these factors are contributing to women empowerment which is an important theme in the discussion of modern development economics. The ensuing chapter discusses the empowerment in the context of women empowerment through KME in Pathanamthitta district.

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Chapter 6

WOMEN EMPOWERMENT

Contents

The chapter focuses on the third objective of the study. It deals the core dimensions of women empowerment -- economic, social/culture, political / legal. IDRC (2013) identifies economic empowerment in terms of capacity of women to *participate* in, *contribute* to and *benefit* from growth processes in ways that recognise the value of their contribution, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth". This definition coincides with their definition of inclusive growth--growth that ensures economic opportunities for all segments of the population, with a special emphasis on the poor, particularly women and young people who are most likely to be marginalised. DFID identifies increasing people's access to and control over economic resources and opportunities including jobs, financial services, property and other productive assets (from which one can generate an income) skills development and market information as

indicators of economic empowerment. The variables used for assessing economic empowerment are average monthly Income before and after (Sulaiman, 2014, UN Foundation, 2015, Dutta, 2014, Oommen, 2008) average monthly savings (UN Foundation 2015) before and after average yearly asset formation (Malhotra and Schuler, 2003, Schuler and et al., 2010, Biswas and Kabir, 2004) role in economic decision making at household level (Malhotra, 2005, Chen 1997, Alsop and Heinsohn, 2003), skill development (UN Foundation, 2015), and control over earned income (WDR, 2012; Malhotra and Schuler 2003; Chen 1997; Alsop and Heinsohn, 2003)

The study comprises beneficiaries belonging to all the 145 unit. It includes all the beneficiaries of all individual units and beneficiaries of group units who were selected randomly from each unit. For the sake of the study there are four categorisation -- **Industry wise**– manufacturing and non-manufacturing, **Location wise** –rural and urban, **Type wise** — Group and individual **Product wise**-dairy and poultry, food products, garment making handicraft, toiletries and utilities, services and business. Income, savings and asset formation before after joining KME have been examined through the different classifications made: industry wise, location wise, type wise, product wise.

ECONOMIC EMPOWERMENT

6.1 Income

Table 6.1: Average monthly Income before and after joining KME

	N	Minimum	Maximum	Mean (in ₹)	SD
Average monthly Income Before	145	0.0	3000.0	130.000	421.4064
Average monthly Income after	145	200.0	16300.0	3992.062	2708.6775

Source: survey data

Table 6.1 shows the average monthly Income before and after joining KME. The monthly income after joining KME shows an average variation of 2708.68 with Mean of ₹ 3992.062 which implies that the monthly income varies on an average between ₹1283.38 and ₹6700.74.

Table 6.2: Industry wise categorisation of mean income before and after joining KME

	Mean (in ₹) income before joining KME	SD	Mean (in ₹) income after joining KME	SD
Location				
Manufacturing	116.9	353	4057.0	2991.6
Non-Manufacturing	144.9	489.8	3918.5	2367.9
Total	130	421.4	3992.1	2708.7

Source: survey data

Table 6.2 implies that mean income before joining KME is higher among non- manufacturing group, and mean income after joining KME is highest among manufacturing units. Mean income of manufacturing unit is higher than average income. Here it can be inferred that manufacturing units have a better position in generating income. It may be because of the skill development programmes provided by the Kudumbashree.

Table 6.3: Location wise mean income before and after joining KME

Location	Mean (in ₹) income before joining KME	Standard deviation	Mean (in ₹) income after joining KME	SD
rural	64.2	239.9	3582.6	2291.2
urban	309	684.8	5105	3399.9
Total	130	421.4	3992.1	2708.7

Source: survey data

Table 6.3 shows the location wise mean (in ₹) income before and after joining KME of 145 units. Mean (in ₹) income before and after joining KME is high in urban area than rural area .Location wise monthly profit per head is also high in urban area. It may be because of the reason that the maydays generated is high in urban area than rural area. Increase in average income is higher in rural area than urban area. It can be attributed to higher educational qualification and employment opportunities in urban area than rural area. The gap between mean (in ₹) income before and after joining KME between rural and urban area has narrowed down. This shows the extent to which Kudumbashree has succeeded in creating income generating activities among rural women.

Table 6.4: Type wise mean income before and after joining KME

Type	Mean (in ₹) income before joining KME	SD	Mean (in₹) income after joining KME	SD
Individual	192.5	570.3	4541.3	2900.2
Group	85.9	266.9	3604.4	2510.4
Total	130	421.4	3992.1	2708.7

Source: Primary data

Table 6.4 shows type wise mean (in ₹) income before and after joining KME. Mean (in ₹) income after joining KME is high in individual units than group units

Table 6.5: Type wise categorisation of mean income before and after joining KME in Manufacturing and non-manufacturing

Industry	Mean (in ₹) income before joining KME				Mean (in ₹) income after joining KME			
	Group		Individual		Group		individual	
	Mean (in ₹)	Standard Deviation	Mean (in ₹)	Standard Deviation	Mean (in ₹)	Standard Deviation	Mean (in ₹)	Standard Deviation
Manufacturing	117.6	310.3	115.4	431.5	3797.6	2927.6	4565.7	3107.7
Non-Manufacturing	38.2	177.6	251.5	657.4	3314.5	1706.3	4522.5	2778.7

Source: survey data

Table 6.5 shows type wise categorisation of Mean (in ₹) income before and after joining KME in Manufacturing and non-manufacturing. Mean (in ₹) income of group units before and after joining KME is highest among manufacturing than non-manufacturing units. Mean (in ₹)

income of individual units before is higher in non- manufacturing and after joining KME is higher in manufacturing than non-manufacturing units

Table 6.6 Type wise categorisation of mean income before and after joining KME in rural and urban area.

location	Mean (in ₹) income before joining KME				Mean (in ₹) income after joining KME			
	Group		Individual		Group		individual	
	Mean (in ₹)	Standard Deviation	Mean (in ₹)	Standard Deviation	Mean (in ₹)	Standard Deviation	Mean (in ₹)	Standard Deviation
rural	76.3	259.2	33.3	182.6	3632.8	2562.5	3455.4	1414.7
urban	166.7	331.7	351.7	758.9	3364.4	2131.3	5627.1	3559.7

Source: survey data

Table 6.6 shows the mean (in ₹) income before and after being a member of KME in rural and urban area. Mean (in ₹) income before joining KME is higher in urban area than in rural area in the case of both group and individual units .Situations have changed after joining KME Mean (in ₹) income among group units is higher among the rural area than urban area. But in the case of individual units mean (in ₹) income is higher in urban area than rural area. Here we can infer that group units are more successful in rural area and individual units are more successful in urban area

Table 6.7: Product wise categorisation of mean income before and after joining KME

PRODUCT	Mean (in ₹) income before joining KME	SD	Mean (in ₹) income after joining KME	SD
Dairy and Poultry	41.667	204.1	3552.4	1636.3
Food Products	136	365	4992.4	4078.2
Garment making	129.6	424.1	3987.7	1707
Handicraft, toiletries and utilities	84	254.4	3196.4	2619.7
Services	352.5	816.8	5682.1	3049.1
Business	75	228.9	2815	1364.2
Total	130	421.4	3992.1	2708.7

Source: survey data

Among the five categories mean (in ₹) income before joining KME is highest in services and lowest in diary &poultry. Mean (in ₹) income after joining KME is high in services and low in business units (Table 6.7).

6.2 Savings

Table 6.8: Average monthly savings before and after joining KME

	N	Minimum	Maximum	Mean (in ₹)	SD
Average Monthly Savings Before	145	0.0	800.0	12.414	85.7020
Average Monthly Savings after	145	0.0	6000.0	638.621	933.2817

Source: survey data

Mean (in ₹) monthly savings after joining KME is 51.44 times higher than savings before joining KME (Table 6.8).

Table 6.9: Industry wise categorisation of mean savings before and after joining KME

Industry	Mean (in ₹) savings before joining KME	SD	Mean (in ₹) savings after joining KME	SD
Non-Manufacturing	11.8	76.4	563.5	798.5
Manufacturing	13	93.7	704.9	1038.6
Total	12.4	85.7	638.6	933.3

Source: survey data

Mean (in ₹) savings before and after joining KME is high in manufacturing than non –manufacturing. SD is also high in manufacturing units (Table 6.9).

Table 6.10: Location wise mean savings before and after joining KME

Location	Mean (in ₹) savings before joining KME	SD	Mean (in ₹) savings after joining KME	SD
rural	9.4	79.9	473.4	696.5
urban	20.5	100.5	1087.7	1295.1
total	12.4	85.7	638.6	933.3

Source: survey data

Table 6.10 depicts location wise mean (in ₹) savings before and after joining KME It is 2.29 times higher in urban area (after joining KME) than rural area. SD is also high in urban area.

Table 6.11: Type wise mean savings before and after joining KME

Type	Mean (in ₹) savings before joining KME	Standard deviation	Mean (in ₹) savings after joining KME	Standard deviation
Individual	10	77.5	831.2	1131.1
Group	14.1	91.5	502.7	741.2
Total	12.4	85.7	638.6	933.3

Source: survey data

Mean (in ₹) savings after joining KME is higher in individual units than group units (table 6.11)

Table 6.12: Type wise categorisation of mean savings before and after joining KME in Manufacturing and non-manufacturing

Industry	Mean (in ₹) savings before joining KME				Mean (in ₹) savings after joining KME			
	Group		Individual		Group		Individual	
	Mean (in ₹)	SD	Mean (in ₹)	SD	Mean (in ₹)	SD	Mean (in ₹)	SD
Manufacturing	19.6	114.9	0.0	0.0	584.3	889.5	941.5	1268.6
Non-Manufacturing	5.9	34.3	17.6	102.9	380.3	417.0	746.8	1025.4

Source: survey data

Type wise categorisation of Mean (in ₹) savings before and after joining KME in Manufacturing and non-manufacturing shows that Mean (in ₹) savings after joining KME is higher in individual units than group units in both manufacturing and non –manufacturing (Table 6.12).

Table 6.13: Type wise categorisation of mean savings before and after joining KME in rural and urban area

Location	Mean(in ₹) savings before joining KME				Mean(in ₹) savings after joining KME			
	Group		Individual		Group		individual	
	Mean (in ₹)	SSD	Mean (in ₹)	SD	Mean (in ₹)	SD	Mean (in ₹)	SD
rural	13.2	94.3	0.0	0.0	482.0	751.2	451.7	544.2
urban	22.2	66.7	20.0	109.5	677.8	662.4	1210.7	1417.4

Source: Primary data

Mean (in ₹) savings before joining KME is higher in urban area than in rural area in the case of both group and individual units. A notable fact is that after joining KME Mean (in ₹) savings of both rural and urban have increased. In rural area savings of group units are higher than individual units and in urban area Mean (in ₹) savings of individual units are higher than group units (Table 6.13).

Table 6.14: Product – wise categorisation of mean savings before and after joining KME

Product	Mean (in ₹) savings before joining KME	SD	Mean (in ₹) savings after joining KME	SD
Dairy and Poultry	0.0	0	470	559.3
Food Products	32	160	1033.2	1525
Garment making	7.4	38.5	622.2	650.5
Handicraft, toiletries and utilities	0	0	466	672.9
Services	30	134.2	972.5	1205
Business	8.3	40	315.4	355.4
Total	12.4	85.724244	638.6	933.3

Source: survey data

Mean (in ₹) savings after joining KME is high in food products and low in business (table 6.14).

6.3 Average Yearly Asset Formation

Table 6.15: Mean asset formation before and after joining KME

	N	Minimum	Maximum	Mean (in ₹)	SD
Mean(in ₹) asset formation Before	142	0.0	2750.0	31.338	245.7157
Mean(in ₹) asset formation after	145	0	83000	6736.89	13658.87

Source: survey data

Mean (in ₹) asset formation before joining KME was 31.338 but after joining KME it has increased to 6736.87 (Table 6.14).

Table 6.16: Industry wise categorisation of asset formation before and after joining KME

Industry	Mean (in ₹) asset formation before joining KME	SD	Mean (in ₹) asset formation after joining KME	SD
Non-Manufacturing	53.7	341.6	5686	10783.1
Manufacturing	10.4	91.2	7664.9	15783.7
Total	30.7	243.2	6736.9	13658.9

Source: survey data

Mean (in ₹) asset formation before joining KME is high in non-manufacturing than manufacturing and mean (in ₹) asset formation after joining KME is high in manufacturing than non-manufacturing (Table 6.16).

Table 6.17: Location wise mean (in ₹) asset formation before and after joining KME

Location	Mean (in ₹) asset formation before joining KME	SD	Mean (in ₹) asset formation after joining KME	SD
rural	25.9	267.1	5294.8	11606.9
urban	43.6	163.5	10656.4	17696.4
total	30.7	243.2	6736.9	13658.9

Source: survey data

Mean (in ₹) asset formation after joining KME is higher in urban area (higher than total Mean (in ₹) asset formation) than rural area . SD is also higher in urban area (Table 6.17).

Table 6.18: Type wise mean asset formation before and after joining KME

Type	Mean (in ₹) asset formation before joining KME	Standard deviation	Mean (in ₹) asset formation after joining KME	SD
Individual	15	86	8706.7	14934.6
Group	41.8	309.7	5346.5	12587.2
Total	30.7	243.2	6736.9	13658.9

Source: survey data

Mean (in ₹) asset formation after joining KME is higher in individual units than group units (Table 6.18)

Table 6.19: Type wise categorisation of asset formation before and after joining KME in Manufacturing and non-manufacturing

Industry	Mean(in ₹) asset formation before joining KME				Mean(in ₹) asset formation after joining KME			
	Group		Individual		Group		individual	
	Mean (in ₹)	SD	Mean (in ₹)	SD	Mean (in ₹)	SD	Mean (in ₹)	SD
Manufacturing	16.0	113.1	0.0	0.0	6596.1	15543.9	10152.0	16559.4
Non-Manufacturing	80.9	471.6	26.5	113.6	3472.1	5584.1	7900.0	13956.8

Source: survey data

Mean (in ₹) asset formation of individual units are higher than group units in both manufacturing and non-manufacturing (Table 6.19).

Table 6.20: Type wise categorisation of asset formation before and after joining KME in rural and urban area

Location	Mean(in ₹) asset formation before joining KME				Mean(in ₹) asset formation after joining KME			
	Group		Individual		Group		individual	
	Mean (in ₹)	SD	Mean (in ₹)	SD	Mean (in ₹)	SD	Mean (in ₹)	SD
rural	36.7	317.5	0.0	0.0	5807.2	13222.6	4134.5	5812.0
urban	88.9	266.7	30.0	120.8	1455.6	2336.2	13416.7	19356.9

Source: survey data

Mean (in ₹) assets before joining KME is higher in urban area than in rural area in the case of both group and individual units. A notable fact

is that after joining KME mean (in ₹) assets of both rural and urban have increased. In rural area assets of group units are higher than individual units and in urban area mean (in ₹) assets of individual units are higher than group units (Table 6.20).

Table 6.21: Product – wise categorisation of mean asset formation before and after joining KME

Product	Mean (in ₹) asset formation before joining KME	SD	Mean (in ₹) asset formation after joining KME	SD
Dairy & Poultry	0.0	0.0	4725	6483.2
Food Products	0.0	0.0	14784	23654.5
Garment making	29.6	154	4029	6616.8
Handicraft, toiletries& utilities	0.0	0.0	4472	10181
Services	45	146.8	10020	17291.3
Business	114.6	561.3	3035.4	5006.4
Total	30.7	243.2	6736.9	13658.9

Source: survey data

Mean (in ₹) asset formation after joining KME is high in food products and low in business (Table 6.21).

6.4 Empowerment Index

In the present study 3 dimensions of empowerment have been identified. On the basis of these dimensions, an empowerment Index has been developed. It has been prepared in the framework of Human Development Index 2013 developed by UNDP (details regarding empowerment index calculation is given in Appendix 6.1). Each dimension is composed of different variables.

Economic dimension has three variables which are measured on 3 point scale -- role in decision making, skill development and control over earned income. Social dimension has 10 variables which are measured on 3 point scale,-communication skills, self-confidence, mobility, participation in socio-cultural activities, improvement in participation in seminars, competitions, discussions etc, co-operation with other members, change in the attitude of own children towards you, consciousness of freedom, improvement in position in society after becoming a member of Kudumbashree, ability to contribute to the development of your society.

Political dimension has seven variables- which are measured on 3 point scale- participation in grama/ward sabha, awareness about develop projects in the panchayat, participation in political activities, awareness about the group bylaws, awareness about the need for women empowerment, awareness about the right of women, awareness about gender discrimination.

Table 6.22: Industry wise Women Empowerment Index

Industry	**Dimensions**	**Dimensional Index**	**Combined Empowerment Index**	**Level of empowerment**
Non - manufacturing	Emp. Economic	0.591		
	Emp. Social	0.688		
	Emp. Political	0.713		
	Total Empowerment		0.662	medium
Manufacturing	Emp. Economic	0.643		
	Emp. Social	0.795		
	Emp. Political	0.772		
	Total Empowerment		0.733	High

Sources: Survey data

Table 6.22 shows the Industry wise empowerment index. In both non-manufacturing and manufacturing units minimum and maximum value lies between 4 and 30. In both cases sum, Mean (in ₹) and SD is high in social empowerment and low in economic empowerment. In both cases average minimum is high in political empowerment and low in social empowerment. Average maximum is same in all empowerment except economic empowerment of non-manufacturing units. Average score is high in social empowerment and low in economic empowerment in both cases. Average index of non-manufacturing is high in political empowerment (2.426) and low in economic empowerment (2.181). In the case of manufacturing it is high in social empowerment (2.590) and low in economic empowerment (2.286). In non-manufacturing Dimensional index with sample min/max is high in social empowerment. Empowerment Index with sample min/max is high in manufacturing than non-manufacturing. In the case of non-manufacturing units dimensional index is high in political empowerment and low in economic empowerment. In the case of manufacturing units dimensional index is high in social empowerment and low in the case of economic empowerment (0.643). Combined empowerment Index is high in manufacturing units (empowerment index –high) than non-manufacturing (empowerment index –medium). (Details are given in Appendix 6.2)

Table 6.23: Location- wise Women Empowerment Index

Location	Dimensions	Dimensional Index	Combined Empowerment Index	Level of empowerment
Rural	Emp. Economic	0.597		
	Emp. Social	0.738		
	Emp. Political	0.753		
	Total Empowerment		0.692	Medium
Urban	Emp. Economic	0.675		
	Emp. Social	0.763		
	Emp. Political	0.722		
	Total Empowerment		0.719	High

Source: Survey data

Table 6.23 shows the location wise empowerment index. In the rural area maximum and minimum value falls between 4 and 30 and in the case of urban area it falls between 5 to 30. In the case of both rural and urban area sum and Mean (in ₹) and SD is highest in the social empowerment and lowest in economic empowerment. In the case of rural area average minimum is the highest in the case of Political empowerment. In the case of urban area it is high economic empowerment. When comparing rural with urban, average minimum of economic empowerment is higher in urban area than rural area, social and political are the same. Regarding average maximum in rural area economic empowerment is the lowest. Social and political empowerment has equal values. In urban area all have equal values.

Average score is the sum/no of units. In both rural and urban area the average score is the highest in the social empowerment. When compared with rural area, urban area has higher average score in social and political empowerment. Economic and social empowerment is higher in urban area than rural area. Dimensional index of Political empowerment stands highest in rural area while social empowerment stands the highest in urban area dimensional index of economic empowerment is low in rural area. Combined empowerment index is higher in urban area (high) than rural area (medium). (Details are given in Appendix 6.3)

Table 6.24: Type wise Women Empowerment Index

Type	**Dimensions**	**Dimensional Index**	**Combined Empowerment Index**	**Level of empowerment**
Individual	Emp. Economic	0.62		
	Emp. Social	0.724		
	Emp. Political	0.721		
	Total Empowerment		0.688	Medium
Group	Emp. Economic	0.616		
	Emp. Social	0.759		
	Emp. Political	0.761		
	Total Empowerment		0.708	High

Source: primary data

Table 6.24 shows the type wise empowerment index. In both group and Individual units minimum and maximum value falls between 4 and 30. In both cases sum, Mean (in ₹) and SD is highest in social empowerment and low in the case of economic empowerment. Average minimum is high in the case of political empowerment and low in the case of social empowerment in group and individual units. Average maximum is low in the case of economic empowerment of Individual units. Average score of social empowerment is highest and economic empowerment is lowest in both individual and group units. Average index is high for social empowerment in both cases and low for economic empowerment. Dimensional index with sample min/max is the highest for social empowerment in both cases and in the case of individual it is the lowest with regard to political empowerment and in group units, it is the lowest in the case of economic empowerment. Empowerment index with sample min/max is highest for individual units than group units. Dimensional index is high in social empowerment and low in economic empowerment in both cases. Dimensional index of political empowerment is comparatively higher in urban area than rural area. Combined empowerment Index is higher in group units than individual units. Group units acquired high level of empowerment (0.708) and individual units acquired medium level of empowerment (0.688). (Details are given in Appendix 6.4)

Table 6.25: Product- wise Women Empowerment Index

Product	Dimensions	Dimensional Index	Combined Empowerment Index	Level of empowerment
Diary & Poultry	Emp Economic	0.590		
	Emp. Social	0.652		
	Emp. Political	.676		
	Total Empowerment		0.638	medium
Food products	Emp. Economic	0.633		
	Emp. Social	0.834		
	Emp political	0.806		
	Total Empowerment		0.752	high
Garment	Emp Economic	0.654		
	Emp. Social	0.750		
	Emp. Political	0.733		
	Total Empowerment		0.711	high
Handicraft Toiletries Utilities	Emp. Economic	0.640		
	Emp. Social	0.804		
	Emp political	0.780		
	Total Empowerment		0.738	high
Services	Emp Economic	0.600		
	Emp. Social	0.700		
	Emp. Political	0.754		
	Total Empowerment		0.681	medium
Business	Emp. Economic	0.583		
	Emp. Social	0.715		
	Emp political	0.717		
	Total Empowerment		0.669	medium

Source: survey data

Table 6.25 depicts product wise women empowerment index. Minimum and maximum value of all the six units falls in between 4 and 30. Average score is high for social empowerment and low for economic empowerment in all units. Average index is high for political empowerment except for garment and handicraft. Average index is low for economic empowerment in all units. Dimensional Index with sample minimum / maximum is high for social empowerment in all units except dairy and poultry and food products. In the case of dairy and poultry it is high in economic empowerment. It is low for economic empowerment in the case of garment, handicrafts, services and business and political empowerment is low for dairy, food products, and business. Empowerment Index with sample min/max is high for garment making and low for dairy and handicraft. Dimensional index is high in social empowerment in the case of food products, garment making, and handicraft and in the case of dairy, services and business it is high in political empowerment too. Combined empowerment index is high for food products (0.752), garment making, handicraft utilities and toiletries and low for dairy and poultry, services and business (Details are given in Appendix 6.5).

Table 6.26: Combined Empowerment Index

Location	**Dimensions**	**Dimensional Index**	**Combined Empowerment Index**	**Level of empowerment**
Rural	Emp. Economic		0.618	
	Emp. Social		0.745	
	Emp. Political		0.744	
	Total Empowerment			**0.700**

Source: survey data

Regarding Economic empowerment beneficiaries of KME have achieved medium empowerment index (0.618). In social empowerment-beneficiaries of KME have achieved high empowerment index (0.745). In the case of political empowerment beneficiaries of KME have achieved high empowerment index (0.744). Regarding combined empowerment index beneficiaries of KME have achieved high empowerment index (0.700). From this it can be inferred that though KME has achieved overall high level of empowerment, economic empowerment is medium (Table 6.26)

Empowerment Index

Combined empowerment index is higher in manufacturing units (high) than non-manufacturing units (medium). Combined empowerment index is higher in urban area (high) than rural area (medium). Combined empowerment index is higher in group units (high) than individual units (medium). Combined empowerment index is high for food products (0.752), garment making, handicraft utilities and toiletries and low for dairy and poultry, services and business

To conclude marked change is visible in income, savings and asset formation after joining KME. The Combined Empowerment Index shows that economic empowerment is relatively low compared to social and political empowerment.

Chapter 7

SUMMARY AND CONCLUSION

Contents

7.1 Back ground and focus of the study

Economic performance evaluation is an important area in the field of development. The development of enterprise significantly influences the earnings of persons engaged in it, thereby empowering them. Many studies done in different contexts substantiate this. In the light of this understanding the present study is carried out to assess the economic performance of Kudumbashree Microenterprises. A comparative evaluation of enterprises across different categories is done. The level of women empowerment achieved across various categories of enterprises has been examined.

7.2 Major findings

7.2.1 Economic performance

In respect of total revenue following are the major findings

- **Industry wise** performance shows that though manufacturing units earn high total revenue than non – manufacturing, the difference is not significant.

- **Location wise** performance shows that total revenue of units operating in rural area is higher than that of units in urban area.
- **Type wise** performance shows that total revenue of group units are higher than Individual units. The difference is statistically significant.
- **Product wise** performance shows food products earn the highest total revenue and dairy and poultry units earn the lowest total revenue.

The following are the major findings with regard to total cost:-

- Industry wise performance shows that manufacturing units incur higher total revenue than non – manufacturing, the difference is not significant **.**Cost disaggregation shows that cost incurred is the highest in raw material and in inventory. It is same in the case of manufacturing and non-manufacturing units. Difference in cost on *plant and machinery* and *other equipment* is significant at 1percent level. Cost on *inventory* and *cost on wages* is significant at five percent level. In the case of thrift loan only non-manufacturing units are avail higher thrift loan than manufacturing units and it is statistically significant at one percent level.
- **Location wise** performance shows that total cost of units operating in rural area is higher than that of units in urban area. Disaggregation of location wise total cost shows that cost except on raw material and marketing and distribution is higher

in urban area than rural area. Difference in annual expenditure on land and building, raw material is significant at five percent level. Difference in loan payment between groups is also significant. . Except thrift loan own fund, subsidy and loan are higher in urban area units than in rural area units, but the difference is statistically significant in subsidy and thrift loan only.

- **Type wise** performance shows that total cost of group units is higher than Individual units. The difference is statistically significant. Type wise categorization of total cost shows that in the case of group units expenditure on raw material procurement is higher than expenditure on all other items. Regarding Individual units they incur high expenditure on marketing and distribution, Expenditure on inventory is comparatively lower in both individual and group units. All cost except cost on plant and machinery is higher in group units. The difference is statistically significant in the case of cost on other equipment, and cost on raw materials only. In the case of cost on marketing and distribution, the difference between groups is significant. The own fund and thrift loan of individual units are higher than that of group units. The difference is statistically significant in thrift loan. The subsidy and loan of group units are higher than that of individual units, the difference in both case is statistically significant at one percent level.

- **Product wise** performance shows food products incur higher total cost than others and dairy and poultry units incur lower cost. The product wise cost disaggregation -- in the case of Land and building the highest cost is incurred by services and the lowest cost by the diary units. In the case of plant and machinery the highest cost is incurred by services and the lowest cost by business. In the case of other equipment Business incurs the highest cost and dairy and poultry incur the lowest cost. For Inventory handicrafts incur high cost and dairy has no cost on this account. For raw material, business incurs the highest cost and services incur the lowest cost. In the case of marketing, services incur the highest cost and dairy and poultry incur the lowest cost. In the case of wages, food products incur the highest cost and dairy and poultry incur the lowest cost. In case of loan repayment services incur the highest cost and business incurs the lowest cost. Own fund is the highest in food products and the lowest in business. Subsidy received is higher in handicraft, toiletries and utilities. The units which availed the highest loans are food products and the lowest are dairy and poultry. Regarding thrift loan dairy and poultry has taken the highest amount and food products the lowest amount. Total capital is the highest for services and the lowest for food products.

Finding related to total profit are following

- **Industry wise performance shows** manufacturing units incur high profit, monthly profit and monthly profit per head, than non-manufacturing, the difference is not statistically significant.
- **Location wise** performance shows that total profit and monthly profit of units operating in rural area is higher than that of units in urban area. Monthly profit per head is higher in Urban area. The difference is significant in monthly profit and monthly profit per head.
- **Type wise** performance shows total profit and monthly profit of group units are higher than Individual units. The difference is statistically significant. Monthly profit per head is higher in individual units than group units. The difference is statistically significant at five percent level.
- **Product wise** performance shows food products incur higher profit and monthly profit than others. Dairy and poultry units incur lower profit, monthly profit.

Following are the findings regarding employment generation:-

- **Industry wise** man days generated is higher in non-manufacturing and additional man days generated is higher in manufacturing. The difference is significant only in the case of man days generated.
- **Location wise** employment generation shows man days generated and additional man days generated are higher in

urban area than in rural area. The difference in man days generated is significant at 10 percent level.

- **Type wise** man day's generated and additional man days generated is higher in individual units than group units. Difference in man days generated is significant.

Following are the findings regarding training programmes:-

- **Industry wise** influence of training programmes show that periodical skill development programmes have an equal effect upon the industry and the dependent variable TC and Periodical skill development programme has an equal effect upon industry and dependent variable TR.
- Location wise influence of training programmes shows that periodical skill development programme has equal effect upon the location and the dependent variable TC. Periodical skill development programme has equal effect upon the location and the dependent variable TR.
- **Type wise influence of training programmes shows that** PIP has an equal effect upon type of the unit and dependent variable total cost. Skill development programme has an equal effect upon type of the unit and dependent variable total cost. Periodical skill development programme has an equal effect upon type of the unit and dependent variable total cost. Periodical skill development programme has an equal effect upon the type and the dependent variable TR.

Following are the findings regarding Experience:-

- The total revenue and monthly profit, total cost of units having 6-10 years' experience is higher than that of all other units. Difference in monthly profit is significant. There is strong association between experience and location (Pearson chi-square p value .003). Own fund and subsidy, is higher among units having 6-10 years' experience in Kudumbashree while loan and thrift loan, is higher among units having 11 and above years' experience. Interaction between periodical skill development programme training and experience upon TC is weakly significant at 10 percent level.

7.2.2 Comparative evaluation of microenterprises across various categories such as rural and urban, group and individual, manufacturing and non-manufacturing

- Classification on the basis of type and location. -- Rural individual (RI), rural group (RG), urban individual (UI), and urban group (UG).

- Classification on the basis of location, type and industry--- Rural Individual non- manufacturing (RINM) Rural individual manufacturing (RIM), Rural group non-manufacturing (RGNM), Urban Individual non-manufacturing (UINM), Urban Individual manufacturing (UIM) Urban Individual manufacturing (UIM), Urban group non-manufacturing (UGNM), Urban group manufacturing (UGM).

Following are the findings relating to total revenue:-

- Difference in total revenue is significant between RI and RG, RI and UG, RG and UI, UI and UG.
- The differences in total revenue between RINM, and RGNM, RINM and RGM, RINM & UGM, RIM and RGM, RIM & RGM, RIM and UGM, RGNM and RIM, RINM and KGM, RGM & UIM and UGM and UIM are significant.

Following are the findings relating to total cost:-

- The difference in the total cost is significant between RI and RG, RI and UG, RG and UI, UI and UG. Cost disaggregation has also been done. The study finds that the difference in total capital between RI and RG, RI and UI,RI and UG,UI and UG are significant
- The study found that the difference in subsidy between the following groups. RI and KG, RI and UG, UG and RG, UI and KI, UI and UG and difference in availing loan is significant between RI and RG,RI and UI,RI and UG according to the Hochberg statistics for unequal group variance at one percent level significance level. Difference in thrift loan is significant between RI and RG,RI and UG,RI and UG
- Regarding the 8 groups cost difference is significant between RINM and RGNM, RINM, RGM, RINM, UGNM and RINM and UGM. RIM & RGNM and RGM, RIM & UGM, RGNM and RINM and RIM, RGM and UIM, RGM and RIM, UGM and UIM.

In respect of total profit following are the findings:-

- Profit difference is significant between RI and RG, RI and UG, RG and UI according to Hochberg statistics for unequal group variance and is significant at 5% level.
- The profit variation between, RINM and KGNM, RINM and RGM, RIM and RGNM, RIM and RGM, RGNM and RINM, RGNM and RIM, RGNM & UINM, RGM and UINM units according to the Hochberg statistics for unequal group variance is significant at 1% level except RGNM and UINM and RGM and UINM (it is significant at 5% level).
- The study finds that monthly profit difference is significant between RI and RG, RI and UG, RG and UI.
- The study results show that the monthly profit variation between RINM and RGNM, RINM and RGM, RIM and RGNM, RIM and RGM, RGNM and RIM, RGM and UINM, UINM and RGNM are significant at 5% level. Out of them RINM and RGNM, RINM and RGM, RIM and RGNM, RIM and RGM, RGNM and RINM, RGNM and RIM are significant at 1% level according to the Hochberg statistics for unequal group variance.
- Monthly profit per head between RI and UI, RG and UI, UI and RI are significant
- Monthly profit per head variation between RINM and UINM, RGNM and UINM are significant at 10% level.

With regard to employment generation following are the findings:-

- Total man days generated is the highest in UI and the lowest in RG. Additional man days generated is the highest in UG and the lowest in RG.
- Man days generated is the highest among UINM and the lowest in RGM. Additional man days generated is the highest in UGM and the lowest in UGNM

Following are the findings regarding training programmes

- Periodical skill development programme has an equal effect upon the industry and the dependent variable TC
- Skill training has an equal effect upon the nature of the unit and dependent variable profit.
- PIP has an equal effect upon the nature of unit and dependent variable profit.

7.2.3 Major Findings Regarding Women Empowerment

Marked change is visible in the income, savings, and asset formation after joining KME

Industry wise women empowerment analysis reveals the following findings:-

- In the case of non-manufacturing units dimensional index is the highest in political empowerment (0.713) and the lowest in economic empowerment (0.591).

- In the case of manufacturing units dimensional index is the highest in social empowerment (0.795) and the lowest in the case of economic empowerment (0.643).
- Empowerment Index is higher in manufacturing units (0.733, high) than non-manufacturing units (0.662,medium).

Location wise women empowerment analysis reveals the following findings:-

- Regarding rural units dimensional index is the highest in political empowerment (0.753) and the lowest in economic empowerment (0.597).
- In the case of urban units dimensional index of social empowerment (0.763) is the highest and the lowest in economic empowerment (0.675).
- Empowerment Index is the higher in urban units (0.719, high) than rural units. (0.692,medium).

Type wise women empowerment analysis reveals the following findings:-

- Regarding individual units dimensional index is the highest in social empowerment (0.724) and the lowest in economic empowerment (0.62).
- In the case of group units dimensional index of political empowerment (0.761) is the highest and the lowest in economic empowerment (0.616).
- Empowerment Index is higher in Group units (high) than in individual units (low).

Product wise women empowerment analysis reveals the following findings

- Dimensional Index of social empowerment is high in the case of food products (0.834), garment making (0.750), and handicraft (0.804). In the case of diary (0.676), services (0.754) and business (0.717) dimensional index is high in political empowerment.
- Empowerment index is the highest for food products (0.752) and the lowest for dairy and poultry.

Findings on overall empowerment

- Regarding Economic empowerment beneficiaries of KME have achieved medium empowerment index (0.618).
- Regarding Social empowerment-beneficiaries of KME have achieved high empowerment index (0.745).
- Regarding Political empowerment beneficiaries of KME have achieved high empowerment index (0.744).
- Overall empowerment index is (0.700) beneficiaries of KME have achieved high empowerment index.

7.3 Suggestions and policy implications

- The findings point to the fact that intensive measures need to be taken to better the economic performance of microenterprises. The following steps can be taken.
- Provide subsidy along with loans; reduce interest rates on loans; implement uniform interest rates. Loans should be customer friendly.

- District missions can take initiatives in providing raw material at low cost and identify more outlets for finished products; brand names to be given to all products.
- Provide training in effective cost management, advanced methods and techniques of production, proper accounting. Interim and follow up training should be given to improve performance.
- Though the overall women empowerment index is high, social and political empowerment index is higher than the economic empowerment index .This falls in line with the Kerala Model of Development. So Kudumbashree should take effective measures to boost economic empowerment.

Conclusion

The findings show that in the industry wise classification no difference exists between manufacturing and non-manufacturing units. It may be because of the reason that manufacturing units comprise petty units which require low capital, low technology and low skill. On the other hand location wise and type wise difference is significant. Training programmes are not much effective in improving the performance. Regarding the empowerment aspect Kudumbashree has achieved overall high level empowerment. Economic empowerment is relatively low. The higher level of social and political empowerment is encouraging. The importance lies in the fact that women have acquired the capability to carry out their own initiatives to change and improve their situation. Women below poverty line have exercised their choice of a livelihood,

used that choice supported by Kudumbashree and succeeded in translating their entrepreneurial skills into wellbeing outcomes for themselves, their families and society at large. The synergy generated through collective agency of women has tended to develop transformative thinking regarding gender based constraints, and helped them move towards giving scope to a full range of women's abilities and potential.

This study on KMEs in Pathanamthitta has shown that engagement in economically productive activities through Kudumbashree Microenterprise has helped women gain economic and social status along with political empowerment. There is ample scope for replicating the performance of Pathanamthitta Microenterprises in other districts. But there is the need to address the limitations or problems faced by women in KMEs before that. Another aspect to be considered and examined seriously is the sustainability of the existing economic performance. Along with sustaining the economic performance, there should be efforts for scaling up these enterprises further. In a state like Kerala where women constitute more than 50 percent of population and present a low work participation rate, every step to bring women work force into the labour market will be a beneficial not only for women but also for the State economy.

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Appendices

Appendix 1.1

Industry wise classification of units as per NIC 2008

Manufacturing	Code
1. Toiletaries(soap, lotion, washing powder etc)	Division 20, Group 202 ,class- 2023 Sub divisions— soap -231, lotion-232,washing powder-233,Toiletaries -237
2.Utilities (candle, umbrella., agarbatti, bag etc)	Division 32,Group 329, class- 3290 Sub divisions— Umbrella-903., agarbatti, bag—909
3. Food products (pickles, bakery, curry powder, honey extraction, nutrimixetc)	Division , Group 103, class- 1030 Sub divisions— pickles, curry powder-10306, bakery honey extraction, nutrimixetc--10306
4. paper products (Carry bag, book binding etc)	Division 17 , Group 170, class- 1709 Sub divisions—paper products-1709, Carry bag, book binding --17024
5. Cloth products (readymade garments, tailoring etc)	Division 14 , Group 141, class-1410 Sub divisions—readymade garments-14101, tailoring etc-14105
6. Handicraft (ornament making, arunmulakannadyetc)	Handicraft--(Division 32, Group 32, class-3220 Sub divisions— ornament making----Division 32 , Group 322, class-3220 Sub division-32120

Source: National Industrial Classification, 2008

Non- Manufacturing	
1.Animal husbandry	Division-01, Group -014
1.1 poultry farming (breeding , egg production)	Division 01, Group 014, class- 0144 Sub divisions-01461, 041462
1.2 cow rearing (breeding, milk production)	Division 01 , Group-014, class-0141 Sub divisions- 01411, 01412
1.3 goat rearing (breeding, milk production)	Division 01, Group 014, class- 0144 Sub divisions-01441, 01442
2. services	Division 56, Group 562, class- 5621 Sub divisions-
2.1 catering, (catering restaurant, fast food)	Division 56, Group 562, class-5621 Sub divisions- catering- 56210 restaurant -56101, fast food-56102
2.2 auto	Division 77, Group 771, class- 7710 Sub divisions-77100
2.3 IT (printing, service activities related to printing,data processing)	Division 63,18, Group- 631,181, class- 6311,1811,1812 Sub divisions-63114,18112

Source: National Industrial Classification, 2008

Appendix 4.1

Multiple comparison of product wise total revenue

Dependent variable		Units		Mean difference	Std Error	P	95% confidence interval	
							Lower bound	Upper bound
TR	Hochberg	1	2	-225001.3433	71813.97230	0.031	-438739.0587	-11263.6279

Source: Computed from survey data

Appendix 4.2

Industry wise total cost disaggregation-robust test of equality of means

	Robust test of equality of mean				
Dependent variable	**Welch**	**Statistics**	**df1**	**df2**	**Sig**
Plant and machinery		4.136	1	95.24	.045
Other equipment		4.852	1	91.97	.030
Wages		4.097	1	84.161	.046

Source: Computed from survey data

Appendix 4.3

ANOVA for industry wise thrift loan

	Robust test of equality of mean				
Dependent variable	Welch	**Statistics**	**df1**	**df2**	**Sig**
Thrift Loan		3.085	2	74.28	.052

Source: Computed from survey data

Appendix 4.4

Robust test of equality of means for location wise cost disaggregation

		Statistics	df1	df2	Sig
Annual expenditure on land and building	Welch	3.874	1	43.82	.055
Annual expenditure on plant and machinery	Welch	9.302	1	48.579	.004
Annual expenditure on raw material	Welch	26.948	1	98.971	.000

Source: Computed from survey data

Appendix 4.5

ANOVA for type wise annual expenditure on marketing and distribution

Monthly profit per head		Sum of squares	df1	F	Sig
	Between groups	22800504607.216	1	14.903	.000
	Within groups	218779546034.412	143		
	Total	241580050641.628	144		

Source: Computed from survey data

Appendix 4.6

Multiple comparisons of product wise TC

Dependent variable		Mean difference			Std Error	Sig	95 percent confidence interval	
							Lower bound	Upper bound
TC	Hochberg	1	2	-138627.10333	38889.02330	.007	-254371.30	-22882.9
		2	3	128155.40889	37770.64546	.013	15739.7993	240571.018

Source: Computed from survey data

Appendix 4.7

Test of homogeneity of variance of Product wise cost disaggregation

Variable	Levene statistics	df1	df2	Sig
Land and building	7.981	5	139	.000
Plant and machinery	10.712	5	139	.000
Other equipments	9.963	5	139	.000
Inventory	2.481	5	139	.035
Raw material	4.335	5	139	.001
Marketing	3789	5	139	.003
Wages	13.449	5	139	.000
Loan repayment	2.231	5	139	.055

Source: Computed from survey data

Robust test of equality of means

	Welch	Statistics	df1	df2	Sig
Land and Building		4.205	5	56.85	.003
Plant and machinery		19.750	5	57.339	.000
Other equipment		19.165	5	61.508	.000
Raw material		5.274	5	64.369	.000
Marketing		13.244	5	61.37	.000
Wages		5.273	15	59.525	.000

Source: Computed from survey data

Appendix 4.8

Multiple comparison of product wise thrift loan

Dependent variable	products		Mean difference	Std Error	Sig	95 percent confidence interval	
						Lower bound	Upper bound
Thrift loan	1	2	-11855.83333	-3265.64255	.006	-21585.26	-2146.40
		3	11368.05556	-3205.85457	.008	1826.56	20909.54

Source: Computed from survey data

Appendix 4.9

Location –wise product cost disaggregation

Location	Product	TC	Mean of Land & Building	Mean of Plant & machinery	Other equipments	Inventory	Raw material	Marketing distribution	Wages	Loan repayment
Rural	Food product	318681.25	3800	17375	10450	1601	133467	77717	238392.50	44878.75
	Garment making	167717.95	364450	8968	157445	1403.50	73540	42510.05	1480	26199.50
	Handicraft, toiletries and utilities	233814.05	2020	7594.84	9012.05	374.21	111894.74	69549.53	2685.53	30646.32
	Business	259404.63	2963.16	0	24291.05	478.42	132000	70158.68	4460.95	25158.68
	Dairy and poultry	149029.78	1016.67	34068.33	4639.22	0	59000	26011.11	505.56	28500
	Services	226828.00	4400	25710	15920	200	56200	83456.00	6390	36440
Urban	Food product	190987.60	0	24540	6143.20	436	19200	72066	15073.40	55569
	Garment making	157184.71	3974.29	34281.14	16949.43	2020.29	39683.71	19003.71	3405.71	37851.57
	Handicraft, toiletries and utilities	286860	17445.83	21021.33	7440	11416.67	87523.67	63156.83	25773.17	51415.83
	Business	154328.80	8440	4000	23800	1560	34400	39360.80	6416	36352
	Dairy and poultry	170972.33	0	43287	8056.33	0	32000	45371.67	4554	36033.33
	Services	265460.70	8890	48440.80	23813.00	1410	4344	73177.10	7595.40	58604.40

Source: Survey data

Appendix 4.10

ANOVA for type wise monthly profit per head

		Sum of squares	df1	F	Sig
Monthly profit per head	Between groups	22448924.713	2	4.937	.028
	Within groups	650233181.039	143		
	Total	672682105.752	144		

Source: Computed from survey data

Appendix 4.11

Multiple comparison of type wise monthly profit per head

Dependent variable				Mean difference	Std Error	Sig	95 percent confidence level	
							Lower bound`	Upper bound
Monthly profit per head	Hochberg	4	5	-1870.62000	621.9147	.045	-3721.6058	-19.6342
		5	6	2147.52500	627.64682	.012	279.49791	4015.5709

Source: Computed from survey data

Appendix 4.12

Industry wise influence of periodical skill development programme on total revenue

Periodical skill development programme	Industry	Mean (in ₹)	SD	N
those who did not get periodical skill development training	non-manufacturing	308922.7	219062	34
	Manufacturing	333344	247791.8	24
	Total	319028.1	229577	58
those who got periodical skill development training	non-manufacturing	289467.2	185030.2	34
	manufacturing	356597	319424.8	53
	Total	330362.3	275529.3	87
Total	non-manufacturing	299194.9	201481	68
	manufacturing	349349.3	297507.7	77
	Total	325828.6	257357	145

Source: Survey data

Appendix 4.13

Industry wise influence of periodical skill development programme on total cost

periodical skill development programme	industry	Mean (in ₹)	SD	N
those who did not get periodical skill development training	non-manufacturing	214888.1	114070.3	34
	manufacturing	225288.8	139681.7	24
	total	219191.8	124228.	58
those who got periodical skill development training	non-manufacturing	206629.2	111139.7	34
	manufacturing	236602.1	176673.5	53
	total	224888.6	154367.8	87

Source: Survey data

Appendix 4.14

Location wise influence of PIP on monthly profit

Location	Training programme	Monthly profit (in ₹)
Rural	Got PIP	18525.75
	Did not get PIP	9325.40
Urban	Got PIP	4611.33
	Did not get PIP	6277.30

Source: Survey data

Appendix 4.15

Location wise influence of periodical skill development programme on total cost

Dependent variable	Location	Total cost of units who didn't get periodical skill development programme (in ₹)	SD of units who didn,t get periodical skill development programme (in ₹)
Total cost	Rural	218000	130940.3
	Urban	229521.2	30142.94
	Total	219191.8	124228.9
Dependent variable		Mean of units who got periodical skill development programme	sd of units who got periodical skill development programme
Total cost	Rural	235443.6	157432.4
	Urban	207616.6	149986.0
	Total	224888.6	154367.8

Source: Survey data

Appendix 4.16

Location wise influence of periodical skill development programme on total revenue

Dependent variable –total revenue

periodical skill development programme		N	(in ₹) mean	SD
Those who didn't get periodical skill development programme	Rural	52	322952.2	241214.5
	Urban	6	285018.7	76252.82
	Total	58	319028.1	229577.0
Those who got periodical skill development programme	Rural	54	360458.9	256624.6
	Urban	33	281113.4	252840.8
	Total	87	330362.3	275529.3
Total periodical skill development programme periodical skill development programme	Rural	106	342059.4	264733.7
	Urban	39	281714.2	233669.9
Total		145	325828.6	257357.0

Source: Survey data

Appendix 4.17

Type wise influence of skill development programme on TC

Dependent variable – Total cost

Type	Skill development training	N	Mean	SD
Individual	Those who didn't get training	41	127266.6	64507.40
	Those who got training	19	156122.6	102257.8
	Total	60	136404.3	78705.52
Group	Those who didn't get training	98	264194.7	106355.2
	Those who got training	37	308454.8	184951.7
	Total	85	283460.8	146548.6
Total	Those who didn't get training	89	201115.4	112445.8
	Those who got training	56	256770.7	176376.9
	Total	145	222609.9	142646.8

Source: Survey data

Appendix 4.18

Descriptive statistics on type wise influence of periodical skill development programme on TC

Periodical skill development programme	Type	N	Mean	SD
Who didn't get training	Individual	21	111656.6	67344.24
	Group	37	280225.4	106496.9
	Total	58	219191.8	124228.9
Who got training	Individual	39	149730.1	81915.73
	Group	48	285954.9	172283.9
	Total	87	224888.6	154367.8
Total	Individual	60	136404.3	78705.5
	Group	85	283460.8	146548.6
		145	222609.9	142646.8

Source: Survey data

Appendix 4.19

Type wise influence of periodical skill development programme on Total revenue

Dependent variable: total revenue

Periodical skill development programme	Type	N	Mean	SD
Those who didn't get periodical skill development programme	Individual	21	140872.2	83453.93
	Group	37	420143.5	224851.6
	Total	58	319028.1	2295770
Those who got periodical skill development programme	Individual	39	185587.7	109366.7
	Group	48	447991.7	312597.2
	Total	87	330362.3	275529.3
Total	Individual	60	169937.3	102602.2
	Group	85	435869.6	276650.9
	Total	145	325828.6	257357.0

Appendix 4.20

Experience and Location

Years of experience		Rural	Urban	Total
upto 5	total number	18 (17.0)	5 (12.8)	23 (15.9)
	Percentage of total	12.4	3.4	15.9
6-10	total no.	53 (50.0)	31 (79.5)	57.9
	percentage of total	36.6	21.4	57.9 percent
11and above	total no.	35 (33.0)	3 (7.7)	38 (26.2)
	percentage of total	24.1	2.1	26.2
total	total no.	106(100)	39 (100)	145 (100)
	Percentage of total	73.1	26.9	100

**bracketed values are in percent*

Source: Survey data

Appendix 4.21

Experience and type

Years of experience		Group	Individual	Total
Up to 5	Total no. within type	16 (18.8)	7 (11.7)	23 (15.9)
	Percentage of total	11	4.8	15.9
6-10	Total no within type	47 (55.3)	37 (61.7)	89 (57.9)
	Percentage of total	32.4	25.5	57.9
11and above	Total no. within type	22 (25.9)	16 (26.7)	38 (26.2)
	percentage of total	15.2	11	26.2
total	Total no. within type	85 (100)	60 (100)	100
	Percentage of total	58.6	41.4	100

**bracketed values are in percent*

Source: Survey data

Appendix 4.22

Influence of experience on industry

Years of experience		Manufacturing	Non - manufacturing	Total
upto 5	Total no.	14	9	23
	Percentage within industry	18.2	13.2	15.9
	Percentage total	9.7	6.2	15.9
	total no.	45	39	84
6-10	percentage within industry	58.4	57.4	57.9
	Percentage of total	31.0	26.9	57.9
	Total	18	20	38
11and above	Percentage within industry	23.4	29.4	26.2
	Percentage of total	12.4	13.8	26.2
	Total	77	68	145
total	Percentage within industry	100	100	100
	Percentage of total	53.1	46.9	100

Source: Survey data

Appendix 4.23

Sources of finance and years of experience

Own fund	Mean	SD
Up to 5	12130.43	10376.13
6-10	20683.33	35688.67
11and above	16963.42	25517.30
total	18351.79	30459.01
subsidy		
Up to 5	35217.39	32315.15
6-10	36027.38	29549.84
11and above	30855.26	36881.28
total	34543.45	31894.98
loan		
upto 5	133043.5	82472.30
6-10	113131.0	77386.96
11and above	91052.63	73182.09
total	110503.4	77795.24
thrift loan		
upto 5	4000	11801.39
6-10	3970.83	9549.06
11and above	10026.32	15492.78
total	5562.414	11342.99

Source: Survey data

Appendix 4.24

Total cost, periodical skill development programme and years of experience

Dependent variable -Total cost

Periodical skill development programme	Years of experience	Mean	SD	N
who didn't get periodical skill development programme	upto 5	178516	102854.1	5
	6-10	260031	124683.2	33
	11and above	161975.2	105406.0	20
	total	219191.8	124228.9	58
who got periodical skill development programme	upto 5	220977.4	80390.47	18
	6-10	217028.6	163602.5	51
	11and above	251069.6	185569.2	18
	total	224886.6	154367.8	87

Appendix 5.1

ANOVA for location and type and wise total revenue

	Robust tests of equality of mean				
		Statistics	df1	df2	Sig
Total revenue	Welch	31.733	3	31.426	.000

Multiple comparison for total revenue

Dependent variable		KME	Units	Mean difference	St.errors	sig
Total Revenue	Hochberg	RI	RG	-304292.54737*	47630.33439	.000
			UG	-376916.82222*	83955.38216	.000
		RG	UI	212192.78070*	47630.33439	.000
		UI	UG	-284817.05556*	83955.38216	.005

Source: Computed from survey data

Appendix 5.2

ANOVA for location, type and industry-wise total revenue

		Robust tests of equality of mean			
		Statistics	**df1**	**df2**	**Sig**
Total revenue	Welch	13.808	7	25.881	.000

Multiple comparison of total revenue

Dependent variable		**KME**	**Units**	**Mean difference**	**St.errors**	**Sig**
Total revenue	Hoschberg	RINM	RGNM	-305685.01569*	67688.90071	.000
			RGM	-312843.57801*	63287.87567	.000
			UGM	-452601.08235*	113437.19988	.003
		RIM	RGNM	-292472.82564*	74038.14761	.003
			RGM	-299631.38796*	70037.24173	.001
			UGM	-439388.89231*	117336.51750	.007
		RGM	UIM	237778.69565*	70037.24173	.025

Source: Computed from survey data

Appendix 5.3

ANOVA for Location and type wise total cost

	Robust tests of equality of means				
		Statistics	**df1**	**df2**	**Sig**
Total cost	Welch	29.751	3	31.733	.000

Multiple comparison for total cost

Dependent variable		**KME**	**Units**	**Mean difference**	**St.errors**	**sig**
Total Cost	Hochberg	RI	RG	-173603.54737*	26064.92189	.000
			UG	-243883.32222*	45943.21049	.000
		RG	UI	105626.68070*	26064.92189	.001
		UI	UG	-175906.45556*	45943.21049	.001

Source: Computed from survey data

Appendix 5.4

ANOVA for location and type wise subsidy

	Robust tests of equality of means				
		Statistics	**df1**	**df2**	**sig**
Subsidy	Welch	43.725	3	31.701	.000

Multiple comparison for subsidy

Dependent variable		**KME**	**units**	**Mean difference**	**St.errors**	**Sig**
subsidy	Hochberg	RI	RG	-35250.52632*	5520.57630	.000
			UI	-27706.66667*	6610.78872	.000
			UG	-82567.77778*	9730.81753	.000
		RG	RI	35250.52632*	5520.57630	.000
			UG	-47317.25146*	9025.68805	.000
		UI	UG	-54861.11111*	9730.81753	.000

Source: Computed from survey data

Appendix 5.5

ANOVA for location and type wise Loan

	Robust tests of equality of means				
		Statistics	**df1**	**df2**	**sig**
Loan	Welch	22.344	3	32.735	.000

Multiple comparison for loan

Dependent variable		**KME**	**Units**	**Mean difference**	**St.errors**	**sig**
loan	Hochberg	RI	RG	-96100.87719*	14657.54680	.000
			UI	-65166.66667*	17552.14310	.002
			UG	-117888.88889*	25836.05509	.000
		UI	RI	65166.66667*	17552.14310	.002

Source: Computed from survey data

Appendix 5.6

ANOVA for location and type wise total capital

Respondent variable	Robust tests of equality of means				
		Statistics	df1	df2	sig
Total capital	Welch	18.643	3	31.752	.000

Multiple comparison for total capital

Dependent variable		KME	units	Mean difference	St.errors	sig
Total capital	Hochberg	RI	RG	-112124.78070*	18848.85066	.000
			UI	-75348.33333*	22571.15249	.006
			UG	-181673.33333*	33223.83687	.000
		UI	UG	-106325.00000*	33223.83687	.010

Source: Computed from survey data

Appendix 5.7

Location, type and industrywise total cost

	Robust tests of equality of mean				
		Statistics	df1	df2	Sig
Total cost	Welch	14.213	7	25.750	.000

Multiple comparison of Total cost

Dependent variable		KME	units	Mean difference	St.errors	Sig
TC	Hoschberg	RINM	RGNM	-175909.16863*	37060.58981	.000
			RGM	-179528.27877*	34650.96900	.000
			UGNM	-218809.48529*	67842.78642	.043
			UGM	-272035.43529*	62108.40315	.001
		RIM	RGNM	-165533.47179*	40536.88847	.002
			RGM	-169152.58194*	38346.33832	.001
			UGM	-261659.73846*	64243.33235	.002
		UIM	RGM	-129246.88963*	38346.33832	.027
			UGM	-221754.04615*	64243.33235	.020

Source: Computed from survey data

Appendix 5.8

Location, type and industry-wise cost disaggregation

Nature	Land & Building	Plant & Machinery	Other equipments	Inventory	Raw material	Marketing	Wages	Loan repayment
RINM	882.35	10881.76	6068.59	0	19764.71	37150.59	1411.76	2152.94
RIM	2723.08	12650.92	9569.15	1855.38	18461.59	34526.15	2732.69	26396.54
RGNM	3453.33	22844.67	20035.67	369.67	126533.33	66807.17	4458.60	33137.17
RGM	3301.52	11015.22	12406.96	936.52	131003.04	71242.61	11151.09	36101.96
UINM	4588.24	38595.88	12566.35	464.712	23882.35	55396.29	6186.88	45682.12
UIM	2807.69	18674	9598.77	901.77	21676.92	44049.31	9393.38	41883.92
UGNM	13275.00	27000	47960	3500	98100	64767	7545.25	51852
UGM	19199.00	49206.80	13843.60	14619.80	123428.40	59931.20	26346.40	61362
Total	3927.34	19271.85	13785.00	1275.94	83417.12	58171.57	7554.74	35824

Source: Survey data

Appendix 5.9

ANOVA for Location and type wise profit

		Robust tests of equality of mean			
		Statistics	df1	df2	Sig
Total profit	Welch	25.856	3	30.813	.000

Multiple comparison for total profit

Dependent variable		KME	units	Mean difference	Std. errors	sig
Monthly profit	Hochberg	RI	RG	-136620.96842*	24451.74132	.000
			UG	-132486.15556*	43099.74543	.015
		RG	UI	113068.96842*	24451.74132	.000

Source: Computed from survey data

Appendix 5.10

ANOVA for Location and type wise monthly profit

		Robust tests of equality of mean			
		Statistics	df1	df2	Sig
Monthly profit	Welch	26.052	3	30.802	.000

Multiple comparison for monthly profit

Dependent variable		KME	units	Mean difference	St.errors	sig
Monthly profit	Hochberg	RI	RG	-11410.43158*	2033.86286	.000
			UG	-11036.85556*	3584.97869	.015
		RG	UI	9451.09825*	2033.86286	.000

Source: Computed from survey data

Appendix 5.11

ANOVA for Location and type wise monthly profit per head

		Robust tests of equality of mean			
		Statistics	df1	df2	Sig
Monthly profit	Welch	3.772	3	32.292	.020

Multiple comparison for monthly profit per head

Dependent variable		KME	units	Mean difference	St.errors	sig
Monthly profit per head	Hochberg	RI	UI	-1959.33333*	529.29210	.002
		RG	UI	-1765.07281*	442.00436	.001
		UI	RG	1765.07281*	442.00436	.001

Source: Computed from survey data

Appendix 5.12

ANOVA for Location, type and industry-wise profit

		Robust tests of equality of mean			
		Statistics	**df1**	**df2**	**p**
Total profit	Welch	10.809	7	25.74	.000

Multiple comparison of profit

Dependent variable		**KME**	**units**	**Mean difference**	**St.errors**	**sig**
Annual profit	Hoschberg	RIM	RGNM	-135981.50769*	37943.32067	.013
			RGM	-133192.91639*	35892.92287	.008
		RGNM	RINM	140088.49412*	34689.43711	.002
			RIM	135981.50769*	37943.32067	.013
			UINM	114335.78824*	34689.43711	.034
		RGM	UINM	111547.19693*	32433.98489	.021

Source: Computed from survey data

Appendix 5.13

ANOVA for Location, type and industry wise monthly profit

	Robust tests of equality of mean				
		Statistics	**df1**	**df2**	**sig**
Monthly profit	Welch	10.867	7	25.750	.000

Multiple comparison of profit

Dependent variable		**KME**	**units**	**Mean difference**	**St.errors**	**sig**
Annual profit	Hoschberg	RINM	RGNM	-11646.70784*	2885.41244	.003
			RGM	-11506.87596*	2697.80749	.001
		RIM	RGNM	-11296.76667*	3156.06532	.013
			RGM	-11156.93478*	2985.51648	.008
		RGNM	UINM	9500.64902*	2885.41244	.034
		RGM	UINM	9360.81714*	2697.80749	.019

Source: Computed from survey data

Appendix. 5.14

Influence of skill development programme on TR, TC, P, MP and MP per head.

Nature	Skill training	TR	TC	Profit	Monthly profit	Profit per
RI	No skill training	120861.29	100095.71	21555.43	1796.29	1796.29
	Skill training	130948.33	107829.67	23118.67	1937.67	1937.67
RG	No skill training	399737.95	265535.26	145221.77	12152.51	1640.40
	Skill training	465240.73	289686.67	176136.73	14678.06	2544.48
UI	No skill training	196262.40	155796	40439.4	3369.95	3379.95
	Skill training	255436.70	199586.30	55850.40	4654.20	4654.20
UG	No skill training	252166.60	252665.60	99511	8292	1678.40
	Skill training	686601.25	463341.25	2232.60	18605	2189.25

Source: Survey data

	Dependent variable Yearly profit	N	Mean	SD
RI	No skill training	21	21555.42	11780.39
	Skill training	9	2318.66	24022.79
RG	No skill training	43	145221.76	146599.65
	Skill training	33	176136.72	133041.67
UI	No skill training	20	40439.4	29231.86
	Skill training	10	55850.4	43283.04
UG	No skill training	5	99511	90372.15
	Skill training	4	223260	269330.37

Source: Survey data

Appendix 5.15:

Influence of PIP on location and type wise profit

Nature of unit	N		Mean	SD
RI	30	No skill training	22024.40	15982.43220
	0	Skill training		
RG	68	No skill training	151155.5294	132065.57
	8	Skill training	222309	200742.159
UI	21	No skill training	41393.71	28825.36
	9	Skill training	55336	45876.16
UG	9	No skill training	154510.55	18519.15
	0	Skill training		
Total	128	No Skill training	103118.52	123431.56
	17	Skill training	133911.52	161438.61

Source: Survey data

Multiple comparison

		Mean difference (I-J)	Std error	Sig
RI	RG	-136620.9684	24437.62916	.000
	UG	-132486.1556	43074.87069	.015
RG	RI	136620.9684	24437.62916	.000
	UI	113068.9684	24437.62916	.000
UG	RI	132486.1556	43074.8706	.015

Source: computed from survey data

Appendix 5.16

Share of employee

Location	*Share of employee(Mean)*
Rural	26.19
Urban	28.71
Total	26.87
Type	*Share of employee(Mean)*
Individual	29.65
Group	24.90
Total	26.87
Product	*Share of employee*
Dairy and poultry	28.39
Food product	23.09
Garment making	28.51
Handicraft, Toileteries and utilities	26.81
Services	32.21
Business	23.04
Total	26.87

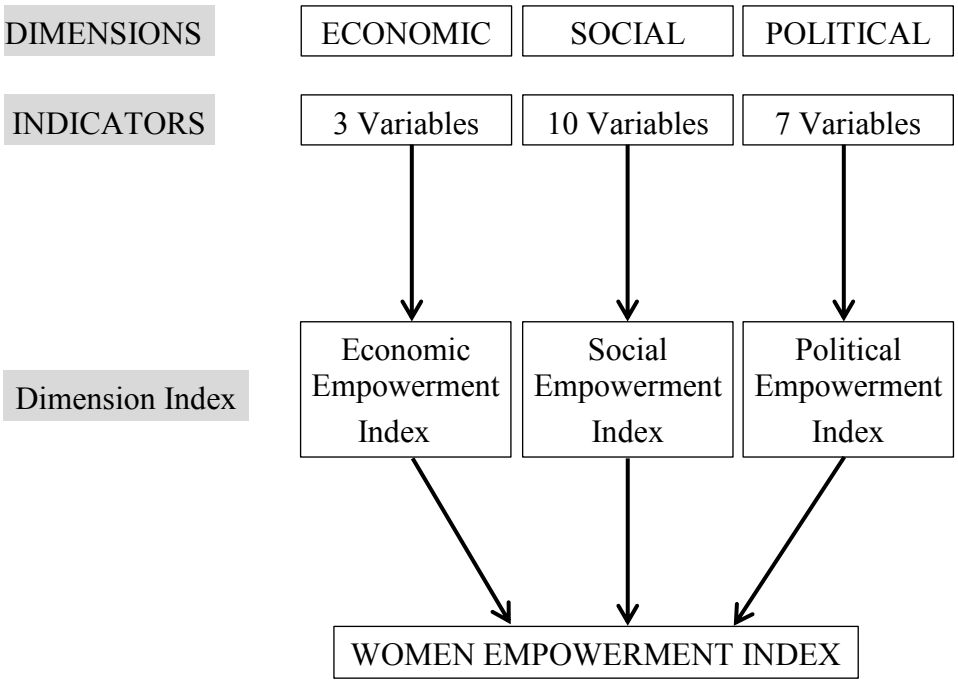
Source : computed from survey data

Appendix 6.1:

Calculating the Empowerment Index- graphical presentation

Women Empowerment

Index



Source: Compiled from HDI Report 2013

Women Empowerment Index is a summary measure of key dimensions of women empowerment. It measures the average achievements in three basic dimensions of women empowerment. Economic, social and political. The Women Empowerment Index is the geometric Mean (in □) of dimensional indices from each of these 3 dimensions.

Steps to calculate the Women Empowerment Index

There are two steps to calculate WEI

Step 1: Creating the dimension indices

Minimum and maximum values are set in order to transform the indicators into indices between 0 and 1. The maximum is the highest observed value and minimum value is the subsistence value.

After defining the minimum and maximum values, the sub-indices are calculated as follows:

$$\text{Dimension Index} = \frac{\text{Actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

Step 2: Aggregating the sub-indices to produce the women empowerment index.

The Women Empowerment Index is the geometric Mean (in ₹) of the three dimension indices.

$$\left(I_{\text{Economic;}}^{1/3} \quad I_{\text{Social}}^{1/3} \quad I_{\text{Political}}^{1/3} \right)$$

The level of women empowerment can be assessed with the following scale. 0.8-1 very high empowerment, 0.7 - 0.799 high empowerment, 0.55- 0.699 medium level of empowerment, below, 0 .55- low level of empowerment.

Appendix 6.2

Industry wise Women Empowerment Index

		N	Minimum	Maximum	Sum	Mean (in ₹)	SD	Av Min	Av Max	Av Score	Av Index
Non-manufacturing	Emp Economic	68	4	8	445	6.544	1.014	1.33	2.667	6.544	
	Emp. Social	68	12	30	1616	23.765	5.029	1.200	3.00	23.765	
	Emp. Political	68	11	21	1155	16.985	2.783	1.571	3.00	16.985	
	TotaL	68	29	59	3216	47.294	7.736			53.6	
Manufacturing	Emp. Economic	77	4	9	528	6.857	0.996	1.333	3.00	6.857	
	Emp. Social	77	12	30	1994	25.896	3.673	1.200	3.00	25.89	
	Emp political	77	11	21	1371	17.805	1.913	1.571	3.00	17.805	
	Total	77	28	59	3893	50.558	5.172				

		Av. index	Dimensional index with sample min/max	Empowerment index with sample min/max	Dimensional index	Empowerment Index
Non-Manufacturing	Emp Economic	2.181	0.636		0.591	
	Ep. Social	2.376	0.654		0.688	
	Emp. Political	2.426	0.599	0.629	0.713	0.662
	Total					
Manufacturing	Emp Economic	2.286	0.571		0.643	
	Ep. Social	2.590	0.772		0.795	
	Emp. Political	2.544	0.681	0.670	0.772	0.733
	Total					

Appendix 6.3

Location wise Women Empowerment Index

	Location	N	Minimum	Maximum	Sum	Mean (in ₹)	SD
Rural	Emp. Economic	106	4	8	698	6.585	1.022
	Emp. Social	106	12	30	2625	24.764	4.268
Total	Emp. Political	106	11	21	1859	17.538	2.269
	Total Empowerment	106	28	59	5182	48.887	6.222
Urban	Emp. Economic	39	5	9	275	7.051	0.916
	Emp. Social	39	12	30	985	25.256	5.035
	Emp. Political	39	11	21	667	17.103	2.693
	Total	39	29	59	1927	49.4103	7.87307

	Location	AVMIN	AV Max	Av.Index	Dimensional index with sample min /max	Empowerment index with sample min/max	Dimensional index	Empowerment Index
Rural	Emp. Economic	1.333	2.667	2.195	0.646		0.597	
	Emp. Social	1.200	3.00	2.476	0.709		0.738	
	Emp. Political	1.571	3.00	2.505	0.654	0.669	0.753	0.692
	Total Empowerment							
Urban	Emp. Economic	1.667	3.00	2.350	0.513		0.675	
	Emp. Social	1.200	3.00	2.526	0.736		0.763	
	Emp. Political	1.571	3.00	2.443	0.610	0.613	0.722	0.719

Appendix 6.4

Type wise Women Empowerment Index

		N	Minimum	Maximum	Sum	Mean (in ₹)	SD	Av Min	Av Max	Av Score	Av Index
Individual	Emp Economic	60	4	8	404	6.733	0.918	1.333	2.667	6.733	2.244
	Emp. Social	60	12	30	1469	24.483	4.605	1.200	3	24.483	2.448
	Emp. Political	60	11	21	1026	17.100	2.454	1.571	3	17.10	2.443
	Total Empowerment	60	28	59	2899	48.317	6.915			48.317	
Group	Emp. Economic	85	4	9	569	6.694	1.080	1.333	3	6.694	2.231
	Emp. Social	85	12	30	2141	25.188					
	Emp political	85	11	21	1500	17.647	2.328	1.571	3	17.647	2.521
	Total Empowerment	85.29	59	4210	49.5294	650					

		Dimensional index with sample min/max	Empowerment index with sample min/max	Dimensional index	Empowerment Index
Individual	Emp Economic	0.683		0.62	
	Emp Social	0.694		0.724	
	Emp. Political	0.610	0.661	0.721	0.688
	Total Empowerment				
Group	Emp Economic	0.539		0.616	
	Emp. Social	0.733		0.759	
	Emp. Political	0.665	0.640	0.761	0.708
	Total				

Appendix 6.5

Product wise Women Empowerment Index

		N	Minimum	Maximum	Sum	Mean (in ₹)	SD	Av Min
Diary & Poultry	Emp Economic	24	4	8	1570	6.542	0.977	1.333
	Emp. Social	24	12	30	553	23.042	5.377	1.200
	Emp. Political	24	11	21	395	16.458	3.064	1.571
	Total Empowerment	24	29	59	1105	46.04	8.233	
Food products	Emp. Economic	25	4	8	1700	6.80	1.041	1.333
	Emp. Social	25	19	30	6670	26.680	2.883	1.900
	Emp political	25	15	21	457	18.280	1.514	2.143
	Total Empowerment	24	41	59	1294	51.760	4.304	

		Av. Max	Av. score	Av. Index	Dimensional index with sample max/min	Empowerment index with sample min/max	Dimensional index	Empowerment index
Diary & Poultry	Emp Economic	2.667	6.542	2.181	0.635		0.590	
	Emp. Social	3	23.042	2.304	0.613		0.652	
	Emp Political	3	16.458	2.351	0.546	0.597	.676	0.638
	Total empowerment							
Food Product	Emp Economic	2.667	6.800	2.267	0.700		0.633	
	Emp. Social	3	26.680	2.668	0.698		0.834	
	Emp Political	3	18.280	2.611	0.547	0.644	0.806	0.752
	Total empowerment							

		N	Minimum	Maximum	Sum	Mean (in ₹)	SD	Av Min	Av Max	Av Score	Av Index
Garment	Emp Economic	27	5	8	187	6.926	0.781	1.667	2.667	6.926	
	Emp. Social	27	12	30	6750	25	4.498	1.200	3	25	
	Emp. Political	27	11	21	466	17.259	2.314	1.571	3	17.259	
	Total Empowerment	27	28	58	13.28	49.185	6.463				
Handicraft Toiletries Utilities	Emp. Economic	25	4	9	171	6.840	1.179	1.333	3	6.840	
	Emp. Social	25	20	30	6.520	25.080	3.303	2	3	26.080	
	Emp political	25	13	21	448	17.920	1.706	1.857	3	17.920	
	Total Empowerment	25	43	57	12.71	50.840	4.150				

Garment		Av. index	Dimensional index with sample min/max	Empowerment index with sample min/max	Dimensional index	Empowerment Index
	Emp Economic	2.309	0.642		0.654	
	Emp. Social	2.500	0.722		0.750	
	Emp. Political	2.466	0.626	0.662	0.733	0.711
	Total empowerment					
Handicraft Toiletries Utilities	Emp Economic	2.280	6.568		0.640	
	Ep. Social	2.608	0.608		0.804	
	Emp. Political	2.560	0.615	0.597	0.780	0.738
	Total					

		N	Minimum	Maximum	Sum	Mean (in ₹)	SD	Av Min	Av Max	Av Score	Av Index
Services	Emp Economic	20	5	8	1320	6.60	0.883	1.667	2.667	6.600	
	Emp. Social	20	12	30	4800	24	4.974	1.200	3.00	24.00	
	Emp. Political	20	11	21	351	17.550	2.800	1.571	3.00	17.550	
	Total Empowerment	20	29	57	963	48.150	7.590				
Business	Emp. Economic	24	4	8	1560	6.500	1.180	1.333	2.667	6.500	
	Emp. Social	24	12	30	5830	24.2	4.891	1.200	3	24.292	
	Emp political	24	121	21	409	17.042	2.476	1.571	3	17.042	
	Total Empowerment	24	29	58	1148	47.833	7.510				

Services		Av. index	Dimensional index with sample min/max	Empowerment index with sample min/max	Dimensional index	Empowerment Index
	Emp Economic	2.200	0.533		0.600	
	Emp. Social	2.400	0.667		0.700	
	Emp. Political	2.507	0.655	0.615	0.754	0.681
	Total empowerment					
Business	Emp Economic	2.167	0.625		0.583	
	Ep. Social	2.429	0.683		0.715	
	Emp. Political	2.435	0.604	0.636	0.717	0.669
	Total					

Appendix 7

INTERVIEW SCHEDULE

Topic: Economic Performance of Kudumbashree Microenterprises and Women Empowerment: A Case Study of Pathanamthitta District

The data and information provided will be used only for the study purpose and will be treated as strictly confidential.

Interview Schedule -1- Economic Performance

DISTRICT KUDUMBASHREE MISSION

1. Name of District
2. Details of Kudumbashree - Number of CDS
   - Number of ADS
   - Number of NHG
3. Total number of microenterprises

Year	Group	Individual	Rural	Urban	Total Enterprises
2008-09					
2009-10					
2010-11					
2011-12					
2012-13					
2013-14					
2014-15					
2015-16					

I GENERAL INFORMATION

(Tick the correct one)

1. Location of Enterprise : a) Rural ☐ b) Urban ☐

2. Nature of the enterprise:

a) Group ☐ b) Individual ☐

c) Started in (year) ☐

3. NATURE OF ENTERPRISE

1. ANIMAL HUSBANDRY

   (cow, goat rearing, poultry farming, piggery etc)

   Specify:……

2. TOILETRIES

   (Detergent, soap, lotion etc)

   Specify:……

3. UTILITIES

   (Candle, Umbrella, Agabathi,chappal etc.)

   Specify:……

4. FOOD PRODUCTS

   (Catering, pickle etc)

   Specify:……

5. PAPER PRODUCTS

   Specify:……

6. CLOTH BASED PRODUCT

Specify:……

7. HANDICRAFT

Specify:……

II FINANCIAL DETAILS

4. Details of Building if applicable

a) Own building ☐ b) Rented ☐

5 . Details of average yearly expenditure since its inception

Cost incurred on	
➢ Land and building	
➢ Plant and Machinery	
➢ Other equipments	
➢ Inventory	
➢ Raw material	
➢ Marketing and distribution	
➢ Wages	
➢ Loan repayment	
➢ Total Cost	

6. Details of average yearly revenue, profit, monthly profit, monthly profit per head since its inception

Total Revenue	
Total profit	
Monthly profit	
Monthly profit per head	

7. Source of capital since its inception

Capital	
Own fund	
Thrift loan	
Loan	
Subsidy	

8. Do you have any problems regarding loan facility?

Yes ☐ No ☐

If Yes please specify…….

TRAINING

9 . Details of trainning programmes attended

Training programmes	**How many of you got training?**	**From which department/institution**
a) GOT		
b) EDP		
c) Skill development		
d) PIP		
e) Periodic Skill development programme		

9.1 Do you need further training? Yes ☐ No ☐

If yes in which area is training needed?.....

10. Average yearly employment generation

- Number of Man days generated ☐
- Number of additional man days generated ☐

INTERVIEW SCHEDULE-2 Women Empowerment

1. Location of enterprise : a)Rural ☐ b) Urban ☐
2. Type of enterprise : a) Group ☐ b) Individual ☐

3. ECONOMIC EMPOWERMENT

	Before joining KME	**After joining KME**
Average monthly income		
Average monthly savings		
Average yearly asset formation		

3.1 Nature of role and participation in economic decision making at household level –

a. alone ☐ b, collective ☐ c, no role ☐

3.2 Level of skill developed after becoming part of Kudumbashree Microenterprise

a, High ☐ b, moderate ☐ c, nil ☐

3.3 Level of control over your income.

a. Fully ☐ b. partial ☐ c. no control ☐

4 SOCIAL –CULTURAL EMPOWERMENT

4.1. Level of co-operation with other members?

a. high ☐ b. moderate ☐ c. nil ☐

4.2. Level of increase in your ability in communicating at meetings after becoming member of kudumbashree

a. High, ☐ b. average ☐ c. nil ☐

4.3. Level of increase in your self-confidence after becoming member of kudumbashree?

a. highly ☐ b. moderately ☐ c. nil ☐

4.4. Level of mobility i.e. the ability to approach offices and public places to get things done for you /others

a. high ☐ b. moderate ☐ c. nil ☐

4.5 Level of. participation in socio-cultural activities and panchayat /municipality Melas?

a. high ☐ b. moderate ☐ c. nil ☐

4.6. Level of. Participation in competitions, seminars, discussions?

a. high ☐ b. moderate ☐ c. nil ☐

4.7. Has the attitude of your children towards you changed ever since you became a member of Kudumbashree? To what extent?

a, high ☐ b. moderate ☐ c. no change ☐

4.8 . Level of Consciousness of freedom

a. High ☐ b. average- ☐ c. nil ☐

4.9 Level of improvement in position in society after becoming a member of kudumbashree

a. High ☐ b. average ☐ c. nil ☐

4.10 To what degree are you able to contribute to the development of your society

a. Highly ☐ b. moderately ☐ c. nil ☐

5 POLITICAL/LEGAL EMPOWERMENT

5.1. Level of. participation in gramasabhas / nagarasabhas punctually?

a. full ☐ b. partial ☐ c. nil ☐

5.2 Level of. awareness of development programmes in your panchayat /Municipalilty

a. full ☐ b. partial ☐ c. nil ☐

5.3 Level of. participation in political activities

a. full ☐ b. partial ☐ c. nil ☐

5.4 Your awareness about kudumbashree bye-laws

a. Fully aware ☐ b. partially aware ☐ c not aware ☐

5.5 Level of your awareness about need for women empowerment –

a. High ☐ b. medium ☐ c. low ☐

5.6. Level of your awareness about the rights of women

a. High ☐ b. moderate ☐ c. low ☐

5.7 Level of your awareness of gender discrimination?

a. High ☐ b. moderate ☐ c. low ☐

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List of Publications

Articles Published in Books

[1] **Female Self -Employment through Neighbourhood groups: A Case Study (2011),** *Female Employment in India Issues and Challenges*, p. 264-276. ISBN 978-93-80095-26-4

[2] **Technology for Women Empowerment: A Case Study of Kudumbashree Micro Enterprises (2012).** *Technology for Women Empowerment*. *Issues and Challenges*, p. 122-129. ISBN: 978-81-8387-539-4

Articles Published in Journals

[1] **'Women Entrepreneurship Development through Poverty Alleviation Schemes: A Case study'**, Shanlax International Journals, Vol.6 (2), p 88-93, March 2018. ISSN: 2319-961X

[2] **'Tackling Domestic Violence: Role of Kudumbashree'**, Journal of Women Empowerment and Technology-WET, Vol.1, p 40-48, January – June 2015. ISSN2394-4420

[3] **'Neighbourhood Groups and Women Empowerment: A CaseStudy of Peringara Panchayat in Pathanamtitta District'**, SB Academic Review-Humanities and Business Studies Edition, Vol.XIV, p 183-196, 2007 ISSN:0973-7464

Article Published in Proceedings Volume

[1] **Kudumbashree, Women empowerment and Socio-economic Change: Acase study**, p. 102-110, 2015. ISBN: 978-93-85105-16-6.

[2] **Women Empowerment through capacity building: A case study**, p. 257-276, 2017. ISBN978-93-5281-178-6

Paper Presentations

[1] Presented a paper titled ”Women Empowerment through Microenterprises: A Case Study of Kudumbashree at the 19th Annual Conference and International Seminar *Crisis Affecting Peace, Prosperity and Culture in the Third World Scenario* conducted by Association of Third World StudiesSouth Asia Chapter, hosted by Department of History, Psychology and Sociology, Sree Sankararacharya University of Sanskrit, Kalady, Kerala from 10-12 December 2014.

[2] Presented a paper titled “Women Empowerment Through Capacity Building: A Case Study” at the International Seminar on *Catalysing Women Empowerment for an Egalitarian Society* held at Titus II Teachers Training College, Tiruvalla Kerala from 25-2 7October 2017 in collaboration with ICSSR.

[3] Presented a paper titled “Women Empowerment through Microfinance: A Case Study “At the 5th *International Kerala History Conference* held at M .S.M. College, Kayamkulam Kerala from 9-11 November 2017.

[4] Presented a paper titled “Catalysing Women Power for Inclusive Development: A Case Study” at the ICSSR sponsored two day *International Conference on Economic Transformation for Inclusive Growth and Development* hosted by Cochin University of science and Technology in collaboration with Indian Economic Association during March 16-17, 2018.