

## KUDUMBASHREE ICT MOVEMENT- ANALYSIS ON REVENUE, CUSTOMER ACQUISITION AND COMPETITION

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### ABSTRACT

Kudumbashree is the biggest poverty eradication and women empowering project in India and powerful women's movements in Asia with women participation of more than three and half million engaged in a portfolio of profitable micro business activities that covers more than fifty per cent of the households in Kerala. The fundamental pillars of Kudumbashree project are micro credit, entrepreneurship and empowerment. Apart of encouraging the poor women flock to setup traditional micro business units, the project team took the challenge to setup information communication technology based micro units for empowering women and subsequently eradicating poverty from the Kerala state. The effort became successful and now the ICT based micro enterprises under the aegis of Kudumbashree is a wonderful model for empowering women and eradicating poverty. In this descriptive research paper, the author only highlighting, nature of activity of women ICT micro units, sales and income women ICT micro units, customer orientation and competition faced by women ICT micro units. The research paper is based on both primary as well as secondary data and executed probabilistic sampling technique for selecting sample. The author used both descriptive as well as inferential statistical tools for inference.

**Keywords:** Women empowerment, Poverty, Information Communication Technology, Kudumbashree, Kerala.

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**1.0 Introduction** to Kudumbashree and ICT movement  
The Kudumbashree is a woman based participatory programme initiated by the Government of Kerala in 1998 for completely remove poverty from the Kerala through rigorous societal action under the control of Local Self Governments. Today Kudumbashree is the biggest women empowering project in India and also powerful women's movements in Asia with a full-time women participation of 3.7 million, which is engaged in a bouquet of lucrative activities wrap more than 50% of the households in Kerala. The three fundamental pillars of Kudumbashree project are micro credit, entrepreneurship and empowerment. In fact the Kudumbashree initiative has today thrive in addressing the basic needs of the unprivileged women and thus providing them a more decorous living and a healthy sustainable future.

Kudumbashree is unique from conservative programmes in the sense that it recognize poverty not just as the scarcity of money, but also as the denial of basic rights. The poor need to find a collective voice to help claim these rights. In this context Kudumbashree plays a vital role in enhancing the financial status of the less privileged women in the state through its thrift and credit societies. These societies assist them to save and provide them with

cost effective and easy credit. The savings of the women are collected together and provided as loans to the most deserving poor families. These loans have been used for purpose ranging from covering hospital expenses to meeting working capital needs for micro enterprises. The Community Development Societies facilitate bank linkages for farming, micro housing and micro insurance and also serve as the delivery point for skill up-gradation and market development support to micro enterprises. In addition to micro finance, micro enterprise development, gainful wage employment and improved livelihood skills form the supportive pillars of Kudumbashree's economic empowerment strategy. Kudumbashree always have a strong backup support and active collaboration of local self governments, development agencies and technical organizations in its attempt to improve the value of the services and products offered by the poor. In the current context Kudumbashree is on its journey for developing an inimitable societal brand that is racial, homely and environment friendly, while looking for no compromise on quality. The triumphant strategies of Kudumbashree is the translation of social needs into business opportunities. This approach has garner good bonus by the setting up and managing of micro enterprises by the poor

women flock in the area namely, solid waste management, supplementary nutrition and Information communication technology (ICT).

### 1.1 POVERTY ERADICATION AND ICT MOVEMENT

During late nineties Kudumbashree project team identified a number of potential micro sectors in which women's enterprises could setup and operate, including ICT based micro enterprises. Because of the lack of awareness, skills and confidence it was very difficult to materialize the ICT based projects and needed a top-down push. In this context one of the important noticeable factor that Kerala has the state with higher women literacy rate (82.23%, 2001). This motivated the Kudumbashree to do entrepreneurial experiment with ICT based micro enterprises, since basic literacy is inevitable for such kinds of vendor. More over availability of financial support from the central government schemes supported the Kudumbashree to venture with ICT based micro enterprises. This led to the development of women ICT based micro enterprises under the banner of Kudumbashree for poor women empowerment and thereby poverty eradication in Kerala state. The first unit was started on 15th Sept 1999, when Kudumbashree team recognized a market opportunity in data entry work of government records. In this scenario Kudumbashree initiated training and team building process to identify potential women flock with basic literacy from below poverty line (BPL) families to join the micro ICT unit. Subsequently for financing the state government issued order, so that banks could provide loans without a requirement for security and Kudumbashree ICT micro enterprises unit competed with three multinational companies and secured the bid worth Rs.3.64 Lakh. The first data entry job went successfully and that brought reputation. Subsequently Kudumbashree team set a target to setup 36 ICT units by 31st March 2000, but auspiciously they managed to setup 48 micro ICT units. Along with this target there was significant exposure within the media about the ICT unit. As a result of this combined action, there started to be much more bottom-up interest and then demand for creation of ICT units. Demand for women's ICT units further got momentum during the period 2001-2004 when the state government ICT department agreed to give an order that state government departments could give orders for ICT services direct to Kudumbashree without need for tendering. Subsequently a similar order was issued

for local governments throughout Kerala. Currently there are 72 women ICT micro enterprises concentrating on data entry jobs are spread across Kerala, governed by poor women flock under the aegis of Kudumbashree. This research paper is actually a part of doctoral work done by the author in Kerala related with Kudumbashree women ICT micro enterprises. Since the scope of the study is very vast, in this research paper the researcher is only highlighting, nature of activity of women ICT micro units, sales and income women ICT micro units, customer orientation and competition faced by women ICT micro units.

### 2.0 REVIEW OF LITERATURE

**Mansell.R & When.U (1998)** mentioned on how ICTs can be harnessed for purposes of meeting development goals. There is one chapter in the publication specifically on the uses of ICTs when poverty is pervasive. They warn that if poor countries implement investment strategies that emulate the 'one person - one telephone - one Internet access point' model that is predominant in the West, frustration will be rife. In addition, they advance the view that there is little to be gained from access to global or local resources if the skills to select, interpret and apply the information are absent or poorly developed through the population. Consequently, they suggest it is important for poor countries to develop models for 'access' and 'information content' because the capacity to generate and share information about local resources is as important as access to distant digital information.

**Wresch.W (1996)** argues that there are four information problems frequently faced by the poor: geographic isolation, lack of communication channels, language problems, and lack of computer systems. Two of these are directly ICT related constraints, given the crucial role of communication channels and computer systems. In the case of geographic isolation, the key message is that electronic links are used to supplement face-to-face contact, not to replace it. Many poor suffer from lack of communication beyond their local confines. Take the telephone, for example. It is the main medium used for communication, but there are many places where telephone lines do not exist. Where there are telephone lines, information follows.

In many poor countries, part of the problem is a combination of poverty and lack of foreign aid. A relevant example in this regard is the case of Zimbabwe where five European countries paid for digital exchanges, but these had

to be from corporations in their own countries. Given this requirement, Zimbabwe ended up with five different exchange switches with five times the maintenance difficulties. In addition, they are only being used to 40% of their capacity because of lack of local financing or foreign interest to make more lines available to homes, even though the demand for these lines is there.

**Chowdhury.N (2000)** presents the position taken by realists that in an increasingly global village, ICTs have the potential of helping the poor to acquire literacy, marketable skills and so on. However he believes that common perceptions of the potential of the digital age are limited by the habits of mind one develops in an industrial society. These habits are different for those who have grown up in poverty with no television sets for instance to shape their world view. Most of these people are found in Africa and the developing world in general. The basis of this argument is weak however since Barlow has no empirical evidence to support his assertion, apart from his experiences in the countryside of a developed country.

**Pigato.M.A (2001)** in his paper focuses on this relationship with empirical evidence from sub-Saharan Africa (SSA) and South Asia. Two objectives of the paper were first to examine patterns of utilization, ownership and affordability of ICTs within countries in SSA and South Asia. The second objective was to suggest ways through which information and ICTs can best be used in poverty alleviation strategies. The data sources for this undertaking included: Demographic and Health Surveys (DHS) from 26 low income SSA and South Asian countries during 1991-99; two surveys of poor urban and rural households in Nepal and India; two surveys of small and medium enterprises (SMEs) in Tanzania and Botswana; and existing case studies of applications of ICTs in rural areas from both SSA and South Asia. The author found that SSA and South Asia have the lowest ICT access and within countries there is urban/rural and rich/poor divide. Moreover, there is an unmet demand for information. Pigato points out that private sector initiative are most successful while those led by governments for rural development have mixed results while the externally funded initiatives have numerous drawbacks. The paper advocates the need for an integrated framework to develop appropriate policies of access and diffusion of ICTs within developing countries, but evidence shows that technology is not a goal in itself. Instead, it is a means for achieving

development goals.

**Samiullah.Y & Rao.S (2000)** argued that are those who sincerely believe that ICTs have the potential to combat rural and urban poverty and foster sustainable development. However, this can only be achieved if ICTs are appropriately deployed and made to address the differential needs of urban and rural people. The authors argue that successful ICT interventions can only be achieved if there is an enabling environment, the participation of the private sector and NGOs, the free flow of information, access by women, and capacity building. They challenge governments to address the issue of the digital-divide by first ensuring that there is synergy in projects regardless of sponsorship background. **Schon.D.A et al. (1999)** wrote that to design policies that would capture the benefits of ICTs for the poor, there is the need to understand that poverty is not simply lack of adequate income. Their thesis - though based on low-income communities in the USA - is that the poor are hurt more by exclusion from the mainstream economy and society, and feel disempowered to improve their situation. In many situations, it does make them feel like they have no useful valid knowledge to offer. To some extent, this is true of many in the developing world, when they try to lobby or bring their issues across to those in the developed world who hold the purse-strings and decision-making powers on many critical issues. The authors concluded that the poor, even if provided with access to IT are unlikely to transform themselves from consumers to producers of knowledge because IT reinforces for the poor the idea that machines know more than they do. The truth of this cannot be fully argued in the context of their book. From an African perspective, **Butcher (1998)** suggested that the repetition of rhetorical statements on the developmental potential of ICTs has started to ring hollow, raising more questions than answers. The following is an attempt to answer some of their concerns from existing literature, although some were written after their papers were published. **Duncombe.R and Heeks.R (1999)**. A study was done in Botswana, where the authors found that investment for Internet access was significant in terms of initial financial outlay, running costs, time and skills. Such investments need to be accompanied by significant benefits in terms of the frequency of use and the quality of the information provided. It was clear that only in specific sectors - such as technical services, the ICT sector, and travel and tourism - could benefits of information access

be achieved. These are all sectors that require regular access to information and/or software across borders. The researchers note that information-related interventions by entrepreneurs or institutions must recognize the critical and continuing role to be played by informal information systems and human interaction. They concluded that a holistic approach to the information economy is required which provides information skills, communication skills and assistance with improving organic-, literate- and intermediate- technology based systems as well as the more obvious ICT-focused areas. The role perceived for ICTs in this process lies in the context of the overall information needs of the enterprises, using three main decision criteria: prioritising ICTs in overall business development; assessing how ICTs can be successfully and cost effectively applied; and establishing how ICT constraints can be overcome.

The study conducted by **CSIR (1996)** noted that small-scale businesses were currently one of the fastest growing and important sectors in sub-Saharan Africa as far as job creation was concerned, but it is the sub-sector which most lags behind in the use of ICTs. They found that many ICT-based projects for the benefit of small, medium and micro-enterprises (SMMEs) were being planned and new opportunities were emerging. However, in many cases not enough time has elapsed since, for instance, a full Internet service was installed, and for projects to come to fruition. Therefore, the examples below are the products of a few years later.

**Kenny.C (2001)** says most arguments related to poverty focus on insufficient nutrition, inadequate shelter and so on. It is only recently that some have started to argue that lack of access to information and communications technologies (ICTs) is an element of poverty. This contention is not comparable to traditional discussions of poverty issues although it is recognised that ICTs have the potential of having a crucial role in poverty alleviation efforts. In this respect, Kenny discusses the use of ICTs in poverty alleviation in relation to poor people's limited access to ICTs. He proposes the implementation of government policies that might help to overcome the so-called 'digital-divide.'  
**Brown.M.M (2001)** argues that ICTs are simply tools. Significantly, no single tool can solve a global problem, such as, poverty, which has such complex and multiple causes. The author gives examples of where ICTs can play a significant role such as in the creation of jobs and in the reduction of distance. However, the author points out that it would be

preferable if the labour force were educated in this information age.

**Mohanan Pillai & Shanta (2008)** argues while there are hundreds of government projects aimed at poverty alleviation, stock taking of their impact revealed that their outcomes have been mixed. In this context the newly designed projects based on ICT, specifically aimed at reducing the social, gender and economic divide needs to be examined to understand the lessons that these new initiatives offer. Such an attempt is made in this project on employment generating potential of this technology among poor women.

**Chandrasekar .K.S. and Siva Prakash C.S (2010)** mentioned that contemporary economic environment is closely associated with the importance of ICT enterprises, it is the responsibility of the state government and Kudumbashree officials to positively address the challenges and enthusiastically support and invite more women's to setup micro ICT units and thereby to become a role model in Micro ICT enterprising for other states.

### 3.0 OBJECTIVES OF THE STUDY

1. To analyze the nature of work under taken by the Women ICT based micro enterprises.
2. To analyze the average sales and income earned by Women ICT based micro enterprises.
3. To get insight about various customers associated with Women ICT based micro enterprises.
4. To analyze the competition faced by Women ICT based micro enterprises.

### 4.0 Hypotheses for the study

#### Hypothesis -1

H0: The ICT enterprises are not able to face the future competition to sustain in the business.

H1: The ICT enterprises are able to face the future competition to sustain in the business.

#### Hypothesis -2

H0: There is no significant increase in competition from past few years for ICT based enterprises.

H1: There is a significant increase in competition from past few years for ICT based enterprises.

### 5.0 METHODOLOGY OF THE STUDY

The descriptive study was conducted through collecting primary and secondary data. The primary data needed for the

study was collected through a systematic survey using a structured interview schedule containing relevant scaled questions based on the identified variables of the study. The primary data was only collected from Kudumbashree ICT micro enterprises and relevant secondary data for the study was collected from books, journals and research publications pertaining to the subject. A sample of 36(50%) of the total 72(100%) data processing units across central, south and north Kerala were selected for the study. A stratified simple random sampling survey was carried for selecting sample for survey by considering number of units in each district. The author used descriptive statistics as well as inferential statistics namely one sample't' test used for statistical inferences.

**6.0 DISCUSSION BASED ON OBJECTIVES AND HYPOTHESES**

**6.1 Nature of work under taken by the women ICT Micro enterprises**

Table 1 shows the nature of work undertaken by the women ICT based Micro enterprises under Kudumbashree. From the table it was clear that the majority (88.90%) of the units are concentrating on data entry (core activity) jobs that they received from government departments (preparation of voters list, BPL list etc.), 44.40% under takes IT man power supply along with their core activity, 38.90% providing IT training apart of their core activity and only 11.10% enterprises undertakes web designing and animation/designing jobs apart of their core activity. There are four ICT units (11.10%) whose core activities revolved around hardware/computer assembling and servicing.

Work	Frequency (%)
IT training	14(38.9)
Hardware assembly	4(11.1)
Data entry	32(88.9)
Web designing	4(11.1)
Animation/Designing	4(11.1)
IT man power supply	16(44.4)

Total Units = 36

Table 1: Nature of Work Under Taken By the Women ICT Enterprises

**6.2 Sales Analysis women ICT Micro enterprises**

The below table 2 indicates minimum, maximum and average value of sales achieved by the ICT enterprises during

the period April 1st 2008 to march 31st 2009 and April 1st 2009 to March 31st 2010. During the period 2008-2009 and 2009-2010 enterprises achieved minimum sales of 2 lakhs and 2.6 lakhs respectively. The average sales during these periods were 5.3 lakhs and 4.89 lakhs respectively. The table indicates a decrease in sales year by year from the average sales data.

Year	Sales		
	Minimum	Maximum	Average
2008 - 09	2 lakhs	12 lakhs	5.30 lakhs
2009 - 10	2.6 lakhs	14.2 lakhs	4.89 lakhs

Table 2: Sales achieved by the ICT enterprises during the period 2008-2009 and 2009-2010.

**6.3 Income earned by women ICT Micro enterprises**

The table 3 shows the details of enterprises monthly earning from its operations .From the table it was clear that 38.90% of enterprises are earning Rs 30000 to Rs 40000 per month, 30.60% enterprises are earning around Rs 20000 to Rs 30000, 19.40% of enterprises are earning Rs 40000 to 50000, 8.30% earning around Rs 10000 to Rs 20000 and hardly 2.80% earns more than Rs 50000. From the discussion with the group members it was clear that most of the units earnings are not exact because of the lump sum payment, delay from the side of the government departments for dispersing the payment of work and varying work load.

Income	Frequency	Percent
10000 - 20000	3	8.3
20000 - 30000	11	30.6
30000 - 40000	14	38.9
40000 - 50000	7	19.4
>50000	1	2.8
Total	36	100.0

Table 3: Average income enterprise earned per month

**6.4 Customers associated with women ICT micro enterprises**

The table 4 shows the customers associated with ICT based enterprises .58.30% of enterprises are doing government works with marketing support of Kudumbashree. 44.40% associated with government and aided schools for supporting IT education apart of government works, 11.10% of enterprises undertook work from local self



government bodies and publics apart of government work. During the discussion with the members it was clear that the enterprises are heavily dependent on agency for identifying the market and literally not self sufficient to identify the market and build up the same for the future enterprise growth. The ICT enterprises supplying labors required for local self governments (LSG's) data entry operations and over a period of time these labors will get contract employment in same palace with better salary and this phenomenon will severely affect the enterprises sustained operations.

Customers	Frequency (%)
Publics	4(11.1)
Schools	16(44.4)
Govt. Departments/ Agencies	21(58.3)
LSG's	4(11.1)

**Table 4: Details of the main customers associated with ICT enterprises**

**6.5 Identifying the customer for ICT enterprises services**

The table 5 shows how does the women ICT micro enterprises finds out customer's. The table clearly indicated that all the enterprises are supported by agency (Kudumbashree) to locate the customer and get the work. In the entire sample 50% mentioned that they also get local self government (LSG's) support for identifying the customer and 8.3 % reported personal contact will help certain extent to identify customer community. From the discussion with the members it was clear that without the support of agency it is literally difficult to identify the customers and get continuous work.

Source	Frequency (%)
Personal contact	3(8.3)
Agency support	36(100.0)
LSG' support	18(50.0)

*Table 5: Details of sources of customers*

**6.6 Competition Analysis**

The table 6 shows that 69.40% ICT enterprises reported they are experiencing severe inter enterprises competition and 27.80% reported they are facing competition from women ICT units comes under certain cooperative societies

operating in rural and semi urban areas . 14% reported they experience competition from local DTP centers .However the competitions from the DTP centers are not going to affect the ICT enterprises under Kudumbashree, since the nature of work is entirely different. 27.80% also reported that they are facing moderate competition from ICT units comes under Akshya state .

Source	Frequency(%)
Private DTP centers	5(14)
Kudumbashree ICT units	25(69.4)
Women co-operative ICT units	10(27.8)
Others	10(27.8)

**Table 6 : The main competitors of ICT based enterprises**

**6.7 Opinion about Competition**

The null and alternative hypothesis formulated for the study is given below:

**H0:** There is no significant increase in competition from past few years for ICT based enterprises.

**H1:** There is a significant increase in competition from past few years for ICT based enterprises.

The table 7 shows the opinion about the increase in competition. 36.1% of enterprises strongly agreed on the statement, 52.8% agreed that there is a significant increase in competition, 11.1% of enterprises were found neutral and also nobody reported disagreement. A t-test was conducted to test the significant of agreement and the mean score is obtained as 4.25 with standard error of 0.108 which is significantly above 3 at 1% level of significance. Hence we could accept the alternative hypothesis, ie "There is a significant increase in competition from past few years for ICT based enterprises".

Opinion	Frequency (%)	Mean (SE)	t-value (p-value)
Disagree	0	4.25 (0.108)	11.553* (0.00)
Neutral	4(11.1)		
Agree	19(52.8)		
Strongly Agree	13(36.1)		
Total	36(100)		

H0: Mean =3; H1: Mean > 3

\* significant at 1% level of significance

*Table 7 : Competition analysis*

**6.8 Opinion of women ICT micro enterprises to face the competition**

The null and alternate hypothesis formulated for the study is given below:

**H0:** The ICT enterprises are not able to face the future competition to sustain in the business.

**H1:** The ICT enterprises are able to face the future competition to sustain in the business.

The table 8 shows the opinion about whether the ICT enterprises are able to face the competition to run the business successfully in near future. 8.3% of enterprises strongly agreed on the statement, 44.4% agreed that that could able to face the competition, 47% of enterprises were found neutral and also nobody reported disagreement. A t-test was conducted to test the significant of agreement and the mean score is obtained as 3.61 with standard error of 0.107 which is significantly above 3 at 1% level of significance. It indicates that the members believe the ICT enterprises will be able to face the competition up to a certain extent. Hence we could accept the alternative hypothesis, ie "The ICT enterprises are able to face the future competition to sustain in the business".

Opinion	Frequency (%)	Mean (SE)	t-value (p-value)
Disagree	0	3.61 (0.107)	5.686* (0.00)
Neutral	17(47.0)		
Agree	16(44.4)		
Strongly Agree	3(8.3)		
Total	36(100)		

H0: Mean = 3; H1: Mean > 3

\* significant at 1% level of significance

**Table 8: The analysis of ICT enterprise to face the competition to run the business**

**CONCLUSION**

The study of women ICT based micro enterprises under Kudumbashree in Kerala clearly shows that majority of the units are concentrating on data entry jobs that they received from government departments. The study indicates a decrease in sales year by year from the average sales data and in fact it is not a good sign for sustainable growth. In the case of monthly income, majority of ICT units earns an average forty thousand rupees per month. From the discussion with the ICT members it was clear that most of the units earnings are not exact because of the lump sum payment, delay from the side of the government departments for dispersing the

payment of work and varying work load. During the discussion with the ICT unit members it was clear that the enterprises are heavily dependent on agency (Kudumbashree) for identifying the market and literally not self sufficient to identify the market .The study clearly indicated that all the ICT units are supported by agency (Kudumbashree) to locate the customer and get the work. In the case of competition, there is a significant increase in competition from past few years and majority of ICT units reported that they are experiencing severe inter enterprises competition and moderate competition from ICT units comes under akshya project. However the ICT units are confident to face the future competition to sustain in the business. The above finding clearly gives doubts in terms of sustainability of women ICT micro enterprises in Kerala. The author suggest that woman ICT micro enterprises in Kerala should exploit opportunities from dynamics of domestic business environment and should focus on the creation of uncontested market space by executing related or unrelated diversification for the sustainable growth.

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