

Efficacy of Knowledge Management Strategies and Technology Transfer (KMS&TR) for Rural Women Entrepreneurship Development at Village Knowledge Centre's of M. S. Swaminathan Research Foundation – An Appraisal Study

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Introduction: An Overview

Information and Communications technologies (ICTs) have played a major role in the development of emerging societies. For the past several years, India has experimented with extending the reach of ICTs to rural areas with a view to bringing development to these areas. Several projects are currently underway.

ICT is the combination of both information and communication technologies. It is worth noting here that the difference between these two have always been a contentious issue. Communication, which is one of the important facets of human life, may be broadly divided into two categories: one way communication and two way communication. One way communication includes the broadcasting media like radio and television while two way communications comprises faxes, telephones, mobiles, pagers and voice over internet protocol. However, there is no clear outline between information technology and communication technology. For example, mobile phones are generally considered as the communication technology but in the new economy with the advent of wireless applications, data and information can also be accessed through mobile phones. Similarly, the Internet is mainly considered as the indicator of information technology. But many users communicate with other users via voice over internet protocol from their personal computers. In this case it switched to communication technology. This paper examines the efficacy of knowledge management strategies and attempt to reveal the ICT usages and transfer in the rural development perspective.

In the context of this research paper, Knowledge Management is referring to the active collection of processes that govern the creation, dissemination, and utilization of knowledge for the benefit of the users namely the rural women entrepreneurs. Hence, we are referring to rural women entrepreneurs many times.

Basic Definitions of Knowledge Management (KM)

According to Ermias Sehai, “Knowledge is information in the context to produce an actionable understanding”

1. Knowledge management is the management of the organization towards the continuous renewal of the organizational knowledge base. For example, the creation of supportive organizational structures, facilitation of organizational members, putting IT-instruments with emphasis on teamwork and diffusion of knowledge into place - Thomas Bertels
2. Knowledge Management (KM), as the word implies, the ability to manage "knowledge". We are all familiar with the term Information Management. This term came about when people realized that information is a resource that can and needs to be managed to be useful in an organization. From this, the ideas of Information Analysis and Information Planning came about. Organizations are now starting to look at "knowledge" as a resource as well. This means that we need ways and means for managing the knowledge in an organization. We can use techniques and methods that were developed as part of Knowledge Technology to analyze the knowledge sources in an organization- Maarten Sierhuis
3. “Knowledge Management can be defined as a systematic discipline of policies, processes and activities which empower an organization to apply knowledge to improve its effectiveness, innovation and quality”.
4. “Effective Knowledge Management means that an organization or network of partners (actors) gets the right information to the right person at the right time in a user friendly and accessible manner so that they can perform their jobs efficiently”.
5. “Knowledge Management is defined as the creation, organization, sharing and use of knowledge for development results”.
6. KM comprises all possible human and technology oriented interventions and measures which are suited to optimize the production, reproduction, utilization and logistics of knowledge in an organization

Here, we can say → Knowledge is “Information with value, from the human mind” - Tom Davenport

Subsequently, majority of the academics and knowledge management authorities make a distinction between the three related but discrete terms of data, information, and knowledge. The three terms are hierarchical in nature with data being the foundation upon which information builds to a cliff of knowledge. Today, several cognitive theories exist that take into account the pyramid of data, Information and knowledge. Some research suggests the hierarchy should extend beyond these three basic building blocks. For example, the US Department of Defense (1996) suggests the hierarchy should include a fourth component understanding. Systems theorist and Professor of Organizational Change Russell Ackoff’s hierarchy extend the Defense’s pyramid to five by adding wisdom (Allee, 1997).

Advantages of Knowledge Management

The following are the advantages that could be derive from KM.

1. Easy to Plan, organize and coordination is made more easily for instances in such areas as Business, Material, Human Resource.
2. Helps to Manage the business, Man, material ,Money, marketing, Mood, Milieu, Machine, and Technology etc.,
3. Make it easy in Information handling process / Information Management System
4. Avoidance of Costly Mistakes
5. Faster Problem Solving
6. Better / Selective Solutions
7. Helps in Gaining New Business Opportunity
8. Reduction of Risks such as financial risk
9. Helps in the Maintenance of good relationship with labours / higher officials / collaborators etc.,
10. Helps in Introducing new Technologies in accordance with the suitable business strategy in order to avoid losses.

Knowledge Management Strategy (KMS)

1. KMS is a plan that describes how an organization, bureau or office will share and apply its knowledge and expertise.
2. KMS is initiative that begins before strategy and it is a way of consolidating, improving and systematizing existing activities.

Benefits of KMS to rural women entrepreneurs

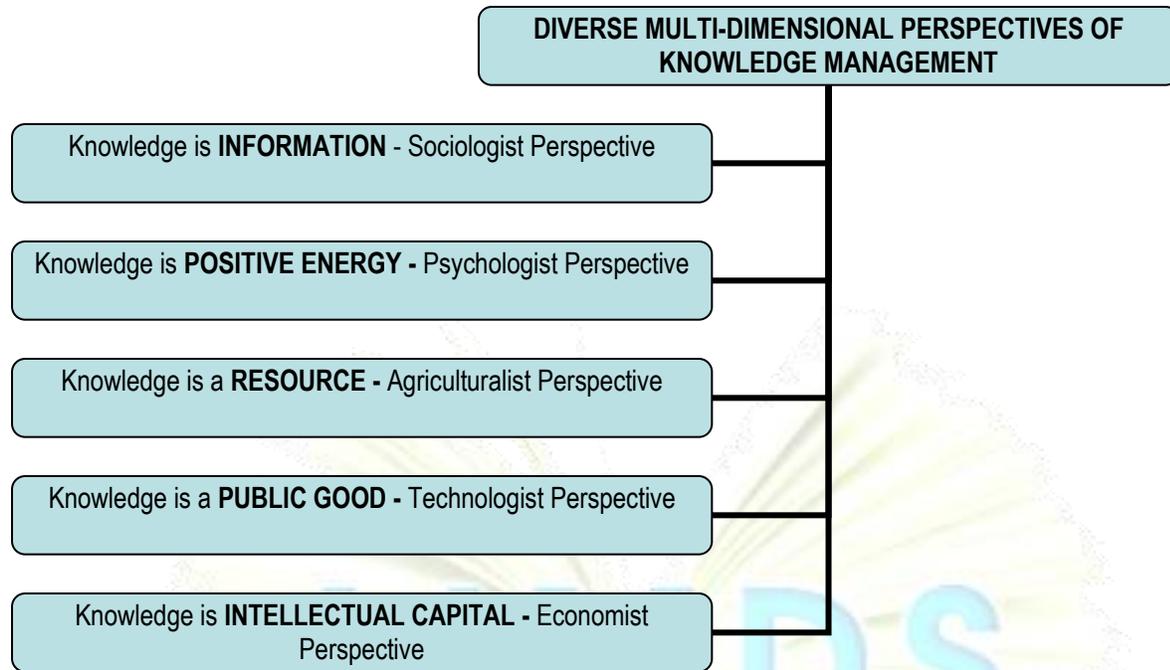
- Increase awareness of good Knowledge Management Practice
- Clear Communicable plan where you want to go, how you plan to get there;
- Gain senior and superior management commitment;
- Integrate KM into the corporate culture in the long run;
- Attract resources for implementation and provide a basis against which you can measure progress.

M. S. Swaminathan Research Foundation and Village Knowledge Centre: An Overview

M.S.Swaminathan Research Foundation started with a clear new vision strategies and unshakable belief that knowledge, information and technology applied intelligently, can make a big difference to the lives of the rural women entrepreneurs (RWE). Here, Knowledge and Information is playing a vital role to become as a successful entrepreneur, especially of rural women in the rural areas. Generally, woman is having a fear to act as an entrepreneur due to millions of practical reasons and problems; hence women need adequate knowledge in the field of entrepreneurship, administration and management. In the fast, growing entrepreneurial world, women must have adequate knowledge to be successful entrepreneurs. Hence, M.S.Swaminathan Research Foundation facilitates the opportunities to pool resources for women entrepreneurs and to take the role in promoting micro-enterprises, small, medium and large business enterprises. Knowledge is the most essential element for rural women entrepreneurs to plan, organize, train,

and sustain the job and shaping the enterprises and business. Consequently, since 2004, M.S.Swaminathan Research Foundation (MSSRF) has been setting up many village knowledge centers to inculcate the entrepreneurial knowledge to the rural women sections. By doing this kind of services, it is engaging itself in the making and promoting entrepreneurs in the rural areas with the development of the traditional based innovational entrepreneurial movement in order to face the present competitive environment.

Knowledge Management – Diagrammatic Representation Of Diverse Multi-Dimensional Perspectives



What is a village knowledge Centre?

“Village Knowledge Centres are the essential component for realizing our goal of graduating to a knowledge society and India’s transformation to a developed country by 2020.”A P J Abdul Kalam, Former President of India

Village Knowledge Centre is accessing point or Place for enhancing progressive rural development, which incorporates the facility of Information, communication and technology to make viable of individuals and village level in terms of socially, economically, managerially and otherwise. It makes opportunity to get training and awareness programs on agriculture, animal husbandry, health, employment, ICT literacy courses, Fisheries, micro enterprises and all other sectors as per the environment circumstances and situation or movement of the respective local area people’s needs. This local area needs are located at Panchayat level and maintaining is done by village knowledge workers, who are well trained, so well to run the VKC in good manner and also which are eventually being organized by Boundary partners, Strategic partners, Village Management committee, volunteers and village Resource centre.

Village knowledge centre perveying yeomen services to the emerging rural women entrepreneurs

Who are the women entrepreneurs?

“Women Entrepreneurs are said to be women or group of woman, who initiate, organize and run a business enterprise, in terms of Schumpeterian concept of innovative entrepreneurs, woman who innovate, imitate or adopt a business activity are called “women entrepreneurs”

1. “A woman entrepreneur can be defined as a confident, innovative and creative woman capable of achieving self economic independence individually or in collaboration, generates employment opportunities for others through initiating, establishing and running the enterprise by keeping pace with her personal, family and social life.” Kamal Singh
2. “An enterprise owned and controlled by a women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated by the enterprise to women.” Government of India-reports.

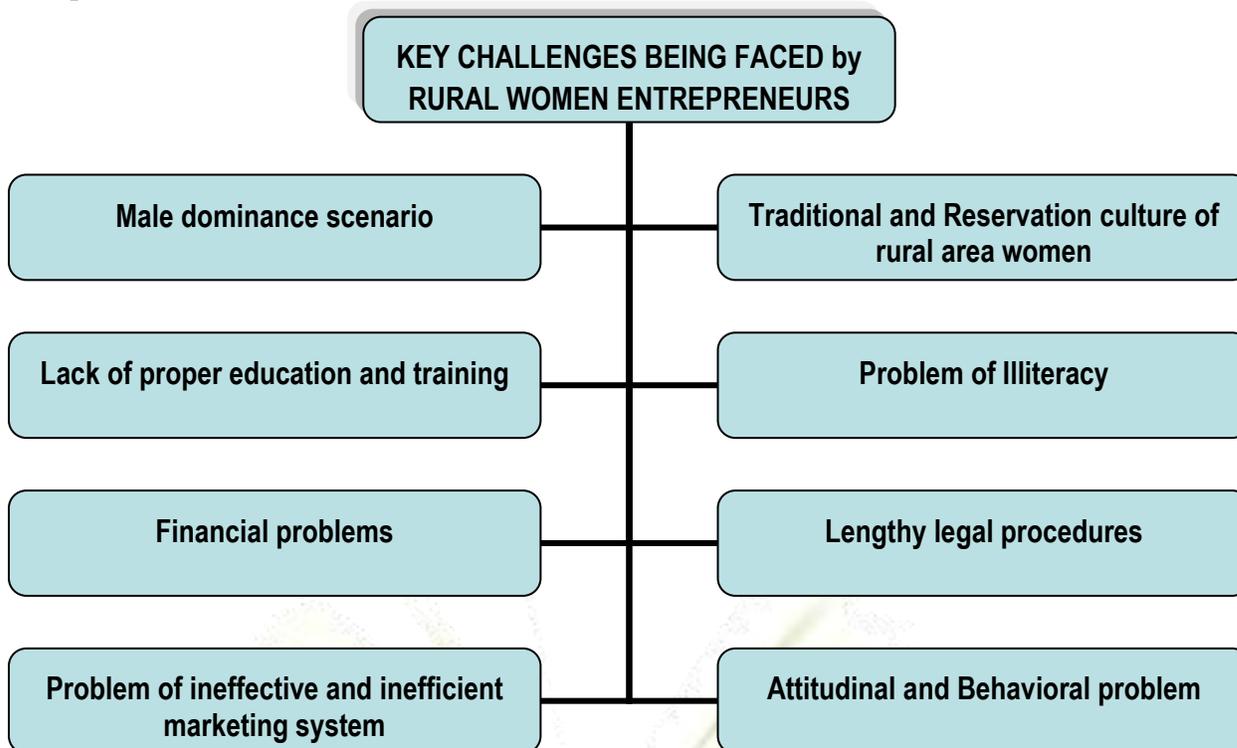
Accordingly, all Knowledge Centre’s offers incredible and yeomen services to the marginalized rural women entrepreneur, particularly in the contemporary scenario whereby many entrepreneur’s experience lot of cutthroat competition emerging from the liberalized open market environment. Here, this research foundation has come forward to empower women and it has presently emerged that *“The real possibilities for changing poor people’s lives through knowledge intensive community oriented work with knowledge management and information communication technology is immensely possible in the 21st century”*

Knowledge in management practices is making rural women entrepreneurs as meaningful term, now-a-days, rural women entrepreneurs are having plenty of opportunities but lack of knowledge is impinging their progress, and they are not able to utilize the opportunity in a fruitful manner. Hence, M.S.Swaminathan Research Foundation empowers the village knowledge centre (VKC) to facilitate the rural women entrepreneurs to get modern knowledge, education and training in their entrepreneurial careers on the basis of the following major areas of enterprises namely:

- Employment opportunity through skill development in basic computer application
- Training on Making ornamental articles with sea shells oysters etc.,
- Training on value added products from alma fruits and vegetables
- Training in fruit juice preparation and vegetables soups.
- Training in coconut climbing
- Self employment through training in tailoring
- Training on Micro enterprises such make omum water ,detergent soaps, Mushroom cultivation, incense stick making,
- Training on agriculture product making to rural women Self help groups such as organic product making, panchakaviya mixture production, tricoterma verti preparation.
- Traditional variety conservation practices in rural tribal women entrepreneurs at kolli hills, Tamilnadu
- Training on artificial jewel making and doll making
- Loan assistance to rural women entrepreneurs for starting the Bag shop and tailoring shop etc.,

- Training on Screen printing work,

By and large, the following diagram reveals, the key problem being faced by rural women entrepreneurs



Source: www.iosrjournals.org

Details of the Key challenges of Rural Women Entrepreneurs

1. Male dominance scenario

The attitude of the society towards women and constraints in which she has to live and work inspite of the constitutional equality and legal equality in practice affects them. The attitude of men not only of tradition bound village men but even those who are responsible for decision making, planning and research are not treating women with equality. They still suffer from male domination and undermine about a woman's role and capacity in the field of entrepreneurship. Even in MSSRF, many of the entrepreneurship programs are alienated towards male entrepreneurs rather than the female, hence it indicates the biasness of institutions in gender perspectives. Even in the 21st century.

2. Traditional and Reservation culture of Rural area women

The attitude or traditional reservation culture creates difficulties and problems at all levels. i.e., family support, training, banking, licensing and marketing, women in non urban areas or peri-urban areas have to suffer still further. They have to face not only resistance or reservation of men but also of elderly women who are ingrained with this attitude of inequality. In rural area joint families arrangements are still the norm. The over bearing presence of elders restrain even young men from venturing out in to the competitive environments; so one can imagine how much a young girl needs to put up to

become economically independent!!!. Though in the rural area women are working along with men since times immemorial their contribution in monetary terms remain unaccounted for, or if at all accounted, it is given a very low value base level. They are mostly engaged in low paid jobs, backbreaking agricultural activities or act as helpers in handicrafts activities' of dominating groups.

3. Lack of proper education and training measures.

It is not that women do not have skills or capacity but they are not properly trained or inculcated in craftsmanship because it is felt if a skill is imparted to a girl it is wasted. Because, when she gets married she takes away the skill with her and keep it with her husband. A mobile training center will attract more women as family members do not like sending women away from family for training, nor do women like to neglect their own family. Securely, part time training facilities especially during afternoon will attract more women to acquire more modern entrepreneurs skills. To enable women to require a skill certain facilities like stipend, good hygienic crèches for their children, transport facilities need to be given to them in advance.

4. Problem of Illiteracy

Surveys have found that uneducated women do have certain level of knowledge of measurement as well as basic accounting. They may be totally illiterate but they have their own system of accounting and they do manage their small petty trade and businesses i.e vegetable seller, vendors', fisher folks women, etc., not only in urban areas but even in the rural areas. They know where and how to deal with it, also how much to buy and what price it has to be sold. They also know how much they need to keep aside, for price fluctuations and are very cautious and take decision after considering all pros and cons. This is the greatest thing with them and we need to start from this stage and move forward.

5. Financial problems

Women entrepreneurs are meeting a lot of financial constraint or initial capital problems. Money or finance is the blood steam of any enterprise. It has to be made available at the right amount. It is true that one can borrow finance from bank and other financial institution but the biggest catch is that of collateral security which is required to get bank credit. And women generally do not have any property in their names. House or property is mostly in the names of their father, brother or husband. Women may have some jewellery but even that cannot be given as security without consent of their husband or any other male member of their family. Family members do not like to risk their capital in ventures started by women. Basically, there is lack of confidence in a woman's ability to manage all this things. They may risk all family fortune for their sons or male members business. For this, they even persuade women to part with their jewel but are not ready to invest anything in the projects of women members of the community.

6. Lengthy legal procedures for obtaining Loans.

Procedures of bank loans, delay and the running about to get the loan, task involved in getting the loans, this has surely deterred many women from venturing in to profitable businesses. In banks too, there is a misconception that women entrepreneurs are rich and they having nothing to do at home and therefore get into the fancy ideas of starting business or industry. And so women are dissuaded to start ventures or delay in providing credit are caused by all these factors.

7. Problem of ineffective and Inefficient marketing system

The hurdles are not yet over as one of the biggest one comes now namely marketing. And that is marketing both raw material and of finished goods. To market her product she has to be at the mercy of middleman who eats up a big chunk of profit. Here, the middle man tries to exploit women entrepreneurs at both ends. They deny her discount or give the minimum discount in purchase of raw material and on the other hand try to extract maximum credit discount and commission on purchase of finished products from her. If she decides to eliminate middlemen, it involves lot of running about or wondering around. Secondly, in these days of still very high competition a lot of money is required for advertisement. If the product happens to be consumer product, then it takes time to win people away from other products and make this product popular. And then the tendency is to always question the quality of the product produced by women entrepreneurs, though many agree that women entrepreneurs are more sincere in maintaining the quality and time schedule than others .

8. Attitudinal and Behavioral problems.

Women have to fight against these attitudinal and behavioral problems all the way but fortunately they are realizing that it will have to eventually get united and organized independently and just not a part or wing of some greater organization to fight for their rights. Thus organizations like Indian council of women entrepreneurs, awake, WIMA, Sewa have come up to fulfill all these needs and requirements. In most of the countries women entrepreneurs have organization and they also have world congress of women entrepreneurs, where they interact. If they are organized they can represent their cases to various levels of government. They can ask government for facilities like training, education, re-education, retraining, demand some ancillary units of public sectors for women entrepreneurs, ask government to make available industrial estates or sites for women entrepreneurs within comfortable distances, to allow large number of installments in the purchase schemes of industrial sheds, help marketing of their products by giving preference to products of women entrepreneurs in government purchasing policy and recommend them for selling their goods and services abroad.

Selection of Business by rural women entrepreneurs

Rural women entrepreneurs are selecting their business based on the resource available and calculated risk management and also utilize the knowledge to apply for the development of the business to win – win strategy. Because of the fact that, rural women entrepreneurs are always standstill, the major factors affecting their business are stated here below. They are constantly looking for the best opportunities to sustain their business. The following factors are considered while undergoing the selection process of business ventures by the rural women entrepreneurs' namely:

- Fund rising capacity, capacity to repay, credit worthiness,
- Education Level factor
- Personality traits
- Training / Knowledge Management
- Social commitments and understandings
- Positive Attitudes and Behavior and also positive Moods

How are the women funding their businesses in India? What are the sources of funding in India?

Table 1: Sources of funds for Women Entrepreneurs in starting Business

Family members	43%
Bank or credit unions	33%
Friends	25%
Venture capital	17%
Business acquaintances	21%
Colleagues	16%
Government Funding programmes	15%
Others	01%

Source: Dell Women's Entrepreneur Network (DWEN) – 2012 global conference in New Delhi

The above table clearly indicates that, a major chunk of funds emanate from the family members (43%) of the women entrepreneurs. Unfortunately, they receive less funding from banking and credit unions to extend of Thirty Three percent. They receive inadequate attention from the government funding programmes(15% only) and rest of funds are obtained from other sources.

The rest of the factors that are influencing the entrepreneurs in sourcing their funds, are factors such as labour, marketing, raw materials etc. Similarly, rural women entrepreneurs can start self employment units with the support of bank loans from public and private financial institutions. The appropriate selection of business is very essential element for rural women entrepreneur because most of whom have not had specialized educational background as well as relevant working experience. Hence, rural women entrepreneurs need adequate knowledge and training to overcome many such problems. The intervention strategies adopted by this foundation to mitigate the hurdles are as follows, namely:

- **On the job training programme**
M.S.Swaminathan Research Foundation and in collaboration with the banks, both private and nationalized banks are facilitating and conducting appropriate training programmes on the basis of demand of rural women entrepreneurs which is called as **demand driven training approach**. This kind of training is conducted for enhancing the prospects of rural women entrepreneurs' career development.
- **Entrepreneurship development programs conducted by specialized organizations and banks**
Once the rural women entrepreneurs decides to start a business they are encouraged to under go specialized training in a similar industry / business unit which trains them in all the aspects of that particular business, this could be arranged by institutions like M.S.Swaminathan Research Foundation, Coconut Development board, Cochin, federation of chambers of commerce and industry etc.

Generally, rural women entrepreneurs are inclined to starting the following Enterprises:

- Micro enterprise industries such as Agarbathi / incense stick manufacturing, Papad making, Fruit juice shops, Pickle making, soap and detergent making
- Catering /Food services / Hotel / Restaurant Services

- Tailoring Unit / Embroidery design /Textile industries / khadi industries/ Handicrafts industries / Educational services /Milk distribution-vendors / Xerox shop / DTP work / Operating Telephone booth/ stationery shop/ courier service etc.,

Development of New strategies for Re-shaping the Rural Women Communities and Development of women entrepreneurs' through Ultra Small Banking Service: A Model for PPP in Technology Extension and transfer for rural women entrepreneurship development

Brief Background on the Role of Bank's and Savings in the Development of a Country

Economic growth and development is strengthened on the basis of the gross domestic savings (GDS) of the peoples of any country. The Gross Domestic Saving facilitates and rooted up in the financial resources that eventually would take appropriate developmental and welfare programs for the people. Savings fix up the economic progress as well as investment capacity of a country. Hence, GDS controls the financial regulations and soundness of a country. According to the RBI report 2010; in 1950 savings level was 10% only in 2010 it grown up to 33.70%, it is the highest saving level of the global side. In 1950 public sector contributed 18% but in 2010; it has come down to 6% only. Here, the Canara bank decided to start the Ultra Small bank / branch in each and every village. Where it was facilitated by the ICT enabled services (Computers, Laser Printer, Wireless phone, UPS).

Table 2: Trend of Deployment of Household Savings

Deployment of Household Savings (%)							
Category	1950	1960	1970	1980	1990	2000	2010
I. Financial	26.39	32.14	37.70	46.58	54.05	48.11	50.21
II. Physical	72.21	67.86	62.30	53.42	45.95	51.89	49.79
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Handbook of Statistics on the Indian Economy, RBI

The decennium analyses of the deployments of Household Savings are presented in two major categories viz. Financial across various decades and Physical components across various decades. The table above clearly reveals that, there was sustainable growth and progress in the deployment of financial saving at the same time there was great declining trend in the physical saving across the various decades.

The decennium analysis of household savings discloses that, the majority of people are patronizing with the Government and private banks (47.3%); it is clearly shown that, the interest of people are mainly lying with the secured, modernized and easy mode of transactions. Apart from that, people are interested to deposit their savings in life assurance schemes like LIC /PF / Pension Funds. At the same time, currency saving indicated a constant growth performance across the various decades.

Table 3: Major components of Household Savings

Major components of Household Savings (%)				
Category	1970	1980	1990	2011
1. Currency	13.9	11.9	10.6	13.3
2. Deposits with Banks/NBCs	45.6	40.3	31.9	47.3
3. LIC/PF/Pension Funds	28.6	25.0	28.4	32.9
4. Small Savings (Govt.)	4.2	11.1	13.4	6.5
5. Shares & Debentures	1.5	3.9	8.4	-0.4
6. Others	6.2	7.8	7.3	0.4
Total	100.0	100.0	100.0	100.0

Source: Handbook of Statistics on the Indian Economy, RBI

The ownership of bank deposits data reveals interesting trends which are indicated in Table: 4

Table 4: Ownership of the Bank Deposit

Ownership of the Bank Deposits (%)					
No	Category	1990	2001	2010	Var. over 1990
1	Government	6.80	10.00	13.5	+6.70
2	Corporate (Private)	6.20	4.60	14.80	+8.60
3	Financial sector	6.20	7.30	10.00	+3.80
4	Household (Ind./Trusts/Prop.)	71.60	67.20	58.00	-13.60
5	Foreign sector	9.20	10.90	3.70	-5.50

Source: RBI Reports

The above table clearly reveals that, the major portion of ownership is influenced by the Households. At the flip side, it is interesting to note that, the government ownership is less than private ownership. However, the rests of the ownership position are mutually shared by financial sectors and foreign sectors. Further, the decennium analysis shows that, the government is taking appropriate action to hold the ownership than the private sectors. Even though the corporate sector is a little bit (minimal) is even greater than the government ownership in banking deposits. At the same time across various decades, household ownership is falling down; hence, it kept the negative variance over the period under study. However, households/Individuals are the ultimate owners of overall banking deposits.

What is Financial Inclusion?

1. Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost (The Committee on Financial Inclusion, Chairman: Dr. C. Rangarajan).

2 Financial Inclusion, broadly defined, refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial

services such as insurance and equity products (The Committee on Financial Sector Reforms, Chairman: Dr.Raghuram G. Rajan)

Imperative Need for Financial Inclusion:

ICT offers promises for the future of rural India in terms of economic growth and alleviation of poverty. The World Bank in its annual report on 'Global Economic Prospects' highlighted that the population of the poor living on less than 1 dollar per day has increased from 474.4 million in 1987 to 552 million in the year 2000. Financial Inclusion plays a vital role in the economic growth of a country. Even though India has six lakhs villages; only 34,000 villages are getting the banking services; In India around 26 % of (145 Million) house-holds completely excluded from banking services. This malaise has led generation of financial instability and created absence of saving habits among the rural peoples. In this scenario, M.S.Swaminathan Research Foundation (MSSRF) and Canara bank jointly has extended Ultra Small Banking (USB) services to the Pillaiyarntham village. The Ultra Small Branch (USB) service started on September 2012, at Pillaiyarnatham; Operating in the building of Village Knowledge Centre

The Ultra Small banking service delivery is highly essential to the rural communities' for the development of banking transactions Around Pillaiyarnatham, where more than 15 remote villages are located. This banking system, especially USB can facilitate the banking services in a more easy way; minimizes the transportation cost; it maximizes the time saving and avoids the filling of confusing forms. Hence, more than 3000 village people can easily open the new bank accounts and easily get the benefits of banking financial service and products.

The USB service is the mile stone for pillaiyarnatham village people's development. Public Private

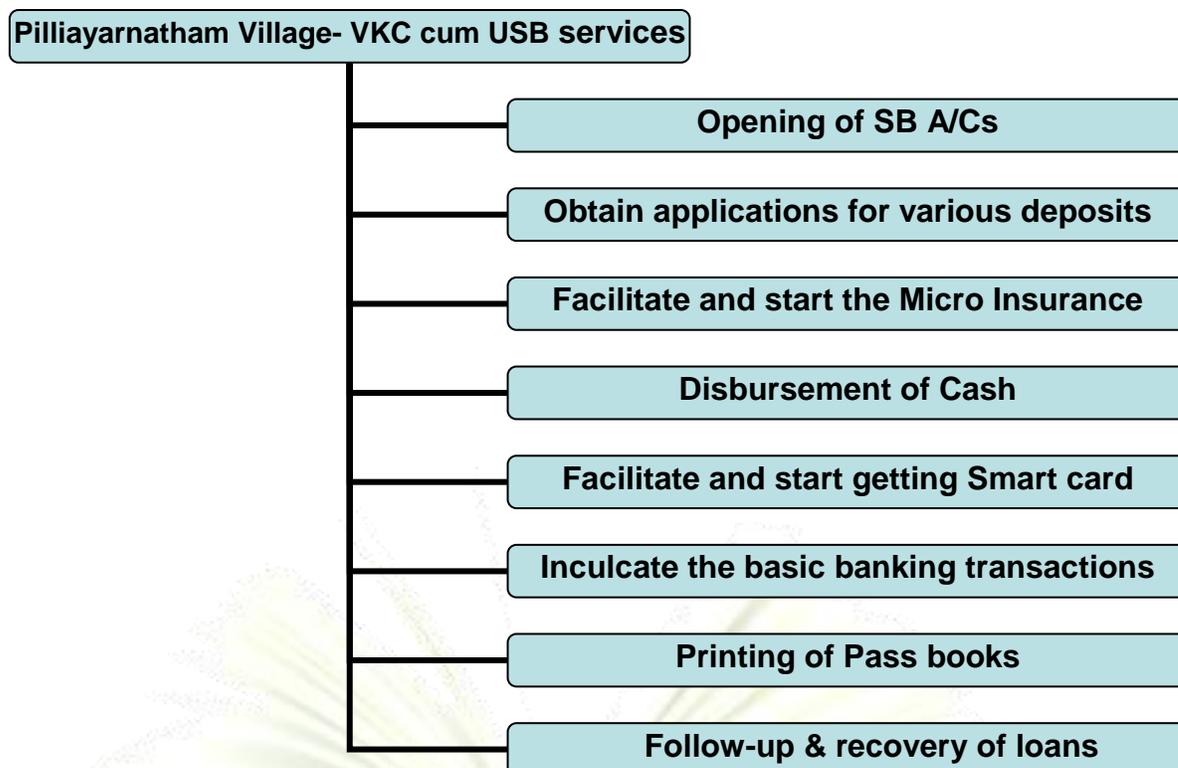
Partnership (PPP) plays an essential and vital role in the development of rural communalities through adopting appropriate action and implementing of joint venture programs such as this one under study.

Evolution of the Ultra Small branch of Pillaiyarnatham, linked with the VKC for the enhancement of Rural Women Entrepreneurship Development

These rural women have mostly studied up to the primary school, whereas they have difficulties to even understand the concept of banking service as well as banking transaction system paved way for the introduction of the USB. Hence, Pillaiyarntham VKC has introduced the new innovative technology based on the Ultra Small banking service to rural communities, especially for rural women entrepreneurs on the day-today banking operations. In broad view, this USB offering banking service has become very easy to rural women entrepreneurs to access the modernized banking technologies. This system is making banking transactions to be very simple to manage and the banking services are delivered in a very simplified manner.

Major Opportunities for Rural Women Entrepreneurial Development created by Ultra Small Banking System

Diagram: 1 Showing the Key Services Delivery of Ultra Small Branch (USB)



Source: compiled by the researchers from Primary data of Pillaiyarnatham Village-VKC

Understanding of Ultra Small Branch:

The ultra small branch services delivery system has overcome the challenging issues over the period of time.

1. Modernized Transfer of Technology and well equipped Infrastructure facilities

M.S.Swaminathan Research Foundation and Canara bank, Gandhigram, Tamilnadu has arranged well modernized technologies transfers to the village by providing Computer, Laser Printer, UPS; mini bio metric ATM machine and most essential facilities and contribution made by the community which provides well equipped infrastructure building, provision of Table and chairs.

2. Minimization of Transportation Cost and Time Saving

Ultra Small banking service saves the rural people's time and money by avoiding travelling from pillaiyarnatham to Gandhigram to reach the main branch of Canara bank for their banking transactions. Here, the pillaiyarnatham Village is far away, which is more than 7 kms from Gandhigram headquarters.

3. Easily Understanding the Banking Operations and Transactions

The rural people are mostly illiterate. They couldn't operate the banking services in full. They often get confused to manage the various forms and challans at bank. To solve these problems, the Ultra Small Banking services delivery system has made it easy. These

banking services approaches' has saved the invaluable time, money and avoid misguidance of unknown persons or middleman.

4. Enhancing the Level of Secure Transactions and Safeguard of customer needs

At the time of dealing with the cash transactions at bank level; the rural people fully rely on the help of others like filling up the forms, cheque; even need assistance in operating ATMs. At the time of requesting help from others in the bank, they expose themselves to unwanted problem of insecurity and all the banking transactions undergoes insecure. On the side of Ultra Small bank, there is no insecurity at all, because of bio-metric method is used to transact and Business Correspondence is the well known local person by one and all of that village. Hence, ultra small branch ensure the highest level of secure transactions in the village.

4. Routing Subsidies and Welfare Measures programs through USB and VKC's

In broad view, around 3 lakh crores of government subsidies and welfare programs funds are routed through banks. Hence, USB has now emerged as the most viable structure to reach the government welfare measures as well as improving the rural people's livelihood standards. As it needs, canara bank, Gandhigram, they directly sought the support to run the Ultra Small branch at

Pillaiyarnatham village. Fortunately M.S.Swaminathan Research Foundation has initiated the social oriented uplifting services at the Pillaiyarnatham village through Village Knowledge Centre and has appointed a Village Knowledge worker who works as a multi task handler and who has undergone full-fledged master training on computer literacy, mobilizing community and disseminating information through traditional and modernized technology based systems; and also who is working as a SHG federation coordinator.

Therefore, it made easier for canara bank, Gandhigram to appoint the VKW as Bank Corresponding (BC) for Ultra Small Branch of Pillaiyarntham. Overall, these kinds of new technology based approach can develop the rural women entrepreneurs and remove the prolonged challenges and social and economic barriers. Moreover, it is highly essential to educate the rural women to rise up from the bottom level to the top level and besides imbibe the self-confidence and self-motivation to start their own enterprises. It is heartening to note that, **Pillaiyarntham VKC-cum-USB** has facilitated 150 socially and economically weaker women entrepreneur's to stronger women entrepreneurs by provided Rs. 50,000/- to 2,00,000/- loan. Hence, rural women entrepreneurs have been utilizing the USB services for enhancement of their social and economic development in the competitive environments.

Case Analysis and Appraisal of successful stories of Talented Rural Women Entrepreneurs in the Contemporary Environment vis-à-vis-Village Knowledge Centre's as source of Knowledge Management Information Strategies and technology transfer development for rural women entrepreneurs

1. Handy craft product making Training Scheme for - Mrs. X. Sengolammal, Olaikuda

I have three children, my husband is a fisherman. My son is taking a course to become an electrician. One daughter is studying at the 11th and the other is studying at 12th standard. I have heard about the village knowledge centre (VKC) in Olaikuda through one of my relative. My husband's income was not sufficient to run the family. When we were struggling, I came to know through a knowledge worker of the village knowledge centre that the centre gives training to the villagers on how to make ornamental articles with sea shells/oysters and other materials. I

therefore decided to join the course and got trained in the same skill development in the said rural trade entrepreneurship. Now, I make beautiful show pieces / decorative items using shells and oysters materials and earn about Rs. 5000/- pm and also M.S.Swaminathan Research Foundation has arranged for the marketing facility for our products. Consequently, they have arranged, to sale the products through PULSE, a philanthropic organization. At the moment, I have applied for a bank loan to start an Ornamentals Business Unit in my own rural village. This shall enable me to create gainful employment opportunity within my own village without going outside the village as immigrant worker. Through this training program, am presently empowered to teach other rural women entrepreneurs what I learnt and facilitate them to become future rural women entrepreneurs.

2. Training program in prawn pickle preparation for Ms. A. Selvi, Thangatchimadam

I am a disabled woman from a family of fishermen. Everyone, in my family is involved in fishing and the fish trade is our time immemorial traditional business. I am running the valampuri Handicapped Self Help Group (SHG) at MGR Nagar in Thangatchimadam. Making use of the membership fees and the subscription fees, we have set up a small business of shell craft. As such, we wanted to start small business, we approached the village knowledge centre to learn the preparation methods of making prawn products, understanding cost implications, understanding marketing strategies etc., Village knowledge centre arranged a training session to teach us the preparation of prawn pickle. After getting thorough knowledge through M.S.Swaminathan Research Foundation, I and my SHG group started the prawn pickle business through our SHG. It enabled us in getting Rs. 10,000 as income. Also, many other similar organizations are offering training programs in the field of Prawn Farming and Technology. There are many Prawn Farming Institute started in Karaikal Region in Pondicherry Union Territory pioneered in Prawn Culture and technology for taking advantage of the high demand of prawn products within India and outside India.. Hence, we need organic links with MSSRF with some of the leading Prawns Farming Organizations to promote these new rural enterprises.

3. Training on value added products from Amla fruit undertaken by Mrs. Jeyanthi Rani, Kalikampatti, Dindigul district

I am residing at Kalikampatti village, acting as a co-ordinator of Self help group namely naintha kaigal, through the internal lending process we encouraged our members to start petty shops as well as getting involved in cattle husbandry and other livestock rearing. We decided to do amla pickle products business. Hence, we approached M.S.Swaminathan Research foundation, village knowledge centre. For which the MSSRF organized two days training program on the preparation of value added products from amla fruits, to obtain some products such as nuts, pickle, juice and jam etc., after completion of the training we initiated amla jam production from 1 kg of amla on a trial basis. It was sold in 150 gram packs. It was sold within one day which was in deed surprising and created incredible interest to run it as full-fledged rural based business enterprise. Hence, we got motivated and bought 10kgs of amla and prepared the jam products in 100 and 150 grams packs to sale in the local towns. Through this business our SHG is getting income as much as Rs. 15,000 per month. And also we can impart this techniques and knowledge to other rural women entrepreneurs in the region. It is really, a success story in deed.

4. *Self-motivation to become an entrepreneur through tailoring course undertaken by Mrs. Anjalin Anandhi, oalikuda*

My husband is a fisherman, I have two children. I have only studied up to 10th standard. Hence, I am frequently struggling with financial constrains and fund crunches, even to minimally run the family day-to-day activities had become very cumbersome to me. So, I decided to learn some kinds of skill to enable me earn an income and gain a job to curve out a niche for my livelihood support. Fortunately, I heard about the village knowledge centre that offers the tailoring course to rural woman at no cost at all. I therefore, made up my mind and joined the tailoring course there and got trained, thereby gained a lot of knowledge and skill about the tailoring practices and methods. After obtaining the training, I could stitch for my self without getting any help from anybody at all. In the meantime, I discussed with the village knowledge worker to start a tailoring unit with minimum of 3 sewing machines. At the time, I did not have any idea on how to get the initial capital investment. The village knowledge worker guided me on how to get bank loan. I got the bank loan and started a tailoring unit now under my own business leadership initiatives. It is exhilarating to point out that, there are 10 rural women who are working in the units. Thus, it has really lighted up their families in many ways like this, as a result of the efforts taken out by the M.S.Swaminathan Research. It is really a success story to all of us in this region.

5. *Friends of Coconut climbing Training Programme undertaken by Mrs. Chitharai Selvi, Nochiodaipatti, Dindigul*

Even though I have studied up to 8th standard as well as I husband, we are getting mere wages for our hard work and we felt as if, it is a terribly curse to us to lives. We expected to get the right opportunity to rise up in life and obtain sustainable sources of livelihoods. Fortunately M.S.Swaminathan Research Foundation conducted a coconut climbing Training Programme. Even though, I had a lot of doubts such as “*can a woman really be capable of climbing a coconut tree?*” Mssrf explained and demonstrated how to climb with the help of coconut climbing machine (Device) in a nice and comfortable manner without technical hitches. I have participated in this programme with the permission of my husband and now I have noted plainly that my fearfulness had gone out completely. During the course of the training, I learnt not only how to climb the coconut tree and thorough knowledge, also known thorough knowledge and skill about yoga and contributed to my exercises for maintaining my health fitness. After training, I got a coconut climbing machine which I’m using now to pluck coconuts, coconut crown head cleaning. Now, I’m earning Rs. 300 per day. Which are really helping my family to run family household expenditures and make livelihood security secure and smoothly moving forward. It brings happiness to the entire family eventually. Moreover, I can give best education to my children. My family is settling down in the aspect of socially, economically viable. In this job, I’m serving 15 places which is closer to my villagers and neighbors by covering and climbing 900 trees as well as offering training components to the rural women. It is surely motivating and encouraging to many women such that, they come forward to jointly start a *rural women coconut climbers association*. We are the pioneer entrepreneurs in coconut climbers in Taminadu State and Dindigul District. We can also encourage them to form viable cooperative enterprises, such as *rural women coconut co-operative climbers association*. and derive benefits from the department of cooperation in India and Tamilnadu. Through these women coconut climbers association, we can serve various villages, regions and coconut farmers by offering coconut harvesting prices at reasonable amount at the right time. Earlier, hand and foot climbers

were asking Rs. 15 to Rs 40 per tree and also with the condition that, the coconut tree owners/coconut farmer should possess at least 10 coconuts trees and after harvesting, they should also give the coconut climbers a minimum of 10 coconuts. On the contrary, our women coconut climbers' association team collects Rs. 10 per tree without any type condition. These kinds of knowledge management and skill training inputs have really helped directly to our rural women to rise up for their *socio-economic betterment and well-being in the contemporary environment*.

Conclusion

To sum up, M. S. Swaminathan Research Foundation is surely shaping the rural women entrepreneurs by pooling of knowledge, technical skills and managerial skills on the basis of right job for right person. The Village knowledge centre is strengthening its base on technical, scientific, feasibility, through proper education; training and technical knowledge to the rural women entrepreneurs. The knowledge management imparted is appropriately suitable for their business and keeps on to educate them on the best managerial skills to sustain in the field of rural women entrepreneurship forever. Rural women entrepreneurs are getting adequate opportunity to source the right kind of knowledge, to select the right enterprises and the best, suitable type of business ventures from variety of businesses available in the open competitive business environment. Eventually, Knowledge is the single most important resource input for the upliftment of the rural women to manage their own business and enterprises. Hence, MSSRF would continuously support the rural women entrepreneurs' to get adequate knowledge through village knowledge centers in the contemporary environment.

Subsequently, the Indian Culture and systems of keeping in-build saving habits is being exploited in this context; Based on this Ultra Small banks are encouraging the saving habits among rural women communities. Moreover, USB inculcate the rural women communities to enhancing livelihood upliftment measures. The banking service has become very easy by adopting modernized technologies. As 3 lakh crores of government subsidies and welfare programs fund routed through banks. In connection with that public private partnership joint venture activity need to emerge the structure for reaching the government welfare measures as well as up-scaling of the rural people's livelihood standards. Eventually Ultra small banking services are making revolution in Indian economy and strengthening the saving habits among the village communities. The Public Private partnership approach (PPP) and effective system supporting the USB to reach the Mile stone of offering the banking services to the rural women communities and women entrepreneurs in the twenty first century.

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