

## **SUMMARY AND IMPLICATIONS**

### **INTRODUCTION**

The nature and field of technology transfer depends upon the stage of a country's development, its resource endowments, requirements and priorities, on the one hand, and availability of technology which can be transferred and terms and conditions on which it is offered for transfer. The basic features of technology transfer have to be kept in mind while dealing with the transfer of technology to rural areas and selection of technology as appropriate not only from technical point of view but also from socio-economic angle. It has universally been recognized that technology transfer in rural areas is of special importance because scientific and technological knowledge and other factors of production in India are immobile particularly between modern urban sector and traditional rural sector and the latter cannot sustain itself against competition from the former with-out systematic and resolute application of scientific information in the various fields in the rural areas. Even for the programmes for removal of poverty and making life of the rural population better and more meaningful, systematic application of scientific knowledge and Innovations has become an essential pre-requisite.

The innovative technologies already developed in different fields for generating rural economy in agriculture, forestry, poultry, fishery, animal husbandry and for making rural life better by providing better health practices, modern medical treatment, etc. since independence have not been meager.

However, there has not been sufficient mobilization of the prospective beneficiaries to take full advantage of such technology transfers. The low technology base of the programmes proposed for technology transfer to rural areas without reliable and relevant information on appropriate techniques, clear cut transfer policy, adequate technical services supported by the implementing agencies and clear appreciation of advantages have made technological improvement in rural areas frustrating and the results poor.

In rural society, though technology use is one aspect of social justice, bringing hope to the hopeless can be facilitated by use of technology to improve their quality of life. Technology could enhance their capabilities and encourage their

participation in the process of development. But the promotion of technology cannot be accelerated unless a climate of receptivity and an awareness of the importance of technology in modern life are created in the general public. Use of local resources and skills for the design and development of technologies would be helpful towards their speedy acceptance and adoption.

Appropriate technologies for rural areas may be defined as “low cost, need based technologies which are most appropriate and suitable to the environment. This will include a package which must be technically feasible, economically viable, socially acceptable, environment friendly, consistent with house hold endowment and relevant to the needs of rural people. People will come forward to take advantage of such technologies and which help the poor to get themselves above the poverty line. An appropriate technology is location specific. It is characterized by the features like local resources, cheap capital and employment for the local people.

Women can play a more positive and active role in development if they are given access and training to improved technologies in their daily activities. The appropriate technologies for women are the technologies which reduce the drudgery of women in the house hold work and enable them to undertake income generating activities based on their manpower and resources. Experiences in countries such as China, Cuba and Tanzania suggest that the improvement of simple village technologies is the only feasible approach to the gradual modernization of the rural economy. Use of local resources and skills for design and development of technologies would be helpful towards their speedy acceptance and adoption.

Problem areas must be identified and appropriate technologies searched for which can help to solve these problems. This strategy can be best adapted by the unified field of action by five powers. “Panch Shakti” i.e. people’s power, social workers, educational institutions, the industrialists and the Government. Among the Panch Shakti, the two powers, Educational Institutions and People’s Power are the focus of the proposed study.

### **Educational institutions**

The capacities of the scientists in various disciplines and institutes can be utilized to solve the technological problems of the rural areas and to develop the

techniques which can help the poor, based on the resources available in the villages and the technology must be simple and capital cheap. They should support preparation of information packages aimed at promoting awareness among the village population regarding transferable technologies through such means as print materials, films etc. They should also act as resource persons to train in technology transfer for grass root level workers and beneficiaries in the rural areas.

### **People's power**

There is some vibrant strength in the village community which makes them face all ordeals with great hope. The rural population is said to be coping with a dependency syndrome, forcing them to look up to the Government for financial help. While external help is necessary and desirable, the initiative for developing areas should come from the rural people themselves. The community should plan for optimum utilization of local resources and potential for its own development and to adopt appropriate technology with help of NGOs, government and technical bodies to upgrade their local talents and to stand on their own legs. Educational Institutions can act as the bridge to bring together the people and the technologies.

Most women have not yet benefited economically from new technological inputs in production on farms and in factories. In addition, by mere fact of being women, preparation and distribution of food for the family is regarded as their natural responsibility. It is not the technology itself that creates the wealth; rather, it is the appropriate and effective use of such technology that does so. When technology is applied to add value to resources and provide marketable products and services, wealth is increased (i.e., the management of technology creates wealth and prosperity). Technology plays pivotal role in the interactions among individual, society, and nature. Technological advances have major effects on each of these entities and are, in turn, influenced by them.

Management of technology involves developing an understanding of these relationships and dealing with them in a rational and effective manner. The quality of life of women and their life-styles are influenced by a number of factors as women are part of the socio-economic and cultural living of the group to which they belong. Thus "Life-style is a concept used to denote the way people live" and this reflects the whole range of social values, attitudes, and activities. Any strategy at

development will be incomplete without involving the rural masses aimed at raising their socio-economic status, upgrading skills particularly towards mitigation of drudgery, accessibility of appropriate technologies, increased income sources and gainful employment.

Thus the present study entitled “Adoption of Technology and Innovation among SHG Women Beneficiaries-A Study of life-style management” was undertaken.

## **METHODOLOGY**

### **General Objective**

The main objective of the study is to examine the “Adoption of Technology and Innovations among SHG Women Beneficiaries for better life-style Management”.

### **Specific Objectives of the Study**

- To examine the personal, socio-economic, educational, organizational support systems, and situational background of the SHG women beneficiaries
- To identify the technologies known to SHG beneficiaries which were beneficial to them.
- To assess the technologies utilized by the SHG beneficiaries in their day-to-day life to reduce drudgery.
- To examine the attitude of SHG beneficiaries towards various labour productivity enhancing and drudgery relief technologies for adoption.
- To list out the commonly used labour saving technologies which alleviate women’s drudgery and labour burden in low-return areas.
- To assess the benefits accrued to the SHG beneficiaries from adoption of technologies.
- To find out the technologies which they would like to adopt in future and for what purpose.
- To identify the reasons for non-adoption of technologies and likely remedies.

## **Hypothesis**

A hypothesis is a specific statement of prediction. It describes in concrete terms what one expects will happen between variables in the study. However, not all studies have hypotheses. Sometimes a study is designed to be exploratory. There may be no formal hypothesis, if the purpose of the study is to explore some area more thoroughly in order to develop some specific hypothesis or prediction that can be tested in future research i.e inductive approach. In inductive reasoning, the research begins with specific observations and measures detect patterns and regularities, formulate some tentative observations that can be fully explored, and finally end up developing some general conclusions or theories.

## **Area of Study**

The present research investigation was undertaken in rural areas of Chittoor District of Andhra Pradesh.

## **Sample Design**

Using purposive stratified random sampling technique women beneficiaries from SHGs were selected for the study. The total sample selected for the study consisted of 500 Self-Help Group women beneficiaries – 250 from Chandragiri and 250 from Ramachandrapuram (RC Puram) Mandals of Chittoor District.

## **Sample Frame**

Two Mandals from Rural Chittoor were selected purposefully for the study – Chandragiri and Ramachandrapuram Mandal as they had a large number of SHGs actively functioning in the area. Chandragiri Mandal had 158 actively functioning SHGs, of which 24 SHGs were selected purposefully for the study. The total SHG beneficiaries belonging to the selected 24 SGHs was 430. Of these, 250 SHG Beneficiaries were selected randomly for the present study systematically. Similarly, Ramachandrapurm Mandal had 127 actively functioning SHG groups of which 24 SHGs were selected purposefully. The 24 groups had 420 beneficiaries of which 250 were selected randomly for the study. As such 500 SHG Beneficiaries were selected for the study – 250 from Chandragiri Mandal and 250 from Ramachndrapuram (RC Puram) Mandal.

### **The study covers the following components**

The primary data was collected using an Interview schedule specifically developed for the purpose;

- Socio-economic and demographic profile of the respondents
- SHGs profile of the beneficiaries
- Adoption of technology and innovation by the SHG beneficiaries

### **Data Analysis**

The data collected from the field was processed by adoption of Statistical Package for Social Sciences (SPSS). These packages were used in order to make the analysis easy and clear.

### **Statistical tests and procedures**

The schedules were numerically coded for computer applicability and analysis. Suitable statistical techniques viz., frequencies, percentages, t- test and chi-square test were applied to identify the independent variables that could significantly influence the SHG women Beneficiaries life styles.

## **MAJOR FINDINGS OF THE STUDY**

### **Socio-economic and Demographic Profile**

The socio-economic and demographic profile of the SHG beneficiaries by Age, Religion, Social Status, Education Qualification, Marital Status, Type of Family, Occupation etc. is presented briefly----

About 30 percent of the Chandragiri SHG women were in the age group of 20-29 years, with another 30 percent in the age group of 30-39 years. 27.2 percent of the RC Puram SHG women were in the 30-39 years age group and 26.4 percent were in the age group of 20-29 years.

Majority (76.4% and 95.2%) of the Chandragiri and RC Puram SHG women belonged to Hindu religion. One-fifth (23.6%) of the Chandragiri and a small percent (4.8%) of the RC Puram SHG women belonged to Muslim religion.

More than half (57.6%) of the Chandragiri SHG women belonged to Backward Castes while two-fifths (43.2%) of the RC Puram SHG women belonged to open category.

A large proportion of the SHG women in general, were married, 11.2 percent of the Chandragiri and 16.4 percent of the RC Puram SHG women were widowed.

More than one third (36%) of the Chandragiri SHG women had secondary school education while 30 percent were illiterates. A greater proportion (51.6%) of the RC Puram SHG women were illiterates.

### **Living Conditions**

Higher proportion (62.8% and 64.8%) of the Chandragiri and RC Puram SHG women belonged to Nuclear family system. 37% and 35% of the Chandragiri and RC Puram SHG women belonged to Joint family system.

Majority (91.6% and 77.6%) of the Chandragiri and RC Puram SHG women were living in pucca houses. A small percent (4.8%) of the Chandragiri and (3.6%) RC Puram SHG women were living in kutcha houses. Some of the houses are in bad shape for want of maintenance.

### **General Facilities**

Majority (82.4% and 74%) of the Chandragiri and RC Puram SHG women were having good sanitary facilities. 17 percent of Chandragiri and 26 percent of RC Puram SHG women did not have that facility. They were using public toilet facilities, open pits, fields etc.

A large majority of the Chandragiri and RC Puram SHG women had drinking water facility. They had Tap connection from Panchayat water supply. The small proportion of SHG women who did not have tap connections, used public water taps and bore well.

### **Occupation**

More than one-third (41.2% and 35.2%) of the Chandragiri and RC Puram SHG women were belonged to Home makers. 18.4 percent of the Chandragiri and 32.4 percent of the RC Puram SHG women were Daily labour. Above one-tenth

(17.6% and 12.4%) of the Chandragiri and RC Puram SHG women were Entrepreneur. The main income generating programmes undertaken by the respondents were stationery shop, sale of palm leaves, production and sale of snacks and bakery items, animal husbandry, poultry vending, vegetable vending, sale of readymade garments, petty provision shops etc.

### **Monthly Income**

More than one third (38.8% and 36.4%) of the Chandragiri and RC Puram SHG women were earning 2001-3000 monthly income. 17.2 percent of the Chandragiri and 26.8 percent of the RC Puram SHG women were earning 3001-4000 monthly income. 15 percent of the Chandragiri and 26.4 percent of the RC Puram SHG women were earning more than Rs.4000 per month.

### **Land holding**

Majority (50.4% and 52.8%) of the Chandragiri and RC Puram SHG women had land below five cents. 23.2 percent of the Chandragiri and 25.2 percent of the RC Puram SHG women possessed 5-10 cents. Higher number of SHG women in both Chandragiri and RC Puram possessed land below five cents.

## **II. SHGs profile of the Beneficiaries**

### **About the Organization**

The number of members in SHGs normally ranged from 10 to 20. It is expected that, within the group, there should be true democratic culture in which all the members must participate actively in the decision making process by taking part in discussions. More than half (59.6%) of the Chandragiri SHG women belonged to 11-15 members, more than two-fourths (62.8%) of the RC Puram SHG belonged to <10 members. Majority (56%) of the RC Puram SHG women stated that their group size was stable.

### **Source of Motivation from SHG**

Nearly half (48%) of the Chandragiri and more than half (59.6%) of the RC Puram SHG women reported that friends or relatives were the main source of their motivation to join the group.



### **Agenda of meetings**

Generally, the agenda of the meeting is fixed either by the Group leader in consultation with the members or the leader; the members and the link worker jointly fix the items of agenda to be discussed in each SHG meeting. 65 percent of the Chandragiri SHG beneficiaries stated that the agenda was fixed by the members of the group while three fourths of the RC Puram SHG beneficiaries said that group members and the link worker jointly fixed the agenda.

### **Monthly Thrift Collection**

Some fix an amount, which is agreed upon by majority of the groups under them, while others leave the matter to the SHGs to fix up the amount. Half of the (52.4%) Chandragiri SHG women were saving Rs.100 per month. Majority of the (66%) RC Puram SHG women save at Rs.50 per month.

### **Individual Thrift saving**

Thrift saving is a way to inculcate the habit of savings among the poor women to raise their sources gradually. The SHG system is the forum for them to practice it. The individual thrift savings of the respondents 60.8 percent of the RC Puram SHG women had thrift savings of less than Rs. 500 per Annual.

### **Purpose of savings**

Purpose of the savings are social security, education, marriage/festival, emergency, family needs etc. Majority (66%) of the Chandragiri SHG women and less than half (42.2%) of the RC Puram SHG women stated emergency.

### **Availing of Loans from SHGs**

There were no significant differences between Chandragiri and RC puram by monthly loan instalments to SHG funds.

There were no significant difference between Chandragiri and RC puram regarding loan amount borrowed from SHG funds.

There were no significant difference between Chandragiri and RC puram by total loan taken from SHG funds.

### **Utilization of loan**

41.41 percent of the Chandragiri SHG women and one-third (31.75%) of the RC Puram SHG women utilized their loans for self employment, one-fifth (22.03% and 20.26%) of the Chandragiri SHG women utilized for animal husbandry and asset building.

A larger proportion (64% and 60%) of the Chandragiri and RC Puram SHG women had become aware of various Governmental schemes of development and welfare through Information Technology advances.

89.6 percent of the Chandragiri SHG women and about 96.4 percent of the RC Puram SHG women reported that they discussed social problems in their SHG meetings.

The level of participation in Gram Sabha increased considerably after they became members of the SHGs. 62.8 percent of the Chandragiri SHG women and 44% of the RC puram SHG women attended Gram Sabha meetings after they joined the SHG.

A large proportion (99.2% and 98.4%) of the Chandragiri and RC Puram SHG women have exercised their right to vote in the last elections.

96% and 96.4% of the Chandragiri and RC Puram SHG women stated that their communication skills have improved after joining SHG's while 92.4 percent of the Chandragiri and 90% of R C Puram SHG women stated that they have started self employment activities. Four fifths of the Chandragiri and 94.8 percent of the RC Puram SHG women stated that SHG's encouraged them to increase their mobility.

### **Leisure Time activities**

Majority (67.2% and 56%) of the Chandragiri and RC Puram SHG women's hobby was to watch T.V. One Fifth ( 20.4 % ) of Chandragiri and 27.6 percent of RC Puram SHG women stated Cooking, 9.6 percent of Chandragiri and 14.4 percent of RC Puram SHG women said making Handicrafts while about 3.2 percent of Chandragiri and 2 percent of RC Puram SHG women said Reading books was their hobby.

## **Improvement in Qualifications**

Majority (67.2% and 68.8%) of the Chandragiri and RC Puram respondents stated that there was no improvement in their educational qualification while about one-tenth (12.8% and 11.2%) of the Chandragiri and RC Puram respondents stated that their educational qualifications improved.

## **Status in the family**

The data on Chandragiri and RC Puram SHG women indicated that their status in the family has improved after joining the SHG. Majority (75.6% and 83.6%) of the Chandragiri and RC Puram SHG women stated that their status in the family improved after joining the SHG. A quarter (24.4%) of the Chandragiri and 16% of the RC Puram SHG women stated that their position in the family was stable.

Majority (66% and 67.2%) of the Chandragiri and RC Puram SHG women cited husband as the decision making power in the family. About one-tenth each (13.6% and 12.8%) of the Chandragiri and RC Puram SHG women stated that they were the decision making power in the family. One-tenth (11.6% and 10%) of the Chandragiri and RC Puram SHG women said In-Laws/Parents had the decision making power in their family.

## **III. Adoption of technology and innovation by the beneficiaries**

### **Household Technologies**

Household appliances also known as consumer electronics are beneficial to women. Modern household appliances help women in maintaining the home with efficiency. Examining the effect of introduction of modern technology in to the domestic realm, shows the effects that such devices have on-women's daily lives.

Household articles like A.C. Cooler, Fans, Television, DVD Players, Radio, Two-in-one, Water Coolers, Water Filter, Water heaters, Solar Lanterns, Emergency lights, Iron Box, Sewing Machines, Mosquito Repellent Machines help women in Household maintenance. Cent percent (100 and 98%) of the Chandragiri and RC Puram SHG women were using Electric fans. 95.6 percent of the Chandragiri and 88.8 percent of the RC Puram SHG women were using television. Above three

quarter (87.2% and 81.6%) of the Chandragiri and RC Puram SHG women were comfortable using mosquito's repelliment machines.

### **Kitchen ware technologies**

Majority (91.2%) of the Chandragiri and 75.2 percent of the RC Puram SHG women were comfortable using Gas stoves. Three quarters (85.2%) of the Chandragiri and 71 percent of the RC Puram SHG women were comfortable using Pressure cookers. 84 percent of the Chandragiri and 73.6 percent of the RC Puram SHG women were comfortable using Mixes. Innovations which are costly and complex for the SHG women beneficiaries to apply will not receive the good will of the farmers hence their rejection. They need to be trained in the field of utilization of solar energy, solar energy plants for their house hold work, cooking system etc.

### **Farm technologies**

Nearly half of the Chandragiri SHG women were using tractors in cultivating operations. 58% had installed pump sets for supplying of water for irrigation. About 44% of the RC Puram SHG women stated that they were using tractors in agricultural activities which has eased considerable work load as also 42 % of the women who said they were using trailers Non adoption of some of these technologies could also be as a result of high prices, relative scarcity and indivisibility of the technologies.

### **Communication technologies**

The communication technologies are Mobiles, DTH, Computer/laptop, Calculator and ATMs very useful in helping to obtain information about Markets, Products, Prices, Health, Education development schemes, welfare programmes etc. cent percent (98.8% and 94.8%) of Chandragiri & RC Puram SHG were having mobiles. Majority (92% and 88%) of the Chandragiri and RC Puram SHG women were having DTH. Usage of ATM and debit cards was also in practice and more women were interested in using them. Though many of them did not own computers, they knew it was useful especially internet. Communication Technology helps SHG women to be aware of the trends in marketing, demand, supply, prices etc. it helps them to keep up with contact with sellers & buyers. From this trend, failure to adopt some of the technologies may be due to some educated women

preferring other more lucrative professions. It may also be attributed to the unavailability of the technologies.

Chandragiri SHG women were had significant relationship (at 5% level) between social status and use of mobiles, ATM and DTH, There is no significance difference between Social status and Computer laptops, Scientific calculators.

RC Puram SHG women were had significant relationship (at 5% level) between social status use of only ATM, DTH. There were no significant differences between Social status and mobiles, laptops, scientific calculators.

Chandragiri SHG women were had significant relationship (at 5% level) between Educational qualification and use of computer/laptops, ATM. There were no significant differences between Educational qualification and mobiles, DTH, scientific calculators.

In RC Puram, there were significant differences (at 5% level) between Educational qualification and use of computer/laptops, ATM, DTH and Scientific calculators. There were no significant differences between Educational qualification and mobiles.

### **Information Technology**

In modern life, the electronic media like radio, television, cinema, Magazines, News paper, Friends/relatives, Neighbours, awareness camps, are the best sources, since it disseminates information. About one third of the Chandragiri and RC Puram SHG women stated that television was a good source followed by 26 percent of the Chandragiri and 23.6 percent of the RC Puram SHG women who cited neighbors were their best source of information.

### **Adoption of technologies and efficacy in daily activities:**

86 percent of the Chandragiri SHG women stated that their efficiency increased after using modern kitchen ware technologies. About three fourths of the RC Puram SHG women also confirmed this view.

The Chandragiri and RC Puram, (89.6% and 86.4%) SHG women stated that modern gadgets helped in speeding up their work and increased their productivity.

Chandragiri and RC Puram, majority (82.8% and 81.2%) of the SHG women agreed that IT & communication tools were very useful in improving their efficiency.

A large proportion of women in Chandragiri and RC Puram, (82.4% and 71.2%) agreed that advances in agricultural technologies resulted in increase of efficiency and productivity.

In Chandragiri, there were significant differences (at 5% level) between Social Status and use of kitchenware technologies, household technologies, IT & Communication technologies. There were no significant differences between Social status and agricultural technologies.

In RC Puram, there were significant differences (at 5% level) between Social Status and use of kitchenware technologies, IT & Communication technologies, agriculture technologies. There were no significant differences between Social status and household technologies.

In Chandragiri, there were significant differences (at 5% level) between Educational qualification and use of kitchenware technologies, household technologies. There were no significant differences between Educational qualification and IT & Communication technologies, agricultural technologies.

RC Puram SHG women were had significant differences (at 5% level) between Educational qualification and use of kitchenware technologies, household technologies, agriculture technologies. There were no significant differences between Educational qualification and IT & Communication technologies.

### **Information, Education and Communication**

Majority (90.4%) of the RC Puram SHG women and more than three quarters (77.2%) of the Chandragiri SHG women used Contraception.

There were no significant differences (at 5% level) between Age and preventing pregnancy at Chandragiri and RC Puram.

In Chandragiri, there were no significant differences (at 5% level) between social status and methods of preventing pregnancy at chandragiri. There were

significant differences between social status and methods of preventing pregnancy at RC Puram.

There were no significant differences (at 5% level) between Education qualification and methods of preventing pregnancy at Chandragiri. There were significant differences between Education qualification and methods of preventing pregnancy in RC Puram.

More than one-third (35%) of the Chandragiri and 47 percent of the RC Puram SHG women had undergone female sterilization.

Majority (96% and 97.2%) of the Chandragiri and RC Puram SHG women had conceived and got pregnant.

Majority (87.92% and 87.24%) of the Chandragiri SHG women and RC Puram SHG women had taken tetanus injections three times during their pregnancy.

Majority (67.49%) of the RC Puram SHG women and Two-fifths (42.08%) of the Chandragiri SHG women stated that they obtained the tablets at the PHC. More than half of (59.17%) of the Chandragiri SHG women and Two-fifths (46.09%) of the SHG women had their delivery's at maternity hospital.

### **Health Awareness & Education**

Health is an essential requirement of all irrespective of age, caste, religion and economic standard. Health awareness & education includes Knowledge, Awareness and Prevention of HIV/AIDS, Primary Health Centers, Leprosy & TB Medication, Health, Community health development, Mobile health unit/visit etc.

Cent percent (99.6% and 100%) of the Chandragiri and RC Puram SHG women had Knowledge and awareness of HIV/AIDS, as also information about prevention. Majority (97.6%) of the Chandragiri SHG women and more than four fifths (89.6%) of the RC Puram SHG women knew about Primary Health Centers. More than two-thirds (63.2% and 58.8%) of the Chandragiri and RC Puram SHG women knew about Leprosy & TB treatment centres. Two fifths each (44.8% and 45.2%) of the Chandragiri and RC Puram SHG women knew about Community Health Development while one-third (33.6% and 30.8%) of the Chandragiri and RC Puram SHG women were aware of Mobile health units/visits.

There were significant differences (at 5% level) between Age and HIV awareness, Leprosy & TB, community health development, and mobile health unit/visit at Chandragiri. There were no significant differences between Age and health centre.

There were significant differences (at 5% level) between Age and HIV awareness, health centre, Leprosy & TB, community health development, mobile health unit/visit at RC Puram.

There were no significant differences (at 5% level) between social status and Leprosy & TB, community health development, mobile health unit/visit at Chandragiri.

There were significant differences (at 5% level) between social status and Leprosy & TB and community health development, mobile health unit/visit at RC Puram.

There were significant differences (at 5% level) between Education qualification and Leprosy & TB, community health development, mobile health unit/visit at Chandragiri.

There were significant differences (at 5% level) between Education qualification and Leprosy & TB, community health development, mobile health unit/visit at RC Puram.

### **Awareness on HIV prevention methods**

Majority (61.6% and 63.6%) of Chandragiri and RC Puram SHG women cited abstaining from sexual intercourse outside marriage as HIV Prevention method. They stated that awareness was generated through Information gaining and this was possible through technology development and adoption.

There were significant differences (at 5% level) between Age and HIV prevention methods at Chandragiri and RC Puram.

There were significant differences (at 5% level) between social status and HIV prevention methods at Chandragiri. There were no significant differences between social status and HIV prevention methods at RC Puram.



There were significant differences (at 5% level) between Education qualification and HIV prevention methods at Chandragiri and RC Puram.

94 percent of the Chandragiri SHG women and 96 percent RC Puram SHG women stated that they knew about the VCTC. They also knew that VCTC conducted free Elisa test and that it was essential for pregnant women to undergo the test.

There were significant differences between Age and HIV Elisa test at 5% Level of Significant at Chandragiri and RC Puram.

## **IMPLICATIONS**

The study highlights the profile of the SHG beneficiaries, the socio-economic factors influencing them and their adoption of new technologies. The present research study shows that Studies on adoption of Science and Technology would help to gather basic information about the use of modern varieties and inputs. Studies of this type also help to identify impeding factors and constraints to technology adoption and input use. Local governments need this information for policy making. Micro surveys can provide such information at a lower expense.

In addition to generating descriptive data about technology diffusion, micro studies can provide useful background information about the farmers who are currently using a technology and those who are not. Without basic descriptive information on who is using the technologies and who is not, it is difficult to know how to formulate policies aimed at improving agricultural productivity. Micro-level studies of technology use will document this information

Micro-level studies answer important questions about technology use. Information on what crops farmers are actually growing in their fields, how they are growing them, their decision-making processes – what factors were important to their choices of crops and technologies can be assimilated. Cross-section data tells about farmer preferences, growing conditions in specific areas, what varietal characteristics are important to farmers and farmers' perceptions of the constraints that they face.

Studies of this nature also provide some information on patterns of adoption and disadoption. Information on whether or not farmers have ever used improved technologies can be collected, as well as information on what they are currently using. A cross-section survey can show whether specific technologies have been tried and discarded by farmers, whether they were used intermittently, or whether they have never been tried at all. Farmers are usually able to provide information on why they did not adopt a new technology. Sometimes their answers provide important insights into the constraints facing farmers.

Understanding the conditions under which improved technologies are profitable would add to understanding of decisions to adopt science and technology innovations. A description of the current practices of farmers can be obtained through micro-level studies. Studies of this kind can explain what farmers are currently doing and may be able to explain what factors influence their decisions.

Researchers are often interested in whether farmers have access to cash or credit, because lack of such access may constrain farmers from using technologies that require initial investments – whether outlays for seeds and fertilizer at the start of the crop season or large cash expenditures for machinery, or investments in infrastructure in fields.

Farmers must have access to information about new technologies before they can consider adopting them. Since extension services are one important means for farmers to gain information on new technologies, extension oriented departments should provide information on new technologies and their benefits to the farmers.

Further it is assumed that adoption of new technologies is for betterment. It is not always so. There are many reasons why the farmers do not adopt improved technologies. First of all they are not aware of the available technologies; they are not aware that there are technologies that would benefit them; misconceptions about the costs and benefits of the technologies; technologies are not available when they are needed; they are not easily accessible and sometimes they are not profitable especially in the short run. Institutional factors, such as the policy environment, affect the availability of inputs and markets for credit and outputs and thus, the profitability of a technology.

It may be concluded that stating that a farmer has not adopted a “recommended” technology does not necessarily imply that the farmer would be better off if he or she did so. Researchers need to understand the challenges that farmers are facing. Focus on the broader issue of how to increase agricultural production – and the impact of new technologies is necessary. Instead of asking whether farmers are adopting improved technologies, attention should focus on their levels of production and finding ways to increase it, through improved technologies, improved infrastructure and institutions, and improved policies. To summarize, micro studies of technology adoption may provide valuable information.

Developing technology that benefits women within a resource-to-consumption system means beginning with the constraints of the beneficiary group which increases the probability that these constraints will be factored into technology development process, given the prior objective of improving that beneficiary group’s welfare. The problem of opportunity where technology innovation can most benefit rural women needs to be identified with a beneficiary diagnosis.

Social and economic development, especially among the rural non-literate poor can be achieved through Science and by using/application of simple technology to solve the day-to-day problems and to use in their day-to-day life style, by improving their functional skills to satisfy their basic needs and conservation of their resources by generating more and more employment opportunities and to generate income resources to get out of the rut of backwardness.

In the present day context, Science and Technology must meet the needs of the poor and studies of this type would help to develop appropriate technologies for rural women.

Many of the existing IEC (Information, Education and Communication) materials are not sensitive to women’s needs. It is necessary to listen to what women have to say about health and what they would like to know. Developing culturally appropriate women sensitive and specific IEC material, which would take into account issues regarding women’s health, would go a long way in attaining high quality Reproductive Health Status for women.

Today, information technology has changed the communication paradigm, making it no longer difficult to reach a large number of people more or less at the same time; and that too enable them to respond, interact as well as obtain a copy of the information within a low-cost. There is a large need for basic communication services in the rural areas of this region. ICT are currently used primarily for news, entertainment and communication with family and friends. Rural households, even the poor, are willing to spend significant portions of their income on communication and media.

### **Suggestions for Future Research**

There is urgent future research need in areas relating to Gender, Science and Technology including identifying missing links, data gap, key issues and short comings.

- Research focusing on levels of women's participation in Science, Technology, Research and Development and at the top decision making position and factors impeding them.
- To focus on the issues and challenges faced by farmers when adopting New Technologies.
- To examine the knowledge and attitude of young girls in rural areas on adoption of new Technologies and Innovations.
- Research focusing on technologies and innovations which rural women feel are more beneficial to them. The purpose and impact of specified technology transfer to rural women and how they impact their life-style in the domestic front and their productivity economically.
- A study on identifying most suitable activity for micro enterprise among Self-Help Groups in different regions, appropriate technologies that can be used, approximate capital and working investment, likely agencies that would provide assistance etc..