

Chapter-7

KVK The Social Transformation of Farm Women and The Light House

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7.1 KVK: The Lighthouse

Krishi Vigyan Kendra (KVK) has been conceived as the lighthouse of agriculture and rural development in India. This is Comprehensive Institutional, arrangement to catalyse the Transformation Process, a process that transform a state and still rural society into a vibrant and economically strong community.

In India right now more than 584 KVKs are working as centers for capacity building, specially for women. It also synthesizes humane capacity with technology viability. It is basically a technology socialization process. Any technology socialization process, again, assumes the characters of the Kinetic of Social Osmosis.

In any phenomenon of social osmosis technology passes through accommodation, assimilation and acculturation process (Acharaya, S & Pradhan, K 2002).

The Technological Socialization Process for farm women through KVK has turned to be a unique social process. In the first stage KVK accommodate the innovations or adoptable technologies in the micro-farming system through a capacity building of farm women. It is better branded as recognition or cognitive phase of technology socialization process. After that the assimilation process will go on happening by a self governed osmosis process where in the “exotic” ideas would be internalized in gender term and perspectives the role of women in India agriculture are so far been Polymorphic which is ranging from child care to seed sowing, nutritional care of the family to post harvest operation.

KRISHI VIGYAN KENDRA: THE LIGHT HOUSE

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7.2 Women: The gender issues in Agriculture

Women constitute one half of India's population. The 1991 census counted 407.1 million females against a total population of 846.3 million. Of these, 297.8 million women live in rural areas and 27 per cent of them are below poverty line. Over the past few years, development of women has been receiving special attention. Studies revealed that rural women play a dual role. They do the household activities and also work on farms and fields. Normally rural women undertake different farm related activities in spite of domestic chores and childcare. According to Dr. M. S. Swaminathan, the renowned agricultural scientist, "the historians believe that it was women who first domesticated crop plants and thereby initiated the art and science of farming. While men went out hunting for food, women gathered seeds from the flora and began cultivating for needs of food, feed, fodder, fibre and fuel – they thus considered the basic life support system like land, water, flora and fauna" – Chhabra (1998). The farm women share a wide variety of farm operations like agriculture farming, animal rearing, poultry rearing and fish farming. They adopt agriculture and allied farming operations which include sowing of seeds, transplanting paddy, irrigating weeding, fertilizing, harvesting, winnowing of crops; cutting, collection, carrying and chaffing of fodder to feed the cattle; milking, processing of milk products, cattle shed cleaning, collection of cowdung, making cowdung cakes and manures from cowdung; caring for sick animals, feeding a balanced ration to the birds, collection of eggs; application of mahua cake, lime, cowdung, to ponds; selling of fishes, keeping the nets etc. as household operations, not in view of gaining financial freedom and they carry out all these activities as unpaid family labour, without achieving much recognition in our male dominated society. Mukhopadhyay (1987) reported that female participation is invisible and mostly unregistered in West Bengal rice production. The majority of their work is uncounted because it is not recognized as economic activity (Stephens *et al.* 1992). Chaturvedi and Chaturvedi (1999) observed a strong bias against female worker in U.P. hills. Hill women work thrice as much as the males and gets poor economic rewards. This is a serious neglect and needs correction. Ghosh *et al* (1998) recorded that the new rice technology has given rise to the higher use of female labour, both absolutely and in comparison to male labour. A disaggregated examination of the components of technology suggests that the bulk of the increased workload for women is in the form of

operations that are largely unrecorded, unmeasured and unaccounted for in traditional economic literature. This is because these activities fall into the category of home production, the importance of which is yet to be properly acknowledge, at least in most of development world.

In general women do all these activities, just for household purpose, without keeping the financial bearing in mind. If they do these jobs on scientific lines with better management and in connection with the information sources, it will boost their family income and uphold their standard of living as well as socio-economic status and which will also help them to compensate their loss in one sector with the profit of other sectors and their family income will be in a secured state. Ahmed and Hossain (1994) observed that in Bangladesh the income received from poultry sub-system are used mainly for growing crops in all farm categories except landless and distress groups. It will also back their husbands to sustain their family living and the women will also get importance in the male dominated society because of financial self sufficiency. Halim *et. al.* (1991) observed that in Mymensingh district of Bangladesh the major sources of savings were sale proceeds from poultry, vegetables and various materials (rice, spice, oil etc.), earning from kantha making and serving as maid servant by the poor women. The reason of informal savings was mostly to meet the family expenditure during crisis. Ahmed and Hossain (1994) revealed that in Bangladesh the savings of the women derived from poultry production are utilized in risk management. Their contribution in the financial mien will proffer them desire status in the family as well as in the society. Without extra time investment, multiform activities can provide financial independence to rural women. In fact, the advantages of multiform entrepreneur tilt so overwhelmingly in favour of rural women that it has every prospect of becoming the pillar of strength and an ideal activity for the development of women in rural areas.

Participation of women in multiform activities apposite to a particular strata of rural women with minimum resource to practice agriculture and allied (animal rearing, poultry rearing and inland lentic fishery) farming activities, possess considerable potentiality to offer gainful employment and to rectify their standing in the society. Employment is a must for the rural women to make them economically independent. It will enable them to stand on their own feet. Being economically independent is a great boon to their self confidence and self-worth. The society will be bound to recognize their

inherent qualities and worth and their inalienable rights. Then they will start getting respect from their family members as well.

On the other hand, mixed farming activities are the provider of techniques to save time, space, capital and labour because all the enterprises like agriculture, animal rearing, poultry rearing and fish farming are interrelated with each other in many aspects like manuring, weeding, cleaning. Applying for credit and repayment of loans etc.

Since very beginning women have been accomplishing a major portion of corporal labour in the family and endeavour to furnish a respectable relief to men. Mahatma Gandhi had said that actual India lies in the villages as 80 per cent of our population lives in the rural areas. So, a large part of women folk lives in rural areas. If they do not fully participate in nation building process, India will not be able to attain the required development.

No doubt, the welfare measures adopted in post-independent India to improve the situation of rural women, had anti-poverty thrust. But all the schemes launched could not improve the living conditions and solve the problems of rural women employment to the desired extent. Women as productive member of the society have equal responsibility like men towards the betterment of society and at the same time they also have equal right to enjoy the privileges. Unfortunately, in India, women are considered an inferior breed. Women might have enjoyed a very high status in theory, but in practice women are treated as mere secondary citizens. So, the problem of poverty can not be tackled without providing opportunities of productive employment to rural women. Women are the important economic agents in India, particularly in the context of poverty. Women's income in the poverty groups is critical for household survival.

So, resource based and remunerative development programme like multiform activities should be taken to involve and upgrade the rural women having minimum resources like land, pond, implement facility, capital and technical assistance etc. except landless and distress groups. Timely appropriate technology and proper extension contact should be developed for farm women keeping in view their participation in agriculture and allied farming activities under different agro-climatic conditions. Before launching any development programme, a study is needed for understanding of the existing situation and also for the course of action to be taken in future.

In different rural enterprises women are catering two most vital roles viz. decision maker and manager. Thus, immense inputs are there imbibed with in empowering rural women and ultimately get their roles more esteemed and eclaird. The study proposes to probe into the entrepreneurial motivation in terms of their role performances, sharing pattern of resources and other unique social and psychological pursuits.

7.2.1 Gender issues

The information required at this stage includes general description of the role of women in livestock production and the contribution of livestock production to the income, status, nutritional level and productivity of the household generally. This should be done across agro-ecological zones and income classes. In addition, attention needs to be paid to women's access to the means of production (land, labour, capital, technical inputs, etc.) and to their ownership of livestock and land. Furthermore, a preliminary assessment of the impact of existing technological packages on women livestock managers is required. These aspects will help to identify the major bottlenecks and areas for further intervention. It is also necessary to describe in general terms the implications and expected difficulties associated with introducing gender considerations into projects. Gaps in available information should also be identical.

7.2.2 Gender Equality

Genders are different, biologically, socially, on the scale of perception and degree of treatment in a given social system. The value structure as performing in the agrarian social system has created a social and economic penchant in favour of the male counterpart primarily and hence, there lies the gender inequality. So, gender equality is a social perception and reality for eliminating the distance in terms of access and entitlement to both resources and benefit in a given social system. It refers to the equal enjoyment by women and men of socially valued goods, opportunities, resources and rewards. Gender equality does not mean that men and women become the same, but that their opportunities and life chances are equal.

Indeed men and women are both physiologically and psychologically different by they both have assets and can make positive contributions to the economy. This requires an understanding of the current status of women and men, their relations to each other and 11th interconnections between

Gender and other factors such as those defined by race, ethnicity, culture, class, age, disability and/or other status.

7.2.3 Rationale for Gender Equality

Global statistics indicate that women are less likely to be involved in planning, research development or application of science than men. Statistics further indicate that women are unequally represented in science and their career progression is not comparable to their male colleagues. Why is it that the numbers of women in scientific institutions remain below those of men?

An understanding of the logic of exclusion/inclusion is key to understanding the dearth of women in science. Understanding the obstacles women face can assist both managers and staff to better understand how organizations perpetuate gender bias. It can also help women scientists to understand that the constraints they face are not simply individual problems but are likely related to systematic issues within the culture of scientific organizations.

7.2.4 Logic of inclusion

The principle of inclusiveness in the policy and approaches is the precondition for any egalitarian development. Contrary to it, the harsh exclusiveness is a misanthropic approach which harnesses the marginalization process by pushing the integral component out of the periphery and creates a socially impermeable layer for plan fully hindering the process of social, cultural and economic osmosis. Many arguments can be presented to defend the inclusion and integration of women into science such as the principals of individual democratic rights and social justice which frame a woman's right to contribute to scientific knowledge both as generator of knowledge and beneficiary.

Access to scientific knowledge and technology is important for sustainable socio-economic development underlying social change and progress. Science and technology is already making distinct and valuable contributions to economic growth and development as evident in many developing countries for example in industry, medicine, energy, and agriculture. However the use of S&T has had least impact in the poorest countries, which are also the countries where gender issues remain

contentious. The exclusion of female talent, potential and creativity in the realm of S&T constitutes an under utilization of human resources.

Developing science to meet current and future needs requires recasting perceptions of science within a culture of sustainable development. Men and women scientists need equal opportunities to establish a bridge to society enabling the transfer of scientific knowledge and technology for the well being and development of a society.

7.2.5 Consequences of exclusion

Data from Canada and the USA show that far fewer women are successfully engaged in scientific enterprises than expected given the increasing numbers of women in the workforce. The problem manifests itself in numerous ways such as reduced access to research opportunities, positions of responsibility, etc. in comparison with male counterparts. Similar situations exists in Latin America, the Caribbean and in Africa – where women have difficulty in accessing education and are rarely found in hierarchical posts or at decision making levels.

This male orientation of science is certainly not the sole explanation for women's under-representation. Evidence suggests that the under representation of senior women scientists in the public arena means that girls have few role models and mentors to encourage them and yet one of the most critical areas where gender affects career attainment is in the realm of social and professional networks. Participation in these networks is though to influence access to information, resources, fora for decision-making on hiring, policy direction and resource allocation.

Women as the child-bearers often carry the 'burden' of childcare and other family members, and unless family-friendly policies are in place in an organization, women employee are likely to be distracted from their career or even taken away from it for considerable periods.

These structural dynamics have negative consequences causing women to leave an organization, embrace the prejudice and act accordingly or increase their performance in order to gain recognition. A last option might also imply that women refuse to deal with gender issues in order not to jeopardize their careers. Suggestions are that institutions require a critical mass of women to be able to change organizational cultures causing gender-

in-development lobbies to target improvement in internal institutional balance as a key element for achieving equality and empowerment.

7.2.6 National Policy for empowerment of women

Professor Amartya Sen highlighted the participation of women with the following discourse, ‘Women are less likely to secure favourable outcomes for themselves in household decision making processes. They feel that their long term security lies in subordinating their well-being to that of male authority figures’.

Rural population involves women folk also to make almost half of it. Their role in work productivity, employment generation and income-oriented activities are hindered by many socio-economic.

7.2.7 Some facts

- Of the world’s 1.3 billion poor, nearly 70 per cent are women.
- Between 75-80 per cent of the world’s 27 million refugees are women and children.
- Only 24 women have been elected as heads of governments in the last century.
- Women hold only 10.5 per cent of the seats in world’s parliament.
- Of the world’s one billion illiterate, two thirds are women.
- Two thirds of 130 million children world wide, who are not in school, are girls.
- In most countries, women work approximately twice the unpaid time men do.
- Rural women produce more than 55 per cent of all food growth in developing countries.
- The value of women’s unpaid house work and community work is estimated at 35 per cent of GDP world wide.
- HIV is increasingly affecting women. Today, about 42 per cent of the estimated cases are those of women.

- 20 million unsafe abortions are performed every year resulting in the deaths of 70,000 women.
- According to 2001 census, out of the total population of 1,027,015,247 the female population was 495,732,169 accounting for 48.2 per cent of the total population. But, their participation in economically productive activities is often underestimated. For last two decades, women's work participation rate increased from 22.73 per cent in 1991 to 28.9 per cent during 2001.
- The World Bank defines empowerment as "The process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Central to this process are actions which both build individual and collective assets and improve the efficiency and fairness of the organizational and institutional context which govern the use of these assets."
- Women's empowerment is further complicated by intervening factors like gender discrimination, low level of education and work participation, poor nutritional status, violence against women, poor health & lack of proper food.
- The government programme for women development began as early as 1954 in India but the actual participation began only in 1974, in general five different modes exists for the upliftment of women in rural areas viz. welfare mode, equality mode, anti-poverty mode, efficiency mode and empowerment mode.
- Welfare mode is one that benefits the most vulnerable group passive recipients and is suitable at the initial stage of development.
- Equity mode the gender needs and redistributing powers can be taken up by this mode.
- Anti-poverty mode recognizes that a majority of women fall in the category of deprivation and reflect on the necessary of providing women better access to resources.
- Efficiency mode takes care by improving the skills by training, imparting education, etc.

- Empowerment mode once economic empowerment is achieved, it would lead to overall development of women at large.

7.2.8 Women Empowerment and Planning Process

The First Five Year Plan (1951-56) envisaged a number of welfare measures for women. Establishment of the Central Social Welfare Board (CSWB), organization of Mahila Mandals or Women's Clubs.

This stress of the Plan was on promoting education of women through enrolling large number of girls in schools.

In the sphere of health, the main emphasis was on material and child health services for women and training of women as doctors, midwives and dais to provide better services for women.

The Second Five Year Plan (1956-61) the empowerment of women was closely linked with the overall approach of intensive agricultural development programmes.

- The plan mentioned the activities of the Central Social Welfare Board and its achievements.
- The need for promoting girls' education through educating parents, making education more relevant to girls' needs.
- And for the first time, the need to take into consideration, the physical and biological disabilities of women while allotting works.

The Third Five Years Plan (1961-66) continued to lay emphasis on the welfare aspects.

- Allocation of funds was recommended for the Central Social Welfare Board.
- The Plan took note of the big gap between the number of school going boys and girls.
- The Plan also emphasized the need to give special scholarship at university level to girls and recommended grants to women's colleges.
- The only mention of women in industry is the reference that the introduction of 'Amber Charkhas' for Khadi spinning had created employment opportunities for women.

Fourth Five Year Plan (1969-74) supported female education as a major welfare measure.

- Emphasis on women's education.
- The status of Women Report was published in 1974.
- Preparations for first women's Conference, which was held at Nairobi in 1975, were in full swing.

The Fifth Year Plan (1974-79) emphasized training of women, who were in need of income and protection.

Functional literacy programme got priority. This plan coincided with International Women's Decade and the submission of Report of the Committee on the Status of Women in India.

Women's Welfare and Development Bureau was set up under the Ministry of Social Welfare.

The Sixth Five Year Plan (1980-85) saw a definite shift from welfare to development.

- It recognized women's lack of access to resources as a critical factor impeding their growth.
- The document pointed out the declining sex ratio
- The lower life expectancy of women as basic indicators of their low status.
- Setting up of cells at district levels for improving women's participation through self-employment was suggested in the document.
- It emphasized the role of science and technology, research and survey, in assessing the level of women's participation. The Seventh Plan (1985-90) emphasized the need for gender equality and empowerment.
- Emphasis was placed upon qualitative aspects such as inculcation of confidence, generation of awareness with regards to rights and training in skills for better employment.
- Stressed a greater integration between health and family welfare and the primary health care for women.

- The Plan document took note of the gaps in the enrolment of girls in primary education.
- It recommended the need for generation of more skilled and unskilled jobs for women through vocational training and proper education for women.
- The Plan Document urged for new technologies capable of reducing the drudgery of household work.
- Women's corporations for promoting employment through skill training were planned for every state.
- The Seventh Plan stated for the first time, that confidence building and creation of awareness of their rights among women must be accelerated.
- It also mentioned the need for initiating integrated development projects for women covering health, education, nutrition and application of science and technology and creation of employment.

The Eight Five-Year Plan (1992-97) focused on empowering women, especially at the grass roots level, through Panchayati Raj Institutions.

- It stressed that women's employment should make them capable of functioning as equal partners and participants in the process of development.
- They should not be treated as mere beneficiaries rather they need to give additional attention for employment.
- It urged for a changing societal attitude towards women through awareness creation.

In 1990s, the stage of local governance began with strong footing. It was given Constitutional status by the enactment of 73rd and 74th Amendment Act 1992 for rural and urban areas respectively. The immediate fallout of the amendments was that people's participation and democratic base of the country widened tremendously. Today, there are 595 panchayats at district level, 5912 at block level and 2,31,630.00 at village level. Similarly, there are about 2009 nagar panchayats, 1430 municipalities and 101 municipal corporations. About 32 lakh elected representatives regin local bodies of

whom about 10 lakh are women and 8 lakh belong to Scheduled Caste/Scheduled Tribe category.

The Ninth Five Year Plan (1995-2000) adopted a strategy of Women's Component Plan, under which not less than 30 per cent of funds/benefits earmarked for women-specific programme.

- The Plan had goals for the overall development of women so as to make her capable of entering the 21st with a lot of self-confidence.
- It stated for the first time, categorically, that for empowering women as the catalyst of social change and development.
- A “National Policy for Empowerment of Women” would be formulated.
- The Plan discussed the need for reservation of seats for women in Parliament and in state legislative assemblies.
- The Plan also proposed 30 per cent representation for women in public sector and free education for girls up to college level.
- The plan proposed the setting up of a ‘Development Bank for Women Entrepreneurs’
- The most important resolve of the Plan was to have a special women's component in the plan to ensure 30 per cent flow of funds to women development sectors.

The Tenth Plan (2002-2007) approach aims at empowering women through translating the recently adopted National Policy for Empowerment of Women (2001) into action and ensuring Survival protection and Development of Women and Children through Rights Based Approach.

The Plan continues with major strategy of “Empowering Women” as an agent of social change and development. For this purpose a sector specific three-fold strategy has been adopted.

1. Social Empowerment: To create an enabling environment through various affirmative development policies and programmes for development of women besides providing them easy and equal access to all the basic minimum services so as to enable them to realize their full potentials.

2. Economic Empowerment: To ensure provision of training, employment and income generation activities with both forward and backward linkages with the ultimate objective of making all potential women economically independent and self reliant; and
3. Gender Justice: To eliminate all forms of gender discrimination and thus, allow women to enjoy not only the *de jure* but also *de facto* rights and fundamental freedom at par in all the sphere, viz., political, economic social, civil, cultural etc.

7.3 Training: The capacity building of farmwomen through KVK

The word “training” as referred in Webster (1947) means: as an act, process, or method of one who trains. Training is a specialized and practical form of education (Plenty *et al.* 1948). He further stated that training in commerce and industry is a specialized and very practical form of education. Basically, it prepares people to do their jobs well. To accomplish this it develops the skills that make for rapid, effective work, the knowledge that is meant for intelligent actions and attitudes that bring willing cooperation with fellow employees and with management.

The Psychological and Psycho-analytical Dictionary (1959) refers training as “the totality of instructions, planned circumstances, and directed activity to which an animal or person is subjected to induce learning.

Training has been explained by Flippo (1966), as the act of increasing the knowledge and skill of an employee for doing a particular job.

Elaborately, Taylor (1961) meant training as “the means to bring about a continuous improvement in the quality of work performed by the staff and individuals. It should equip the leaders with necessary knowledge, skills or abilities and attitudes to perform their job”. Lynton and Pareek (1967) conceptualized that “Training aims at lasting improvement on the job. The kind of education we call training more of the distinctions latter in truth, not for knowing more but to behave differently. Training, then is concerned with people- on the job in organization – the whole of this universally an amalgam.”

The skill training through the method of work experience is the fundamental design of the KVK, but the limited education by way of knowledge and understanding that is required to give rationality to the skill practice should

not be lost sight of Rao (1969) viewed training as “A kind of learning process where a selected group of individuals undergo learning experiences to internalize the skills, resulting in the modification of behaviour towards specific job performed.” Sharma and Pishorody (1964) have stated that “training goes much further than teaching. It involves imparting knowledge plus development of skills and habits.

There are two concepts of training “Prevailing concept” and the “new concept” (Lynton and Pareek, 1967). The difference between the two concepts is based on motivation of the participants and the work organization. According to the authors while the “motivation” is lacking in the “prevailing concept” the main focus in the “new concept” is motivation and work organizations. They have outlined three models of any training process as “simple model”, “elaborate model” and “spiral model”. The simple model of training process conceives the training as the intervening variable which contributes to the participant’s improved behaviour in direct sense and to greater organizational effectiveness in direct way.

The elaborate model of training process includes the element of feedback in addition to the four elements – participant, organization, training and institution, depicted in the simple model of training.

The emphasis is on the relationship between the participant, work organisation, institution and training. Feedback contributes to the improved efficiency of the participant and the organization.

The “spiral model” of training process includes participant, institution and work organization and three stages of the phases of training (pre-training, training and post training). The training programme has been visualized as a whole, and also, each event and the series of events which make up the programme. As stated, there is a before and after phase for each training session and, in between and actual phase of transmission of new knowledge and skill.

All the phases thus, together form a complete training programme.

A close scrutiny of the three models of training indicated that there are great similarities among them and the different is due to the terminology only, or addition of one or more elements.

Lynton and Pareek (1967) described three main phases of training as pre-training phase, training phase and post-training phase. The pre-training phase is primarily concerned with creating a favourable mental attitude towards a training programme by building up of the expectation and motivation to make them feel the need of it. The author viewed that a given training programme may not be motivating to the elements – Participants and work organization at the same time. Therefore efforts should be directed to correlate the understanding in order to achieve good results in a training.

In the “Training Phase” necessary exposure for the opportunity of learning is given in order to streamline the participants to adopt a series of five stages sequences which are selection of items of learning, initial trial of experience, feedback from the initial trial, reinforcement and continued practices and interrelation of what has already been learnt by the participant.

The Post Training Phase involves the process in which the participant is able to put his newly acquired learning into practice. At this stage, if the participant is given approval, encouragement and help to use the knowledge acquired in training, he will internalize the learning experience.

Rao (1972) summarized the meaning of training, its models and phases in the following ways:

- i) The training is the process of helping employees to acquire appropriate habits of thought and action, skill, knowledge and attitude.
- ii) The training is never static. It is an active process which is necessary for sustained growth of a system.
- iii) A good training programme is dynamic, purposive, developmental, comprehensive, scientific, imaginative and normative in nature.
- iv) The training is a two-way process in which the participant, work organization and the institution all gain in terms of further improvement.
- v) The different models of training are almost identical except for the difference of terminology and addition of a few elements.
- vi) The phases of training are pre-training, training and post training.

For the present analysis training has been operationally defined as a two-day dynamic specific learning process directed at change in knowledge, attitude and ability for solving the agricultural and allied (including dairy

farming, poultry farming and vegetable production) production problem in farmers' own situation and adaptation of improved practices and techniques.

7.3.1 Assumptions

- 1) In view of present investigation a consensus view of Lynton and Pareek (1967) and Rao (1969) has been accepted and it is presumed that the Krishi Vigyan Kendras performing the role of training by providing knowledge to the client system in a manner that the knowledge is utilized by the client system in boosting the production.
- 2) It is also assumed that the level of knowledge and adaptation index of the client system will vary due to differences in not only in motivational factors but to differences in socio-personal characteristics.
- 3) It is further assumed that differences in the level of knowledge index and adaptation index occurs not only between the treatment group (beneficiaries) and the control group (non-beneficiaries) but also within the targeted group and the control group and such differences are a result of differences in socio-personal characteristics.
- 4) It is also assumed that the level of knowledge and adoption will vary as a result of not only the socio-personal characteristics but also due to differences in the technology components advocated and propagated by the Krishi Vigyan Kendra to the client systems.

Following the above assumptions and considerations the research hypothesis formulated was that beneficiaries and non-beneficiaries vary in the level of knowledge and adoption index. These differences are the result of variation in them, with respect to their differential socio-personal characteristics explained through age, education, caste, occupation, family size, type of house, material possession, farm size, irrigation, credit utilization, communication sources, social participation, farm power perceptions of change and use of farm literature. Further, the net contribution of these does not explain fully the differential level of knowledge and adoption.

All the socio-personal characteristics of the client system have been considered as independent variables.

The difference in knowledge and adaptation have been considered on the basis of identification of the two different groups namely treatment group

and control group from the social system. The level of knowledge and adaptation are assessed as a consequence of the antecedent variables as one part and training received by the client system as the other.