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Impact of Women empowerment through Drudgery Reduction in Agricultural Operation Trainings During 12th Five Year Plan Period in BCT- Krishi Vigyan Kendra(KVK), Visakhapatnam District

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ABSTRACT: Drudgery Reduction Training is a success of BCT-KVK. Through this women were able to reduce the time and physical strain of harvesting Agricultural produce. Through 3 in 1 Decorticator i.e. (Groundnut, Maize, Sunflower) the rate of harvest is for Groundnut 12kgs/hour compared to normal harvesting 7kgs/hour. For Maize 20kgs/hour compared to normal harvesting 8kgs/hour. For Sunflower 10kgs/hour compared to normal harvesting 4kgs/hour. It is evident that through Drudgery Reduction training program there about 142.5% gain in knowledge among the total Drudgery Reduction Trainees.

KEYWORDS: BCT, KVK, Drudgery Reduction, Literacy Situation, 12th Plan Period, Women Empowerment.

I. INTRODUCTION

Bhagavatula Charitable Trust (BCT) is a non-profit organization working in the rural Visakhapatnam district since 1976. Hallmark of BCT's programs has been involvement community in their own development. Visakhapatnam Krishi Vigyan Kendra (KVK) is under the aegis of BCT. KVK is offering necessary technical support to the farmers and Farm women. The learning process imparts a direction to the farmers to think and act and eventually creates self-confidence. It offers a direction to the farmers to develop their competence, capability, capacity building, acquiring skills, expertise and a holistic development. However, it requires interest of an individual with total commitment and involvement, participation, reception, active interest, dedication, skill, curiosity, vision and mission. Under the changing dynamics of economical and industrial growth, agriculture has to undergo changes with new approaches, therefore, experiential system in agriculture has strong potential for imparting better training of the farmers with high level of skill.

Drudgery Reduction: Drudgery can be reduced by providing gender-friendly farm tools and equipment which increase the productivity of worker with safety and comfort to her. Time scheduling is also needed for achieving such task. The study should include the gender-perspective such as wearing, long hair, purda system, anthropometry, muscular strength, aerobic capacity etc.

In fact, drudgery is termed for hard work, monotony, time consuming, use of traditional tools with inappropriate working posture in field. So one way of reduction of drudgery can be through quantifying the particular field operation. For example, if work is being performed by a farm women with traditional tools in bending/ squatting posture, which

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was reduced by providing women friendly farm equipment (equipment assessed/developed considering gender-perspective). So the physiological workload of same work by both the methods will be evaluated and assessed based on output. To further add the work, a subjective scale can also be used for performance as well as their feedback. In combination to these, drudgery can be assessed in quantifiable term.

The World Bank has suggested that empowerment of women should be a key aspect of all social development programs (Bank, 2001). Since the 1990's women have been identified as key agents of sustainable community development and women's equality and empowerment are seen as central to a more holistic approach towards establishing new patterns and processes of development that are sustainable (Handy & Kassam, 2004). The empowerment of women means for them to have the necessary ability to undertake a number of tasks either individually or in groups, so that they have further access to and control of society resources. Empowerment is recognized as an essential strategy to strengthen the well-being of individuals, families and communities, government and non government agencies (Aref, 2010). In other word empowerment is an abiding process which takes place with specific intent so enabling them to have further control over society's resources. (Rezaei, 2007). This literature suggests that rural researchers need to adopt a more critical approach to the concept and to be more explicit about the processes they claim have facilitated empowerment. This requires the development of useful models of empowerment and effective methods for evaluating and critically assessing claims for empowerment (Anderson, 1996).

India is amongst the fastest growing countries in the world today, with a GDP growth rate of more than 8 % during the XI plan period. This high level of growth can, however, be sustained only when all sections of the society, specially women become equal partners in the development process. It is well recognised that societies which discriminate by gender tend to experience less rapid economic growth and poverty reduction than societies which treat men and women more equally. Gender equality and empowerment would, thus, need to be a core development goal if the growth planned in the XII plan has to be achieved.

Some deliberate policy steps are critical to achieve gender equality. Gender discrimination cannot be automatically corrected in the course of development. The institutions of economics, politics and the law must be considered in terms of how they relate to each other and how they play out across the different arenas where gender discrimination occurs; and gender assessments have to be undertaken continuously to reveal gaps and monitor progress towards gender equality.

Empowerment of women is essentially the vehicle of change to achieve gender equality that is meaningful and sustainable. Empowerment of women is a socio-political ideal, encompassing notions of dignity and equality, envisioned in relation to the wider framework of women's rights. It is a process of gaining control over self, over resources and over existing societal perceptions and attitudes and would be achieved only when an improvement in the 'condition' of women is accompanied by an advancement in their 'position' by enlarging the economic, social and political freedoms and choices available to them.

The National Policy for the Empowerment of Women, 2001 views empowerment as an enabling process that must lead to their economic as well as social transformation. Government has sought to operationalise this approach through legislative and programmatic interventions as well as by mainstreaming gender into the development planning process. Numerous such initiatives were taken during the Eleventh Plan period. These initiatives need to be consolidated and built on during the Twelfth Five Year Plan to enable women to challenge and change the contexts in which they live. Focussed efforts through development programmes, both multisectoral as well as targeted, along with governance reforms would be a pre-requisite. Women, especially the vulnerable and marginalized, would need to be provided a level playing field to access social, economic and legal entitlements as a right. (Source : XII Five Year Plan, Report of the Working Group on Women's Agency and Empowerment, Ministry of Women and Child Development, Government of India, July 2011)

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There is a large section of Women farming community which is still unaware of technological developments in the field of Agriculture, Horticulture and Animal Husbandry. For this purpose a number of extension programmes have been introduced by ICAR and state departments to reduce this gap and these programmes have yielded good results.

The Education Commission (1964-66) recommended that a vigorous effort be made to establish specialised institutions to provide vocational education in agriculture and allied fields at the pre and post-matriculate levels to cater the training needs of a large number of boys and girls coming from rural areas. The Commission, further, suggested that such institutions be named as "Agricultural Polytechnics". The recommendation of the Commission was thoroughly discussed during 1966-72 by the Ministry of Education, Ministry of Agriculture, Planning Commission, Indian Council of Agricultural Research (ICAR) and other allied institutions. Finally, the ICAR mooted the idea of establishing Krishi Vigyan Kendras (Agricultural Science Centres) as innovative institutions for imparting vocational training to the practising farmers, school dropouts and field level extension functionaries.

The ICAR Standing Committee on Agricultural Education, in its meeting held in August, 1973, observed that since the establishment of Krishi Vigyan Kendras (KVKs) was of national importance which would help in accelerating the agricultural production as also in improving the socio-economic conditions of the farming community. The assistance of all related institutions should be taken in implementing this scheme. The ICAR, therefore, constituted a committee in 1973 headed by Dr. Mohan Sinha Mehta of Seva Mandir, Udaipur (Rajasthan), for working out a detailed plan for implementing this scheme. The Committee submitted its report in 1974 .

The 1st KVK, on a pilot basis, was established in 1974 at Pondicherry under the administrative control of the Tamil Nadu Agricultural University, Coimbatore. Establishment of KVK is a landmark in the history of transfer of technology programmes in India. GOI, . (1978-83)

Concepts of Krishi Vigyan Kendra :

1. The Kendra will impart learning through work experience and hence will be concerned with technical literacy, the acquisition of which does not necessarily require as a pre-condition for the ability to read and write.
2. The Kendra will impart training to only those extension workers who are already employed or to the practicing farmers and fisherman. In other words, the Kendra will cater to the needs of those who are already employed or those who wish to be self-employed.
3. There will be no uniform syllabus for a Kendra. The syllabus and programme of each Kendra will be tailored to the felt needs, natural resources and the potential for agricultural growth in that particular area.

It is an innovative institution providing for (i) effective linkage among researchers, farmers and extension workers (ii) practical approach to training through "Learning by doing" (iii) flexible syllabi based on survey and needs of farmers and location specific requirements. By the year 2011 there were 600 KVKs sanctioned under the administrative control of ICAR institutions, state agricultural universities and voluntary organizations(NGOs). It is now policy of the government to establish more KVKs to fulfill the target of two KVKs in each district in Agriculture, Horticulture and Animal Husbandry. ICAR Reports(1975-2011).

II. NEED OF THE STUDY

The present study focused on how BCT-KVK is Transferring the technology through Vocational training programs as a mandate leading to Empowerment of women through Agricultural Mechanization in Visakhapatnam district. Since KVKs are conducting many training programs every year in Agricultural Mechanization for different clientele like Practicing farmers and farm women, Rural youth and Extension functionaries.

III.LITERACY SITUATION OF WOMEN

Literacy rates in India are very low. National Literacy Mission (NLM) statistics show that only 54.16% of women are literate. The Commission also lists out factors responsible for poor female literacy rate. Historically, a variety of factors have been found to be responsible for poor female literacy rate, viz.,

1. Gender based inequality

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2. Social discrimination and economic exploitation
3. Occupation of girl child in domestic chores
4. Low enrolment of girls in schools and
5. Low retention rate and high dropout rate

Literacy helps developing entrepreneurial spirit in women. Participation of women in literacy campaigns has opened several opportunities for neo-literate women to step out of the households and involve themselves in some enterprise or a new vocation.

Jena (2007) in Orissan handicrafts in the age of Globalization: Challenges and Opportunities studied that the Impact of economic liberalization generally feet on the entire economy, or on both formal/organized and informal/unorganized sectors. For instance, the contributions of both formal and informal sectors in terms of income, employment, productivity to whole economy have been changing between pre and post liberalization period, and through the liberalization period. As per the results of the National Sample Survey conducted in 2004-05, about 7.62% of the total work force was formal in nature, while remaining 92.38% or about 422.61 million workers were informally employed. The compound annual growth rate of labour absorption in informal sector in the post-liberalization period (from 1999-00 to 2004-05) is 2.76%, while in the pre-liberalization period (from 1983 to 1988) it was 1.38%. Informal sector has increased not only in terms of its employment size, its contribution to total industrial output and total exports have also been increasing. For instance, Indian handicrafts export crossing Rs. 1220 crores in 1990-91 from merely Rs. 10 crores in the mid fifties. Again the Ministry of Textiles data show, it increases to Rs. 4517.52 crores in 1994-95 and Rs. 7206.79 crores in 2000-01.

Margaret Biswas (1985), The study made it clear that a lot of emphasis should be placed on women education, not in the formal sense but in the sense of creating awareness of issues involved in it.

IV. POINTS ON WOMEN EMPOWERMENT DURING 12TH FIVE YEAR PLAN PERIOD OF PLANNING COMMISSION

A Working Group on “Women’s Agency and Empowerment” for the XII Five Year Plan was constituted by the Planning Commission vide its order no. PC/SW/1-23(1)/2010 dated 25th May 2011, under the Chairpersonship of Secretary, Ministry of Women & Child Development. The broad objectives were to contextualize women’s empowerment and define what the XII Plan seeks to achieve. The Working Group was mandated to carry out a review, analysis and evaluation of the existing provisions/ programmes for women and make recommendations for the XII Five Year Plan.

The first meeting of the Working Group was held on 10th June 2011. To address the ToR in detail, the following five Sub-Groups were constituted:

- (i) Contextualizing ‘Empowerment’: Emerging Issues and Challenges.
- (ii) Legal Framework for Women.
- (iii) Engendering Schemes and Programmes & Skill Development amongst women.
- (iv) Women as prime movers in Governance.
- (v) Gender Mainstreaming and effective Accountability Mechanisms.

The vision for empowerment in the XII Plan is to improve both, the position and the condition of women by addressing structural and institutional barriers as well as strengthening gender mainstreaming.

It has been decided by Planning Commission to set up a Working Group on ‘Women’s Agency and Empowerment’ for the Twelfth Five Year Plan under the Chairpersonship of Secretary, Ministry of Women & Child Development.

Terms of Reference will be :

- i. To conceptualize women’s ‘empowerment’ and define what the Twelfth Plan seeks to achieve. To review the existing priorities, policies, strategies, programmes to see how it feeds into the notion of ‘empowerment’, highlighting conceptually what changes are required. Examine the perspective of Women’s Empowerment and fulfillment of women’s rights, both within the women-specific and women-related sectors, and within diverse regional contexts.

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ii. To highlight emerging issues, challenges and gaps in 'empowerment' from the perspective of these communities and women. This would emphasize the protection, development and empowerment of women and girls, especially the most vulnerable and deprived*, including the declining Child Sex Ratio.

*This includes minorities, scheduled castes, scheduled tribes, including particularly vulnerable tribal groups, internally displaced groups, migrants, urban poor communities, women vulnerable to or victims of abuse, violence, exploitation, trafficking and commercial sex work, affected or infected by HIV/AIDs, single women, widows, the elderly, women with different abilities, among others

iii. To suggest necessary interventions, including those related to the recent National Mission for the Empowerment of Women, schemes related to Adolescent Girls and the rationalization of on-going programmes.

iv. To appraise the implementation of existing women-specific and women-related legislative frameworks, mechanisms for their implementation, identify areas for reform and suggest corrective measures.

v. To review the effectiveness of women's participation in existing institutional arrangements for the implementation of policies and programmes relating to women at national, state, district and local (Panchayati Raj Institutions and Urban local Bodies) levels and suggest interventions for improving their effectiveness and ownership, as needed.

vi. To assess how relevant flagship programmes related to rural/tribal/urban development, health, education, water, sanitation, livelihoods, food security are impacting upon women's development and empowerment and to recommend interventions required for "engendering" the same.

vii. To suggest how the elected women members of Panchayati Raj Institutions can be empowered as prime movers of social change, in partnership with community level women functionaries (ASHAs, AWWs, AWHs, ANMs, teachers) Women's Self Help Groups, community based organizations, voluntary agencies and others.

viii. To assess existing institutional capacity for the development, implementation and monitoring of women related programmes and gender mainstreaming, with qualitative analysis for improved effectiveness.

ix. To review the achievement of monitorable targets for women, resource allocations and utilization during the Eleventh Five Year Plan. To suggest monitorable objectives and indicative resource requirements for Women's Empowerment in the Twelfth Five Year Plan.

x. To suggest interventions for institutionalizing the 'gender lens' with recommendations for capacity development of key institutions for promoting gender mainstreaming.

xi. To recommend how the role of Women in Governance can be strengthened, and their rights to participation in improving public institutions and the: delivery of public services realized.

Source : XII Five Year Plan, Report of the Working Group on Women's Agency and Empowerment, Ministry of Women and Child Development, Government of India, July 2011.

V. TRAINING AND DEVELOPMENT

A formal definition of training and development is

...it is any attempt to improve current or future employee performance by increasing an employee's ability to perform through learning, usually by changing the employee's attitude or increasing his or her skills and knowledge. The need for training and development is determined by the employee's performance deficiency, computed as follows:

Training and development need = Standard performance - Actual performance

Training, refers to the process of imparting specific skills. (Randall S. Schuler, et al., 1989)

5.1 Importance of Training and Development

Training and development programmes, help remove performance deficiencies in employees. This is particularly true when 1. the deficiency is caused by a lack of ability rather than a lack of motivation to perform. 2. the individual(s) involved have the aptitude and motivation needed to learn to do the job better, and 3. supervisors and peers are supportive of the desired behaviours.

5.2 Training process

1. Objectives and Strategies
2. Training needs Assessment
3. Establishment of training Objectives

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4. Designing training programme
5. Implementation of training programme
6. Evaluation of training.

VI. WOMEN'S EMPOWERMENT ASPECTS FROM VARIOUS STUDIES

Drawing on Friedmann's framework (Friedmann, 1992) and the meanings and indicators of empowerment identified in the analysis, Figure 1 presents the model of rural women's empowerment that was developed (Lennie, 2002). This illustrates the interrelationships between the four forms of empowerment that were identified, and summarizes the key features of each form of empowerment. Although these four forms of empowerment are discussed separately in this paper, there are clearly many interrelationships and overlaps between them (Lennie, 2002). Uma Ramaswamy (1991) studies, The role played by women with in the organized and unorganized sector in the Indian economy. It briefly delineated various governmental schemes designed to improve the Socio-economic status of women in "Women and Development". Mitra (1981) in Participation of women in Socio-Economic development, Women and Development, UNESCO narrated that Female work force participation in the informal sector was 49 as against 15 to 17 percent of males.

Vidyavathi (2011) in women in agriculture narrated that Rural women from the most important productive work force in the economy of majority of the developing nations including India. Agriculture, the single largest production endeavour in India, contributing about 18% of GDP, is increasingly becoming a Female activity. Agriculture sector employs 4/5th of all economically active women in the country 48% of India's self-employed farmers are women. There are 75 million women engaged in dairying as against 15 million men and 20 million in animal husbandry as compared to 1.5 million men. The women are the backbone of Agricultural work force but worldwide her hard work has mostly been unpaid. She does the most tedious and back-breaking tasks in Agriculture, animal husbandry and homes. In extension activities the women is now the centre point and activities are being planned keeping her in view. Her enlightenment will change the face of the rural India. Several programmes started at the National Centre for women in agriculture and Krishi Vigyan Kendras, are the right steps in this direction .

6.1 The types of women' empowerment

The major types of empowerment can be summarized into four groups (Lennie, 2002).

Community empowerment: Access to new and useful knowledge and awareness, Developing new skills, abilities, confidence and competence, obtaining the friendship and support of other women, participating in various activities with other women.

Organizational empowerment: New knowledge and awareness about new benefits of technology for rural development through rural tourism development or development of agriculture cooperatives.

Political empowerment: Influencing other government policies and decisions that affect on rural communities, changing town-based people's beliefs, networking with people in government and industry and other women to discuss issues affecting rural women and rural communities. **Psychological empowerment:** An increase in self-confidence and self-esteem, Greater motivation, inspiration, enthusiasm and interest to develop new skills and knowledge, to keep pushing for better services for rural people, feelings of belonging related to participation in the online groups in particular (Lennie, 2002).

VII. KVK ACTIVITIES

7.1 Role of Krishi Vigyan Kendras in Unorganised Sector Development

- 680 Krishi Vigyan Kendras have been established all over Rural India in each district and even 2 KVKs have been sanctioned for some districts according to the need.
- KVKs are concentrating on Vocational Trainings in Agriculture and Allied fields as a mandatory activity.
- KVKs are the main source for Transfer of Technology through trainings and other activities.

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7.2 The Mandate of the KVK

Mandate of KVK encapsulates following functions:

1. Collaborate with the subject matter specialists of the State Agricultural Universities/ Scientists of the Regional Research Station (NARP and the State Extension Personnel) in “on-farm” testing, refining and documenting technologies for developing region-specific sustainable land use systems.
2. Organise long-term vocational training courses in agriculture and allied vocations for the rural youths with emphasis on “learning by doing” for generating self-employment through institutional financing.
3. Organise front-line demonstrations in various crops to generate production data and feedback information.
4. Organise training to update the extension personnel within the area of operation with emerging advances in agricultural research on regular basis.

7.3 What KVK can offer

A) To Research Organisations

- Conducting the on-farm trials for technology assessment
- Refining the existing package of practices for different farming situations within the given NARP Zone.
- Documenting the indigenous technical knowledge of the farmers
- Providing first hand feedback
- Any other need-based activity

B) To Developmental Departments

- Conducting skill oriented training programmes for farmers, farm women, school dropouts, rural youth etc., with regard to new skills.
- Analysis of critical input of demonstration/training programmes
- Implementing the selected development programmes on a pilot basis for providing first hand experience and to set up the model for exposure visit of farmers and development staff
- Conducting demonstrations on slow-moving technologies
- Any other need based activity

7.4 What KVK Expects

A) From Research Organisations

- The latest technological information
- A small sample of the latest material such as seed, seedling, implement etc.,
- Training of KVK staff with regard to new skills which are recommended by the research organisations
- Periodic evaluation of the field programme of KVK by Post-Graduate Students and Scholars etc.,
- Participation of technical experts in the planning and review meeting of KVK on a regular basis.

B) From Developmental Departments

- Allocation of a part of TRYSEM programme to the KVK alongwith the flexibility in choosing the proper kind of trainees.
- Assistance in strengthening the existing infrastructural facilities at the KVK farm for carrying out training programme with much more efficacy.
- Provision of a small demonstration/development fund for implementation of pilot programme in the KVK Villages.
- Participation of the senior officers of the developmental departments in the planning and review meetings of the KVK on a regular basis.

7.5 Major Thrust Areas of KVKs

- Assessment, refinement and demonstration of technology/products.
- Training of farmers.
- Training of extension personnel areas of technology.
- Single window delivery system for technology products, diagnostic services and information through Agricultural Technology Information Centres.

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- Development of gender-specific technologies.
- Creating awareness of improved agricultural technologies among the farmers.

7.6 Organizing Training Programmes of KVK

Organizing training programmes for the farmers and fishermen hitherto has been taken as something adhoc, unplanned and a casual affair. This is why the training programmes could not make much dent on the rapid transfer of farm technology.

The vocational training programme on the contrary is a complex phenomenon and demands a scientific approach and meticulous planning in order to make it effective and meaningful. In the training of the farmers, many diverse and incompatible factors manifest in comparison to the relatively straight-forward teaching-learning situation of the academic world. The task of trainers, therefore, is challenging which needs to be fully recognised in order to enforce the best tactics and talents in the training projects.

Many a time, perhaps unwittingly, the word “Training” and “education” has been used interchangeably. This is not the correct state of affairs. Training connotes the practical aspect of learning, the skills with some knowledge and understanding (education) to improve the performance of certain operations or practices.

The education on the other hand, refers to the acquisition of knowledge and understanding with limited skills (training), with a view to develop the faculty of mind for taking appropriate decisions and actions in life. Generally, the trainers tend to be educational in intent and content, for imparting an education is relatively easier than giving a training for the later demands imparting a lot of skills/practice. In the interest of vocational training, this tradition has to be changed in favour of imparting skills through work experience. This is the most crucial and innovative feature of the training design of the Krishi Vigyan Kendra. All efforts of the trainers of the KVK must revolve around this central theme-giving farmers skills and confidence.

A dynamic training programme is also an action research endeavour. We improve tomorrow on the experiences of today. If such approach and commitment are followed through, the KVK training model will bring in revolution in the field of vocational training and in time to come, in the academic arena by way of inducing pragmatism in education. In organising and conducting the training course, there are three basic stages: (a) planning stage, (b) execution stage and (c) follow-up stage. The precautions and actions, required during each stage are now being briefly discussed.

7.6.1 Planning Stage

Based on the survey work as also by group discussion, personal visits and observations, the technological gaps must be clearly identified and understood and their priorities ascertained for the training purposes. According to the principle of curriculum building, the objectives of the training course have to be set, curriculum for training developed and a plan of work formulated. These have to be done rather religiously. The details of course construction are given in the section that follows.

It is not enough to conduct the village survey and keep the results of the surveys for basing training courses only. In fact, the concerned villagers should be informed and enlightened about the problems and prospects based on such studies. This will create an awareness about their problems and a desire to resolve them. The farmers will thus develop motivation for training as one of the prerequisites for solving their farm problems.

Who should be trained in a KVK?. This is a critical decision. In order to maximise the benefits of investment in training, it is essential to select and train those who would make use of it. The following criteria could be helpful while selecting the trainees:

- a) Farmers and the fishermen having leadership qualities in accepting the innovations as also serving as a catalytic agent for bringing about changes in their communities;
- b) Practicing farmers, farm women, farm youth and agricultural labourers as also in-service extension functionaries;

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- c) Tribal farmers and farmers coming from weaker sections specially those who are below the poverty line;
- d) Farmers of middle-age group and those who are literate (this does not mean ignoring the illiterates); and
- e) Farmers having resources to make sue of the skills acquired in the training programmes and those who may manage resources from external sources/institutions.

To conform to the quality of skill training, the number trainees per batch should not be more than 20 to 25. However, when the technology is simple but crucial, a larger number of trainees can be accommodated.

It is equally important to examine as to what subjects and which aspects of the subjects should find priority in the training scheme of the Kendra. Like the selectivity in the audience/trainers, the selectivity in the subject matter areas is equally essential for realising the maximum benefits from the courses. The following criteria may be considered in selecting the training courses:

- a) The subject matter areas should be of immediate relevance to the farmers and their farming system.
- b) The courses should e in line with the developmental projects/programmes of the government and non government agencies as best as possible. Thus, the KVK will provide the training support and advisory services and the supply of inputs will come from the developmental agencies/government;
- c) A large number short courses on specific problems/subject matter areas may be preferred over the long duration courses;
- d) The courses which could save the time and money of the farmers (for instance, the courses on repairs and maintenance of farm equipments like diesel pumps, power tillers, electric motors etc.) and
- e) The courses which may provide skills to the farmers to fetch remunerative incomes to them on regular basis;
- f) The facilities and resources available with the Kendra and those facilities available with other agencies which can be tapped for training purposes.

After the training course has been selected, it will be in the fitness of things to reexamine and pre-arrange the facilities which are required to support the training course, such as staff farm or laboratory facilities, equipments, accommodation for the trainees etc., For the specialised course, perhaps, there may be a need for a visiting trainer on deputation basis or even to cover a part of a course a few resource trainers may be required.

It may be noted that visiting trainers must get an advance notice, a copy of the course outline as also a guideline for his preparation for the course. For some courses, it might be necessary to send one of the core staff of the Kendra for specific training to specialised institution before he/she can offer the course. In short all measures must be taken to make the course productive.

7.6.2 Execution stage

To make the training programme effective, care has to be taken in making the trainees comfortable and sustaining their curiosity and interest all along the training programme. This can be achieved by rational distribution of work, leisure and recreation. The plan of work must be followed strictly. Some KVKs and institutions rightly integrate in the training programme (on campus and in relatively longer courses) some character building activities such as attending prayers both morning and evening, developing respect for timeliness, keeping the surrounding healthy, keeping high morale and maintaining high integrity. This aspect is as much important as imparting technological skills.

The participants/trainees must get ample opportunities for practice-learning. This alone could provide confidence in them in adopting modern technologies and package of practices without any fear or risk. Together with the work experience given to the trainees, the trainers would like to use a combination of training methods and aids during classroom or field discussions. The indigenous teaching materials and aids, if suitably utilised are as effective as any other modern audio-visual methods and aids.

Self evaluation on the part of trainers on day-to-day progress will help improve the training quality. Such habit should be inculcated in the staff. Proper development of staff is one of the basic duties of a Training Organiser.

7.6.3 Follow-up

To harvest the benefits of training programmes on sustained basis, it is necessary to create in trainees ample aptitude and interest in new technology, its potentiality for production, increased income and self employment. For this purpose, linkage with farmers and other trainers must be maintained on regular and long term basis.

It would be appropriate to maintain a complete list of trainees with their addresses for their communication with respect to their progress or the problems they encounter. The follow-up training, in addition to information support has to be a part of our total training design. However, while some follow-up measures have to be taken by the KVK/TTC staff,

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other agencies institutions must participate in this venture-State Govt. development staff, local voluntary organisations, rural institutions, educational or research institutions etc.

7.6.4 Salient Achievements of KVKs all Over the Country

- Established a network of over 680 Krishi Vigyan Kendras (KVK).
- Conducted 4189 on-farm trials on 537 technologies to identify their location specificity under different farming systems.
- Organized 53,974 Frontline Demonstrations (FLD) to demonstrate the production potential of newly released production technologies on the farmers' fields.
- Trained more than 1.0 million farmers and extension personnel in agriculture and allied fields.
- Conducted large number of extension activities benefiting about 4.19 million farmers and other end users.
- Production of more than 82,000 qt. of seeds and 10.2 million sapling/seedlings/livestock strains, besides various bio-products for availability to the farmers.
- Identified gender issues in agriculture at the National Research Centre for Women in Agriculture.
- Continued functioning of 44 Agricultural Technology Information Centres in ICAR institutes and SAUs.
- Organized 334 interface meetings involving scientists and development officials at the district level .

7.6.5 BCT-KVK and Women Empowerment Activities

As an Agriculture and allied activities leading to Rural Human Resource development, Women can be trained in the following Agricultural Machines.



Fig 1. a) Solar dryer for drying of fish b) Cotton bags and Bhendi Pluckers for drudgery reduction of women
c) Gas based bakery oven d) Drudgery Reduction small implements
e) 3in1Decicator for Groundnut, Maize and Sunflower

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VIII. IMPACT OF TRAINING PROGRAMMES

Singh(1983) observed that farmers trained through KVK mostly belonged to small and marginal categories of land holdings and lower and middle caste groups. He found the KVK system as more specific in its approach and training of the target groups. The gain in knowledge and adoption was significantly higher of KVK trained farmers. A status report on research programmes and progress of KVKs (1985) indicated that KVKs were imparting practical/ skill oriented training in horticultural crops for fruit growers, rural youths and farm women to make the farming as a remunerative venture. Fulzele (1986) observed a significant improvement in the knowledge among trainees after the training programmes. The trainees were found highly satisfied with the training programmes of KVK which were based on interest and needs of the trainees. Singh(1986) found that the level of knowledge of the trained farmers with regard to the cultivation practices of different crops was much higher as compared to the untrained farmers.

IX. DETAILS OF CLIENT-WISE TRAININGS CONDUCTED BY KVKs IN A.P

The details of client-wise training programmes conducted in different disciplines are furnished in Table.1. In all, 1687 training courses (592 on campus and 1095 off campus) were conducted for 49737 persons (33,906 Practicing Farmers, 6,569 Rural Youth and 9,262 Extension Functionaries) out of which 12,484 were SC/ST.

Clientele	No. of courses	No. of participants			No. of SC/ST		
		Male	Female	Total	Male	Female	Total
Practicing Farmers	1057	22273	11633	33906	5069	3805	8874
Rural Youth	283	3337	3232	6569	762	898	1660
Extension Functionaries	347	6613	2649	9262	1230	720	1950
Grand Total	1687	32223	17514	49737	7061	5423	12484

Table 1: Client wise Training Programmes conducted by KVKs (AP) (Consolidated)
Source : Collected from KVK Annual Reports upto 2010

X. DISCIPLINE WISE TRAININGS CONDUCTED BY KVKs (AP) (CONSOLIDATED)

The details of client wise training programmes conducted in different disciplines are furnished in Table.2. In all, 1687 training courses were conducted for 49737 persons (33906 Practicing Farmers, 6569 Rural Youth and 9262 Extension Functionaries) out of which 12484 were SC/ST.

Client	Discipline	No. of courses	No. of participants			No. of SC/ST		
			Male	Female	Total	Male	Female	Total
PF	Agricultural Engg.	13	269	96	365	166	46	212
PF	Agril. Extn.	72	1492	720	2212	399	359	758
PF	Crop Pro.	281	7251	2488	9739	1701	998	2699
PF	Fisheries	27	879	113	992	51	0	51
PF	Home Science	212	1079	4492	5571	429	1112	1541
PF	Horticulture	197	5113	1532	6645	1127	626	1753
PF	Live Stock	54	1276	808	2084	314	336	650
PF	Plant Protection	183	4541	1346	5887	825	305	1130
PF	Post Harvest	3	150	0	150	0	0	0
PF	Sericulture	9	42	23	65	14	12	26
PF	Soil Science	6	181	15	196	43	11	54
PF	Total	1057	22273	11633	33906	5069	3805	8874
RY	Agricultural Engg.	2	44	0	44	11	0	11
RY	Agril. Extn.	16	390	127	517	130	44	174
RY	Crop Production	31	573	66	639	114	26	140

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R	Y	Fisheries	4	70	32	102	13	6	19
R	Y	Home Science	132	343	2495	2838	86	655	741
R	Y	Horticulture	47	893	246	1139	208	82	290
R	Y	Live Stock	15	242	141	383	58	53	111
R	Y	Plant Protection	33	756	119	875	139	32	171
R	Y	Sericulture	1	12	0	12	3	0	3
R	Y	Soil Science	2	14	6	20	0	0	0
R	Y	Total	283	3337	3232	6569	762	898	1660
E	F	Agri. Extn.	38	744	519	1263	128	104	232
E	F	Crop Pro.	95	1928	520	2448	488	227	715
E	F	Fisheries	2	118	2	120	25	1	26
E	F	Home Science	63	766	805	1571	107	213	320
E	F	Horticulture	30	749	129	878	90	24	114
E	F	Live Stock	15	223	21	244	41	8	49
E	F	Plant Protection	100	1982	653	2635	346	143	489
E	F	Soil Science	4	103	0	103	5	0	5
E	F	Total	347	6613	2649	9262	1230	720	1950
		Grand Total	1687	32223	17514	49737	7061	5423	12484

Table2: Discipline wise Training Programmes conducted by KVKs (AP) (Consolidated)

Source : Collected from KVK Annual Reports upto 2010

XI.RESULTS OF TESTING ON KNOWLEDGE LEVEL IN DRUDGERY REDUCTION TRAININGS

Question No.	Before Training	After Training	% increase in Knowledge
I	56	94	67.9
II	46	104	126.1
III	65	85	30.8
IV	45	105	133.3
V	37	113	205.4
VI	24	126	425
VII	61	89	45.9
VIII	63	87	38.1
XI	26	124	376.9
X	15	135	800
Total Score	438	1062	142.5

Table 3: Knowledge level of rural women on Drudgerly Reduction Training

Drudgerly Reduction Training is a success of BCT-KVK. Through this women were able to reduce the time and physical strain of harvesting Agricultural produce. Through 3 in 1 Decorticator i.e. (Groundnut, Maize, Sunflower) the rate of harvest is for Groundnut 12kgs/hour compared to normal harvesting 7kgs/hour. For Maize 20kgs/hour compared to normal harvesting 8kgs/hour. For Sunflower 10kgs/hour compared to normal harvesting 4kgs/hour. It is evident that through Drudgerly Reduction training program there about 142.5% gain in knowledge among the total Drudgerly Reduction Trainees.

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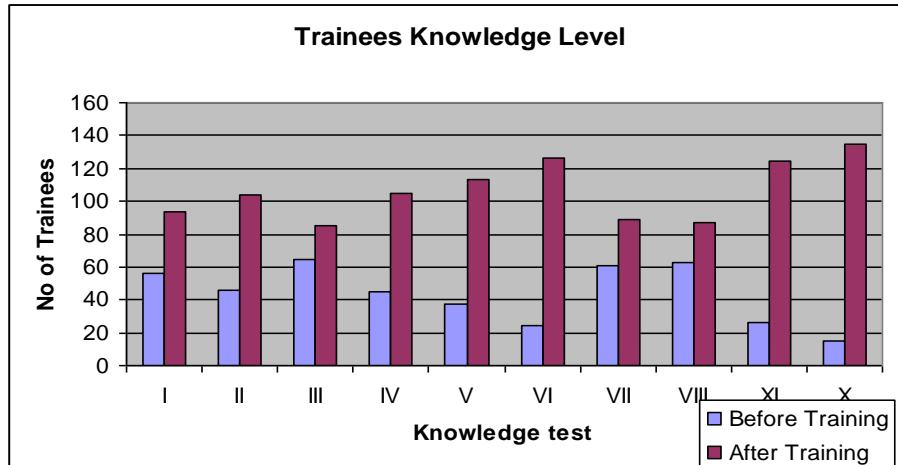


Figure 2: Knowledge level of Trainee in Drudgery Reduction Training

Drudgery Reduction Trainees Knowledge test paper

S.no	Item of Knowledge	Answer
I	Do you know about the Agriculture and Horticulture produce harvesting tools.	(Yes/No)
II	Do you know about the Groundnut Pods decorticating implement	(Yes/No)
III	Do you know about the Maize seed decorticating implement	(Yes/No)
IV	Do you know about the Sunflower decorticating implement	(Yes/No)
V	Do you have idea about Solar Dryer for drying of Fish and Agricultural produce.	(Yes/No)
VI	Do you have idea about Bhendi pluckers and how to cut bhendi	(Yes/No)
VII	Do you have idea about how to use cotton picking bags	(Yes/No)
VIII	Do you have idea about Paddy Drum Seeder for sowing of paddy	(Yes/No)
IX	Do you have idea about CRIDA weeder for weeding	(Yes/No)
X	Do you have idea about the Farm Mechanization schemes	(Yes/No)

XII. CONCLUSION

The result of this study is suitable for the empowerment of rural women for take control of the management of local development in their villages through Krishi Vigyan Kendra Trainings. The empowerment of women will not only be beneficial to women, but society as a whole shall benefit politically, economically and culturally. The results of this review suggested a range of strategies that could enhance rural women's empowerment, including the use of agricultural and allied sectors and cooperatives in this process through KVKs. Women empowerment through agricultural cooperatives was identified as a significant approach to achieving the rural women empowerment.

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