

**RESEARCH ARTICLE :**

Experiential learning- learning experiences and feedback of agricultural graduates towards RAWEP and AELP

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SUMMARY : The basic core of agricultural education instruction consists of three intra-curricular components like classroom instruction, experiential learning through supervised experiences, and leadership activities. Experiential learning is fulfilled through Rural Agricultural Work Experience Programme (RAWEP) and Agricultural Experiential Learning Programme (AELP). Agricultural Graduates of B.Sc (Ag.) are exposed to learn the knowledge and skills by staying with contact farmers in the village in the fifth semester. Along with RAWEP, students are also engaged in running if enterprise in the last semester to gain self employment and self confidence by establishing their own enterprise with the principle of learning while doing. It is found that improving the knowledge and skills in conducting the group discussions, field days, trainings, establishment of information centers (88.88%), Advantages of Fertilizer management (94.44%) , Developing skills in farm budgeting (95.56%), Improving diagnostic skills (96.67%) etc. From the results it was observed that most of the students are felt that it will helps in preparation of village action plans, building of team work, Communication skills, exposure to the various agro climatic situations, preparedness to work with extension professionals. Majority of the students felt that reducing the use of more technical and English words in delivery of presentations and providing portable projectors for visual and video presentation will helps to make RAWEP more effective.

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BACKGROUND AND OBJECTIVES

Agricultural education has been experiential in nature since its inception (Cheek *et al.*, 1994; Hughes and Barrick, 1993; Knobloch, 2003; McLean and Camp, 2000; Roberts, 2006; Stewart and Birkenholz,

1991), as made evident by supervised agricultural experience programs (SAE), field trips, student teaching experiences, problem solving methods, and service-based learning (Roberts, 2006). The Report of the Royal Commission on Agriculture in India stated that training given in Agricultural Colleges was not

sufficiently practical and the inability of agricultural demonstrators. Dr. Radhakrishnan noted that bookishness has greatly limited the value of agricultural education. So, agricultural education should be given a rural setting, so that it includes direct participation and experience with agricultural life and practice. Considering the importance of the knowledge on socio-economic behaviour of the rural farmers under which agricultural graduates have to work. In this context, a new course, Rural Agricultural Work experience.

RAWE Programme was introduced during seventh semester of under-graduate curriculum in Agricultural Universities in India viewed as the best opportunity, which can orient and equip the required potential among the students and facilitate them to completely understand the rural scenario. The Andhra Pradesh Agricultural University, Hyderabad, was the first to introduce RAWEP programme in its curriculum and subsequently some other State Agricultural Universities implemented the 'Rural Agricultural Work Experience Programme (RAWEP)' under which a student is to stay in a village with a host farmer to participate in the agricultural operations and to guide him in the adoption of new technology. This was close on the heels with the Randhawa Committee recommendations.

The basic core of agricultural education instruction consists of three intra-curricular components are classroom instruction, experiential learning through supervised experiences, and leadership activities. When these three components are actualized through a well-designed integrated programme, they provide a context for learning necessary content and life skills to prepare students for adulthood, regardless of their ideal career

areas. (Bailey and Merritt, 1997). The present study is conducted to strengthen the RAWEP and AELP programmes with following objectives.

–To assess the feedback of students about various components of RAWEP Programme

– To assess the feedback of students about various components of AELP Programme.

RESOURCES AND METHODS

The study was conducted to the students of Agricultural College, Jagtial who are allotted to the Northern Telangana Zone of Telangana State. The sample students experienced their RAWEP programme in the districts of Nizamabad, Karimnagar and Adilabad districts under the supervision of Krishi Vigyan Kendra and district Agricultural Advisory and Transfer of Technology Centres of PJTSAU. A Sample of 90 students are selected randomly as respondents from three districts. From each district 30 students are selected randomly and interviewed using pre tested interview schedule. The data was tabulated and analysed according to obtain frequency, percentage and Ranking.

OBSERVATIONS AND ANALYSIS

The data pertaining to experiential learning is tabulated into various components likely Extension Programme, Rural Economics, Crop Production, Crop Protection.

From the results it is clear that improving the knowledge and skills in conducting the group discussions, field days, trainings, establishment of information centers (88.88%), Advantages of Fertilizer management

Sr. No.	Learning experience	Frequency and percentage	Rank (n=90)
1.	Improves listening, presentation, report writing skills	68 (75.55%)	IV
2.	Improves the knowledge and skills in conducting the group discussions, field days, trainings, establishment of information centers	80 (88.88%)	I
3.	Helps in building of self confidence through Public speaking	64 (71.11%)	V
4.	Preparation of teaching and communication aids	62 (68.88%)	VI
5.	Helps in understanding the local proverbs, dialects, local language	60 (66.66%)	VII
6.	Understanding of socio cultural pattern of farmers	76 (84.44%)	II
7.	Identification of various leadership styles of farmers in the village community	56 (62.22%)	VIII
8.	RAWE has helped me to understand adoption patterns and adoption gaps	76 (84.44%)	II
9.	Gaining knowledge on time utilization pattern of rural people	52 (57.77%)	IX
10.	Helps in acquainting knowledge on going TOT programmes in agriculture	72 (80.00%)	III

(94.44%), Developing skills in farm budgeting (95.56%), Improving diagnostic skills (96.67%) etc.

Suggestions:

- Time for each module in RAWEP to be increased
- Should be for one entire cropping season rather than for one semester
- Students should keep away from politics and groupism at least in RAWEP
- Convenience and time availability of farmers to be taken care of
- Adequate publicity to be given prior to each programme
- More collaboration with NGOs and line departments

- Non-availability of projectors for visual and videos presentation
- Use of more technical and English words by students
- Hesitation of contact farmers to learn from students
- Under estimation of student competence by the farmers repeating RAWEP in the same village in 4-5 years.

Implications for strengthening of rural agricultural work experience programme (RAWEP) :

- Attachment with a contact farmer/ progressive farmer in the village facilitated the learning process helped to know the rural agrarian scenario and problems

Table 2: Feed back of students about rural economics programme of RAWEP

Sr. No.	Learning experience	Frequency and percentage	Rank
1.	Developing skills in farm budgeting	86 (95.56%)	I
2.	Development skills in conducting agro economic survey	76 (84.44%)	IV
3.	Source of institutional finance to the farmers	80 (88.89%)	III
4.	Marketing of agricultural products	52 (57.78%)	VIII
5.	Knowledge on purchase of inputs for various agencies involved in agricultural inputs production	72 (80.00%)	V
6.	Understanding the intricacies involved in the provision of wages to the agricultural labour	68 (75.56%)	VI
7.	Credit utilization and distribution pattern of farmers from SHGs, Mandal Mahila Samakyas, and other Social Institutions	54 (60.00%)	VII
8.	Given me competency to prepare farm plans for individual farm families	84 (93.33%)	II

Table 3 : Feed back of Students about crop production component of RAWEP

Sr. No.	Learning experience	Frequency and percentage	Rank
1.	Understanding various management practices of farming in their farming activities	82 (91.11%)	II
2.	Benefits of soil health management	79 (87.78%)	III
3.	Advantages of fertilizer management	85 (94.44%)	I
4.	Understand farming systems and farming	73 (81.11%)	IV
5.	Understand the application of tank silt and organic manures	63 (70.00%)	V

Table 4 : Feed back of students about crop protection component of RAWEP

Sr. No.	Learning experience	Frequency and percentage	Rank
1.	Helps to improve diagnostic skills	87 (96.67%)	I
2.	Helps in identifying beneficiary and harmful insects	71 (78.89%)	IV
3.	Appropriate recommendation of pesticides and agro chemicals	77 (85.56%)	III
4.	Conducting various method demonstrations and trainings	71 (78.89%)	IV
5.	Use of biological methods of pest and disease control	65 (72.22%)	V
6.	Preparation of various spray fluids and botanic pesticides	83 (92.22%)	II

encountered in adoption of technologies life situations in the villages, rural institutions

- Formation of groups improves team work at various agro climatic situations and socio cultural back grounds

- RAWEP has helped to strengthen the linkage mechanism among the contact farmers, students and scientists of DAATTC/KVK

- RAWEP also helped to know the existing indigenous traditional knowledge of farmers along with technologies developed by SAUs/ICAR.

- Conducting PRA with local farmers helps to develop village action plans for effective utilization of local natural resources.

- Conducting various demonstrations, Rythu sadassus/Kisan Melas helps to build up leadership qualities and personality development.

- Conducting socio-economic survey helps to get familiar with the socio-economic conditions of the farmers and their problems with reference to agricultural development.

- Conducting various trainings, demonstrations, observation, practice and participation in various rural developmental programme helps to get the graduates professionally capable to take up their preferred job roles, after graduation.

- It helped to gain an exhaustive knowledge on Rural-Eco system with a first-hand experience of understanding the field level realities of practicing agriculture in farmers' holdings.

- It helped to accrue knowledge and skills about the rural situation, cropping pattern, farming systems, soil types, irrigation sources, cultivation practices, problems in farming, marketing of produce, processing, value addition, etc.

- Gender analysis and Gender Decision making tools helped to know role of women in Agriculture

- Interaction with line department officials helped to know activities of the State Department of Agriculture, its organizational set up, schemes implemented with subsidies, trainings organized, ATMA, NFSM, RKVY and Social Forestry activities, etc.

- General survey of villages which included population of the village, number of agrarian families, crops cultivated, socio-economic condition of the village and students helps to learnt peoples migration to towns mainly for employment.

- Interaction with marginal, small and large farmers

helps to learnt practical knowledge pertaining to cultivation practices, constraints in the production, marketing and other problems. Apart from this, practices of organic farming, Indigenous this procedure, Integrated Farming System, Polyhouse cultivation etc.,

- Exhibition conducted at the end of RAWEP helps for displaying their learning outcomes, activities conducted, models, farm/village development plans, etc.,

- RAWEP enabled students to develop multifarious skills viz., subject matter, observation, analytical, problem solving interactive, questioning, skills in organizing extension activities, report writing, and other related skills, which helped them to gain good confidence about the subject matter and how to deal with different farm issues.

- RAWEP enables the students to gain job related field oriented knowledge and skill sets, besides acquiring capability for management and communication of ideas and technologies to the farming community.

- Highly useful in improving the communication and leadership skills of students along with providing an opportunity to work in agri-based industries provided practical experience in crop production at field level and get acquainted with the on-going TOT programmes.

- Students coming from rural background had limited knowledge of rural settings. This demands the necessity of the programme to provide better rural orientation in general and live situations of agriculture in particular.

- Students coming from non agricultural families take up agriculture course as a last choice in their joining changed their perception due to attachment and staying with farming families.

- It helps me improve communication and leadership skills while conducting extension programmes

- It gives us to building teamwork, diagnostic experience through farm diagnostic visits with coordinator of DAATTC/ KVK and improves knowledge, skill.

- RAWEP developed confidence and professional competence in me to solve field problems

- Students from urban background and also the medium of instruction is English up to seventh semester in B.Sc (Ag.) degree programme are orientated to use their vernacular/ local language during RAWEP and it is immensely useful in improving the communication and self-confidence of students.

Implications for Strengthening of Agricultural Experiential Learning Programme (AELP) :

- It enables to gain adequate self-confidence in

understanding the ground level realities of farming and intricacies of starting their own commercial farming of agri-business, after graduation.

– Preparation of business Plan/Challenging task helps to know technical, managerial, socio-environmental, financial management skills in establishment of new enterprise

–It enables the students to learn in an experiential manner about agriculture practiced in the real-world situation.

– It helps to generate new ideas/Innovations in the field of Agripreneurship Development

– Hands on experience in the selected AELP Unit helps to know the managerial aspects like production, product development, and marketing and value chains involved in product flow.

– It helps me to utilize the available human resources as per the time, cost and availability of resources

– Joint proprietorship management of unit provides an opportunity to reduce stress, allocation of work and to maintain good human relationships with top, middle, lower level of employees.

– Conducting market survey helps in preparation of market strategy to enhance the sales volume of the particular product.

– New product development with various combinations based on consumer preferences helps me to find out job in private sector.

–New skills are acquired to run an enterprise with the help of AELP Advisory Committee.

– Formation of groups improves team work, group harmony, conflict management in running of enterprise

– Business plan preparation helps to expose different agribusiness ventures and learnt about their production and management aspects.

– Project report formulation helps to understand the techno-economic, socio-economic and political environment of the location of enterprise.

– The students also felt that a good performance in AELP Enterprise may land them in a job in some agro-based industries.

Conclusion:

It is concluded that the experiential learning in the two phases of graduation programme really helps in changing the personality of students and improves the entrepreneurial skills to establish, run their own enterprises. The programme has to be strengthened by establishing centers of excellence in various skills and technologies related to agriculture in the respective colleges.

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