

**A Study on Perception among
Participants of RAWE programme at
J.N.K.V.V., Jabalpur**

THESIS

Submitted to the

Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur

In partial fulfilment of the requirements for
the Degree of

MASTER OF SCIENCE

In

AGRICULTURE

(AGRICULTURE EXTENSION)

By

SOUJANYA KOTTE

**Department of Extension Education
Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur
College of Agriculture, Jabalpur MP**

2014

CERTIFICATE - I

This is to certify that the thesis entitled, "**A study on perception among participants of RAWE programme at J.N.K.V.V., Jabalpur**" submitted in partial fulfilment of the requirement for the degree of **MASTER OF SCIENCE (Agriculture) in Agriculture Extension** of the Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur is a record of the bonafide research work carried out by **Ms. Soujanya Kotte** under my guidance and supervision. The subject of the thesis has been approved by the Student's Advisory Committee and the Director of Instructions.

All the assistance and help received during the course of the investigation has been acknowledged by her.

Place : Jabalpur

(N.K. Khare)
Chairman of the Advisory Committee

Date : . . .2014

THESIS APPROVED BY THE STUDENT'S ADVISORY COMMITTEE

Committee	Name	Signature
Chairman	Dr. N.K. Khare
Member	Dr. V.K. Pyasi
Member	Dr. N.K. Raghuwanshi

CERTIFICATE - II

This is to certify that the thesis entitled, " **A study on perception among participants of RAWE programme at J.N.K.V.V., Jabalpur**" submitted by **Ms. Soujanya Kotte** to the Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, in partial fulfilment of the requirements for the degree of **MASTER OF SCIENCE (Agriculture) IN AGRICULTURE EXTENSION** in the Department of **Extension Education** has been, after evaluation, approved by the External Examiner and by the Student's Advisory Committee after an oral examination of the same.

Place : Jabalpur

(N.K. Khare)
Chairman of the Advisory Committee

Date : . . .2014

THESIS APPROVED BY THE STUDENT'S ADVISORY COMMITTEE

Committee	Name	Signature
Chairman	Dr. N.K. Khare
Member	Dr. V.K. Pyasi
Member	Dr. N.K. Raghuwanshi
Head of the Department	Dr. N.K. Khare
Director of Instruction	Dr. S. K. Shrivastava

Declaration and undertaking by the candidate

I, Soujanya Kotte D/o Shri Narsinga Rao Kotte Certify the work embodied in thesis entitled “A study on perception among participants of RAWE programme at J.N.K.V.V., Jabalpur” is my own first hand bonafide work carried out by me under the guidance of Dr. N. K. Khare at Department of Extension Education, Jawaharlal Nehru Krishi Vishwa Vidyalaya, College of Agriculture, Jabalpur during 2013-14.

The matter embodied in the thesis has not been submitted for award of any other degree / diploma. Due credit has been made to all the assistance and help.

I, undertake the complete responsibility that any act of misinterpretation, mistakes, errors of fact are entirely of my own.

I, also abide myself with the decision taken by my advisor for the publication of material extracted from the thesis work and subsequent improvement, on mutually beneficial basis, provided the due credit is given, thereof.

Place: Jabalpur

Date: 28.06.2014

SOUJANYA KOTTE

**Copyright © Jawaharlal Nehru Krishi Vishwa Vidyalaya,
Jabalpur Madhya Pradesh 2014**

Copyright Transfer Certificate

Title of the Thesis : “A study on perception among participants of
RAWE programme at J.N.K.V.V., Jabalpur”

Name of the candidate : SOUJANYA KOTTE

Subject : Agricultural Extension

Department : Department of Extension Education

College : College of Agriculture, JNKVV, Jabalpur

Year of thesis submission : 2014

Copyright Transfer

The undersigned Soujanya Kotte assigns to the Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, Madhya Pradesh, all rights under Copyright Act, that may exists in and for the thesis entitled “ A study on perception among participants of RAWE programme at J.N.K.V.V., Jabalpur” submitted for the award of M.Sc. (Ag.) degree.

Place: Jabalpur

Date: 28.06.2014

(N. K. Khare)
Major Advisor

Soujanya Kotte
(Student)

ACKNOWLEDGMENT

I thank the omnipresent supernatural power that 'G'enerates, 'O'rganizes and 'D'estroys the world, which has blessed me with the opportunity and strength to successfully complete this work.

I express my deep sense of gratitude towards the Chairman of thesis Advisory Committee Dr. N. K. Khare, Professor & Head, Department of Extension Education, JNKVV, Jabalpur for his constructive criticism, illuminating guidance, valuable suggestions and generous encouragement throughout the M.Sc. (Ag.) programme.

I owe sincere regards to Dr. L. N. Sharma, ex – Professor & Head, Department of Extension Education, JNKVV, Jabalpur for his cordial attitude and for sparing his valuable time; the members of my advisory committee Dr. V. K. Pyasi, Professor, Department of Extension Education, Dr. N.K. Raghuwanshi, Professor and Head, Department of Agricultural Economics and Farm Management, JNKVV, Jabalpur for their guidance during the course of investigation.

My thanks are also due to the teaching staff of Department of Extension Education Dr. S. K. Agrawal, Professor, Dr. A. K. Pande, Professor, Dr. M.K. Dubey, Associate Professor, Dr. D.K. Jaiswal, Associate Professor.

I am extremely thankful to Dr. V.S. Tomar, Hon'ble Vice-Chancellor, JNKVV, Jabalpur, Dr. S.K. Rao, Dean, Faculty of Agriculture, Dr. S.S. Tomar, Director of Research Services, Dr. P.K. Mishra, Director Extension, Dr. S. K. Shrivastava, Director of Instruction and Dr. R. V. Singh, Dean, College of Agriculture, JNKVV, Jabalpur and Shri Rajesh Paliwal, Registrar, JNKVV, for providing necessary facilities for my research.

It will be always my immense pleasure to express my indebtedness to my parents Smt. & Shri Sunitha Narsinga Rao Kotte and to my teacher and mentor of Hindu philosophy Shri Ananth Sharma for their encouraging support in each and every point of my life.

Finally, I would like to convey my profound and cordial thanks to people who have directly and indirectly supported my stay at Jabalpur.

Place: Jabalpur

Date:

(Soujanya Kotte)

CONTENTS

CHAPTER	TITLE	PAGE
1.	Introduction	1-6
2.	Review of Literature	7-18
3.	Material and Methods	19-27
4.	Results	28-39
5.	Discussion	40-42
6.	Summary, conclusions and suggestions for further work	43-46
7.	Bibliography	47-49
	Appendices	i-vii
	Curriculum vitae	

LIST OF TABLES

Number	Title	Pages
4.1	Distribution of RAWE participants on orientation	28
4.2	Distribution of RAWE participants on course content of RAWE	29
4.3	Distribution of RAWE participants on inter and intra group relations	29
4.4	Distribution of RAWE participants on scientific information sharing	30
4.5	Distribution of RAWE participants on credit load	30
4.6	Distribution of RAWE participants on monitoring and evaluation	31
4.7	Distribution of RAWE participants on perception towards RAWE programme	31
4.8	Perception of participants towards RAWE programme	32
4.9	Distribution of RAWE participants on gain in knowledge and skill.	33
4.10	Mean score on gain in knowledge and skill on different modules of RAWE programme	33
4.11	The Inter-correlation matrix for independent and dependent variables	34
4.11.a	The correlation of independent variables with perception towards RAWE as perceived by all the respondents	35
4.11.b	The correlation of orientation given on RAWE with other independent variables	35
4.11.c	The correlation between course content of RAWE with other independent variables	36
4.11.d	The correlation between inter and intra group relations during RAWE with other independent variables	36
4.11.e	The correlation between gain in knowledge and skill during RAWE with other independent variables	37

Number	Title	Pages
4.11.f	The correlation between scientific information sharing during RAWE and other independent variables	37
4.11.g	The correlation between credit load of RAWE and other independent variables	37
4.12	The observed problems that were faced by the respondents	38
4.13	Suggestions offered by the respondents	39

INTRODUCTION

Agricultural education is basically aimed to develop skilled manpower to take up farming, undertaking research, teaching and extension work for agricultural development in the Indian context. There is probably no occupation as agriculture in which experience is more necessary and much time is required to obtain experience. The only safe way for inexperienced man to begin farming is by working for a good farmer. Agriculture is backbone of Indian economy to 52 per cent of Indian population. These farmers mostly reside in rural areas and hence, development of our country cannot be possible without strengthening the socio-economic conditions under which a rural farmer works.

The Report of the Royal Commission on Agriculture in India (*Anon, 1928*) stated that complaints were made to them by some cultivators that the training given in Agricultural Colleges was not sufficiently practical. They noted the inability of agricultural demonstrators to handle bullock or to plough properly and recommended provision of further facilities for obtaining practical experience.

One of the greatest educationists of India, Dr. Radhakrishnan (*Anon, 1948*) 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. Later he emphasized that work experience to be provided to senior class students in real life situations, such as work on farms at the time of sowing or planting or harvesting or in a family production unit and the opportunities of this kind are to be utilized to the maximum extent possible. Such work experience should match with the local situations. (*Anon, 1966*).

All these requisites necessitated the re-modeling and development of new pedagogic tools in agricultural education, which is the foundation for future agricultural development. Considering the importance of the knowledge on socio-economic behaviour of the rural farmers under which agricultural graduates have to work. The Indian Council of Agricultural Research

endeavoring to empower youth with appropriate technologies formulated a *Review Committee on Agricultural Universities (1978)*, popularly known as *Randhawa Committee Recommendations(1979)*. This led to the development of a rigorous field programme with emphasis on practical reorientation of farm students to the rural agricultural operation systems and totality of farm life. The students should get exposed to these existing realities of a typical rural setup through interconnected exercises of skill development so as to identify the practical possibilities of academic knowledge in the field. Later, Dean's Committee formulated by the ICAR in 1980-81 suggested the linkage of agricultural education with actual farming situations.

In this context, a new course, Rural Agricultural Work experience (RAWE) Programme was introduced during VIII semester 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 RAWE programme in its curriculum as early as in 1980-81. This was close on the heels with the *Randhawa Committee recommendations*.

Dean's Committee of Indian Agricultural Universities Association (IAUA) (1989) recommended that all the State Agricultural Universities of the country should adopt this programme uniformly for one semester in final year of B. Sc. (Ag.). This course emphasizes on '*learning through experience*' and memory gained in the field is super imposed on knowledge acquired in the class room situation. The vast network of agricultural universities and colleges can play a leading role in cultivating self-confidence and capabilities in the students required for taking up agriculture as a profession. Farm-graduates can begin with launching of agri-clinics and agri-business centers in villages as rural enterprises.

Kirthi Singh (1989,) reported in his presidential address of 17th convention of Indian Agricultural Universities Association (IAUA) at Panthnagar, that there should not be any delay in introduction of RAWE programme in all agricultural Universities. Later he laid down the specific objectives for the programme. (1995b).

The *World Bank (1995a)* stated that there was little emphasis in the curricula on preparing the under graduates for career in agriculture or Agri-business outside government service. However, the opportunities in the government stream are drying up and private employers often have to invest considerable time, money and effort on induction and on the job training for the graduates to make up for educational weaknesses. The graduates from SAUs exhibit lack of confidence in their ability to apply the skills necessary for self-employment.

ICAR initiated a novel idea of 'Rural Agricultural Work Experience' (RAWE) which was later integrated as a single semester course for undergraduate students in agriculture.

Currently, there is a challenge of retaining youngsters in agriculture due to various socio-economic factors, including profitability in agricultural pursuits. It has become imminent to reorient agricultural practices to make them intellectually satisfying and economically rewarding for the youth. To enhance value addition of RAWE in all State Agricultural Universities and also to formulate XII Five-Year Plan of ICAR, on may 19th and 20th 2012, UAS, Bangalore and ICAR, New Delhi conducted a "*National Workshop on Rural Agricultural Work Experience Programme of the students of Agricultural Universities*" in Karnataka State with the objective to merge the RAWE, IN-PLANT training and EL into one composite programme of one year and name as *Rural Awareness and Entrepreneurship Development Programme (RAEDP)*. Finally, combining both RAWE and Experimental Learning courses to make student 'Rural Entrepreneurship and Awareness Development Yojana' (READY) with the grass-root level experience and entrepreneurship skills, the Student READY programme was envisaged in the XII Five-Year Plan.

Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur on the recommendation of Fourth Deans' Committee (ICAR) introduced Rural Agricultural Work Experience programme as an essential requirement for B.Sc. (Ag.) degree. In view of globalization and development of new technologies it is essential that the students meet international quality

standards to develop analytical skill, entrepreneurial qualities and experiential learning for having confidence to do profitable farming. In the programme, students are placed in the villages for intensive training and field experience with farm families. During stay in the villages, they get an opportunity to study the different farm situations, farm practices adopted by the farmers, interact with the farmers to identify the problems and suggest the appropriate measures to solve them for improvement in the existing practices. Students also develop confidence in applying the knowledge gained during the course of the studies and fine-tune their skill with the experience and knowledge of host farmers. Under this programme, RAWE Model-I has been adopted in the Vishwa Vidyalaya with following objectives:

1. To understand of rural community life and the current situation prevailing in villages with special reference to agriculture and allied enterprises.
2. To familiarize with the socio-economic conditions of farmers and their problems with reference to agricultural development.
3. To make students understand farm technologies as adopted by farmers and also to help farmers to prepare sound farm plans matching to available resources.
4. To facilitate development of communication skills in students through use of extension teaching methods for transfer of technology.
5. To acquaint the students with the on-going extension & rural development programmes and to understand the activities of Krishi Vigyan Kendra.
6. To develop confidence and competence in students for solving teaching problems related to agriculture and allied enterprises.
7. To develop understanding regarding high-tech agricultural technology and factors affecting in the adoption of modern methods of agriculture by the farmers.

Need for the present study:

As RAWE itself is a new concept and a decade has been over after starting of this programme at JNKVV. So far nearly 3718 students were trained under this programme. At this point, there is need to take up a study to

find out whether this programme is actually fulfilling the needs of the students, whether the objectives of the programme have been met or not? Also, it is necessary to know whether the students who had undergone practical experience during RAWE are benefited or whether there is evidence of considerable and widespread dissatisfaction with the programme. Until now a couple of research works on the practical knowledge gained by the students are done in the university. But they could not study the programme in view of its implementation. This will be the pioneer study in the college of Agriculture, Jabalpur. The present study proposes to meet all these needs with special emphasis on feed back mechanism from students in operating the programme.

Keeping the above aspects in view, this study in the field of RAWE was undertaken with the title, "A study on perception among participants of RAWE programme at J.N.K.V.V., Jabalpur", with the following objectives:

Specific objectives:

1. To study the perception of participants towards RAWE programme.
2. To know the exposure of RAWE participants in terms of knowledge and skill.
3. To determine the relationship if any, between the independent and dependent variables.
4. To report the perception in terms of future prospects, skill development and implementation of RAWE programme.

Scope of the study:

The results of the present investigation will be useful for the planners and administrators in effective implementation of the RAWE programme.

The findings will enable to know whether there is any need for restructuring RAWE to 'Rural Entrepreneurship and Awareness Development Yojana' (READY) in the vishwa vidyalaya.

Limitations of the study:

Social Science research itself has certain limitations.

1. The study had limitation of time, finance, and resources available at the disposal of the student researcher.
2. As the study is based on the information collected through questionnaires it has some difficulties.
 - There is every possibility for the subjects to be biased in furnishing the information asked for.
 - Sometimes the framing of questions is such that the investigator takes them to mean one thing and the subject another.
 - Usually the subject answers without an adequate amount of thinking thus leaving possibility of mistakes.

Nevertheless, it is hoped that this study would be able to throw some light on the perception of the students towards RAWE programme, besides exposing the various constraints in implementation and to serve as a means for streamlining the programme at every stage.

REVIEW OF LITERATURE

Literature is considered to be the whole body of the literary composition of any language on a given subject. Literature helps to acquire general background knowledge in the given field. It also helps to find out the available information related to the objectives of proposed research and also to find out the gaps in selecting topics for research, besides finding out available techniques which can be used to measure the factors under study, to compare the present results with those of the previous research, to understand the weakness of the previous research and to avoid repetition of similar mistakes.

In this chapter, an attempt was made to review briefly the available literature in the light of the objectives of the study. Every effort has been put forth to review the literature available. However, literature dealing with the study of RAWEP programme was very limited as very few works are done. The related review of literature has been presented below:

Research findings:

Impact of the programme

Shareef and Rambabu (1999) reported that 66.67 per cent of the respondents expressed satisfaction for the cooperation received from their host farmer.

Chauhan (2004) found different impacts on students after this programme like learning new experiences, managing relationship, observe problems, art of negotiation, understand the real life, time management, practicing method, develop team work, feedback, developing art of creative thinking, art of listening, conflict management, understanding recommended technology, understanding real world, money management, working style of local institutions, working with local organizations/leaders and confidence building.

Borthakur and Bortamuly (2013) observed that there was almost equal percentage of respondents (48.01%) and (50.50%) who perceived RAWEP as very useful and useful respectively in gaining and improving communication skills.

Borthakur and Bortamuly (2013) observed that there is improvement in the interaction skills of the respondents, developing right attitude towards the farming community and are adapting towards rural situations.

Attributes of the participants:

a. Rural and Urban background

Ramanjaneyulu (1992) observed that there is no significant difference between students from rural and urban settlements in experience gained through RAWE Programme.

Sanjeev and Narayana Gowda (2013) reported that majority (62%) of the students belonged to urban background and remaining (32%) were from rural background. Even the students coming from the 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.

b. Medium of instruction:

Sanjeev and Narayana Gowda (2013) reported that medium of instruction had a positive significant relation with perception. Since, those who studied in local language could interact better with farmers in RAWE, they had positive perception regarding objectives.

c. Prior exposure to rural life

Ramanjaneyulu (1992) reported that majority of the students had medium agricultural work experience before going to RAWE Programme.

d. Perception

Sanjeev and Narayana Gowda (2013) found that rural-urban background, medium of instruction, achievement motivation, leadership qualities and mass media usage had a positive significance with perception.

Facilities available in the allotted villages:

Srinivasa reddy (1985) reported that facilities available for the students were average.

Kulkarni et al (1991) conducted a study on reaction of staff, students and farmers towards RAWEP of Punjab Rao Krishi Vidya Peeth found that majority of the students were unhappy about the accommodation facilities available in the villages.

Tirupathi Rayudu (1991) observed that there was a positive correlation between facilities available in the allotted villages and extent of students participation in various activities and the experience gained through RAWEP Programme.

Ramanjaneyulu (1992) reported that boy students were facing problems with respect to getting accommodation, from castism, getting cooperation from host farmer and other farmers.

Reddy (2002) found that 56.26% of the respondents gave excellent response towards accommodation followed by transport facilities (62.77%), class room facilities (50%), computer availabilities (55.32%) and recreational facilities (51.06%).

Vijayabhinandana (2003) revealed that majority (68.33%) of the respondents had indicated that the quality of all physical facilities was medium followed by low (16.00%) and high (15.67%).

Extent of participation

Tirupathi Rayudu (1991) after critically analysing the RAWEP of APAU reported that majority of the students showed medium to high involvement in different activities of RAWEP Programme.

Ramanjaneyulu (1992) critically evaluated RAWEP under agricultural college, Bapatla found that extent of participation in extension activities was significantly related to the extent of communication skills gained by the student and feed back operating in the programme.

Ramanjaneyulu (1992) the extent of students participation was rated as medium by the advisory committee members, host farmers and other farmers.

Inter and intra group relation

Reddy (2001) observed from his study that 37.33% of the students of colleges were grouped under 'moderate category' in terms of their perception towards inter and group relationships.

Sujatha (2001) stated that majority (61.67%) of the students had unfavorable attitude towards inter and intra group relationships.

Jamode (2002) reported that the students should take care not to be informal with teachers, as manner and etiquettes being supportive pillars of student teacher relations. Students should show that they really respect the teacher. The students in professional streams need to abide by the formal standards of living.

Vijayabhinandana (2003) revealed that the half of the agriculture teachers had medium (57.50%) interaction with co-teachers followed by high (22.50%) and low (20.00%) interaction while an overwhelming 87.14% of teachers in veterinary faculty had medium interaction followed by low (8.58%) and high (4.28%) interaction with co-teachers. In case of home science, exactly 50% of teachers had medium interaction followed by low (26.67%) and high (23.33%) with co-teachers.

Kiran (2004) reported that the more than half (57.78%) of students of agricultural college, bapatla had moderate interaction with teachers, followed by 35.55% had high interaction and 6.67% had low interaction with teachers and most (41.11%) of students of agriculture college, bapatla had high interaction with colleague students, by 34.45 per cent had moderate interaction and 24.44 per cent had low interaction with colleague students. Similarly vast majority (73.21%) of respondent teachers had moderate interaction with co-teachers, followed by 17.86 per cent had high interaction and large proportion (62.50%) of respondent teachers had medium interaction with students, followed by 25 per cent had high interaction and 12.50 per cent had low interaction with students.

Knowledge and practical experience gained:

a. Knowledge gained

Bandyopadhyay and Kar (2002) stated that 100 per cent of the students gained experience regarding practical knowledge of different agricultural activities, many participatory approaches involved in PRA, about farmers, farm women and children, their lifestyle and involvement in various agricultural operations and experienced the difference between the theoretical and practical knowledge.

Bordoloi, Borthakur and Singha (2013) found that majority of the respondents perceived that RAWE Programme was useful in gaining knowledge on various aspects of diffusion of agricultural technology, extension programme planning and rural development.

Borthakur and Bortamuly (2013) observed that almost all the students gained knowledge and skills in the RAWE programme.

Sanjeev and Gowda (2013) found that RAWE was weak in providing practical experience in crop production at field and acquaintance with on-going TOT programmes.

b. Practical Experience

Srinivasa reddy (1985) conducted a study on effectiveness of RAWEP of APAU and found that the extent of experience gained by the students in different activities was average.

Tirupathi Rayudu (1991) observed that the experience gained by majority of the students ranged from medium to high.

Ramanjaneyulu (1992) found that majority of the students had medium achievement motivation, which was positively correlated and highly significant with the attitude towards RAWE Programme and the extent of participation and knowledge and experience gained.

Ramanjaneyulu (1992) found that there is no significant difference between male and female students in experience gained through RAWE programme.

Ramanjaneyulu (1992) found that extent of experience gained through RAWE programme mainly depend on achievement motivation and prior experience of the student in agricultural work.

Sankaran *et al.* (1996) reported that through the work experience, the students will be able to gain greater self-confidence which will enable them to face the challenges of life.

Sasidhar and reddy (2000) in their study found that insufficient duration of programme, non-availability of accommodation facilities and absence of technical guidance to the students are some of the problems involved in the internship training programmes.

Uma joshi (2000) reported that internship period of very short duration, lack of planning and structure, lack of placement organizations can result into a failure of internship objectives.

Srujana (2001) reported that 72.50% of the students were averagely satisfied, 14.17% of the students were highly satisfied and 13.33% of students were less satisfied with the practical training.

Yadav, Ganvir and Shaikh (2003) found that practical experience is imparted only through RAWE Programme. Hence, it is very essential to strengthen the RAWE programme for giving practical training to the students in real life situations and increase their confidence.

Skills gained:

Sanjeev and Narayana Gowda (2013) found that RAWE was highly successful in improving the communication and leadership skills of students along with providing opportunity to work in agri-based industries.

Satisfaction with the course content (course curriculum):

Srinivasa Reddy (1985) reported that majority of students expressed that work load was moderate and very few perceived it as heavy.

Tirupathi Rayudu (1991) reported that satisfaction with course curriculum was significantly correlated with the students attitude towards RAWE Programme and the extent of involvement in various activities and experiences gained through RAWE Programme.

Ramanjaneyulu (1992) reported that majority of the students expressed medium satisfaction with course curriculum, extent of guidance and supervision by advisory committee.

Bandyopadhyay *et al.* (2001) inferred that majority (90.00%) of the students expressed that curriculum should be with updated information followed by 70.00 per cent of the students opined that it should be both theory and practical oriented.

Srujana (2001) concluded the majority of the students (72.50%) had favorable attitude followed by less favorable attitude (15.00%) and 12.50 per cent of them had more favorable attitude towards VCI pattern of curriculum.

Sujatha (2001) reported that above half (55.67%) of the students had unfavourable attitude, while 36.67 per cent of them had favourable attitude followed by 6.67 per cent of them had moderately favourable attitude towards curriculum.

Sanjay (2002) identified that the curriculum should be developed based on needs and local situations and the experts in the universities have to be coordinated in the process of curriculum development.

Narayan *et al.* (2005) expressed that the curriculum should be updated, modularized and raised to global bench marked.

Sharma (2006) inferred that the curriculum in this context does not mean only the academic subjects traditionally taught in the school, but it includes the totality of experience the pupil receives through the manifold activities that go on in the college, in the class room, library, laboratory, workshop, play ground and in the numerous informal contact between teachers and pupils.

Sanjeev and Narayana Gowda (2013) said that achievement motivation shows a positive significant relation with perception about RAWE objectives.

Class room teaching

Reddy (2001) stated that 38.00 per cent of the overall students of colleges were grouped under 'moderate category' based on their perception on class room teaching.

Sujatha (2001) revealed that 46.67 per cent of the students had unfavourable attitude followed by 40.00 per cent of them had favourable and 13.33 per cent had neutral attitude towards teaching.

Scientific communication and information support

a. Scientific communication

Chandran (2000) showed that more than 25 per cent of the respondents used internet 2-3 times in week and more than 60% used it for accessing information. the purpose of using internet includes communication and information.

Ravishanker (2000) indicated that 71.67 per cent of the government KVK respondents had medium level of information input behavior followed by low (16.67%) and high (11.67%) levels. whereas 58.34% of the Non-government KVK respondents had high level of information input behavior followed by medium (23.33%) and low (18.33%) levels.

Murali (2004) conclude that majority (68.37%) of the respondents had medium information behavior followed by high (16.33%) and low (15.30%).

b. Information support

Prabha (1994) revealed that research journals (11.08%) were the most utilized source by the APAU scientists to attain information, followed by seminars/workshops (93.32%), professional meetings (8.30%), books (7.94%), colleagues (6.76%), personal experience (6.05), visit to research stations (5.80%), daily newspaper (5.70%). The least utilized source of information by the scientists was extension personnel (4.10%).

Rama Krishnan (1999) indicated that 54.17% of the trainees had medium level of information source utilization followed by 23.33% with high level and 22.50% with low level of information source utilization.

Sridhar (2001) reported that majority (54.17%) of the respondents had medium information source utilization behavior followed by high (29.16%) and low information source utilization behavior (16.67%).

Satyanarayana (2002) concluded that majority (67.69%) of trainers not contributed any publication useful for training such as training manual, booklet etc. while 32.31% of them reported that they had contributed such publications.

Reddy (2002) revealed that the trainees were consulted their superiors, books and television most frequently in equal proportions (41.18%). The frequently consulted sources of learning were colleague (50%), technical journal (45.09%) and discussion with experts (45.09%). internet was never used as a source of information by 80.39% of trains.

Vijayabhinandana (2003) reported that majority (67.50%) of teachers in agriculture, veterinary (75.71%) and home science (70.00%) fell under medium category with reference to utilization of learning sources followed by high (16.67%, 12.86%, 16.67%) and low (15.83%, 11.43%, 13.33%) categories.

Extent of supervision and guidance

Srinivasa reddy (1985) reported that majority of the students rated the guidance provided to them by the advisory committee as average.

Tirupathi Rayudu (1991) observed that majority of the students were satisfied with the guidance, supervision and co-operation rendered by RAWEP functionaries.

Monitoring and Evaluation

Ramanjaneyulu (1992) reported that Maximum percent of the students have expressed satisfaction with the present system of evaluation. A meagre percent of students showed their dissatisfaction due to heavy load of the record submission at the end of the programme and grade allotment not in tune with the work done by them and wide discrimination from station to station.

Students Evaluation

Girija (2000) remarked that evaluation procedure are more objective and streamlined for classroom (like exams and tests) whereas the field type of course depends upon evaluating the skills of the students, which are to some extent subjective, many to be standardized.

Kablon and Saini (2000) revealed that the students percentage perceived that teaching and evaluation of all courses, units as good with respect to handling of courses coverage, knowledge and standards of subject matter imparted by the teacher as well as grading of students.

Ramaiah (2001) inferred that majority (58.89%) of respondents had medium perception on evaluation pattern followed by high (21.11%) and low (20%) perceptions on evaluation pattern.

Reddy (2001) reported that 44% of the students of three agricultural colleges had very low perception about evaluation procedures.

Sujatha (2001) observed that majority (55%) of them had unfavorable attitude, while 33.33% of them had favorable attitude followed by few (11.67%) of them had moderately favorable attitude about evaluation pattern.

Narayan *et al.* (2005) suggested that the evaluation system should increase the transparency, reduce the biases through more tests, oral/ written /practical capabilities, multiple evaluation.

Problems and suggestions:

a. Problems faced

Srinivasa Reddy (1985) found that the students in RAWEP Programme were facing problems like lack of minimum facilities in the selected villages, stipulated guidelines not followed in the selection of host farmers, insufficient stipend etc. he also reported that the advisory committee faced problems due to lack of conveyance facilities and lack of co-operation in the village.

Kulkarni et al (1991) reported that absence of students from RAWEP villages, lack of conveyance facilities for advisory committee members, lack of accommodation facilities for students and inadequate stipend were major problems in implementation of the programme.

Ranegowda et al (1991) observed that the knowledge gap among farmers particularly with respect to complex package of practices could be attributed to incompetency of students to educate farmers with respect to these crops.

Tirupathi Rayudu (1991) observed that major drawbacks of the programme as late commencement of the programme and involvement of the students in extra-curricular activities from time to time during the programme period and students staying away from the villages for attending backlog examinations.

Ramanjaneyulu (1992) found that in stations where Agricultural Extension Scientists are not available, the students suffered from poor guidance and supervision.

Ramanjaneyulu (1992) reported that major drawbacks of the programme as perceived by the respondents were insufficient orientation, late commencement of the programme, absence of the students due to backlog examinations and participation in sports and cultural meets during the programme period.

Gogoi (2001) reported that most serious problem faced by students undergoing RAWEP was problem regarding extension literature and print materials followed by problems in organizing training programmes and problem related to supervision.

Borthakur and Bortamuly (2013) reported that as the students are making family budgets themselves and still not learning much about it, there might be some serious lacunas in the process of guidance and supervision.

Sarvesh Kumar and Sharma (2013) found that students expressed financial difficulty during programme.

b. Suggestions

Srinivasa Reddy (1985) suggested that villages with adequate facilities and farmers who are more cooperative must be selected for the programme. Conveyance facilities may be provided for the advisory committee members and incentives may be given for the host farmers. The students should not be allowed to take backlog examinations during the programme period.

Kulkarni et al (1991) suggested that fortnightly discussions with university scientists may be helpful to solve the difficulties of the students. Vehicle should be provided for the advisory committee members and villages with adequate facilities must be selected for the programme.

Ranegowda et al (1991) suggested that intensive pre-camp preparation classes should be conducted to the students on the campus providing simulated experience on thrust areas.

Tirupathi Rayudu (1991) suggested that no student should be permitted to appear for the backlog examinations or to participate in any extra-curricular activities during the programme. Villages with adequate facilities must be selected. The programme should coincide with cropping season

Ramanjaneyulu (1992) suggested that advisory committee should be impartial and record submission may be done periodically during the programme.

Bordoloi, Borthakur and Singha (2013) suggested that in order to improve the RAWE programme of the college, the programme should be recommended only after a session of orientation of the students on the mandated activities of the programme that the students are going to undertake.

Sanjeev and Narayana Gowda (2013) said that most of the students suggested that time for each module in the RAWE should be increased followed by suggestion for stipend.

Sanjeev and Narayana Gowda (2013) reported that nearly 42 per cent of students wanted entrusting of teachers with genuine interest, give opportunities to all the students equally and time convenience of farmers to be taken care.

MATERIAL AND METHODS

This chapter deals with the methods and procedures used designed for planning and conducting the research study. It consists of the following sub-parts:

- 3.1 Location of the study
- 3.2 Research design
- 3.3 Sampling techniques used
- 3.4 Variables, their operationalization and measurement
- 3.5 Instruments of data collection
- 3.6 Validity and reliability of instrument
- 3.7 Statistical tests applied
- 3.8 Derivation of hypothesis

3.1 Locale of the study:

The study was conducted at Jawaharlal Nehru Krishi Vishwa Vidyalaya, College of Agriculture, Jabalpur.

Agricultural college, Jabalpur was purposively selected because:

- (i) College of Agriculture, Jabalpur, Jawaharlal Nehru Krishi Vishwa Vidyalaya, is the main campus and the programme for the university is designed here.
- (ii) As, the researcher doesn't belong to the same campus during graduation, the research would be done without bias and accurate data is obtained.
- (iii) In addition to this time and other resources were also considered.

3.2 Research design:

The design of research is the most important and crucial aspect of the research methodology, as it enables the investigator to answer research questions with objectivity and accuracy i.e., it is the entire process of planning and carrying out the research, to seek the answer of the research question.

An ex-post-facto research design is employed as RAWE was already implemented and data was collected from students based on their experience.

3.3 Sampling technique used:

- a. Selection of respondents: students who completed the RAWE programme in 2013-14 academic year were selected as respondents for the study.
- b. Sample size: all 86 students (34 girls and 52 boys) who have recently completed the RAWE programme were selected. They have undergone the experience programme in Krishi Vigyan Kendra's (KVK) of Betul, Chhindwada, Seoni, Mandla, Dindori and Narsingpur.

S. No	KVK location	No. of Students
Girls		
1.	Betul	12
2.	Chhindwada	09
3.	Seoni	13
Total		34
Boys		
1.	Mandla	16
2.	Dindori	18
3.	Narsingpur	18
Total		52

3.4 Variables, operationalization and their measurement:

Variables and their measurement:

S. No.	Independent variable	Scale
1.	Orientation given on RAWE	Self scoring questionnaire
2.	Course content	- □de
3.	Inter and intra group relationship	- □de
4.	Gain in Knowledge and skill during RAWE	- □de
5.	Scientific information sharing	- □de
6.	Credit load	- □de
7.	Monitoring and evaluation system	- do -
Dependent variable		
1.	Perception towards RAWE	Index was developed

Operationalization of variables:

a. Independent variables:

A five point continuum scale was adopted to get more accurate results with Strongly Disagree (SD), Disagree (D), Un Decided (UD), Agree (A) and Strongly Agree (SA) in few variables and None (N), Little (L), In Between (IB), More (M) and Very Much (VM) in others. The scoring is given as 1, 2, 3, 4 and 5 respectively.

1. Orientation given on RAWE:

It refers to the basic training that was taken by the students before going to the RAWE programme at their college. In which, the objectives and aims of the programme, information that has to be collected course wise, records that have to be maintained and all the basic information on the work to be done by the RAWE student are thoroughly explained. For this, a self scoring questionnaire was prepared. A respondent can obtain a minimum of 11 score and a maximum of 55. On the basis of range of scores, following three categories were formulated.

S. No.	Categories	Score
1.	Low	11-18
2.	Medium	19-36
3.	High	37-55

2. Course content:

It refers to the support given by the detailed structure of the activities mentioned in the RAWE manual for skill development of the student during the RAWE period. For this a self scoring questionnaire was prepared with 21 statements. The respondent can obtain the minimum of 21 score and a maximum of 105. On the basis of range of scores, following 3 categories were formulated.

S. No.	Categories	Score
1.	Low	21- 35
2.	Medium	36-70
3.	High	71-105

3. Inter and Intra group relationship:

It refers to the interaction of the student with his/her group, with concerned subject matter specialist and with farmers in developing communication skills and conducting extension activities. For this, a self-scoring questionnaire with 13 statements was developed. The respondent can obtain a minimum of 13 score and a maximum of 65. On the basis of range of scores, following categories were formulated.

S. No.	Categories	Score
1.	Low	13- 21
2.	Moderate	22-43
3.	High	44-65

4. Knowledge and skill gained during RAWE:

It refers to the knowledge and skills gained by the participant in crop production, crop protection, rural economics, extension programmes and KVK/research station activities on various practical aspects. For this, a self-scoring questionnaire with 91 statements was developed. The respondent can obtain a minimum of 91 score and a maximum of 520. On the basis of range of scores, following categories were formulated.

S. No.	Categories	Score
1.	Low	104- 173
2.	Moderate	174-346
3.	High	347-520

5. Scientific Information Sharing:

It refers to the communication behaviour of the student in sharing scientific information with his/her team, farmers and scientists. For this, a self-scoring questionnaire with 12 statements was developed. The respondent can

obtain a minimum of 12 score and a maximum of 60. On the basis of range of scores, following categories were formulated.

S. No.	Categories	Score
1.	Low	12- 20
2.	Moderate	21-40
3.	High	41-60

6. Credit Load:

It refers to the work management of the student, on number of credit hours that are assigned for each module to complete the RAWE schedule. For this, a self-scoring questionnaire with 11 statements was developed. The respondent can obtain a minimum of 11 score and a maximum of 55. On the basis of range of scores, following categories were formulated.

S. No.	Categories	Score
1.	Insufficient	11- 18
2.	Moderate	19-36
3.	Sufficient	37-55

7. Monitoring and Evaluation System:

It refers to the guiding, monitoring and evaluating the students by the committee members during their entire course period till allotment of grade point. For this, a self-scoring questionnaire with 5 statements was developed. The respondent can obtain a minimum of 5 score and a maximum of 25. On the basis of range of scores, following categories were formulated.

S. No.	Categories	Score
1.	Low	5-8
2.	Moderate	9-16
3.	High	17-25

b. Dependent Variable:

Perception towards RAWE:

It refers to the impression and interpretation of the students based on their practical and personal experience during RAWE programme. For this, a self-scoring questionnaire with 16 statements was developed.

The respondent can obtain a minimum of 16 score and a maximum of 80. On the basis of range of scores, following categories were formulated.

S. No.	Categories	Score
1.	Low	16- 26
2.	Moderate	27-52
3.	High	53-80

3.5 Instruments of data collection:

A well structured questionnaire was used as an instrument of data collection, which was developed incorporating all the items, keeping the objectives and variables in view. It comprises of 2 parts.

1. First part consisted of personal data and indicators of the independent variables.
2. Second part included indicators on perception towards RAWE.

The purpose and objectives of the study were explained to the respondents to record the answers in the questionnaire given to them.

The needed secondary data was collected from the research journals, thesis, reports of State Agricultural Universities and Indian Council of Agricultural Research.

3.6 Validity and reliability of instrument

Validity means truthfulness. According to Lindquist (1951) validity of a test as the accuracy with which it measures that which is intended to

measure. The validity of the questionnaire for this study was maximized by taking the following steps.

The questionnaire was thoroughly discussed with the members of the authority, advisory committee and their suggestions were incorporated.

- I. Pre-testing of the questionnaire was done on 10 per cent of the sample size i.e., on 9 students for improving the instrument.
- II. The relevance of each question in terms of the objectives was checked carefully.

Reliability of an instrument refers to the precision or accuracy of the measurement or score. It has been observed properly that the questionnaire had reliability before it was used as a data collection instrument.

3.6 Statistical tests applied:

Data collected were qualitative as well as quantitative. The quantitative data were tabulated on the basis of approved categorization method as described earlier. The following statistical techniques were used in the study.

1. Unified standard score
2. Percentage
3. Mean
4. Rank order
5. Pearson's correlation coefficient

1. Unified Standard Score

As different components of the questionnaire were not having equal number of questions, unification of the scores obtained was done.

- Unification was done by the following process
- Number of statements on each component was taken as n , score range was on five point continuum, maximum score obtained will be $5n$.
- The unity range lies between n to $5n$.
- Finally the conversion value was taken as $100/4n$.
- The unification of standard scores was done by the formula:

S. No.	Variable name	No. of statements	Score range	Unity range	Conversion value
*	Name of variable	n	n-5n	5n-n=4n	100/4n

Unification of

Standard Score = (obtained summated score – number of items in instrument) X Conversion value

2. Percentage

The term 'Percentage' means a fraction whose denominator is 100 and the numerator of the fraction is called percentage.

$$P = \frac{X}{N} \times 100$$

where,

P = Percentage

X = Frequencies of respondents.

N = Total number of respondents.

3. Mean

Mean was obtained by dividing the sum of the scores by the total number of cases involved according to formula.

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{N} \quad (i= 1, 2, 3, \dots, n)$$

where,

\bar{X} = Mean

$\sum X_i$ = Sum of all the scores in a distribution

n = Number of respondents

N = Total number of respondents.

4. Correlation coefficient:

In order to ascertain the association between two variables, Inter-correlation was applied. This test is widely used in social science, genetics,

medical sciences and many other situations where the investigator wishes to test whether there is any correlation exists between the independent variables and dependent variable.

When an increase or decrease in one variate is accompanied by an increase or decrease in the other variate, the two are said to be correlated and the phenomenon is called correlation. Correlation coefficient is denoted by "r" and is a measure of relationship between two variables. The range of correlation coefficient is between -1 to +1. It means that if the values are negative the variables are negatively correlated and if values are positive, they are positively correlated.

Pearson's correlation-coefficient, 'r' is computed by the formula

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[N\sum x^2 - (\sum x)^2][N\sum y^2 - (\sum y)^2]}}$$

Where:

- N = number of pairs of scores
- $\sum xy$ = sum of the products of paired scores
- $\sum x$ = sum of x scores
- $\sum y$ = sum of y scores
- $\sum x^2$ = sum of squared x scores
- $\sum y^2$ = sum of squared y scores

When more than two variables are there, their correlation with each other may be drawn using correlation coefficient formula and their correlation with each other may be conveniently arranged in the form of a matrix known as correlation matrix.

3.7 Derivation of hypothesis:

This is the step to propose the research inquiry in the form of a testable proposition. It is otherwise called as hypothesis. Hypothesis is a proposition or principle which is assumed in order to draw its logical or empirical consequences.

Relevant hypothesis were formulated on the basis of the study and were tested in the null form.

Null hypothesis:

There is no significant relationship between the selected independent variables and perception of respondents towards RAWE programme.

RESULTS

This chapter deals with the analysis and interpretation of collected data in view of objectives of the study. The data was processed and analysed in line with the objectives of the study.

This chapter is presented under the following sections.

1. The perception of participants towards RAWE programme.
2. To know the exposure of RAWE participants in terms of knowledge and skill.
3. To determine the relationship if any between the independent and dependent variables.
4. To report the perception in terms of future prospects, skill development and implementation of RAWE programme.

Independent variables

Seven independent variables namely orientation given on RAWE, course content, inter and intra group relations, knowledge and skill gained, scientific information sharing, credit load, monitoring and evaluation.

Orientation given on RAWE:

Table 4.1 Distribution of RAWE participants on orientation.

S. No.	Categories	No. of respondents	Percentage
1.	Low	2	2.32
2.	Medium	42	48.84
3.	High	42	48.84
Total		86	100.00

The data of the table 4.1 shows the perception of RAWE students on orientation given at the college. The data reveals that 2.32 per cent perceived low, 48.83 per cent perceived moderate and 43.83 per cent perceived high. Therefore, it can be concluded that most of the respondents had good orientation.

Course content

Table 4.2 Distribution of RAWE participants on course content of RAWE.

S. No.	Categories	No. of respondents	Percentage
1.	Low	3	3.50
2.	Medium	51	59.30
3.	High	32	37.20
Total		86	100.00

The data of the table 4.2 shows the distribution of RAWE participants, on course content of the programme. The data reveals that 3.48 per cent have low perception, 59.3 per cent have moderate perception and 37.2 have high perception. Therefore, it can be concluded that most of the students are positive towards the course content.

Inter and intra group relations

Table 4.3 Distribution of RAWE participants on inter and intra group relations.

S. No.	Categories	No. of respondents	Percentage
1.	Low	1	1.17
2.	Moderate	59	68.60
3.	High	26	30.23
Total		86	100.00

The data of the table 4.3 shows the distribution of RAWE participants, on inter and intra group relations during the RAWE programme. The data reveals that 1.16 percent are having low inter and intra group relations, 68.6

per cent are having moderate inter and intra group relations, and 46.42 percent are having high inter and intra group relations. Therefore, it can be concluded that majority of the students had moderate inter and intra group relations.

Scientific information sharing

Table 4.4 Distribution of RAWE participants on scientific information sharing.

S. No.	Categories	No. of respondents	Percentage
1.	Low	10	11.63
2.	Moderate	57	66.28
3.	High	19	22.09
Total		86	100.00

The data of the table 4.4 shows the distribution of RAWE participants, on scientific information sharing during the RAWE programme. The data reveals that 11.63 per cent students scientific information sharing was low, 66.28 per cent had moderate and 22.09 per cent had high scientific information sharing. Therefore, majority of the students had moderate scientific information sharing.

Credit load

Table 4.5 Distribution of RAWE participants on credit load.

S. No.	Categories	No. of respondents	Percentage
1.	Insufficient	0	0.00
2.	Moderate	26	30.24
3.	Sufficient	60	69.76

Total	86	100.00
-------	----	--------

The data of the table 4.5 shows the distribution of RAWE participants, on credit load of the RAWE programme. The data reveals that none of the students perceive credit load as insufficient, 30.23 per cent feel as moderate and 69.76 per cent feel sufficient. Therefore, majority of the students were satisfied with credit load.

Monitoring and Evaluation

Table 4.6 Distribution of RAWE participants on monitoring and evaluation.

S. No.	Categories	No. of respondents	Percentage
1.	Low	0	0.00
2.	Moderate	19	22.09
3.	High	67	77.91
Total		86	100.00

The data of the table 4.6 shows the distribution of RAWE participants, on monitoring and evaluation of RAWE programme. The data reveals that none of the students had low perception, 22.09 per cent had moderate perception and 77.91 per cent had high perception on RAWE monitoring and evaluation system. Therefore, it can be concluded that majority of the students were satisfied with the monitoring and evaluation system.

Perception towards RAWE

Table 4.7 Distribution of RAWE participants on perception towards RAWE programme.

S. No.	Categories	No. of respondents	Percentage
--------	------------	--------------------	------------

1.	Low	3	3.49
2.	Moderate	38	44.18
3.	High	45	52.33
Total		86	100.00

The data of the table 4.7 shows the distribution of RAWE participants, on perception towards RAWE programme. The data reveals that 3.48 per cent have low perception, 44.18 per cent had moderate perception and 52.32 per cent had high perception towards the RAWE programme. Therefore, it can be concluded that majority of the students had positive perception towards RAWE programme.

Table 4.8 Perception of participants towards RAWE

INDEX			
S. No.	RAWE helped me	Mean score	Rank
a.	To get familiar with rural life.	3.88	II
b.	To understand village situations	3.80	III
c.	To understand rural institutions	3.47	VII
d.	To understand socio-economic conditions of the farmers	3.50	VI
e.	To understand adoption patterns and adoption gaps of the farmers.	3.43	VIII
f.	To understand farmers problems.	3.80	III
g.	To understand farming systems and farming.	3.56	V
h.	To improve diagnostic skills	3.47	VII
i.	Provided practical training in crop production.	3.30	IX
j.	To improve communication skills	3.96	I
k.	To improve leadership qualities.	3.03	X
l.	To develop competency to prepare farm plans for individual farm families.	3.67	IV
m.	To get exposure and increased my confidence.	3.67	IV
n.	To acquaint with on- going Transfer of Technology programmes in agriculture.	2.73	XI
o.	To acquaint with poverty alleviation programmes.	2.46	XIII
p.	To develop professional competence to solve field problems.	2.67	XII

Table 4.8 indicates that, the rank I was allotted to improve communication skills and mean score was recorded as high as 3.96 indicating that most of the participants' communication skills were improved through RAWE programme. Rank II was allotted to get familiar with rural life with mean score 3.88. Subsequently rank III was allotted to understand village situations and to understand farmer's problems with mean score of 3.80. Rank IV was allotted to develop competency to prepare farm plans for individual farm families and to get exposure towards different aspects of agriculture and increase confidence with mean score as 3.67. Rank V was allotted to understand farming systems and farming with mean score of 3.56. Rank VI was allotted to understand socio-economic conditions of the farmers with mean score 3.50.

Rank VII was allotted to understand rural situations and also to improve diagnostic skills as, the mean score was 3.47. Rank VIII was allotted to understand adoption pattern and adoption gap of recommended technology by the farmers with mean score 3.43. Rank IX was allotted to RAWE provided practical training in crop production with mean score of 3.30. To improve leadership qualities was given rank X as the mean score was 3.03. To acquaint with on- going Transfer of Technology programmes in agriculture, to develop professional competence to solve field problems and to acquaint with poverty alleviation programmes gained ranks XI, XII and XIII respectively with the respective mean scores 2.73, 2.67 and 2.46

Knowledge and skill gained

Table 4.9 Distribution of RAWE participants on knowledge and skill gained.

S. No.	Categories	No. of respondents	Percentage
1.	Low	0	0.00
2.	Medium	60	69.76
3.	High	26	30.24

Total	86	100.00
-------	----	--------

The data of the table 4.9 shows the distribution of RAWE participants, on knowledge and skill gained during the village stay. The data reveals that none of the students were found in low category, 69.76 per cent gained medium and 30.23 percent gained high knowledge and skill. Therefore it can be concluded that majority of the students' knowledge and skill is gained during the RAWE programme.

Table 4.10 mean score on gain in knowledge and skill in different modules of RAWE programme

S.No.	Module	Mean score	Rank
1.	Crop production	3.1	IV
2.	Crop protection	4.3	II
3.	Rural economics	3.2	III
4.	Extension programmes	2.9	V
5.	Research station/KVK	4.5	I

The data of the table 4.10 shows that the students who have undergone RAWE programme have gained more knowledge and skill on KVK or research station activities, next to it was crop protection followed by Rural economics and Crop production and finally extension programmes.

Table 4.11 Inter-correlation matrix for independent and dependent variables for total participants (N=86)

VARIABLES	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	Y
X ₁	1.00							
X ₂	0.41***	1.00						
X ₃	0.47***	0.53***	1.00					
X ₄	0.31***	0.55***	0.57***	1.00				
X ₅	0.47***	0.44***	0.5***	0.59***	1.00			
X ₆	0.18*	0.03 ^{NS}	0.07 ^{NS}	0.00 ^{NC}	0.09 ^{NS}	1.00		
X ₇	0.06 ^{NS}	0.12 ^{NS}	0.08 ^{NS}	0.03 ^{NS}	0.25**	0.38***	1.00	

Y	0.43***	0.37***	0.30***	0.42***	0.29**	0.12 ^{NS}	0.12 ^{NS}	1.00
---	---------	---------	---------	---------	--------	--------------------	--------------------	------

Where,

X₁=orientation given on RAWE X₂= course content

X₃=inter and intra group relations X₄=knowledge and skill gained

X₅=scientific information sharing X₆=credit load

X₇=monitoring and evaluation Y=perception on RAWE

^{NS} Non significant

^{NC} No correlation

*** Significant at 0.01 level of probability at (n-2) degrees of freedom

** Significant at 0.05 level of probability at (n-2) degrees of freedom

* Significant at 0.1 level of probability at (n-2) degrees of freedom

'r' table value for 80 degrees of freedom = 0.283 at 0.01 level

= 0.217 at 0.05 level

= 0.183 at 0.10 level

Table 4.11.a. The correlation of independent variables with Perception towards RAWE as perceived by all the respondents (N=86)

S. No	Variables	'r' value
1.	Orientation given on RAWE	0.43***
2.	Course content	0.37***
3.	Inter and intra group relationship	0.30***
4.	Knowledge and skill gained	0.42***
5.	Scientific information sharing	0.29***
6.	Credit load	0.12 ^{NS}
7.	Monitoring and evaluation system	0.12 ^{NS}

From the table 4.11.a, it is inferred that perception towards RAWE is positively significant with course content, inter and intra group relations,

gain in knowledge and skill and scientific information sharing at one per cent level of significance. It is found that perception towards RAWE has no significance with orientation given on RAWE and monitoring and evaluation system.

Table 4.11.b. The correlation of orientation given on RAWE with other independent variables (N=86)

S. No	Variables	'r' value
1.	Course content	0.41***
2.	Inter and intra group relationship	0.47***
3.	Knowledge and skill gained	0.31***
4.	Scientific information sharing	0.47***
5.	Credit load	0.18*
6.	Monitoring and evaluation system	0.06 ^{NS}

From the table 4.11.b, it is inferred that orientation given on RAWE is highly correlated with course content, inter and intra group relationship, gain in knowledge and skill and scientific information sharing of the respondents at one per cent level of significance, followed by credit load at ten per cent level of significance. It is observed that orientation given on RAWE and monitoring and evaluation system are non-significant.

Table 4.11.c. The correlation between course content with other independent variables (N=86)

S.No	Variables	'r' value
1.	Inter and intra group relationship	0.53***
2.	Knowledge and skill gained	0.55***
3.	Scientific information sharing	0.44***
4.	Credit load	0.03 ^{NS}
5.	Monitoring and evaluation system	0.12 ^{NS}

From the table 4.11.c, it is inferred that course content and inter and intra group relations, gain in knowledge and skill and scientific information sharing are highly correlated at one per cent level of significance. It is found that credit load and monitoring and evaluation system are non-significant.

Table 4.11.d. The correlation between inter and intra group relations and other independent variables (N=86)

S. No	Variables	'r' value
1.	Knowledge and skill gained	0.57***
2.	Scientific information sharing	0.54***
3.	Credit load	0.07 ^{NS}
4.	Monitoring and evaluation system	0.08 ^{NS}

From the table 4.11.d, It is found that inter and intra group relations with gain in knowledge and skill, scientific information sharing are highly correlated at one per cent level of significance, and credit load and monitoring and evaluation system were found non-significant.

Table 4.11.e. The correlation between knowledge and skill gained and other independent variables (N=86)

S. No	Variables	'r' value
1.	Scientific information sharing	0.59***
2.	Credit load	0.00 ^{NC}
3.	Monitoring and evaluation system	0.03**

From the table 4.11.e, it is found that gain in knowledge and skill is highly correlated with scientific information sharing at one per cent level of significance, followed by monitoring and evaluation system at five per cent level of significance and gain in knowledge and skill has no correlation with credit load

Table 4.11.f. The correlation between scientific information sharing and other independent variables (N=86)

S. No	Variables	'r' value
1.	Credit load	0.09 ^{NS}
2.	Monitoring and evaluation system	0.25 ^{**}

From the table 4.11.f, it is found that scientific information sharing is positively correlated with monitoring and evaluation system at five per cent level of significance and credit load is non-significant.

Table 4.11.g. The correlation between credit load other independent variables (N=86)

S. No	Variables	'r' value
1.	Monitoring and evaluation system	0.38 ^{***}

From the table 4.11.g, it is found that credit load and monitoring and evaluation system are highly correlated at one per cent level of significance.

Hence, from the above data, the null hypothesis formulated is rejected and it can be concluded that there is significant correlation between the selected independent and dependent variables

Table 4.12 Problems faced by the respondents.

S. No.	The observed Problems that are faced by the respondents	Mean. score	Rank
a.	Don't know how to calculate days to fifty per cent flowering	4.1	IV
b.	Unable to calculate number of rainy days	4.4	II
c.	Problem in getting information for socio-economic survey of village from other agencies	4.2	III
d.	Problem in conducting participatory Rural appraisal in the village	4.4	II
e.	Don't know how to do gender participation analysis in agricultural operations	4.7	I
f.	No awareness on social forestry in the village	4.1	IV
g.	No idea on factors affecting demand and supply of agricultural crops	4.2	III
h.	Unable to organize social awareness camp in the village	2.8	IX
i.	Problem in estimation of demand and supply of labour	3.8	V

	units per annum in the village		
j.	Problem in understanding the specific reasons for gap in adoption of the recommended practices	3.6	VI
k.	Unable to do time trend analysis of agricultural crops using PRA	3.5	VII
l.	Unable to do extension talk with farmers	3.2	VIII
m.	Unable to cover all the activities in time due to lack of expert advice in the villages	3.6	VI
n.	Girl students want to be placed in villages than residing at hostels in order to have good exposure.	3.2	VIII
o.	The stipend given is not sufficient	4.7	I

Form the table 4.12, it is inferred that one of the problem that is ranked first were, the stipend given to the participants during the village stay was not sufficient and participants were unable to understand gender participation in agricultural operations by the farm families, rank II was allotted to the problem that students were unable to calculate number of rainy days in crop production component during their stay at village and also problem in conducting Participatory Rural Appraisal an extension activity, rank III was allotted to problem in getting information for socio economic survey of village from other agencies and also participants were unable to understand factors affecting demand and supply of agricultural crops of the village. Rank IV was allotted to the problem in calculating days to fifty per cent flowering of selected crops of the host farmer and also no awareness to the students on social forestry of the village.

Rank V is allotted to the problem that participants were unable to estimate demand and supply of labour units per annum in the village. Rank VI was allotted to the problem in understanding specific reasons for the gap in adoption by the farmers and also the students were unable to cover all the activities in time due to lack of advice from the expert advice. Rank VII was allotted to the problem faced by the students in doing time trend analysis using Participatory Rural Appraisal. Rank VIII was allotted to the inability of the students to conduct extension talk with the farmers in the village and also, the girl students were willing to be placed in villages, in order to have good exposure. Finally rank IX was allotted to the problem in conducting social awareness camp by the students in the village.

4.13 Suggestions offered by the respondents

S. No.	The following suggestions were made by the respondents	Mean. score	Rank
a.	The activities should be divided into monthly schedules	4.5	I
b.	RAWE staff should be always available for continuous guiding	4.5	II
c.	There should be monthly evaluation	4.1	III
d.	Include few more practical oriented new topics	3.9	IV

Table 4.13 shows a few suggestions that were given by the students to include in the RAWE schedule. They were,

1. The activities in all the modules should be divided into monthly activities, so that there will not be hurry at the end.
2. RAWE advisory committee should be available to the students directly or indirectly for continuous guiding.
3. There should be monthly evaluation of the programme.
4. Include few more practical oriented topics so that village stay may be effectively utilized.

DISCUSSION

In this chapter, the contents of the previous chapter were used as raw material for discussion and to arrive at meaningful conclusions. The findings are examined with the support of literature.

5.1 Distribution of participants based on their perception towards RAWE programme

5.1.1 Orientation given on RAWE

On examination of orientation given on RAWE was understood that equal number of students (48.84%) had medium perception and (48.84%) high perception and very few 2.32 per cent had low perception i.e., most of the students had medium to high perception on orientation given on RAWE. It is indicating that the advisory committee members were creating proper awareness during the orientation given to the students before going to the village stay.

5.1.2 Satisfaction with the course content

It is inferred that highest per cent of the students (59.30%) are moderately satisfied with the course content, 37.20 per cent were highly satisfied with the course content and 3.50 per cent were not satisfied with the course content. It is indicating that the course content is having sufficient scope in developing knowledge and skill of the students. The results were in agreement with Tirupathi Rayudu (1991), Ramanjaneyulu (1992).

5.1.3 Inter and intra group relations

The majority of the participants (68.60%) had moderate inter and intra group relations, 30.23 per cent had high and 1.17 per cent had low inter and intra group relations. RAWE itself is a group activity, the like mindedness within the group i.e., intra group relations may facilitate the inter group relations with the farmers and scientists which in turn affect the individuals learning, the social and cultural activities of students interest may be encouraged for better learning. The results were in agreement with Reddy (2001), Kiran (2004) differed from Sujatha (2001).

5.1.4 Scientific information sharing

More than 66.28 per cent of the students had moderate, 22.09 per cent had high and 11.63 per cent had low scientific information sharing respectively. Scientific information sharing is the bridge with which the students can develop good rapport with the villagers and also the farmers will have credibility on the institutions. For this, the staff in the Krishi Vigyan Kendra's and Agricultural Research Stations may utilise the RAWE students for latest information sharing as extension activities are the best source to attract the attention of the villagers and also it involves group activity and team work. With which the overall development of students and community may take place. The results were in agreement with Sridhar (2001).

5.1.5 Credit load

The majority (69.76%) of the students were highly satisfied and 30.24 per cent were moderately satisfied with the credit load. It is indicating that the present credit load is sufficient for the entire RAWE programme.

5.1.6 Perception towards RAWE based on index developed

More than 52.33 per cent of the RAWE participants had high, 44.18 per cent had moderate, and 3.49 per cent had low perception towards the RAWE programme. It is indicating that the emphasis given on all the modules of the RAWE curriculum is facilitating the learning of the students.

5.2 Distribution of RAWE participants on their exposure on knowledge and skill gained during the programme.

It is inferred that majority (69.76%) had medium, 30.24 per cent had high gain in knowledge and skill during the programme. It is indicating that RAWE is useful in gaining knowledge and skills by the undergraduate students of agriculture. The results were in agreement with Tirupati Rayudu (1991), Bortakur and Bortamuly (2013) and Sanjeev and Gowda (2013) but differed from Srinivasa Reddy (1985).

The gain in student's knowledge and skill is higher in research station or Krishi Vigyan Kendra activities, followed by crop protection activities, rural Economics activities and next to it was crop production and finally extension

activities. The results were in favour of Sanjeev and Gowda (2013) but differed from Bandyopadhyay and Kar (2002), Bordoloi, Borthkur and Singha (2013).

5.3 Relationship between the independent and dependent variables

Upon understanding the the variables orientation given on RAWE, course content of the RAWE programme, inter and intra group relationship, gain in knowledge and skill during the RAWE programme and scientific information sharing were found positively significant with perception towards RAWE which is a dependent variable at five per cent and one per cent level of significance. The variables credit load and monitoring and evaluation were found non-significant with the perception towards RAWE.

Similarly the independent variables orientation given on RAWE, course content, inter and intra group relationship, gain in knowledge and skill during RAWE and scientific information sharing during RAWE were positively inter correlated at one per cent level of significance and were non-significant with credit load and monitoring and evaluation.

Also, it is found that gain in knowledge and skill during RAWE is not correlated with credit load of modules in the RAWE. The variables credit load and monitoring and evaluation were inter-correlated with each other and were positively significant.

SUMMARY, CONCLUSIONS AND SUGGESTIONS FOR FURTHER WORK

The linkage of agricultural education with the actual farming situations was brought up with the introduction of Rural Agricultural Work Experience programme at Jawaharlal Nehru Krishi Vishwa Vidyalaya in 2003-04 academic year, for the under graduate students.

Eleven years have been passed since the inception of the programme. So far 3718 students were trained. At this juncture there is a need to study whether the objectives of the programme have been met or not. Also, it is necessary to know whether there is evidence of considerable and widespread dissatisfaction with the programme. This is the pioneer study in the college of agriculture, Jabalpur. The present study was proposed to meet the need of the programme in view of its implementation. The present study was conducted with the following objectives.

1. To study the perception of participants towards RAWE programme.
2. To know the exposure of RAWE participants in terms of knowledge and skill.
3. To determine the relationship if any, between the independent and dependent variables.
4. To report the perception in terms of future prospects, skill development and implementation of RAWE programme.

To study the impact of the RAWE programme an ex post-facto design was employed as RAWE was already implemented. Agricultural college, Jabalpur was purposively selected as it is the main campus. All the students who registered their RAWE programme during 2013-14 were selected for the study. There were 86 students including 34 female and 52 male students. The dependent variable studied is perception among participants of RAWE programme at JNKVV, Jabalpur. Whereas the variables like orientation given on RAWE, course content, inter and intra group relationship, gain in knowledge and skill during RAWE, scientific information sharing, credit load and monitoring and evaluation system were studied as independent variables.

The measurement was carried out with the help of well structured and pre-tested questionnaire. The students were supplied with the questionnaires and requested to respond. The data thus obtained was processed with the help of frequencies, percentage, unification of standard score and Pearson's correlation coefficient. The findings and conclusions were reported in brief as follows.

6.1 FINDINGS

1. Majority of the respondents had medium to high perception towards the orientation received by them before going to RAWE which was positively correlated and highly significant with the perception towards RAWE programme.
2. Majority of the participants expressed medium to high satisfaction with RAWE course content and is positively correlated and highly significant with the perception towards RAWE programme.
3. Majority of the students had moderate to high inter and intra group relations during the RAWE period and it is also positively correlated and highly significant with the perception of participants towards RAWE programme.
4. Almost all the students gained medium to high knowledge and skill during the RAWE programme and it is also positively correlated and highly significant with the perception of participants towards RAWE programme.
5. Scientific information sharing is also positively correlated and highly significant with the perception of participants towards RAWE programme and majority of the students had moderate scientific information sharing.
6. Majority of the students were moderately satisfied with the credit load and credit load was found as non-significant with the perception of participants towards RAWE programme.
7. Majority of the students were satisfied with the evaluation of the records and monitoring and evaluation system was found non-significant with the perception of participants towards RAWE programme.

8. Orientation given on RAWE is found positively correlated and highly significant with course content, inter and intra group relations, gain in knowledge and skill, scientific information sharing and is non-significant with credit load and monitoring and evaluation system.
9. Course content found highly significant with inter and intra group relations, gain in knowledge and skill, scientific information sharing and is non-significant with credit load and monitoring and evaluation system.
10. Inter and intra group relations found highly significant with gain in knowledge and skill, scientific information sharing and is non-significant with credit load and monitoring and evaluation system.
11. Gain in knowledge and skill was found highly significant with scientific information sharing, not correlated with credit load and is non-significant with monitoring and evaluation system.
12. Scientific information sharing found non-significant with credit load and monitoring and evaluation system.
13. Perception of the students was significantly correlated with orientation given on RAWE programme, course content of RAWE, inter and intra group relations, gain in knowledge and skill, and scientific information sharing during RAWE.
14. Girl students were facing problems in doing most of the RAWE activities like collecting data from village institutions, conducting PRA due to lack of rapport building with villagers, in analysing farm plans of the host farmer, etc by residing at hostels.
15. Majority of the students felt that monthly evaluation from the administrators should be there so as to complete all the activities within time and learn more.
16. Majority of the students suffered from poor guidance and supervision with which they were unable to complete few activities in time.
17. Major drawbacks of the programme as perceived by the respondents were insufficient orientation on biometric observations, socio-economic survey and Participatory Rural Appraisal.

6.2 CONCLUSIONS

1. Majority of the students had moderate to high perception towards RAWE programme. Hence, it can be concluded that the designed RAWE programme had met almost all the needs of the students.
2. The suggestions that were made by the students may be incorporated in the programme so that the observed problems faced by the students may be solved.
3. As the objectives of the RAWE programme were met, up gradation of the RAWE programme by incorporating in-plant training may be done. Otherwise, the recently merged Rural Agricultural Work Experience Programme (RAWE), In-Plant training and Experiential Learning Programme (ELP) into Rural Entrepreneurship and Awareness Development Yojana (READY) may be introduced.

6.3 SUGGESTIONS FOR FUTURE WORK

1. Future researchers may take up a study exclusively on the extent of communication Skills developed and feedback mechanism operating in the programme.
2. A comparative study of similar programmes in various universities may be beneficial to know which activities we are missing out.
3. A study on effectiveness of the Experiential Learning Programme (ELP) may be taken, so as to know the necessity of introducing Rural Entrepreneurship and Awareness Development Yojana (READY) programme in the University under Graduation curriculum.

BIBLIOGRAPHY

- Anonymous. 1928. The Report of the Royal Commission on Agriculture in India, New Delhi: GOI.
- Anonymous. 1948. The report of University Education commission, Vol. I, Ministry of Education and Culture, New Delhi: GOI.
- Anonymous. 1966. The Report of University Education Commission, New Delhi: GOI.
- Anonymous. 1978. The Report of Review Committee on Agricultural Universities, New Delhi: ICAR.
- Anonymous. 1989. An evaluation of Rural Agricultural Work Experience (RAWE): A report of Department of Extension Education, College of Agriculture, Dapoli, Ratnagiri (M. S.).
- Anonymous. 1995a. The Report of the World Bank on Agricultural Education, Washington: World Bank.
- Anonymous. 1995b. The Report of the Third Dean's committee on Agriculture Education in India, New Delhi: ICAR.
- Anonymous. 1999. Rural Agricultural Work Experience Programme. *Manual* Acharya N G Ranga Agricultural University, Rajendranagar, Hyderabad.
- Barman, U. 1995. A study on perceived quality and usefulness of the content of farm issues of a local Assamese daily. M. Sc. (Ag.) Thesis, Assam University, Jorhat.
- Bandyopadhyay, A. K. and Kar, S. 2002. Teachers' and students' perception about RAWE programme. *Research Journal of Extension Education* 2: 38-43.
- Borodoloi, R., Borthakur, S. and Singha, A. K. 2013. Analysis of utility status of college in Assam Agricultural University under Rural Agricultural Work Experience Programme (RAWE). *Journal of Human Ecology*, **42**(3): 295-302.
- Borthakur, S. and Bortamuly, D. 2013. Perceived Utility of RAWEP in Gaining Knowledge on Communication skill, Farm Resource Management and socio-economic Aspects under AAU. *Journal of Academia and Industrial Research (JAIR)*. volume 2, Issue 6 November 2013. pp-382-385.
- Chauhan, N. B. 2004. RAWE Programme: An appropriate model to create high quality human resources for sustainable extension services. *National workshop on Communication support for sustaining extension services*. 17-18 february, 2004, Banaras Hindu University, Varanasi. (India).
- Dipak, De., Jiril, B. and Ghadei, K. 2004. Rural Agriculture Work Experience Programme (RAWEP)- An appropriate model to create high quality human resources for sustainable extension services. *National workshop on Communication support for sustaining extension services*. 17-18 february, 2004, Banaras Hindu University, Varanasi. (India).

- Gogoi, D. 2001. Problems faced by the students of College of Agriculture , AAU, Jorhat, during (RAWE) programme. M. Sc. Thesis, college of Home science, Assam Agricultural University, Jorhat.
- Godawat, Asha, Maheshwari and Snehlata. 2008. Opinion of B.Sc. Home science graduates of SAUs of Rajasthan regarding RAWE programme. Rajasthan Journal of Extension Education, **16**:227-228.
- Khare, N. K. and Pyasi, V. K. 2013. Manual for Rural Agricultural Work Experience. DFA/JNKVV/Manual RAWE/UG/2013/24. Jawaharlal Nehru krishi Vishwa Vidyalaya, Jabalpur, 55p.
- Lewin, K. 1946. Action research and minority problems. Journal of social issues. 2(4): 34-46.
- Murali, G. V. 2004. Exposure and utilization of agricultural websites by post graduate students of agricultural college, Bapatla. Unpublished M. Sc. (Ag.) thesis, ANGRAU.
- Nanwal, R. K. and Singh, K. P. 2004. On-farm studies under Rural Agriculture Work Experience (RAWE) Education Programme in India – some results. CCS Haryana Agricultural University, Hisar.
- Reddy, D. S. 1985. A study on effectiveness of Rural Agricultural Work Experience Programme of Andhra Pradesh Agricultural University. M. Sc. (Ag.) Unpublished Thesis, ANGRAU, Rajendranagar Hyderabad.
- Rao, I. V. S. 1986. Papers presented at the *National Works on RAWE Programme* Held at Sri Venkateshwara Agricultural college, Tirupathi (APAU), 25-27 September.
- Randhwa, N. S. 1992. Report of the Indian Council of Agricultural Research Committee on Rural Agricultural Work Experience Programme implementation in SAU's of India.
- Raman, K. V. 1993. Scientists Training and Interactions with Farmers in India, Farmer First (Ed.), pp-169-171.
- Ravishankar, S. 2000. A comparative study of Krishi Vigyan Kendras (KVK'S) of government organizations and Non-government organizations in Kurnool district of Andhra Pradesh. Unpublished M. Sc. (Ag.) thesis, ANGRAU, Andhra Pradesh.
- Shareef, S. M. and Rambabu, P. 1999. Reactions of students towards RAWE programme. *Maharashtra journal of Extension Education*. **18**: 279-282.
- Seetharaman, N. and Iqbal, I. M. 2000. National seminar on Rural Agriculture Work Experience organized by Indian Council of Agricultural Research, and Tamil Nadu Agricultural University at Coimbatore, Oct. 20-22, 2000.
- Sujatha. 2001. Students perception about academic environment in Home Science Faculty of Acharya N G Ranga Agricultural University, Andhra Pradesh. M. Sc. Thesis Unpublished, ANGRAU, Hyderabad.
- Sanjeev, M. V. 2003. An analysis of functioning of RAWEP at UAS, Bangalore and Kerala Agriculture University, M. Sc. (Ag.) Thesis, Unpublished. UAS, Bangalore.
- Soni, R. L, Kothari, G. L. and Dave Rashmi. 2011. Opinion of B.Sc. (Ag.) graduates of MPUAT regarding RAWE programme. *Indian Journal of Agricultural Research and Extension*, **4**:39-40.

- Shivramu, K, Ranganatha, A. D, Manjulatha, B. N. and Krishnamurthy, B. 2011. Opinion of contact farmers on Rural Agricultural Work Experience Programme, *Mysore journal of Agricultural Sciences*, **45**(1) 139-142.
- Sanjeev, M. V. and Gowda, K. N. 2013. Perceptions on Experiential Learning: A Study of Agricultural Students. *Indian Research Journal of Extension Education*. 13(1), January 2013 pp-48-55.
- Sarvesh, Kumar and Sharma, R. C. 2013. Outlook of Agriculture Undergraduates of JNKVV towards RAWE programme. *TECHNOFAME-A Journal of Multidisciplinary Advance Research*, Vol.2 No. 1, 40-43.
- World Bank Report. 1995. Document of the World Bank Report No. 13517- IN staff Appraisal Report of India, AHRD, March 9, 1995. South Asia Deptt. Of Agriculture Operations Division.
- Wankhade, Abhay and Verma, V. K. 2007. Opinion of students towards Rural Agricultural Work Experience (RAWE) Programme. *JNKVV Research journal*, 41 (1):147-150.
- Yadav, V. V, Ganvir, B. N. and Shaikh, A. M. 2003. A study of practical experience gained by RAWE students. *Journal of Maharashtra Agricultural Universities*, volume 28, January 2003, pp 66-69.

A study on perception among participants of RAWE programme at J.N.K.V.V., Jabalpur

Research conducted by:

Soujanya Kotte
M. Sc. (Ag.)- Final
Agril. Ext. Edn.

Research Guided by:

Dr. N. K. Khare
Professor & Head
Deptt. of Ext. Edn.

A few statements are given below with regards to your experiences (opinions) related to the exposure and practice related to your participation in the rawe programme (village stay). This is not a test, because there are no wrong answers. The answer to each statement is a matter of your personal perception (opinion). Your true opinion, whatever it is the right answer, kindly answer truly and frankly about each statement by putting a sign (✓) in one bracket as you think proper i.e., in the place provided in front of each statement. Your frank response will help to understand personal views about the handling of the RAWE programme by JNKVV, Jabalpur as perceived by you personally. There are few alternatives to choose [✓] for each statement in term of

- | | |
|-------------------------------|------------------------|
| 1. Strongly disagree (SD) { } | 1. None (N) { } |
| 2. Disagree (D) { } | 2. Little (L) { } |
| 3. Undecided (UD) { } | 3. In between (IB) { } |
| 4. Agree (A) { } | 4. More (M) { } |
| 5. Strongly agree (SA) { } | 5. Very much (VM) { } |

Personal data:

1. Age of the respondent (yrs):
2. Sex : Male / Female
3. Day scholar / hosteller
4. Medium of instruction:
 - High school standard: Hindi / English / others
 - Higher secondary school: Hindi / English / others
5. Prior exposure to rural life before RAWE: yes / No
6. Current Grade Point: 6 - 7.4 { } 7.5 – 8.5 { } 8.5 and above { }

S. No	Statements/Indicators	SD	DA	UD	A	SA
A.	Independent variables					
1.	Orientation given on RAWE helped you to <ul style="list-style-type: none"> a. Get familiar and conversant with rural life. b. Understand village situations. c. Understanding why rural institutions are for d. Build confidence to address the problems e. Understanding how to record observations. f. Get familiar with budgeting procedures followed. g. How Agro-economic survey is done. h. Taking ratios from the recorded observations. i. Calculate estimated yield from biometric observations. j. Do gender participation analysis. k. Method to Conduct PRA techniques. 					
2.	l.					
3.	m.					
4.	n.					

5.	o.					
6.	p.					
7.	q.					
8.	r.					
9.	s.					
10.	t.					
11.	u.					
12.	<p>How much Course content helped you in developing skills related to the</p> <p>a. Identification of major agricultural problems of village.</p> <p>b. For collecting, preparing and reporting crop production practices.</p> <p>c. For collecting, preparing and reporting plant protection practices.</p> <p>d. To analyse the activities of host farmer under weather extremities.</p> <p>e. To compare farmers practice with that of recommended practice.</p> <p>f. To know the performance of various crops raised by host farmer.</p> <p>g. In analysing family budget of host farmer.</p> <p>h. To do farm holding survey.</p> <p>i. To analyse cost concepts.</p> <p>j. To study gender participation in agricultural operations.</p> <p>k. To know pattern of decision making.</p> <p>l. Regarding preparation and presentation of teaching and information material.</p> <p>m. Organizing agricultural exhibition or training programmes.</p> <p>n. To understand organization pattern and working of KVK.</p> <p>o. To study the experiments and programmes of KVK.</p> <p>p. To do Participatory Rural Appraisal methods in village.</p> <p>q. To gain knowledge on rural institutions.</p> <p>r. To understand farm management skills.</p> <p>s. To understand marketing chain of agricultural produce.</p> <p>t. To understand social forestry of the village.</p> <p>u. To understand resource mobilization of farmers.</p>	N	L	IB	M	VM
13.	<p>Inter and intra group relationships between students, teachers and farmers has helped me</p> <p>a. To improve Talking skills.</p> <p>b. To improve Listening skills.</p> <p>c. To improve Presentation skills.</p> <p>d. To conduct group discussions.</p> <p>e. To organize demonstrations.</p> <p>f. To organize exhibition.</p> <p>g. In preparation of AV aids.</p> <p>h. Report writing.</p> <p>i. To understand local dialect.</p> <p>j. The effective use of audio visuals.</p> <p>k. To process information and analyse.</p> <p>l. To organize awareness camp in village.</p> <p>m. To know factors affecting demand and supply.</p>	N	L	IB	M	VM

14.	<p>Knowledge and skill gained during RAWE has helped</p> <p>(i) With respect to Crop production Recorded agricultural operations helped</p> <p>a. To understand crop critical stages.</p> <p>b. In handling implements in field.</p> <p>c. To understand reasons behind farmers practice.</p> <p>d. To know new practices of farmers.</p> <p>e. To understand systems of planting and spacing.</p> <p>f. To identify nutritional disorders.</p> <p>g. To identify physiological disorders.</p> <p>h. To know practiced irrigation methods of farmers.</p> <p>i. To know the dose of foliar applications used by farmers.</p> <p>j. To understand rate of application of organic farmers.</p> <p>k. To correlate weed infestation with the stage of crop growth.</p> <p>l. To know most frequently used herbicides.</p> <p>m. To know preferred weed control method of farmers.</p> <p>n. To record No. Of days to 1st flowering</p> <p>o. Days to 50% flowering.</p> <p>p. To observe symptoms of crop maturity.</p> <p>q. To learn harvesting and threshing methods.</p> <p>r. To compare estimated yield with actual yield.</p> <p>s. To observe the crop state when subjected to drought/flood.</p> <p>t. To calculate number of rainy days.</p> <p>u. To understand drought spells if any.</p> <p>v. To analyse the crop growth with temperature variation.</p> <p>w. Developed skill in handling farm machinery</p> <p>(ii) With respect to plant protection practices I learned</p> <p>a. Input supply agencies of different agricultural inputs.</p> <p>b. The dosage calculations of fungicide for seed treatment.</p> <p>c. The insecticide dosage calculations for spraying.</p> <p>d. Regarding precautionary measures that farmer's take at different stages of crop growth.</p> <p>e. To identify pests at different stages of crop growth.</p> <p>f. The recommended control measures against pests.</p> <p>g. Number of agro-chemical applications and Frequency of plant protection chemicals the farmer is doing.</p> <p>h. Type of equipments used by farmer.</p> <p>i. Cost calculations and labour utilized.</p> <p>(iii) With respect to agro-economic survey of the village, farm holding survey and family budget helped to understand</p> <p>a. The distance of infra-structural facilities from the village.</p> <p>b. Topography of the village.</p> <p>c. Population statistics of the selected village.</p> <p>d. Structural distribution of the land holding.</p> <p>e. Land utilization pattern in the village.</p> <p>f. Problems of irrigation, drainage and soil management if any.</p> <p>g. Difficulties faced by the farmers in getting HYV.</p>					
-----	---	--	--	--	--	--

	<p>h. Difficulties experienced in securing manures and fertilizers.</p> <p>i. Problems in securing pesticides.</p> <hr/> <p>j. Irrigation sources of the village.</p> <hr/> <p>k. Area under crops in the village in different seasons.</p> <hr/> <p>l. Available methods of employment and modes of wage payment.</p> <hr/> <p>m. Estimate the supply of labour units per annum.</p> <hr/> <p>n. The different agro-based industries existing in the village.</p> <hr/> <p>o. Further scope to set up any other type of agro-based industry.</p> <hr/> <p>p. The demand for labour units per crop per hectare.</p> <hr/> <p>q. Cattle pair per day requirement.</p> <hr/> <p>r. Quantum of credit by different agricultural agencies.</p> <hr/> <p>s. Extent of area under high yielding varieties and local varieties in respect of major crops grown.</p> <hr/> <p>t. Wholesale prices and retail prices of major agricultural commodities.</p> <hr/> <p>u. History of land holdings of the host farmer</p> <p>v. Sub-division and fragmentation of the host farmer.</p> <p>w. Costs and returns of the major crops.</p> <p>x. Costs and returns from livestock enterprises.</p> <hr/> <p>y. Host farmer's risk to farm production.</p> <hr/> <p>z. Weaknesses of the family budget of host farmer.</p> <p>(iv) With respect to agricultural extension activities helped you</p> <p>a. Understanding the gap in adoption of the practices.</p> <hr/> <p>b. Understanding the specific reasons for gap in the adoption.</p> <hr/> <p>c. Developing extension strategies for the gap observed.</p> <hr/> <p>d. Understanding the credibility of information sources of farmer.</p> <hr/> <p>e. Building rapport with the farmers and farming community.</p> <hr/> <p>f. Understanding resources of the village with the help of resource mapping technique of PRA technique.</p> <hr/> <p>g. Understanding residential details with the help of social map.</p> <hr/> <p>h. Understanding the agricultural development with the help of time line of PRA technique.</p> <hr/> <p>i. Understanding the trend in agricultural crops using time trend of PRA.</p> <hr/> <p>j. Understanding the preferences of the farmers on crops with that of matrix ranking of PRA technique.</p> <hr/> <p>k. Understanding Seasonal calendars' of past decade using PRA technique.</p> <hr/> <p>l. Understanding the relationship between the individuals and the key institutions in decision making using Venn diagram.</p> <hr/> <p>m. Teaching farmers regarding their village resources, problems and solutions using PRA.</p> <hr/> <p>n. Understanding local environment with clear local priorities.</p> <hr/> <p>o. Organizing method demonstrations and follow up activity.</p> <hr/> <p>p. Organizing farmers training programme.</p>				
--	---	--	--	--	--

	<p>q. Organizing agricultural exhibition to create awareness on weak points of agricultural practices.</p> <hr/> <p>r. Organizing field visits with the help of scientists and gave solution to their problems.</p> <hr/> <p>(v) Studying on-going central/state sponsored rural development programmes and extension work</p> <ul style="list-style-type: none"> ➤ Agricultural development programmes ➤ Poverty alleviation programmes <hr/> <ul style="list-style-type: none"> ➤ Women development programmes <p>a. Studying Problems in Public agricultural systems</p> <p>b. In documenting any success / failure story in the village.</p> <hr/> <p>c. In presenting any extension talk to farmers.</p> <hr/> <p>d. In studying the role of village institutions in extension work.</p> <p>e. In documenting indigenous technical knowledge of farmers.</p> <p>f. In participating in social forestry activities.</p> <hr/> <p>g. Organize any awareness camp in the village</p> <ul style="list-style-type: none"> ➤ On health care ➤ Animal care <hr/> <ul style="list-style-type: none"> ➤ Blood donation <hr/> <ul style="list-style-type: none"> ➤ Adult education ➤ Child education ➤ Cleanliness 				
15.	<p>Scientific information sharing</p> <p>a. You received the first hand scientific information from scientists.</p> <p>b. The scientific information given by you is positively accepted by the farmers.</p> <p>c. Field problems are taken to scientists for solutions by you.</p> <p>d. The problems you discussed with the scientists are also shared between your group members.</p> <p>e. Recommendations given by you to farmers are discussed within the group for more clarity.</p> <p>f. Reading agricultural news paper for the local agricultural NEWS regularly.</p> <p>g. Weather forecasts to the farmer are intimated timely.</p> <p>h. Farmers are interested to know the information from you.</p> <p>i. Field level extension worker is in contact timely with you.</p> <p>j. Farmer’s participation is more when you display the agricultural information.</p> <p>k. Farmers are more interested in discussing with you regarding</p>				

	<p>agricultural information.</p> <p>i. The relationship of farmer and scientist has become strong because of information sharing.</p>					
16.	<p>Credit load</p> <p>a. Number of credits allotted for each module is adequate.</p> <p>b. Unable to complete the activities given, in time due to less credits.</p> <p>c. Reduce the duration of RAWE and allot the remaining time to industrial training.</p> <p>d. Rural Economics part is not properly understood with the credits.</p> <p>e. Credits allotted to extension are not sufficient.</p> <p>f. More number of credits is allotted to KVK activities.</p> <p>g. Industrial training should be included as a module.</p> <p>h. Unable to cover all the activities due to lack of proper orientation.</p> <p>i. Group tasks are not properly organized and distributed by the KVK.</p> <p>j. Reciprocal interaction in research station is missing.</p> <p>k. The activities should be divided into monthly activities so that all components are covered timely.</p>					
17.	<p>Monitoring and Evaluation</p> <p>a. Present RAWE evaluation has sufficient scope for the development of analytical abilities among students.</p> <p>b. There should be a written examination in addition to present system of evaluation at the end of RAWE to assess the student's real performance in terms of capacity to understand and solve rural problems.</p> <p>c. There should be monthly evaluation so that all the activities are given equal importance.</p> <p>d. RAWE staff should be always available for continuous guiding.</p> <p>e. Monthly leadership is given to all the students of the village in reporting village activities to the co-ordinator.</p>					
18.	<p>Class room study has helped to understand subject in terms of</p> <p>a. How much you understood when professors took class in class room</p> <p>b. How much you understood in practical field experiments.</p> <p>c. How frequently you have gone through references cited by professors after class.</p> <p>d. Whether class notes is much easily understandable than references.</p> <p>e. Whether the abstract you understood in the class room is exactly same in field conditions.</p> <p>f. There is lot of difference in the theoretical knowledge gained and practical knowledge experienced.</p> <p>g. Practical knowledge in the field always gave a new experience.</p> <p>h. You are able to understand theory more than practical.</p> <p>i. Professors are able to provide the information expected by you in class</p> <p>j. Facilities in the library are satisfactory.</p> <p>k. Sufficient field experience you got in practicals.</p>					

	<p>l. If guest lectures on respective subjects is given, it will be useful.</p> <p>m. If you have interaction with scientists working in research stations, it will be useful.</p>					
B.	<p>Dependent variable</p> <p>Perception towards RAWE: INDEX</p> <p>RAWE helped me</p> <p>a. To get familiar with rural life.</p> <p>b. To understand village situations</p> <p>c. To understand rural institutions</p> <p>d. To understand socio-economic conditions of the farmers</p> <p>e. To understand adoption patterns and adoption gaps of the farmers.</p> <p>f. To understand farmers problems.</p> <p>g. To understand farming systems and farming.</p> <p>h. To improve my diagnostic skills</p> <p>i. Provided me practical training in crop production.</p> <p>j. To improve my communication skills</p> <p>k. To improve my leadership qualities.</p> <p>l. To develop competency to prepare farm plans for individual farm families.</p> <p>m. To get exposure and increased my confidence.</p> <p>n. To get acquainted with on- going TOT programmes in agriculture.</p> <p>o. To get acquainted with poverty alleviation programmes.</p> <p>p. To develop professional competence to solve field problems.</p>					
C.	<p>Problems felt by respondents on the following aspects</p> <p>a. Problem in getting information for socio-economic survey of village.</p> <p>b. The stipend given to you during your course work is sufficient to meet the expenses in the village stay.</p> <p>c. You want to be placed in villages than residing at hostels in order to have good exposure.</p> <p>d. RAWE period gives you chance to study thoroughly your courses of last 3 years and apply in field.</p> <p>e. Mention other problems</p> <p>Suggestions given by the respondents</p> <p>a.</p> <p>b.</p>					

CURRICULUM VITAE

Name of the Author: SOUJANYA KOTTE

Place and date of birth: Karimnagar (Andhra Pradesh)
on 22nd February 1990.



Academic Profile:

Degree	Name of the Institution	Year of passing	Percentage / OGPA	Subject
M. Sc. (Ag.)	J.N.K.V.V. , JABALPUR.	2014	7.7/10.00 SCALE	Agriculture Extension
B.Sc. (Ag.)	A.N.G.R.A.U., Rajendranagar, Hyderabad.	2012	8.33/10.00 SCALE	Agriculture
Intermediate	Sachdeva School of Excellence, Andhra Pradesh.	2007	81.7%	Biology (Bi.P.C)
Secondary school	Chinmaya Vidyalaya, Andhra Pradesh.	2005	72.2%	Life skills education

Special scientific interests:

To work on organizational management and public private partnership.

Relevant professional experience:

Completed two months internship from 03rd June 2013 to 08th August 2013 at National Bank for Agriculture and Rural Development (NABARD), Bhopal (M.P.) on the topic "Agricultural Extension System- Role, Status and Areas of Partnership" which is a study on current extension and advisory services and their reach to farmers.