# **MANUAL**

# Of

# **Student 'READY' Programme**

(Rural Entrepreneurship Awareness Development Yojana)



Shri Vaishnav Institute of Agriculture Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore (M.P.)

# **MANUAL**

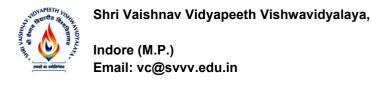
Of

# Student 'READY' Programme

(Rural Entrepreneurship Awareness Development Yojana)



Shri Vaishnav Institute of Agriculture Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore (M.P.) Prof.(Dr.) Upinder Dhar, Vice Chancellor, SVVV, Indore



## **FOREWORD**

The Student READY (Rural Entrepreneurship Awareness Development Yojana) programme aims to provide rural entrepreneurship awareness, practical experience in real-life situation in rural agriculture and creating awareness to undergraduate students about practical agriculture and allied sciences. The programme will help in building confidence, skills and acquire Indigenous Technical Knowledge (ITK) of the locality and thereby preparing the pass-out students for self-employment. It also aims to provide opportunities to acquire hands-on-experience and entrepreneurial skills through experiential learning (EL) and Hands on Training (HoT).

Rural Agricultural Work Experience (RAWE) will provide an opportunity for students to understand the rural setting in relation to agriculture and allied activities to familiarize with socio-economic conditions of farmers and their problems, to learn real field situations, especially in contact with farmers, growers, etc.

Agro Industrial Attachment (AIA) is useful to gain the knowledge and experience of the work culture, because it provides an industrial exposure to the students for developing their career in the Agro based industries.

Experiential Learning Programme (EL) and Hands on Training (HoT) offered to undergraduate agriculture students will empower students with practical know how and skill development. The employability of students will definitely increase in the Agro-Industry Sector.

I hope that *Manual of Student 'READY' Programme* would guide the students in achieving cherished objectives of the programme and the designated RAWE teachers will also be benefited while adopting the new syllabus of 5<sup>th</sup> Dean's Committee of ICAR.

Date:	(Upinder Dhar)
-------	----------------

Dr. K.N. Guruprasad Coordinator, SVIAg, Indore



## **PREFACE**

Student READY (Rural Entrepreneurship Awareness Development Yojana) is a new initiative to reorient graduates of agriculture and allied subjects for ensuring and assuring employability and develop entrepreneurs for emerging knowledge intensive agriculture. This programme includes Rural Agricultural Work Experience (RAWE) and Experiential Learning.

Rural Agricultural Work Experience (RAWE) enable the students to gain rural experience, give them confidence and enhance on-farm problem solving abilities in real life situations, especially in contact with farmers, growers, etc. The students will undertake this programme during the VII semester for a total 20 credits in two parts viz.,16 credits of RAWE and 4 credits of Agro Industrial Attachment. It will consist of general orientation and on campus training by different faculties followed by village attachment/unit attachment at KVKs/Research Stations. The students will be attached with the agro-industries to get an experience of the industrial environment and working. During village stay, the students stay along with rural households and this provides a rare opportunity to rediscover the farmers. Besides acquiring first hand field experience, the RAWE bring about positive changes in the student's mindset, outlook, personality traits, managerial and entrepreneurial skills.

Experiential Learning (EL)/Hands on Training (HoT) Programme will be undertaken by students during VIII Semester for a total of 20 Credits. They shall have to choose two modules from a basket of twelve each having 0+10 Credits.

It is passionately hoped that the students will make the best use of this manual to gain sufficient rural experience and be of benefit to the farmers and themselves equally.

(K.N. Guruprasad)

Prof. Vinod Dhar Head - Centre for Vocational Studies Head - Shri Vaishnav Institute of Agriculture, Indore



Shri Vaishnav Vidyapeeth Vishwavidyalaya Shri Vaishnav Institute of Agriculture Indore (M.P.)

Email: vinoddhar@svvv.edu.in

## **ACKNOWLEDGEMENT**

In the changed agricultural scenario world over, it has been felt essential to give a new and vibrant impetus to reorient the agricultural graduates towards self-reliance. SVIAg under the aegis of SVVV, Indore since its inception in the year 2018 has been making concerted efforts in improving the levels of learning and inculcating elements of self reliance in the students for serving the rural community vis-a-vis strengthening their own career prospect of gainful employment.

Student READY Programme as recommended by Vth Deans' Committee (ICAR) for implementation by all state agricultural universities and agricultural institutes all over India is also pursued in this institution for under graduate students. **READY component-I RAWE & READY Component-II AIA** is offered to students in VII semester whereas; **READY component-III Experiential Learning / Hands on Training** is being offered in the VIII semester of the final Year.

The Rural Agricultural Work Experience (RAWE) helps the students primarily to understand the rural situations, status of technologies adopted by farmers, prioritize the farmer's problems and to develop skills and attitude of working with farm families for overall development in rural area. It is hoped that this manual will serve the purpose of implementing the new RAWE and AIA Programme and would be of great utility to students. Also, Experiential Learning (EL)/Hands on Training (HoT) will give students proper insight into the vocational aspect as well as scope for useful skill development and in the end enhance their employability in companies dealing in agricultural and allied sector. Moreover, the students can start their own agro based enterprise also.

The help rendered by faculty, especially Mr. Satish Patidar, Assistant Professor, Department of Agronomy, SVIAg and staff members of the SVIAg in creating, editing and manuscript writing of this manual is duly acknowledged.

Dated:	(Vinod Dhar)

# **CONTENTS**

S.No.	Particulars	Credit hrs.	Page Nos.
1.	Component-I Rural Agricultural Work Experience (RAWE)		1
	Objectives		2
	Component-II Agro-Industrial Attachment (AIA)		2
	Activities and Tasks during Agro-Industrial Attachment Programme		2
	Objectives		3
	I. Registration		3
	II. Eligibility for Registration		3-4
	III. Monitoring		4-5
	IV. Evaluation		5-6
	V. Implementation of Programme		6
	VI. Norms of allotment of villages		6
	VII. Orientation		7
	VIII. Programme of Work		7-9
2.	Proforma for daily diary of students & Weather Record		10-11
3.	Courses		
1	Participatory Rural Appraisal (PRA) and Transfer of Technology	0+2	12-24
2	Field Crop Production Intervention	0+2	25-30
3	Plant Protection Intervention (Plant Pathology)	0+1	31-34
4	Plant Protection Intervention (Agricultural Entomology)	0+1	35-39
5	Soil Improvement Intervention (Soil Sampling and Testing)	0+2	40-48
6	Horticultural Production Intervention	0+2	49-51
7	Post Harvest Management and Value Addition of Fruits and Vegetables	0+2	52-56
8	Animal Husbandry Intervention	0+1	57-63
9	Agricultural Production Economics and Farm Management Intervention	0+2	64-66
10	Farm Machinery and Power	0+1	
11	Agro-Industrial Attachment	0+4	
	Annexure		

Credits: 20 (0+20)

# Shri Vaishnav Institute of Agriculture Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Student 'READY' Programme

The Hon'ble Prime Minister of India launched 'Student READY' programme on 25<sup>th</sup> July 2015. The term 'READY' refers to "**Rural Entrepreneurship Awareness Development Yojana**".

To reorient graduates of agriculture and allied subjects for ensuring and assuring employability and develop entrepreneurs for emerging knowledge intensive agriculture, the component envisages the introduction of the programme as an essential prerequisite for the award of degree to ensure hands on experience and practical training.

#### The components of 'READY':

- Rural Agricultural Work Experience (RAWE) &
- In-Plant Training/Agro Industrial Attachment (AIA)
- Experiential Learning / Hands on Training
- Skill Development Training
- Students Project

Fifth Deans' Committee has recommended for under graduate program of B.Sc.(Hons.) Agriculture RAWE and AIA programme in VII<sup>th</sup> and Experiential Learning / Hands on training (HoT) in VIII<sup>th</sup> semester of the programme.

# Rural Agricultural Work Experience (RAWE) & Agro Industrial Attachment (AIA)

The Rural Agricultural Work Experience (RAWE) helps the students primarily to understand the rural situations, status of Agricultural technologies adopted by farmers, prioritize the farmer's problems and to develop skills & attitude of working with farm families for giving them confidence and enhancing on farm problem solving abilities.

The students will undertake this program during the seventh semester for a total duration of 20 weeks with a weightage of 0+20 credit hours in **two** parts namely **RAWE** and **AIA**. It will consist of general orientation and on campus training by different faculties followed by village attachment/unit attachment in KVK or a research station. The students would be attached with the agro-industries to get an experience of the industrial environment and working. Due weightage in terms of credit hours will be given depending upon the duration of stay of students in villages/agro- industries.

At the end of RAWE & AIA, the students will be given **one week for project report preparation**, **presentation and evaluation**. The students would be required to record their observations in field and agro-industries on daily basis and will prepare their project report based on these observations.

Credits: 16 (0+16)

Credits: 4 (0+4)

# **READY Component-I**

### Rural Agricultural Work Experience (RAWE)

### **Objectives**

- 1. To provide an opportunity to the students to understand the rural setting in relation to agriculture and allied activities.
- 2. To make the students familiar with socio-economic conditions of the farmers and their problems.
- 3. To impart diagnostic and remedial knowledge to the students relevant to real field situations through practical training.
- 4. To develop communication skills in students using extension teaching methods in transfer of technology.
- 5. To develop confidence and competence to solve agricultural problems.
- 6. To acquaint students with on-going extension and rural development programmes.

# **READY Component-II**

## Agro-Industrial Attachment (AIA)

Technology and globalization are ushering an era of unprecedented change. The need and pressure for change and innovation is immense. To enrich the practical knowledge of the students, in-plant training shall be mandatory in the VII<sup>th</sup> semester for a period of up to 3 weeks. In this training, students will have to study a problem in industrial perspective and submit the reports to the SVIAg. Such in-plant trainings will provide an industrial exposure to the students as well as to develop their career in the high tech industrial requirements. In-Plant training is meant to correlate theory and actual practices in the industries. It is expected that sense of running an industry may be articulated in right way through this type of industrial attachment mode.

# Objectives

- 1. To expose the students to Industrial environment, this cannot be simulated in the university.
- 2. To familiarize the students with various Materials, Machines, Processes, Products and their applications along with relevant aspects of shop management.
- 3. To make the students understand the psychology of the workers, and approach to problems along with the practices followed at factory
- 4. To understand the scope, functions and job responsibilities in various departments of an organization.
- 5. To expose various aspects of entrepreneurship during the programme period.

#### **Placement**

Students shall be placed in Agro-and Cottage industries and Commodities Boards

for three weeks.

• Industries include Seed/Sapling production, Pesticides-insecticides, Post harvest-processing-value addition, Agri-finance institutions, etc.

# Duration wise activities performed during RAWE

S.No.	Activity	Week/s	Total Duration		
1	Orientation & Placement	1	1 week		
2	Survey of Village	1			
3	Agronomical Interventions	2			
4	Plant Protection Interventions	2			
5	Soil Improvement Interventions (Soil sampling and testing)	2	15 weeks		
6	Fruit and Vegetable Production Interventions	2			
7	Food Processing and Storage Interventions	2			
8	Animal Production Interventions	2			
9	Extension and Transfer of Technology Activities	2			
10	Agro-Industrial Attachment	3	3 weeks		
11	Project Report Preparation, Presentation & Evaluation	1	1 weeks		
	Total	20 weeks	20 weeks		

### Registration

• The students shall register for RAWE programme during VII semester in B.Sc. (Hons) Agriculture degree programme.

# Eligibility for registration and other requirements

- Students undergoing studies leading to the award of B.Sc. (Hons.) Agriculture shall be eligible for a period of one semester (VII).
- A student will be under the administrative control of the Head of the Institution as he joins. The Head of the Institution will ensure that all the rules and regulations of ICAR are strictly adhered to.
- A student will devote his whole time to the approved training and will not be allowed to accept or hold another appointment paid or otherwise.
- If a student shows unsatisfactory progress during the course of his training or gives up the chosen course of studies before its completion without any prior approval of the Head of Institution, or is irregular in attendance (85 per cent attendance is compulsory).

Students registered for RAWE programme, will have to repeat the programme at their own cost.

• The students registered for RAWE are not allowed to leave the venue of their placement without written permission of Coordinator RAWE / HoD/HoI, SVIAg. Permission will be granted only under emergency.

- Good conduct and regularity in attendance are also implied conditions for the continuance of Programme.
- The Coordinator of RAWE/Head KVK is expected to bring to the notice of the Head SVIAg any adverse report that may have been necessitated due to habitual/ irregularity, misbehavior, participation in strikes etc. suggesting suspension/ cancellation registration.

# Monitoring

- 1. The advisory committee for monitoring of RAWE programme will comprise of the following members:
- 2. Principal Scientist/Senior Scientist /Senior Scientist and Head (KVK) / Heads of Research Station of concerned station (Chairman).
- 3. Head SVIAg's nominee (Head will be the overall in-charge of the programme).
- 4. Head/representative of the departments involved in the RAWE programme.
- 5. Students will be required to submit a final comprehensive report on or before the date specified in the academic calendar.
- 6. The students will be required to maintain a daily diary as per the prescribed proforma. They shall produce their diary to the visiting teacher for inspection and for recording their observation & suggestions. The visiting teachers shall verify the work and sign the diary.
- 7. The Chairman of the committee shall monitor daily activities of individual student.

## **Evaluation**

- 1. Students shall be evaluated component-wise under village attachment/ agroindustrial attachment.
- 2. Each SVIAg of SVVV will designate a Student READY Program Coordinator and component wise evaluation committees. These committees will evolve a method of evaluation depending upon the component undertaken giving due weightage to the observations made by the Scientists/Agro-industrial Officer and the Senior Scientist and Head (KVK)/Head research station with whom they are attached.
- 3. Since the Credit Hours allotted to the Student READY programme are gradial, the minimum condition of attendance and grading system will apply for the program as will be applicable to other courses.
- 4. It is expected that at the end of Student READY program, the students should gain competency for entrepreneurship, which should be innovative and creative in nature. The evaluation committee must ensure percentage increase in this competency at the end & successful organization of all Student READY programmes.
- 5. The 100 marks allotted to each activity will be awarded by considering the performance of student viz. work done in respective subject with the host farmer, observation of the teacher recorded during the visits, punctuality, enthusiasm, rapport with the host farmer and any other significant achievements of the student. All the course teacher will evaluate the comprehensive report, submitted by the student and conduct viva-voce examination as per their courses.

S.No.	Activity	Credit(s)	Maximum Marks		
Component - I Rural Agricultural Work Experience (RAWE)					
1	Participatory Rural Appraisal (PRA) and Transfer of Technology	0+2	100		
2	Field Crop Production Intervention	0+2	100		
3	Plant Protection Intervention (Plant Pathology)	0+1	100		
4	Plant Protection Intervention (Agricultural Entomology)	0+1	100		
5	Soil Improvement Intervention (Soil Sampling and Testing)	0+2	100		
6	Horticultural Production Intervention	0+2	100		
7	Post Harvest Management and Value Addition of Fruits and Vegetables	0+2	100		
8	Animal Husbandry Intervention	0+1	100		
9	Agricultural Production Economics and Farm Management Intervention	0+2	100		
10	Farm Machinery and Power	0+1	100		
Compo	onent - II Agro-Industrial Attachment (AIA)	l	1		
11	Agro-Industrial Attachment	0+4	100		
	Total	0+20	1100		

Thus, a student registered for RAWE will have to obtain 550 marks, i.e. 50% to pass RAWE; OGPA will be worked as ICAR/SVVV procedures. In case, a student failed to secure the required marks will have to repeat the programme at their own cost, in the next year as and when RAWE will be offered.

# Implementation of the Programme

The students from SVIAg will be placed in Krishi Vigyan Kendra/ Research Station under the jurisdiction of SVVV, Indore and a small group of 4-5 students will work in the selected villages.

# Norms for Allotment of Villages

- 1. The students will be placed in KVK or Research Station and they will be equally distributed in different villages depending on availability of enterprising and innovative host-farmers. The ADR/Senior Scientist / Senior Scientist and Head (KVK) must satisfy themselves with regard to suitability of selected farmers / villages for fulfilling the overall objectives of RAWE programme.
- 2. Among the student placed in a village, one student nominated by Station in-charge will function as a student group leader and coordinate the activities in the assigned village

#### Orientation

Students have to report to the In-charge RAWE programme in SVIAg as per the prescribed schedule of work for orientation immediately after registration. The Heads of concerned departments will ensure that the students are well exposed to the latest practices / technologies available in their respective fields before undergoing training on Agronomical Interventions, Plant Protection Interventions, Soil Improvement Interventions, Fruit and Vegetable production interventions, Animal Production Interventions and Extension and Transfer of Technology activities.

# Programme of Work

The RAWE programme comprises of Ten components as under:

- 1. Participatory Rural Appraisal (PRA) and Transfer of Technology
- 2. Field Crop Production Intervention
- **3.** Plant Protection Intervention (Plant Pathology)
- **4.** Plant Protection Intervention (Agricultural Entomology)
- **5.** Soil Improvement Intervention (Soil Sampling and Testing)
- **6.** Horticultural Production Intervention
- 7. Post Harvest Management and Value Addition of Fruits and Vegetables
- 8. Animal Husbandry Intervention
- **9.** Agricultural Production Economics and Farm Management Intervention
- **10.** Farm Machinery and Power

#### 1. Participatory Rural Appraisal (PRA) and Transfer of Technology

The students shall involve themselves in the following activities i.e. Participatory Rural Appraisal, Identification of agricultural problems of the village and training needs of the farmers, Conducting method demonstrations of improved practices, Organization of short duration farmers training camp, field visits and agricultural exhibitions, Study of the on-going rural and agriculture development programme in the villages, Arrange farmers meeting to discuss agricultural aspects, Visit to various village institutions and study their role in development programmes and other extension activities, Motivate farmers through different extension teaching methods, Documentation of success stories.

Each student will prepare a report with respect to the activities indicated above and submit it to the Chairman of Advisory Committee for its evaluation. The students shall be given an opportunity to acquaint themselves with on-going programme and activities of research, development, marketing, extension agencies and organizations in the village. The students will submit report on the institutions he/she has visited.

The students shall take-up a survey of the village as per the prescribed scheduled. The students shall be required to collect the data on overall condition of village, resource endowment and its utilization, problems of labour and employment and other important economic aspect detailed in the schedule. The student shall also conduct a PRA of the village.

#### 2. Field Crop Production Intervention

In agronomical interventions, the students will be exposed to various crops and different agronomical practices in farmer's field. He /She will also involve in production technology and management of various crops. The student shall maintain a record of work done in prescribed proforma.

#### 3. Plant Protection Intervention (Plant Pathology)

Under this the students will be exposed to various plant diseases, and physiological disorders prevailing in the area and prescribe remedial measures.

### 4. Plant Protection Intervention (Agricultural Entomology)

#### 5. Soil Improvement Interventions (Soil sampling and testing)

Under this component the students shall involve in activities i.e. Soil Testing, Collection of soil sample by using Geo positioning system (GPS). Students shall study the Use of soil health card for fertilizer schedule, Integrated Nutrient Management (INM) and its importance in soil quality improvement, role and importance of micronutrients in crop production, soil salinity, alkalinity and acidity and its reclamation. Natural Resource Management (NRM), role of Biofertilizer in improving soil health, soil properties important for soil health, Quality control in fertilizer, Soil degradation, improvement of soil health for sustainable agriculture, vermicompost and its role in improving soil health, classification of green manures & role in improving soil health, Water management, Crop rotation.

#### 6. Horticultural Production Intervention

In fruits and vegetables crops, the students shall involve themselves in field operation viz., seedbed preparation, nursery management, propagation etc. along with their host farmers. The student shall maintain a record of work done and will submit it at the end of the semester.

#### 7. Post Harvest Management and Value Addition of Fruits and Vegetables

Students shall involve themselves to study and collect the information i.e. methods of food processing and preservation, Importance of processing of fruits and vegetables, spices, condiments and flowers, Packaging of horticultural commodities, Common methods of storage, Post harvest management and equipment for spices and flowers, Quality control in Fruit and vegetable processing industry, Storage structure and methods of grain storage, Traditional and modern storage structures, Indigenous Technological Knowledge used for food storage.

#### 8. Animal Production Interventions

Under this, the students shall collect the information of livestock on various aspects i.e. daily maintenance and feed expenses, milk production, milk disposal, dairy products, egg and birds, pig etc.

#### 9. Agricultural Production Economics and Farm Management Intervention

Agricultural production economics is concerned primarily with economic theory as it relates to the producer of agricultural commodities. Some major concerns in agricultural production economics are as: Goals and objectives, Choice of outputs to be produced, Allocation of resources among outputs, Assumption of risk and uncertainty.

#### 10. Farm Machinery and Power

Students will understand the farm machinery used in the field for different primary and secondary operation. Also gain knowledge of working principles of field implements, maintenance of farm machineries, application of implements for different field operations.

Student will also understand the importance of custom hiring centers and economics of rental field implements.

#### 11. Agro-Industrial Attachment

The students shall involve themselves in the activities and tasks during Agro- Industrial attachment for 3 Weeks duration viz.

- 1. Acquaintance with industry and staff.
- 2. Study of structure, functioning, objective and mandates of the industry.
- 3. Study of various processing units and hands-on trainings under supervision of industry staff.
- 4. Ethics of industry.
- 5. Employment generated by the industry.
- 6. Contribution of the industry promoting environment.
- 7. Learning business network including outlets of the industry.
- 8. Skill development in all crucial tasks of the industry.
- 9. Documentation of the activities and task performed by the students.
- 10. Performance evaluation, appraisal and ranking of students.

#### **Case study of Agro-Industry Attachment**

- 1. Topic/Title of case study
- 2. Student name/ID. No.
- 3. Name of Instructor/Supervisor/Designation.
- 4. Department/Section.
- 5. Details of Agro-Industry Promoter/Place/Address of Industry.
- 6. Relevance of case study.
- 7. Objective of case study.
- 8. Functioning of agro-industry/structure of industry/type of technology used/type of machinery used.
- 9. Case study output.
- 10. Future prospects of case study & suggestions.
- 11. Recommendations for beneficiaries/farmers about the case study.
- 12. References.

Appendices.

Credits: 20 (0+20)

## **READY – Component-III**

# **Experiential Learning Programme (ELP)/ Hands on Training (HoT)**

Experiential Learning means that learning and development are achieved through personal involvement, typically in group, by observation, study of theory or hypothesis and bring in innovation or some other transfer of skills or knowledge. Experiential learning is a business curriculum - related endeavor which is interactive.

Experiential Learning is for building or reinforcing skills in project development and execution, decision making, individual and team coordination, approach to problem solving, accounting, marketing and resolving conflicts etc. The programme induces movement and motivation in students to explore and discover their own potential and infuses confidence in them.

## **Objective:**

The main objectives are:

- 1. To promote professional skills and knowledge through meaningful hands on experience.
- 2. To design and execute project work.
- 3. To build confidence and to work in project mode.
- 4. To acquire enterprise management capabilities to start one's own enterprise.
- 5. To be industry read for employability.

#### **Duration:**

The Experiential Learning programme will be offered for one complete semester period in the final year. This programme will be undertaken by the students during the eighth semester for a total duration of 24 weeks with a weightage of 0+20 credit hours.

#### Attendance:

The minimum attendance required for this programme is 85%. The attendance of a student will be maintained at Experiential Learning unit and communicated every week by the manager of Experiential Learning. No student will be eligible for the final evaluation of EL if he has attendance short of 85% and any student having shortage of attendance has to re-register the EL when offered next by paying the assigned fee.

## Students Eligibility:

Students registering for ELP should have **completed all the courses at the end of fifth semester successfully. No student will be allowed to take up the ELP with backlog/repeat courses.** The assignment/allotment of the ELP shall be based on merit of the student at the end of 5<sup>th</sup> semester. A separate certificate would be issued to the students after successful completion of ELP course.

## Modules for skill development and entrepreneurship:

Students will register for any of two modules listed below of 0+10 credit hours each. (Total 20 credits)

Course Code	Title of the modules	Department	Credits
BAG801	Production Technology for Bioagents & Biofertilizers	SS & AC; PP	0+10
BAG802	Seed Production, processing and technology	PBG; SST	0+10
BAG803	Mushroom Cultivation Technology	CVS;PP	0+10
BAG804	Soil, Plant, Water and seed Testing	SS & AC; CP	0+10
BAG805	Poultry Production Technology	LPM;AH;CVS	0+10
BAG806	Commercial Beekeeping	Entomology, Horticulture	0+10
BAG807	Commercial Horticulture	Horticulture	0+10
BAG808	Agriculture Waste Management	CVS; Agronomy	0+10
BAG809	Organic crop production technology	CVS; Agronomy	0+10
BAG810	Hybrid Seed Production Technologies	PBG; Agronomy & Horticulture	0+10
BAG811	Floriculture & Landscaping	Horticulture	0+10
BAG812	Food Processing/ Value addition in milk	PHT, AH	0+10

# Project Preparation Modules for Experiential Learning (EL) / Hands on Training (HoT)

- 1. Project title of case study
- 2. Student name/ Id. No.
- 3. Department/ Section.
- 4. Name of guide / Instructor / supervisor / designation / department.
- 5. Jurisdiction / relevance of project.
- 6. Project Activities / Methodologies.
- 7. Project output/results.
- 8. Summery & Conclusion.
- 9. Future Prospects of Case Study & Suggestions.
- 10. References
- 11. Appendices

## Component – I: Rural Agricultural Work Experience (RAWE)

#### PROFORMA FOR DAILY DIARY OF STUDENT

(To be maintained by the student in ruled notebook)

1.	Name of the student	:

2. Enrolment No. :

10

Ma	anual for RAWE & AIA		SVIAg, SVVV, Indore
3.	Name of the College	:	
4.	Name & address of the contact farmer	:	
5.	Research Station / KVK	:	
6.	Abstract of work	:	

Work days & Date	Abstract of work done	Signature & Designation of Visitors / Contact Farmer
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

<sup>\*</sup> Daily diary will be maintained in a separate ruled book Register showing work report on daily basis for each month of stay in the village.

# Fortnightly Progress Report

Number of Fortnight		Remarks about the performance	Signature of officers Incharge
1			
2			
3			
4			
5			

Note: Fortnightly / Monthly verification will be done on the basis of daily diary.

# WEATHER RECORD

Village: Taluka:	
(if the data at the place is not available, the data of the research station can be given)	

Month	Met. Week	Temperatu	ire	Humidity %		Rainfall (mm)	No. of rainy days
		Max <sup>0</sup> C	Min ⁰C	Morning	Evening	(/	

# PATWARI RECORD OF THE VILLAGE (To be acquainted with)

- 1. Khasara
- 2. Khatauni
- 3. Zamabandi
- 4. Village Map

l.	Survey	of	Village
(0+1)	-		

$C_r$	00	114	۱.	- 1
Cr	ピし	Ш	ι.	

١	/S-I	-	Ge	rد	10	ra	П	n	fo	rn	กล	ıti	$\cap$	n
١	<i>/</i> U=	۱ . ۱	$\mathbf{U}_{\mathbf{U}}$	71	ı				ıu	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ılı	u	

1.	Name of village:
2.	Tehsil:
3.	District
4.	Distance in Kilometers from the nearest:
a)	Primary/Middle Scholl:
b)	High School/ Higher Secondary/College:
c)	Post Office:
d)	Telegraph Office:
	Railway Station:
f)	Bus Stand:
g)	Tehsil Place:
h)	Krishi Upaj Mandi:
5.	Transport facilities available in the village:
6.	· · · · · · · · · · · · · · · · · · ·
h١	Distance:

# VS-II: Population of Village

S.No.	ltem	Population as per Census
1.	Total Population	
2.	Total Male 1. Literate 2. Illiterate	
3.	Total Female 1. Literate 2. Illiterate	
4.	Number of Cultivators	
5.	Number of Agricultural Labourers 1. Male 2. Female	
6.	Other Nos. of Scheduled Castes Nos. of Scheduled Tribes Nos. of Scheduled Backwards	

Note: Information of village population to be obtained from the Gram Panchayat Officer /Patwari

# VS-III: Land use pattern of village

S.No.	Item	Area in hectares	% to total Geographical area
1.	Total Geographical area of Village		
2.	Area under forest		
3.	Barren and uncultivable land		
4.	Land put to non-agricultural use		
5.	Cultivable waste land		
6.	Total fallow land		
7.	Net area sown		
8.	Net irrigated area		
9.	Area sown more than once		
10.	Gross cropped area (S.No. 7+9)		
11.	Area under 1. Light soil (Depth upto one foot) 2. Medium soil (Depth 1 to 2 ft) 3. Heavy soil (Depth more than 2ft)		

Note: Information on land use pattern of the village to be obtained from the Patwari.

# VS-IV: Irrigation facilities available in the village:

S.No.	Source of Irrigation	Number	Area irrigated in Hectare			
			Seasonal	Perennial		
1	. Total Wells a) Well in use b) Not in use					
2	. Canal					
3	. Tube wells					
4	. Tank					
5	. Other Sources (specify)					

## VS-V: Implements and machinery available in village:

S.No.	Particulars	Number
1.	Bullock drawn implements	
2.	Hand drawn implements	
3.	Tractors	
4.	Power thresher	
5.	Electric pump/oil engine	
6.	Sprayers	
7.	Dusters	

Note: Information on irrigation facilities and implements and machinery can be obtained from the Patwari and Village Development Officer (V.D.O) working in Gram Panchyat.

# VS-VI: Cropping pattern of village (use data for current/latest year):

S.No.	Сгор	Varieties grown	Area in	Percentage to gross
			hectares	cropped area
1.	Soybean			
	a) Yellow			
	b) Black			
2.	Jowar			
	a) HYV b) Local			
3.	Maize a) HYV			
	a) HYV b) Local			
4.	Cotton			
	a) HYV			
	b) BT			
_	c) Other			
5.	Paddy a) HYV			
	a) HYV b) Improve			
	c) Other			
6.	Tur			
	a) HYV			
	,			
7.	Moong			
	a) HYV b) Local			
8.	Urid			
0.				
	a) HYV b) Local			
9.	Wheat			
	a) HYV			
	b) Improve c) Local			
10.	Gram			
10.	a) HYV			
	b) Local			
11.	Oilseeds (Safflower,			
	Groundnut, Sunflower,			
	Linseed, Seasmum, Nizer etc.			
12.	Other crops (Vegetables)			
13.	Gross cropped area of village			
		]		

Note: Data on Cropping Pattern of the village to be obtained from the village Patwari.

# VS-VII: Wages rates prevalent in the village:

S.No.	Period	Wages Rate (Rs.) per day					
		Man	Women	Bullock pair	Tractor/hr.		
1	.Khairf Season a) Sowing time b) Interculture c) Harvesting d) Threshing						
2	2. Rabi Season a) Sowing time b) Interculture c) Harvesting d) Threshing						
3	3. Summer Season						

# Household Schedule (HS)

Information	of Selected	Cultivators
ппоппапоп	OL OCICCICA	Cullivators

a)	Name of the Farmer	<u> </u>
b)	Caste	······
c)	Village	<u> </u>
d)	Block	TehsilDistrict

# HS-I: Details about Family Members

	Name					Relation with	n Occupation			
No.		(Yrs)	IL	Р	М	S	G	head	Main	Subsidiary
1.										
2.										
3.										
4.										
5.										
6.										

IL - Illiterate, P - Primary Level, M - Middle Standard, S - Secondary Level, G- Graduate & above.

# HS-II: Details about land possessed by the cultivator

S.No.	Particulars	Area (hectare)
1.	Total land area	
2.	Permanent fallow	
3.	Current fallow	
4.	Net sown area	
5.	Area under irrigation	
6.	Area sown more than once	
7.	Gross cropped area (4+6)	
8.	Approximate value of land (Rs./ha)	
9.	Total land revenue paid (Rs.) per year	
10.	Other taxes	

## **HS-III: Details of Livestock Position**

S.	Particulars	Type of A	Others		
No.		Bullock	Milch Anin	nal	
		Pairs	Buffaloes	Cows	
1.	No. of animals				
2.	Age of animals				
3.	If purchased Year of purchase Price (Rs.)				
4.	If home bred Present Value (Rs.)				

## **HS-IV: Farm Machineries**

S.No.	Name of Machine	Machine's make	Year and Purchase/price	Present value (Rs.)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Manual	for	DAM	<b>I</b>	AIA	
Manuai	TOT	KAW		AIA	

\_\_\_\_\_SVIAg, SVVV, Indore

# **HS-V: Inventory of Residential and Farm Building**

S.No.	Type of building	Year of constriction	Type of construction	Present value (Rs.)
1.	Type of building			
2.	Residential			
3.	Cattle Shed			
4.	Other Shed Storage			
5.	Irrigation Structures (Pump house)			
6.	Tractor shed			
7.	Others			

## **HS-VI: Financial Position of Farmer**

## (I) Dues payable (Liabilities)

S.No.	Particulars		Loan No.				
		I	II	III	IV		
1	Amount of loan						
2	.Date of borrowing						
3	Source of loan						
4	Purpose of loan						
5	Amount of loan outstanding at the end of year						

# (II) Dues Receivable

S.No.	Dues receivable from	Amount in Rs.
1.	Cultivator/Relatives	
2.	Traders	
3.	Aarhata	
4.	Other	

## (III) Net Worth = Total Assets - Total Liabilities

Assets - HS- III, + HS -IV, HS-V Liabilities- HS-VII+II

Manual for RAWE & AIA_		SVIAg, SVVV, Indore

HS-VII: Details of labour used for one important crop grown by the selected farmer:

I) Name of Crop	II) Ar	ea (ha)
-----------------	--------	---------

S.No.	Name of Operation		peration of use			ock	Labo	ur	Mac	nine I	abou	ır		
	oporation.	0. 400	Fam	Family I		d	Owi	ned	Hire	d	Own	ed	Hire	d
			Hrs.	Val.	Hrs.	Val.	Hrs.	Val.	Hrs.	Val.	Hrs.	Val.	Hrs.	Val.
1.	Ploughing													
2.	Harrowing													
3.	Leveling													
4.	Manuring													
5.	Seed raising													
6.	Sowing/ Transplanting													
7.	Fertilizer application													
8.	Weeding													
9.	Hoeing													
10.	Fertilizer application (Second dose)													
11.	Plant protection													
12.	Irrigation													
13.	Harvesting													
14.	Threshing and winnowing													
15.	Transportation of produce to home													
16.	Other operation													

Manual for RAWE & AIA	SVIAg, SVVV, In	ıdore

# HS-VIII: Details of Material used and Estimation of the cost of cultivation of one important crop grown by the selected farmer:

I) Name of the Crop...... II) Area (ha).....

S.No	o Particulars	Quantity Used	Price per unit	Total cost	Per cent to total cost
1.	Family labour				
	a) Man (day)				
	b) Woman (day)				
2.	Hired Human labour owned/Hire				
	a) Male (day)				
	b) Woman (day)				
3.	Bullock labour Pair (day)				
	a) Owned				
	b) Hired				
4.	Machine Labour				
	a) Owned (Hrs.)				
	b) Hired (Hrs.)				
5.	Seed (Kg)				
6.	Manures (Q.)				
7.	Fertilizer				
	a) N				
	b) P				
	c) K				
8.	Insecticides				
9.	Irrigation charges (Rs.)				
-	Land Revenue				
	.Other taxes				
12	Total S.No. 2 to 11				
13	3. Interest on working capital on S.No.12 @10%				
14	Rent paid for leased in land				
15	Rental value of owned land prevailing rate in the village or				
	1/6th of the gross value of produce				
16	Interest on fixed capital @ of 10% per				
	annum (Excluding land)				
	Total Cost (S.No. 12 to 16)				
	PRODUCTION				
	a) Main produce (Q.)				
	b) By produce (Q.)				
	Gross Income = (Value of M.P.+B.P.)				
	Net Income over				
	Net income over				
	a) Cost A2 = GI-Cost A2				
	b) Cost B2 = GI-Cost B2				
	c) Cost C2 = GI-Cost C2				
	d) Cost C3 = GI-Cost C3				

#### **Cost Concept:**

Cost A1 = S.No. 2 to 13 (Except S. No. 12)

Cost A2 – Cost A1 + Rent paid for leased in land if any Cost B1= Cost A1+ Interest on fixed capital (Excluding land value)

Cost B2 = Cost B1 + Rental value of owned land + rent paid for leased in land Cost C1 = Cost B1 = Imputed value of family labour i.e. S. No. 1

Cost C2 = Cost B2 + Imputed value of family labour (i.e. S. No. 1) Cost C3 = Cost C2 + 10% of Cost C2 (Treated as managerial cost) Cost of Production Rs./q = (Total Cost – Value By Product) / (Yield/ha)

# HS-IX: Crop Production Record

S.No.		of the crop Area Qu		ıced	Productivity per hectare	
	with variety	(ha)	Main product (Q)	By product (Q)	Main product (Q)	
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

# **HS-X**: Disposal of Farm Produce

S.No.	Name of the	Quantity	Quantity	Quantity	uantity sold			
	crop P	Produced	Consumed	Q	Price/Q	Total		
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								

# **HS-XI: Family Budget of the Farmer**

S.No.	Item	Total Value	% of total			
		Home Purchase Produced				
	Cereals Jowar Wheat Rice Other					
	Pulses Tue Gram Mung Urid Other Pulses					
	Edible Oil Groundnut/Linseed/Til /Safflower Vegetable oil					
	Non Vegetarian Mutton/Chicken Eggs Other					
	Milk and Milk Products Milk Ghee/Butter					
	Condiments and Spices 1. Condiments 2. Chilies 3. Turmeric 4. Other					
	Beverages 1. Tea 2. Coffee 3. Other					
	Fuel and Light					
	Clothing and Footwear					
	Education					
	Medicine and Medical Services					
	Other					
	TOTAL					

lanual f	or RAWE & AIA			SVIAg, SVVV, Inc
ther Ir	nformation Related to Village / I	District		
Ind	ustry wise progress in Production	and employ	ment (\	/ear
S.No.	Village industry	Produc		Employment in days
	December of considerations	in R	S.	
1.	Processing of cereals and pulses			
2.	Ghani Oil			
3.	Village leather			
4.	Cottage Match			
5.	Sugar Cane and Khandsari			
6.	Bee Keeping			
7.	Village pottery			
8.	Carpentry and block smithy			
9.	Lime manufacturing			
10.	Others			
. Em	ployment potential in forestry (Yea	ar		)
S.No.	Head of Development		Empl	oyment (Man hours)
1.	Production forestry			
2.	Regeneration operation			
3.	Road construction			
4.	Social Forestry			
5.	Minor Forest Product			
Insti () S.No.	tutional Finance for Agricultural Description	Development		) unt (Rs.)
1.	Primary agril. Credit societies			\ - /
2.	Govt. loans			
3.	Commercial bank loans			
4.	RRB loans (Total Short Term Credit)			
	1		II.	
3)				
S.No.	Particular		Amo	unt (Rs.)
3.140.	<u></u>			
1.	Primary land Development bank			
	Commercial bank loans			
1.				

J. 140.	Cereals	Pulse	es Oil Seed	s Fruits	Vegetables	Forest Produc
<u> </u>						
Nu	mber of cold s	torage pre	vailing in the	district		
.No.	Year of Estab	lishment	Commodity	Store Cap		Charges/per months
.No.	Name of Sche	me		Bene	eficiaries (Nos	.)
Deta	ails of minor in	rigation p	rojects			
Deta	ails of minor i		rojects Numbers	Area	covered (ha)	
	1			Area	covered (ha)	
	1			Area	covered (ha)	
	1			Area	covered (ha)	
	1			Area	covered (ha)	

Manual for RAWE & AIA\_\_\_\_\_\_SVIAg, SVVV, Indore

Manual	for RAWE & AIA			SVIAg, SVVV, Indor
8. Self	Help Groups in the v	rillage/cluster		
S.No.	Name of SHG	Group of Person	Activity	Employment
Final Re	eport on Socio-econo	mic Study of Village/F	armer:	
should v	vrite at least one para	•	al facilities, po	e and selected farmer. H pulation composition an ould also be prepared.)
Obser	vations on Contac	t Farmers:		
Students	will record their observ	ation on following aspec	ts:- (Quantity,	Nature, Use Pattern)
a)	Resource base of the f	armer		
<b>o</b> )	Technological Status o			
c)		estment pattern of farme	r	
d) - \	Marketing problems of			
∋) :)	Constraints in adoption	•	000/- ner vear	per family. (Use separat
,	space is insufficient)	ist poverty line of its. 02	,000/- pci ycai	per farmly. (Ose separat
			S	Signature of Studer
Remark	s of Examiner:			
Sig	nature of Examiner		Signat	ure of Officer In-charg
		25		

Manual for RAWE & AIA		SVIAg, SVVV, Indoi
II: Agronomical Interv	ventions	Credits: 3 (0+3)
<b>J</b> 1 1 11 11	Format - I	
•	ural Operation Performed by raphs of important features	y the Host Farmers (Some good can be attached)
Name of the host farme	ers	
Village	Block	
District	Cropping Season(	(s)

Field No.	Field area (ha)	Crop(s) Variety(s) grown		Agronomic operation done by the farmer during crop production					
			Tillage	Seed rate, Sowing date seed treatment, sowing method etc.	and	Weed control and inter culture operations	Irrigation and drainage		
1	2	3	4	5	6	7	8		

Agronomic	operations d	one during crop	Actual Yield per ha		
After care / plant protection	Harvesting	Transportation to threshing floor	Threshing and winnowing	Main production (Grain/Tubers/ Green vegetable)	By-product (Straw/Stover/ Haulm)
9	10	11	12	13	14

# Estimated value of the produce (Rs./ha)

Main produce	Main produce	Main produce	Estimated expenditure (Rs./ha)	Profit or loss (Rs./ha)
15	16	17	18	19

Remarks and	Signature
Farmer of the	Teacher

Signature of Student Signature of

Format - II Details of the cropping programme proposed by the student to the Host Farmer (To be filled by the students as suggestions to the farmers)

Field No.	Field area (ha)	Crop(s) Variety(s) grown		Agronomical operation done by the farmer during crop production			
			Tillage	Seed rate, Date of Sowing, Seed treatment, Depth of sowing etc.	Manuring and Fertilizer application	Weed control and inter culture operations	Irrigation and drainage
1	2	3	4	5	6	7	8

Agronomic operations done during crop productio				Actual Yield per h	a
After care / plant protection	Harves- ting	Transportation to threshing floor		Main production (Grain/Tubers/ Green vegetable)	By-product (Straw/Stover/ Haulm)
9	10	11	12	13	1

Estimated value of the produce (Rs./ha)

Main Produce	Main Produce	Main Produce	Estimated expenditure (Rs./ha)	Profit or loss (Rs./ha.)
15	16	17	18	19

Remarks and Signature Signature of Student Signature of Farmer of the Teacher

# Background Information of the Host Farmer

	Background information of the Host Farmer	
	1. Name of the farmer  (a) Total land owned by the farmer (ha)  (b) Land suitable for cultivation (ha)  (c) Land not suitable for cultivation  (i) Farm Stead (ha)  (ii) Waste land (ha)	
	2. Soil Conditions  (i) Topography  (ii) Colour  (iii) Texture  (iv) Depth  (v) Fertility Status	
4.	Rainfall of the district (Weekly):  5. Irrigation facilities available on the field	
(ii) (iii)	(i) Irrigation source  Water availability period :  Approximate irrigated area (ha) :	•
6.	Drainage requirement :	
7. (i) (ii) (iii) 8.	Crop(s) / Variety (s) i.e. grown by the farmers  During kharif:: During rabi:: During summer::  Existing cropping systems practiced by the farmer	
(i) (ii) (iii)	Cropped area during kharif : Cropped area during rabi : Cropped area during summer :	
9. (i) (ii) (iii)	Use of seeds Own seeds Seeds if purchased / Procured (Source/Agency): Category of seed used, if purchased:	

Manual for RAWE & AIA	SVIAg, SVVV, Indore				
o. Use of agro-inputs					
(Fertilizers/Manures/Herbicides/Insecticides/Fungicides/Others) etc. (quantity)					
11. Adoption of cultivation practice	by the farmer with reasoning				
(i) Traditional practice (ii) Recommended practice	: :				
	12. Livestock / position in numbers  (i) Bullock  (ii) Cows  (iii) He buffaloes  (iv) She buffaloes  (v) Goats  (iv) Others				
<ul> <li>13. Farm machinery and power</li> <li>(i) Availability of electricity</li> <li>(ii) Tractor</li> <li>(iii) Trolley / bullock cart</li> <li>(iv) Plough</li> <li>(v) Harrow</li> <li>(vi) Leveler</li> <li>(vii) Seed drill</li> <li>(viii) Weeders</li> <li>(ix) Threshers / Winnowers</li> <li>(x) Chaff cutters</li> <li>14. Market facilities (Regulated/unitany)</li> </ul>	regulated): (Mandi, Cold storage if				
15. Transport facilities (Road, Railways)	:				
<ul><li>16. Loan facilities</li><li>(Cooperative or commercial or private</li></ul>	: Banks, Government Agencies, Other sources)				
17. Technological facilities  (i) Training Centres / Charcha Mandal  (ii) Television / Radio  (iii) Public Library  (iv) Krishi Vigyan Kendra  (v) Research Centre  (vi) NGO's	: : : :				

# 18. Calendar of the farm operation during the crop season / year. Calendar of agricultural operations done by the farmer\*

S.No.	Day and Date	Name of the operation performed by the (Attach a separate sheet, if necessary)
1.	2	3
2.		
3.		

Calendar should be maintained for the following: (a) Land preparation (i) Number of ploughing / harrowing (ii) Leveling Soil and water conservation practices (iii) Practices / soil amendments Any practice to facilitate : (irrigation/drainage) (iv) Seed and sowing (b) Seed treatment / seed inoculation (i) Raising of nursery, if needed (ii) Seed rate (iii) Method of nursery raising : (Sowing, Fertilizer Application (iv) Irrigation, after care), if needed Date of sowing / transplanting (v) Method of sowing of Transplanting (vi) : (if applicable) Date of sowing / transplanting : Plant population etc. (vii) Thinning / gap filling (viii) Bird watching / aftercare after seeding (ix) Fertilizer application (c) Application of organic manures (i) Application of fertilizers (ii) Method and time of manure and fertilizer application : (iii) Any other information pertaining to nutrient management: (iv) (d) After care Weed control (ii) Intercultural

Manual for RAWE & AIA	SVIAg, SVVV, Indore
(iii) Manual / cultural (iv) Mechanical / Chemical weed control meas (v) Special cultural operations, if any: (vi) Any other information like earthening: stace (e) Irrigation (i) Time of irrigation (s) : (ii) Drainage, if done : (f) Plant protection (i) Time and stage of the occurrence: of the part of damage caused : (iii) Extent of damage caused : (g) Control measures adopted for the control in the control	cking, wrapping, nipping etc.  pests / diseases  ol of insects pest / diseases ers: quency of application :
Summary of the work by the student done or separate sheet of paper, if necessary)	n the farmer's field : (Attach
Suggestions to farmers for future work (Attach separ	rate sheet)
Signature of Student	Signature of Officer In-charge
Remarks and Signature of Examiner	

	anual fo	_SVIAg, SVVV, Indor							
	. Plant	Credits: 2 (0+2)							
(A	.). Ento	mology							
•	•		ant Insect	pests of at lea	ıst two ı	major crops cultiv	ated in village.		
1.		e of Crop		•		, ,	3		
	2. Name of insects identified in the field								
ے. آ		1		1		lo : .:	<b>b</b> :		
	S.No.	Common Na	ame	Local Nam	16	Scientific Name	Systematic position		
	1.								
	2.								
	3.								
	4.								
	5.								
•	S.No.	Early growth	n stage	Vegetative sta		Flowering / podding / earhead	Grain etc.		
	1.								
	2.								
L	3.								
	4.								
	5.						ı		
2.	5.	sity of pest a	nttack and	d degree of in	festati	on (Pest wise)			
_	5.	sity of pest a	ittack and	d degree of in	festati	on (Pest wise)			
1	5.	sity of pest a	ittack and	d degree of in	festati	on (Pest wise)			
1	5. Intens	sity of pest a	attack and	d degree of in	festati	on (Pest wise)			
	5.  Intens  Nil Low	sity of pest a	ittack and	d degree of in	festati	on (Pest wise)			
N 1	5. Intens Nil Low Medium		attack and	d degree of in	festati	on (Pest wise)			
	5. Intens Nil Low Medium High Epidemic					on (Pest wise)	ield		
1 1 1 1	5. Intens Nil Low Medium High Epidemic Collect	ction of majo			edatory	v insects in the f	ield		
3.	5. Intens Nil Low Medium High Epidemic		or insect-		edatory	insects in the f			
1 1 1 1	5. Intens Nil Low Medium High Epidemic Collect	ction of majo		pests and pro	edatory	insects in the f			
1 1 1 3.	5.  Intens Nil Low Medium High Epidemic  Collect S.No.	ction of majo	or insect-	pests and pro	edatory	insects in the f			

\_\_\_\_32 \_\_\_

2.												
•												
3.												
	•		•									
. Cher	mical Contr	ol:										
Pest	Farmers Practices						Rec	ommende	d pra	ctic	es	
attack	Name of Insecticide	Dose	spi	oe of ayers uster	Stag of c	_		ne of cticides	Dose		Type of sprayer / Duster	Stages of cro
)	Commo	nly avai	lable i	nsectici	des	in th	e vil	lage / loca	al ma	rke	t:	
í)	Precaut											
ii)	Methods	s of pre	paratio	n of ins	ecti	cidal	solu	ıtion:				
iv)	Method	of calib	ration	of mach	nine	s (sp	raye	r / duster)	:			
. Ro	dent man	agem	ent ii	า field	as	wel	l as	in Hou	se /	St	orage	(As pe
ecomr	nended p	ractic	e)									
Farmers	Practices					Reco	nm	ended Pra	ctice	25		
Strategi		Field		Stora	age	Strat			Fiel			Storage
Tapping		Crop	Dose	Dos		Tapp		Poison	Cro		Dose	Dose
		stage	Dosc	503	,,,			Baiting	stag		Dosc	Dosc
		-10.90							- 10.3	, •		
S.No.	Name of Fo	ood Gra	in	Mois	ture	cont	ent	Fungicide Fumigant			D	ose
								Treatmen	t			
1	For Human							_	t			
1.	For Human	nurnose						_	t 			
2.	For storage							Treatmen				
2. <b>B. Do</b> o		n of inc	ligenc					Treatmen		of p	pest ma	nagem

Manual for RAWE & AIA\_\_\_\_\_\_SVIAg, SVVV, Indore

Cultural methods | Mechanical/ physical

methods

4. Methods of Control adopted: (2 major crops) (Crop wise at different times)

Non chemical methods

Name of Insects

#### **B. Plant Pathology**

The following assignments have to be completed by Group (Batch) / Individual students during their stay in adopted Villages under RA WE programme.

#### I. Herbarium Collection

Each student has to submit at least 15 plant disease species specimens properly pressed / dried and labeled in file cover by giving following information.

1. Name of crop / variety 2. Name of Disease 3. Name of the casual organism 4. Locality / place / Name

5. Date of collection 6. Collected by

### II. Demonstration of disease management technology

To be done by each batch of students in 0.5 (Half) acre area:

A. Seed treatment in 1. Gram, 2. Wheat, 3. Potato, 4. Seasonal ve	egetable (any
two)	
1. Gram:	
(a) Bio agent ( <i>Trichoderma</i> ) @ 5g/kg seed	
(b) Thiram + Carbendazim (2:1) 3 g/kg seed	
(c) Control without treatment	
2. Wheat:	
(a) Carboxin @ 2.5 g/kg seed	
(b) Control without any treatment	
3. Potato:	
(a) 0.5% (5g/liter) Mancozeb solution for 30 minutes	
(b) Control without any treatment	

Demonstration on foliar spray of fungicides: supported by Field photograph in paddy/soybean/potato/pea/chilies/mustard/lentil/tomato etc. Optional (any two).

For Powdery mildew - Sulphur(35 EC) @3g/liter water.

For Leaf spots / Blights (early / late) Mancozeb @3g/liter water.

For Downy mildew / white rust: Copper Oxychloride (Fytolan or Blue Copper) @3g/L water.

#### 4. Soybean:

Thiram +Carbendazim (2:1) 3g/kg seed for seed & seedling diseases For YMV prone areas: Thiamethoxam 3g/kg seed

Foliar diseases: Control

Spray of carbendazim 1 g/L after 30 and 45 days after sowing.

5. Paddy:

Seed treatment:

Carbendazim 1 g + Seed treatment

Streptocycline 0.25 g

Per kg/L Seedling drip (30 ml) Before

transplanting

Blast:

Carbendazim 1-1.5 g/L water (with sticker or soap)

**Bacterial blight:** 

Spray Streptocycline (Pausamycine, Agrimycine 100 etc.) 2.5-3.0 g/10 L of water with sticker (Repeat in case cloudy/raining after 7 days)

Smut/bunt:

Propiconazole 1 ml/litre spray during flowering stage.

## III. Training cum Demonstration of low cost simple oyster mushroom production technology: To be done by each batch (Date wise record of data/ photos)

Specially - Farmer women/Rural Youth

Trainings to: unemployed youth/farmers and rural/tribal people on mushroom production, its nutritional and medicinal value and post harvest technology in order to generate an alternative source of employment and sustainable income.

### **IV.** Survey of Plant Disease:

Each student has to submit duly filled proforma (as per manual/booklet) of least five commonly occurring diseases from 4-5 location/field i.e. 20 - 25 proforma.

For example: brown spot/blast of paddy, yellow mosaic, blights of soybean, loose smut of wheat, wilt/root rot/collar rot of gram, powdery mildew of pea - cucurbits and disease of other crops/vegetables.

Each student will prepare a "Practical Record" giving details of above work duly verified by Station I/c Course teacher and submit the same at the Semester end.

Signature of Student

Signature of Officer In-charge

Manual for RAWE & AIA	SVIAg, SVVV, Indore
IV. Soil Improvement Interver 2 (0+2)	ntions (Soil Sampling and Testing) Credits:
Students have to test soil samples in rinformation should be collected according	respective Krishi Vigyan Kendra, for which the ding to the given format:
Information Sheet for Soil	Testing
<ol> <li>Full address of Farmer</li> <li>Sample number</li> <li>Number of soil samples</li> <li>Date of soil sampling</li> <li>Field name (Khasara number of source of irrigation)</li> <li>Source of irrigation</li> <li>Nature of field i.e. sloppy, depring</li> <li>Crop rotation</li> <li>Name of crops to be sown</li> <li>Amount and nature of fertilizer</li> <li>Visual nutrient deficiency, if any</li> <li>Water infiltration rate</li> <li>Water logging problem, if any</li> <li>Any other</li> </ol>	r not : :ression, stony etc.: : : : : applied to the previous crop:
Preparation	on of Soil Health Card
<ul> <li>Detail Information of Farmer</li> <li>Name</li> <li>Address</li> <li>Village</li> <li>Tehsil</li> <li>District</li> <li>Aadhar Number</li> <li>Mobile Number</li> <li>Details of Soil Sample</li> <li>Soil Sample Number</li> <li>Date of Soil Collection</li> <li>Khasra Number</li> <li>GPS:</li> </ul>	<ul> <li>:</li> <li>:&lt;</li></ul>
<ul><li>Longitude</li><li>Latitude</li></ul>	: :Irrigated Soil/Rainfed Soil :

## Result of Soil Testing

S.No.	Parameter	Value	Analysis	Remarks
1.	рН			
2.	EC			
3.	Organic Carbon			
4.	Available Nitrogen			
5.	Available Phosphorus			
6.	Available Potassium			
7.	Available Sulphur			
8.	Available Zinc			
9.	Available Boron			
10.	Available Iron			
11.	Available Manganese			
12.	Available Copper			

Recommendations for application of Micro nutrients				
S.No.	Parameter	Recommendations for soil application		
1.	Sulphur (S)	Gypsum (18%)		
2.	Zinc (Zn)	Zink Sulphate (21%): 25 Kg./ha		
3.	Boron (B)	Borex (10%)		
4.	Iron (Fe)	Ferrous Sulphate (19%)		
5.	Manganese (Mn)	Maganesium Sulphate (30.5%)		
6.	Copper (Cu)	Copper Sulphate (24%)		
General I	Recommendations			
	1. Organic Manure	5 tonnes/ ha		
	2. Bio-fertilizer			
	3. Gypsum			

### **Integrated Nutrient Management for Major Crops**

S. No.	Crop	Nutrients (N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O) kg/ha	Fertilizers (kg/ha)				
			Urea	SSP	MoP	DAP	
1.	Rice	120:60:40	261	375	67	0	
			210	0	67	130	
2.	Maize	180:60:40	391	375	67	0	
			340	0	67	130	
3	Soybean	20:80:20	43	500	33	0	
			0	0	33	174	
4.	Wheat	120:60:40	217	375	67	0	
			210	0	67	130	
5.	Chickpea	20:50:20	43	313	33	0	
			0	0	33	109	
6. Sug	Sugarcane	300:80:60	652	500	100	0	
			584	0	100	174	
7.	Mustard	80:40:20	174	250	33	0	
			140	0	33	87	
8.	Pigeonpea	30:60:40	65	375	67	0	
			14	0	67	130	
9.	Jawar	80:40:40	174	250	67	0	
			140	0	67	87	
10.	Hybrid Bajra	120:60:50	261	375	83	0	
			210	0	83	130	

- Application of FYM @ 5 t/ha reduces the requirement of Urea, SSP and MoP by 54, 63 and 42 kg/ha, respectively from given doses of fertilizers for different crops.
- Seed treatment by crop specific Rhizobium in legumes and Azotobactor/ Azospirillum in non-legume crops @ 5.0 g/kg seed and PSB @ 3.0 kg/ha as soil application for all crops is recommended.
- In case Zinc deficiency, application of Zinc Sulphate @ 25 kg/ha on alternate year is advised.
- In case of sulphur deficiency, application of S @ 40 kg/ha per year or continuous application of SSP instead of DAP is advised.

Manual fo	or RAWE & AIA		SVIAg, SVVV, Indore
Object	tive and advantage of	soil testing:	
Objecti			
1.			
2.			
3. 4.			
5.			
Advant	ages:		
1.			
2. 3.			
3. 4.			
5.			
Importa	ance of Micronutrients in	Crop Production	
S.No.	Name of micro nutrient	Importance	
1.	Zinc	importance	
2.	Copper		
3.	Iron		
3. 4.			
5.	Manganese Boron		
5. 6.	Chlorine		
7.			
7.	Molybdenum		
Reclama	tion of soil salinity, alkalinity	and acidity	
1.	Soil salinity		
2.	Soil alkalinity		
	idity		
	-	(NIDM)	
	resource management	`	
	le of Bio fertilizer in improvin	g soil health	
1.			
2. 3.			
3. 4.			
		39	

(b) 1. 2. 3. 4.	Role of Vermi compost in improving soil health
(c) 1. 2. 3. 4.	Role of Green manure in improving soil health
(d) agri 1. 2. 3. 4.	Soil degradation, improvement of soil health for sustainable culture Reasons:
	Improvement:
	1.
2. 3. 4.	
(e) 1. 2. 3. 4.	Role of Quality control in fertilizer
( <b>f</b> ) 1. 2. 3.	Water management for soil improvement
4. (g) 1. 2. 3. 4.	Role of Crop rotation in soil improvement
Sigi cha	nature of Student Signature of Farmer Signature of Officer In- rge

Manu	al for RAWE & AIA	SVIAg, SVVV, Indore					
V. F	ruit and Vegetabl	Credits: 3 (0+3)					
A. FRUIT PRODUCTION							
	s of existing fruit tree d of the Scheme:	s: 	)				
1. 2. 3. ii. iii. i <sup>v</sup> v.			Area (ha)/	No. of trees i.			
	Crop-wise det	ails shall be giver	under 1	following heads			
4. Fruit	Manures/Fertilize crops / intercrop	rs applied	Time	Quantity			
5. 6.	Inter-crop taken ( Actual yield obtai	name of the crop season) ned	Crop	Area Plant population m <sup>2</sup>			
i) ii)	Fruit Crop Inter Crop	Area	Quality	Amount (Rate/kg)			
7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	Net Expenditure F	ms it Crops Inter Crops Rs. per ha and sale of the produce on technology y ted	per t	ree			
18.	Net profit	per ha	per t	ree			

Signature of Farmer

Signature of Student

S.No.	Date	Operation done 8	Operation done & trees covered			
		Plot –I	Plot –II	material used		
1.						
2.						
3.						
4.						
5.						

Ν	Manual for RAWE & AIA				SVIAg, SVVV, II	ndore
	Operational Labor	ur Cost (Rs). (only two plo				
	S.No. Particulars	Owned@	Hired @	Bullock	Tractor	

S.No.	Particulars	Owned@	Hired @	Bullock Pair @	Tractor machinery
1.	Ploughing / harrowing				
2.	Digging, filling & planting				
3.	Manuring /Fertilizers				
4.	Weeding				
5.	Irrigation				
6.	Trining & Pruning				
7.	Spraying/Dusting				
8.	Harvesting/grading/ packing				
9.	Watching				
10.	Transport to market				

Total Cost on Lab	our (Rs.)	
-------------------	-----------	--

### **Material Cost**

S.No.	Particulars	Number		Value (Rs.)		Remarks	
		Plot-1	Plot-2	Plot-1	Plot-2		
1	Plant Material a) Seedling b) Layers / Grafts						
2	.Manures/Fertilizers						
3	.Irrigation						
4	Hormone & Plant protection Chemicals						
5	Staking cost						
6	Packaging Material						
7	Cultivation problem/ other problems identified						

Total cost of material	(Rs.):			
------------------------	--------	--	--	--

Manual for RAWE & AIA	SVIA	yVV2, p	, Indore

### **COST OF FARM PRODUCE (YEAR WISE)**

- 1. Name of Crop, Number & Age of Trees
- 2. Crop Variety
- 3. Date of flowering & harvest
- 4. Production (kg) and income Per tree

Rs. Per ha Rs.

- 5. Price of Produce Rs. Demonstration by student on:
- (a) Propagational studies
- (b) Special Horticultural Practices
- (c) Special problem & demonstration of solution (Training, Prunning, Bahar treatment, Manuring etc.)

Plantation of fruit trees-Demonstration & Plantation of at least 5 fruit trees Grading and

Packing

Storage – Zero Energy Chamber

Note: Detailed note on above shall be written.

Signature of Student

N	lanual f	or RAWE	& AIA					SVIAg, SVVV, Indore
В	. VE	GETABLE	PRODU	ICTION				
С	roppin	g Scheme	e for Veg	getables (	period of repor	ts)		
	1.	Plot No.	Crop va	riety				Area (ha)
		i.	Brinjal					
		i.	Potato /	Tomato				
		iii.	Onion/G	arlic				
		iv.	Cabbage	/Cauliflow	ver			
		V.	Chillies/0	Coriander/	Fenugreek			
		vi.	Other					
2	. Nu	trient Ap	plication	on:				
				Time	Quality	Rate		Value
		applied						
		r applied nanure use	ad .					
	Orcciri	nanare ase	,u					
3		ercrop tak	en:		C	rop	Area	
	harif abi Sur	mmer				-		
11	abi Sui	IIIIIGI				-		
						-		
	. Ac lain veg iter crop		obtained	:	Quantity (No./	Q)	Rate	e Rs. Value Rs.
<b>5</b> .	. Yio	eld per ha os	(Quintal	/No.) Mai	n crops			
6	. Es	timated co	ost:		Main crop:			
7	. Gr	oss Incom	ne in Rs.	(value)	Inter crop:			

per plot

per ha

per ha

Net Income Rs. (value) per plot

Cost/ Benefit ratio

8.

9.

Man	ual for RAWE & AIA		SVIAg, SVVV, Indore
PLO	T HISTORY (two important crops)		
Field	I <b>–</b> I		Field –II
1.	Name of Student	:	
2.	Name of institute to which attached	d :	
3.	Name of farmer	:	
4.	Topography	:	
5.	Soil type with drainage	:	
6. (hou	Well/Canal/River/Water: irrigation : rs/day & area covered)	: with potential available	
7.	Crops grown in last year	: Plot No., Survey No. and	area in ha:
8. plant	Crops now grown with Plot No. ted or proposed	:Survey No. and area (ha)	
9.	Remarks	:	
_	nature of Inspection Officer dent	In-charge	Signature of

		Calend	ar of	Ope	rations			
eriod	of report					:		
ame d	of crop and area (ha)	):						
S. No.	Date	Operation covered	done	and a	ırea		ils of labour or & material	
. <u> </u>		Field - I		Field	- II			
		11010		1010				
perat	ional cost (Labour w	ages) one	crop c	nly			_	
S.No	Particular	Owned M/F/B.P./ 1 2 3	Hire M/F/B 2:3	.P./ 1	Hired F M/F/B.P.		Machinery Hours	Tractor Rate
1.	Ploughing							
2.	Harrowing							
3.	Bed Preparation							
4.	Manuring							
5.	Sowing/Planning							
6.	Fertilizers							
7.	Irrigation							
8.	Weeding Earthing Training Staking							
9.	Spraying Dusting							
10.	Harvesting Grading Packing							
11.	Watching							
12.	Transport to market							
- Male	e, F - Female, B.P Bul	llock Power						
	Income		Net F	Profit	t			
otal								

Manual for RAWE & AIA	SVIAg, SVVV, Indore
Farm production cost (year	to) (at least one crop)
Name of Crops Variety	
Date of Flowering	Date of Harvest
Production (Quintal) Rate (Rs.)	
Value of Produce (Rs.) Material Cost (Area	)

S.No.	Particulars	Quantity		Va	Remarks	
		Crop-I	Crop II	Crop-I	Crop II	
1.	Seed/Seedling Plant					
2.	F.Y.M./ Oil cake / Fertilizer a) b) c)					
3.	Total No. Irrigation Season Irrigation Charges					
4.	Hormonal spray and plant protection charges Cost of chemical					
5.	Stake cost					
6. emarks	Packaging/Charge (Boxes or tokni) for hybrid tomato only byงล่นช่อกอดกลterial					

Vegetable Nursery raising (Crop......)

Site selection & Nursery bed preparation Nursery area required for one hectare Seed rate required for different Vegetable crops Seed and soil treatment Type of Nursery bed raised/flat/sunken bed After care

Manual for RAWE & AIA	SVIAg, SVVV, Indore
Economics of Nursery raising for one hectare	
Quantity & quality of certified /TL seed saved by the farmer from the p Production Technology)	revious crops (Seed
Special Horticultural Practices to boost vegetable produ	uction
Hot water treatment of Cole crop seed for control of Black rot (Bacteria tuber seed treatment.	al) disease. Potato
Use of herbicides in weed control in vegetables.	
Special method of raising cucurbits seedling & for early planting in spr Staking for hybrid tomato.	ing- summers season.
Use of plant growth regulators MH, Ethereal for increasing fruit set, in	cucurbits.
Identification of production problems of major commercialized vegetal	oles.
Control of major insect, pests and diseases. Economics of vegetable	production.
Layout of kitchen garden to get vegetable throughout the year. Crops suitable rotation.	for kitchen garden with
Signature of Student	
Submission of brief write up by student on work done including specia up vegetable production.	l practices for boost
Signature of Student	

Signature of Officer In-charge

Remarks by Evaluator

Signature of Examiner

٧	I. F	Food Processing and Storaดู	ge Interventions	Credit: 1 (0+1)
p co P vo	rocessing ondiment ost harve egetable	shall involve themselves to study and preservation, Importance ts and flowers, Packaging of hort est management and equipment processing industry, Storage structures, Indigenous Technology	of processing of fruits icultural commodities, Confor spices and flowers, Cucture and methods of grains	and vegetables, spices, nmon methods of storage, Quality control in Fruit and in storage, Traditional and
F	ood pro	cessing methods that are use	d by farmer to preserve	foods:
	S.No.	Method	Material used (Cereals/P	ulses/Vegetable/Fruits)
	4	Defrice antique and for anima		
	1.	Refrigeration and freezing		
	2.	Canning		
	3.	Irradiation		
	4.	Dehydration		
	5.	Freeze-drying		
	6.	Pickling		
	7.	Pasteurizing		
	8.	Fermentation		
Ρ	rocedure	es for fruit and vegetable preserva	tion	
	Procedu	res	Practical applications etc.)	(Fruits/Vegetables
	Fresh sto	•		
	Cold stor	•		
	Freezing			
		ehydration		
	Concentr	ration		

Manual for RAWE & AIA\_\_\_\_\_\_SVIAg, SVVV, Indore

### Packaging material Used for horticultural crops:

Chemical preservation
Preservation with sugar

Pasteurization
Sterilization

Students have to collect the information regarding the packaging material used for vegetables, fruits and other material at village level.

N	lanual f	or RAWE & AIA	SVIAg, SVVV, Indore
		naterial i.e. wood, ban r, crates, etc.	nboo, straw and synthetic bags, sacks, cardboards, plastic
	S.No.	Name of article	Packaging material used
	1.		
	2.		
	3.		
	4.		
	5.		
L		1	
S	torag	e Interventions	
1.	ı	Grain contamination	is influenced by
a.		Type of storag	e structure
b.		Temperature	
C.	pH		
d.	Moistu	ıre	
2.		Storage losses in	grains (%)
а.		_	ure used
b.		• •	
			rpose of storage
C.			nt
d.		•	actices
3.		What are the inse	ects that are seen during storage
Ī	S.No.	Name of Crop	Insect pests observed during storage
	1.	Paddy	
	2.	Wheat	
	3.	Maize	
	4.	Groundnut	
	5.	Pulses	
	6.	Coriander	

7.

Other Crop

Mar	nual for R	AWE & AIA		SVIAg, SVVV, Indore
4.	Name o	f the structure used for g	rain storage :	
Out	door stru	ictures		
		torod		
2) ( 3)		tored erials used for construction		
4)		innovative practice that the		
5)		olem observed by farm in st		
,		l or modern methodn practices		
		edule		
-		ing		
j.	Contro	ol Measures adopted l	by Farmers for Stora	ge pest & Rodent
	S.No.	Name of Insect C	ontrol Measures	
	1.	Beetles		
	2.	Weevils		
	3.	Moth		
	4.	Other		
i. Kin		method used by the farmer Fumigant aluminum pho	rs of the locality)	
).		Rodent rat cases	ортнао	
		Poison baits		
		Rat borrow fumigation		
	Storag	e Structure used by t	he farmers of the loc	ality
		Kothi/Banda		
١.		PAU Bin (capacity 1-5 to	o 15 quintal)	
<b>:</b> .		•	ud and bricks polythene)	
۱.		Cylindrical rubberized cl		
		CAP storage (cover and	plinth)	
		Silo Large scale storage		
.  .		Other (Specify)		
	Stude	nt have to write at leas	st two indigenous pra	
		ge adopted at village		actions dood for said
	5.616	go adopted at village		
:, )				
i)				

Manual for RAWE & AIA	SVIAg, SVVV, Indore		
Signature of Student charge	Signature of Officer In-		

<b>Manual for RAWE &amp; AIA</b>	SVIA	, SVVV	, Indore

### **VII.** Animal Production Interventions

### Information of Livestock

Credit: 1 (0+1)

Particulars	Strength of livestock	Name of the Breed
Cow class		
1. Adult cows		
a) Milking		
b) Dry		
2. Heifers		
3. Breeding bulls		
4. Bullocks		
Buffalo class		
1. Adult Buffaloes		
a) Milking		
b) Dry		
3. Heifers		
4. Bulls		
Sheep		
1. Young stock		
2. Adult stock		
3. Adult rams		
4. Adult ewe		
Goat		
1. Young stock		
2. Adult stock		
3. Adult bucks		
4. Adult doe		
Poultry/ Pig/ Fish		
1. No. of chicks/piglets/fingerlings		
2. No. of layers/broilers/boar/sow		
Cost Structure	Amount (Rs.)	Remarks
1. Cost of animals (if purchased)		
2. Cost of dairy structure and paddocks		
Total cost of dairy structures		

Manual for RAWE & AIA_	SVIAg, SVVV, Indore

### Daily maintenance and feeding expenses

Particulars	Cow		Buffa	Buffaloes		Sheep/Goats		у
	Qty.	Amt (Rs.)	Qty.	Amt (Rs.)	Qty.	Amt (Rs.)	Qty.	Amt (Rs.)
Labour male/female requirement								
2. Concentrates (kg)								
3. Green roughages (kg)								
4. Dry roughages (kg)								
5. Mineral mixtures (kg)								
6. Veterinary aids including breeding								
7. Total expenses per day								

### **Daily Milk Production and Disposal Record**

### (A) Milk Production

Date	No. of animals in milk			Milk P	roduced	Total Milk			
	Cow	Buffalo	Sheep	Goat	Cow	Buffalo	Sheep	Goat	Produced (L)

### (B) Milk Disposal (L)

Date	Home consumption (Cow/Buffalo/ Sheep/Goat) Whole milk /Milk	Utilized for making Products (Cow/Buffalo/ Sheep/Goat)	Sale (raw milk) (Cow/Buffalo/ Sheep/Goat)	Name of agency to which sold	Income (Rs.) Rate of Dairy Milk/Unions/ Milk Vendors
	products	Ghee/ butter/Khoa/ Curd/Others			

	me of the		Dairy							
	me or tne		-	Products		N		1.	(D.)	
·	dairy roducts	iry da		(Kg)	Quantity sold (Kg)		sold	Income (Rs.) Rate/kg.		
<u> </u>		•	Eggs	and Bird	s					
Birds and syst		Production of		Home consumption		Disposal of		icy to	(Rs.)	
/rearing	Eggs	Birds/ Chicks	Eggs	Birds/ Meat	Eggs	Birds		icii solu		
				Pig						
	of Anim				Disposal of Animals		Name of agency to which sold		Income (Rs.)	
·		Any	Other	Animals <i>i</i>	Bird	s				
system of		Production of		nption	Dispo	Disposal of		Name of agency to		
/rearing	Eggs	Birds/ Chicks	Eggs	Birds/ Meat	Eggs	Birds	Willell Sold			
	Birds and syst of keeping /rearing  Breed keepin  Species/Breed system of keeping	Breed & system of keeping/rearing  Species/Breed & system of keeping/rearing	Breed & system of keeping /rearing  Breed & system of keeping/rearing  Any  Species/Breed & system of keeping /rearing  Production of Animals  Any  Any  Species/Breed & system of keeping /rearing  Birds/ Chicks  Bredd & system of Animals Any  Any  Species/Breed & system of keeping /rearing  Eggs Birds/	Breed/strains of Birds and system of keeping /rearing   Eggs   Birds/ Chicks   Eggs   Eggs	Breed/strains of Birds and system of keeping /rearing   Eggs   Birds/ Chicks   Eggs   Birds/ Meat    Pig   Production of consumption   Pig    Breed & system of keeping /rearing   Production of Animals/Piglets   Animals/Piglets	Birds and system of keeping /rearing   Eggs   Birds/ Chicks   Eggs   Birds/ Meat   Eggs	Breed/strains of Birds and system of keeping /rearing   Eggs   Birds / Chicks   Eggs   Birds / Meat   Eggs   Birds	Breed/strains of Birds and system of keeping /rearing   Production of Chicks   Eggs   Birds / Chicks   Eggs   Birds / Eggs   Birds / Meat   Eggs   Birds	Breed/strains of Birds and system of keeping /rearing   Eggs   Birds/ Chicks   Eggs   Birds/ Birds   Eggs   Birds/ Chicks   Eggs   Birds/ Birds   Birds   Which sold    Pig   Production of Animals / Piglets   Animals   Animals   Animals / Birds    Any Other Animals / Birds   Birds   Birds    Any Other Animals / Birds   Birds    Species/Breed & system of keeping / rearing   Production of keeping / rearing   Eggs   Birds / Eggs   Birds   Eggs   Birds    Breed & system of keeping / Production of Consumption   Disposal of agency to which sold    Name of agency to which sold   Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold   Name of agency to which sold    Species/Breed & System of keeping / rearing   Eggs   Birds / Eggs   Birds / Eggs   Birds    Breed & system of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agency to which sold   Name of agency to which sold    Name of agen	

### **Yearly Production and Disposal Record**

Particulars		Amount (Rs.)
A)	Total production of –	
1.	Animals	
2. 3.	Milk and milk product	
3.	Dung/F.Y.M.	
4.	Eggs	
5.	Poultry Birds/Chicks	
6.	Wool	
7.	Meat	
B)	Disposal of –	
1.	Animals	
2.	Milk and milk product	
2. 3.	Dung/F.Y.M.	
4.	Eggs	
5.	Poultry Birds	
6.	Wool	
C)	Yearly income from the sale of	
1.	Animals	
2. 3.	Milk and milk product	
3.	Cowdung / F.Y.M.	
4.	Eggs	
5.	Poultry Birds	
6.	Wool	
Tota	al income (Rs.)	

### **Yearly Receipt and Expenditure Statement**

Particulars	Amount (Rs.)
A) Receipt - *	
Total income obtained from the sale.	
B) Expenditure-	
<ol> <li>Cost of feeds and fodder</li> </ol>	
2. Labour cost	
3. Expenditure on land revenue,	
energy charges etc.	
4. Medicines & Vaccines (Veterinary	
Aids)	
Total expenditure	
C) Net profit (per year)	

<sup>\*</sup> Crop production record should be used from Agronomy Proforma.

#### FINAL REPORT:

#### Brief note on work done on specific practices suggested by the 1. students-

Cow/buffalo/ others/crossbred cow

- Sanitation of sheds and Design & house/Pattern adopted eg. Cage housing in layers.
- (b) Balanced ration

i. Concentrate mixture ii. Green roughage iii. Dry roughage

- Full hand milking practice (c)
- First aid given (d)
- Vaccination to R.P., H.S., B.Q. and F.M.D. & Poultry vaccination (e)
- (f) Care of pregnant animal
- Care of calves (g)
- (h) Care of buffalo, if any
- (i) Care of bullocks
- Some important management practices (j)

like grooming, clipping, stoppage of bad habits/vices like sucking of own milk, licking of own calf.

- (k) Visit of cattle show if any
- Maintenance of Pedigree records (1)
- Analysis of work and receptivity of the farmer for improved dairy (2) practices
- (3) Remarks by farmer

Signature of Student

Signature of Officer In-charge

Manual for RAWE & AIA	SVIAg, SVVV, Indore Signature of the Evaluator
	•

\_\_\_\_\_59 \_\_\_\_\_

Manual for RAWE & AIASVIAg, SVVV, Indore					
VIII. Extension and Transfer of Technology Activities Credits: 3 (0+3)					
Study of development programme and activities of various agriculture and rural development programme, extension agencies or organization.					
Project –1: Identifying problems of farmers:					
For identifying the problems of the farmer, it is proposed to collect the information from individual farmers. The students will contact the farmers and collect the information in the schedule for identifying the specific and general agriculture problems.					
1. Name of the farmer:					
2. Village:					
3. Age:					
4. Education:					
5. Total members in family:					
Men Women Children					
6. Total area of land owned (in ha)					
Dry Irrigated Fallow					
7. Sources of information used by farmers:					
<ul> <li>i. How do you obtain the latest information about agricultural technology?</li> <li>ii. On which topics you feel that you are not getting information?</li> <li>iii. Do you regularly obtain farm information from the RAEO?</li> <li>iv. How many times you met the RAEO?</li> <li>v. Do you contact University Experts for obtaining information about agricultural technology?</li> <li>vi. Do you regularly listen to the 'Krishiwani' and other similar programmes of All India Radio?</li> <li>vii. Are you a subscriber of 'News Paper / Krishak Jagat / Krishi Vishwa' or other similar agricultural magazine?</li> <li>viii. How do you keep yourself update about the new agricultural technology to be adopted on your farms?</li> </ul>					

\_\_\_\_\_60 \_\_\_\_\_

Manual for RAWE & AIA	<u> </u>	VIAg, SVVV,	Indore
		· · · · · ·	

#### 8. Adoption of farm technology:

The student is expected to collect the information about the adoption of recommended farm technology related to major crops.

S.No.	Technology Adopted	Name of Crops/ varieties
1.	Improved varieties	
2.	Seed treatment	
3.	Recommended doses of fertilizer	
4.	Irrigation method	
5.	Use of Weedicides	
6.	Insecticide	

#### 9. Identifying specific gaps in adoption:

The student is expected to fill in this sheet about one important cereal, cash and oil seed / pulse crop grown by the farmer. The recommended practices may be based on the information collected from the research recommendation of the Department of Agriculture / Agriculture University. As regards the information with respect to the practices followed by the farmers, the information collected by student under Agronomy and Agriculture Economics may be used.

S.No.	Recommended practices	Practices followed by farmers	Extent of gap in adoption of recommended technology	Constraints in adopting recommended practices	Action oriented suggestions
1.					
2.					
3.					

10. After collecting the information in the schedule the student should record his observations in the following proforma.

S.No.	Agricultural problems identified	Action oriented suggestions for solving the problems
1.		
2.		
3.		

Manual for RAWE & AIA	SVIAg, SVVV, Indore
-----------------------	---------------------

### Project - 2: Organizing Method Demonstration (Jointly)

A method demonstration is a short time demonstration given before a group to show how to carry out an entirely new practice or an old practice in a better way.

Three students should organize a method demonstration collectively on the farmer's field and record their observation with the help of the schedule.

- 1. Topic of demonstration:
- Place of demonstration:
- 3. How the topic was decided?
- 4. What equipments and materials were there on spot before starting the demonstration?
- 5. How publicity was given to the demonstration?
- 6. How were the physical arrangements for the audience on the demonstration?
- 7. What steps were followed while conducting the actual demonstration?
- 8. How many people were present and how many were given opportunity to practice the skill ?
- 9. Whether names of the participants and list of those who contemplate the adoption of the practices were prepared for follow up?
- 10. Your suggestions for improving the effectiveness of the demonstration.

### Project - 3: Organizing Field Visits with Farmers (Jointly)

It is a method by which a group gets together for the purpose of seeing an improved performance or result of practice in actual situations. This requires the group to move out of the area for a considerable period with a pre decided programme.

A field visit will be organized and the students will record their observations with the help of the schedule.

- 1. Place of visit:
- 2. Purpose of visit:
- 3. Whether the places to be visited and the things to be seen and learnt were decided before starting the visit?
- 4. What methods were used to publicize the programme of visit?
- 5. Whether the date, period, transport, food and other related matters with the visit were properly planned?
- 6. How many farmers participated in the visit? Whether they were informed about the visit?
- 7. Which problems of farmers were identified in the field visit?

6. What efforts were made by them to overcome these difficulties? (i)

7. Your own remarks on achievements of the extension programme.

(iii)

(ii) (iii)

### Project - 5: Participation in Village Social Service Activity

The student shall participate in any one of the social service activities already existing in the village. If the activity is not in existence the students will select any one social service activity from the following activities, initiate it in the village with the involvement of people, evaluate the same and record observations in the schedule.

#### Social service activities

- (i) Tree planting in a village
- (ii) Cleaning of village
- (iii) Participation in Blood Donation Camp
- (iv) Participation in Health Care Camp
- (v) Participation in Animal Care Camp
- (vi) Use of Bleaching powder in drinking water
- (vii) Adult education
- (viii) Giving information about the importance of cleanliness of teeth, clothes etc.
- (ix) Establishing a library in village
- (x) Organizing games and sports
- (xi) Organizing social service clubs
- (xii) Providing agricultural information through Bulletins
- (xiii) Providing agricultural information through charts, graphs and samples
- (xiv) Repairing village roads
- (xv) Cleaning drainage channels
- (xvi) Construction of soak pits
- (xvii) Social Forestry
- (xviii) Recreation clubs
- (xix) Bhajan Mandals
- 1. Name of the social service activity, place and date
- 2. Who organized it?
- 3. When was it organized?
- 4. Object of activity
- 5. At what stage did you participated?
- 6. What was the nature of your participation in the activity?
- 7. Was it in the line with object of work?
- 8. Who were the other participants?
- 9. Your remarks and suggestions (a brief write up on the work done by the student)

## Proforma for Case Study of Rural Development / Agricultural **Development Programmes**

	1.	Name of Programme:	
	2.	. Name of Beneficiary:	
		Village: Di	
3.	W	Who informed about the programme?	
4.		Date of participation in the programme:	
5.		Support of the Programme: Cash	
a)			
b)			
c)			
Kin	d		
a)			
b)			
c)			
6.	Subsidi	idies Availed:	
7.	Achieve	evements of the Programme : a)	
b)			
c)			
8.	Probler	ems faced:	
a)			
b)			
c)			
9.	Sugges	estions for Improvement : a)	
b)			
c)			
10.	An ov	overview of the Programme :a)	
b)			
c)			
•	nefits, o lementa	, opinion of the beneficiaries and your own comments on or ntation)	ganization and

Signature of Officer In-Charge Student

Signature of

Manu	ואו זמו	r RAV	v 🛏 🗸	<b>~</b> ΔΙ	Δ

\_SVIAg, SVVV, Indore

# **Project - 6: Poverty Alleviation Programmes (Perception and Evaluation)**

The students during their stay in the village will have an overview of the Poverty Alleviation and Agricultural Development Programmes implemented by various agencies. They should have clear-cut perception of the incidence and causes of poverty among the villagers. The case study of beneficiaries out of the following programmes will be necessary as per profroma appended.

# (A) Agricultural Development Programmes

- 1. Intensive Agricultural Districts Programme (IADP)
- 2. High Yielding Varieties Programme (HYVP)
- 3. Watershed Development Programme (WOP)
- 4. National Agricultural Technology Project (NATP)
- 5. Agriculture Technology & Management Agency (ATMA)
- 6. Jal Dhara
- 7. Pulse Development Programme
- 8. Training and Visit System (T & V System)
- 9. Biogas Plants
- 10. National Horticulture Mission (NHM)

### (B) Poverty Alleviation Programmes

- 1. District Poverty Initiative Programme (DPIP)
- 2. Integrated Tribal Development Agency (ITDA)
- 3. Integrated Rural Development Programme (IRDP)
- 4. Swarnjayanti Gram Swarojgar Yojna (SGSY)
- 5. Mahatma Gandhi National Gramin Rojgar Yojna
- 6. Indra Awas Yojna (IAY)
- 7. Prime Minister Employment Yojna (PMEY)
- 8. Panchyatiraj System
- 9. Madhya Pradesh Rural Livelihood Project (MPRLP)

#### (C) Women development Programme

- 1. Integrated Child Development Scheme (ICDS)
- 2. Rastriya Mahila Kosh (RMK)
- 3. Mahila Samridhi Yojna (MSY)
- 4. Madhya Pradesh ,Women in Agriculture
- 5. Mahatma Gandhi National Gramin Rojgar Yojna (MGNGRY)

## (D) Indigenous Technical Knowledge (ITK)

Identification of ITK practices and mention at least one practice used by farmers. The students will acquaint themselves with this programme through the concerned agency.

Signature of Officer-In-Charge

Signature of Student

Manual for RAWE & AIA		SVIAg	ı, SVVV, Indore
Component – II (0+4)		Cred	dits: 4
IX. Agricultural Industrial Attachment (A	IA) / In-Plant	training	
Name of Industry Location  Does the industry operate in an industrial estate   Ownership  1. Public 3.	Rural Urban N Yes Mixed [	_	ess Form of
2. Private 4.	Cooperati	ve Type of C	Organization
<ol> <li>Individual Proprietorship</li> <li>Partnership</li> <li>Limited Company</li> </ol>	4. Shareholdii 5.	ng Company	Other
Objectives of the industry : Mandates of the industry : Employment :			
Number of workers engaged S.No. Category	Male	Female	Total
Working Proprietor and Partner     Unpaid Workers     Employees     a) Manager & Professional staff     b) Skilled staff     c) Unskilled Staff     d) Others			
Number of Shifts per day			
Number of hours worked per week for all shifts Source of Finance	Working	Capital (Rs	.)
<ul> <li>a) Personal and relatives</li> <li>b) Loans from banks and bank credit institutions</li> <li>c) Other (Specify)</li> </ul>	3		

Tenure of building oc	cupied for ind	duotra (	
a) Wholly owned	· —	Justry	
, \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		,	
b) Wholly rented			
c) Partly rented			
Total area occupied for	or business_		m <sup>2</sup> Contribution of the industry-promoting
environment Labour (	Costs		
S.No. Particular			Amount Paid (Rs.)
	•	cluding bonus 8	gratuity)
<ol> <li>Overtime pay</li> <li>Payment in ki</li> </ol>		drinks, fuel, etc.	+
		social security so	chemes
Training expe			
6. Other labour	costs (Please	specify)	
Purchases			
Goods Purchased (Va	alue in Rs.)		
a) Purchase	e of goods to	be sold in the	same condition
b) Raw mat	terial & suppl	lies purchased	for transformation
Current Technology St	atus		
Type of Machines	Percentage	Average Age	Expected average life span of equipment
Manual			
Automatic			
Computerized		_	
Does the industry have	e any invest	ment plan	Yes/No If yes, please indicated
whether for			
a) Replacemen	nt of old equip	oment	
b) Increasing p	roduction ca	pacity	
c) Upgrading to	echnology	•	
Value of Stocks (At th	0,	nlant training)	
Description		9,	Value (Rs.)
Material supplies and	raw materials	etc	Tailab (1103)
Semi finished product	S		
Finished product Goods purchased for	roods		
	resale		

\_\_\_\_\_68 \_\_\_\_

Manual	for RAWE & AIA				SVIA	g, SVVV, Indore
Value of	fixed assets					
S.No	. Particulars			Value	(Rs.)	
1.	Land					
2.	Building & Other cons					
3. 4.	Transport & Other equ	uipment				
	Others					
Output	<u> </u>	la a es	<u> </u>		ı	
S.No.	Description of main product	Unit	Exported		Locally so	Id
1.	product		Quantity	Value	Quantity	Value
2.			Quantity	T GI G G	- Cuuntity	1
3.						
Direct set Is the incomplete type Quality in Are the putype of collist the quality of Quality Are there	y control staffe any environmental reg	association  certified?  irchased also continuous.  ulations?		Yes	No pes the in No	o If yes, indicate
Yes	have treatment facilities  ure of Student e	No	No need	Signatu	re of Off	icer In-

COLLEGE OF AGRICULTURE,
RAWE PROGRAMME Year

#### **UNDERTAKING**

- 1. I express my willingness to participate in the RAWE programme commencing from ......
- 2. I abide to follow all the guidelines and instructions given to me from time to time by my supervisor
- 3. I will be fully responsible for any loss or injury, which I may suffer while or in consequence of my stay in the village or traveling etc.
- 4. I will depict good conduct & behavior during my village stay and will not indulge in any conflict or coercive activities, which may tarnish of the institution of which I am student.
- 5. I will devote my complete RAWE tenure in the activities assigned to me, If any deviations from the norms are reported, I may be dropped from the roll.

Date:	Signature of Student & Enrolment No
Name	
Father's Name	
	E,
RAWE PROGRAMME Year	

### **UNDERTAKING**

- 1. I express my willingness to participate in the RAWE programme commencing from ......
- 2. I abide to follow all the guidelines and instructions given to me from time to time by my supervisor
- 3. I will be fully responsible for any loss or injury, which I may suffer while or in consequence of my stay in the village or traveling etc.
- 4. I will depict good conduct & behavior during my village stay and will not indulge in any conflict or coercive activities, which may tarnish of the institution of which I am student.
- 5. I will devote my complete RAWE tenure in the activities assigned to me, If any deviations from the norms are reported, I may be dropped from the roll.

Date:	Signature of Student & Enrolment No
Name	
Father's Name	

		INAVE I NOON	AMME Year
		II.	NFORMATION SHEET
1		Name of Student (In capital letters)	
2	2	Father's/Guardian Name	
3	3.	Aadhar Card No.	
4		Bank Account details of Student	Name of Bank/Place:
			Account No.:IFSC Code:
5	j.	Permanent Address	
		Telephone No./Mobile No.	
6	<b>)</b> .	Present Address	
		Telephone No./Mobile No.	
7	<u>.                                    </u>	Blood group	
8		Any specific health	
	-	problem/illness	
9	).	Any other details	
			b best of my knowledge & belief. Date:
Sig C(	gna OL AW	ature of Student	TURE,
Sig CO RA INI	OL AW	LEGE OF AGRICUL E PROGRAMME Year	TURE,
Sig C(	OL AW	LEGE OF AGRICULTE PROGRAMME Year RMATION SHEET Name of Student (In capital	TURE,
Sig C( RA INI	OL AW FO	LEGE OF AGRICUL E PROGRAMME Year RMATION SHEET Name of Student (In capital letters)	TURE,
Sig CC RA INI	gna OL NW FO	LEGE OF AGRICULTE PROGRAMME Year RMATION SHEET Name of Student (In capital letters) Father's/Guardian Name	TURE,
Sig C( RA INI	gna OL NW FO	LEGE OF AGRICULTE PROGRAMME Year RMATION SHEET Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No.	TURE,
Sig CC RA INI	OL NW FO	LEGE OF AGRICULTE PROGRAMME Year RMATION SHEET Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No.	TURE,
Sig CC RA INI	OL NW FO	LEGE OF AGRICULTE PROGRAMME Year RMATION SHEET Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No.	TURE,
Sig CC RA INI	Glaware St.	LEGE OF AGRICULTE PROGRAMME Year RMATION SHEET Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No.	TURE,
Siç  C(C RA INI	Glaware St.	E PROGRAMME Year  RMATION SHEET  Name of Student (In capital letters)  Father's/Guardian Name  Aadhar Card No.  Bank Account details of Student  Permanent Address	TURE,
Siç  C( RA INI 1 2 3 4 5	gna OL AW FO	RMATION SHEET  Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No. Bank Account details of Student Permanent Address Telephone No./Mobile No.	TURE,
Siç  C(C RA INI	gna OL AW FO	E PROGRAMME Year  RMATION SHEET  Name of Student (In capital letters)  Father's/Guardian Name  Aadhar Card No.  Bank Account details of Student  Permanent Address	TURE,
Siç  C( RA INI 1 2 3 4 5	gna OL AW FO	RMATION SHEET  Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No. Bank Account details of Student Permanent Address Telephone No./Mobile No.	TURE,
Siç  C( RA INI 1 2 3 4 5	gna OL AW FO	RECOUNT AGRICULT E PROGRAMME Year  RMATION SHEET  Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No.  Bank Account details of Student  Permanent Address  Telephone No./Mobile No.  Present Address	TURE,
Sig  C( RA INI 1 2 3 4 5	gna OL NW FO	LEGE OF AGRICULTE PROGRAMME YearRMATION SHEET  Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No. Bank Account details of Student  Permanent Address Telephone No./Mobile No. Present Address Telephone No./Mobile No.	TURE,
Sig  C( RA INI 1 2 3 4 5 6	GINAW FO	E PROGRAMME Year RMATION SHEET  Name of Student (In capital letters) Father's/Guardian Name Aadhar Card No. Bank Account details of Student  Permanent Address Telephone No./Mobile No. Present Address Telephone No./Mobile No. Blood group	TURE,

COLLEGE OF AGRICULTURE, .....

The above information is correct to best of my knowledge & belief. Date: Signature of Student

COLLEGE OF AGRICULTURE,
MEDICAL FITNESS CERTIFICATE
1. Certified that I have examined Shri/Kuand found his
/her FIT to attend village stay programme under RAWE.
2. I also certify that the above mentioned student has been inoculated/vaccinated against small pox, typhoid and cholera.
Signature of student
Date Signature Medical Officer (With seal)
COLLEGE OF AGRICULTURE,
RAWE PROGRAMME Year
MEDICAL FITNESS CERTIFICATE
Certified that I have examined Shri/Ku
S/o,D/o and found his //her FIT to attend village stay programme under RAWE.
2. I also certify that the above mentioned student has been inoculated/vaccinated against small pox, typhoid and cholera.
Signature of student
Date (With seal) Signature Medical Officer

# 

The students are advised to carry with them the following:

- 1. Sufficient money for expenditure
- 2. Diary
- 3. Note Book
- 4. Bedding
- 5. Mosquito net/Repellant
- 6. Woolen garments
- 7. Plate, Tumbler, Glass, Water Bottle, Mug, etc.
- 8. First Aid kit
- 9. Gum boots
- 10. Torch
- 11. Candles
- 12. Bucket

Dean
College of Agriculture



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Shri Vaishnav Institute of Agriculture Indore (M.P.)