

## **INSERVICE TRAINING NEEDS OF AGRICULTURAL EXTENSION OFFICERS**

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### *Introduction*

Agricultural Extension Officers must have the knowledge and skill in the new agricultural technology if they are to be efficient to perform the functions expected of them. Inservice training has been accepted as an important method for increasing the efficiency of employees. As Hall (1954) has defined, training is a process of aiding employees to gain effectiveness in their present or future work, through development of appropriate habits of thought, action, skills, knowledge and attitude. A training to be effective must be planned in accordance with the needs of the trainees. This study has been undertaken with the main objective of determining scientifically the inservice training needs of the Agricultural Extension Officers.

### **Materials and Methods**

This study was conducted in Kerala State. Data were collected through questionnaire. Training need was measured by a "training need scale" which was developed for this study. A comprehensive list of training areas was prepared through discussion and review of relevant literature. From the list, seventyfour important and relevant areas were selected after discussion with specialists and extension workers. These selected items were pre-tested and the modified form has been included in the questionnaire each arranged against a four point scale. The respondents were required to check one of these points of all the seventy-four items. The ratings given to the items were quantified by assigning scores of 4, 3, 2 and 1 for "need very much training", need much training", "need some training" and "need no training" categories respectively. In addition to the "need scale" the questionnaire also included questions designed to measure the perception regarding the venue, time, duration and interval of the training to get a comprehensive view of the subject under study. The questionnaire was mailed to the Agricultural Extension Officers of the 144 Blocks in Kerala State. One hundred and seven officers responded. Data were analysed using appropriate methods.

## Results and Discussion

### *Training need perception of major subject areas*

The specific seventyfour training items were grouped into six main subject areas and the mean need perception score was calculated for each of the six subject areas. The data are presented in Table 1. The Table reveals that Engineering has been perceived as the area which need more training followed by Plant Protection, Agronomy, Soil Science, Horticulture and Extension in the order of importance. Increasing use of machine in agriculture in rural areas and the increase in the incidence of pests and diseases might have created a desire among the Agricultural Extension Officers to know more details and new development in these areas. They have felt the least need for inservice training in extension education inspite of the fact that 105 out of the 107 respondents opted for extension, when asked to give their option among teaching, research and extension. The importance of training in extension has not been felt by them which reveals their lack of interest in doing extension work following scientific principles. This finding is in accordance with the finding of Sharma (1966) who observed that the Animal Husbandry Extension Officers in Punjab expressed least need for training in extension education.

### *Training need perception of specific subject matter areas*

Table 2 presents the list of specific subject matter areas with a need perception score of 2.5 and above to indicate the specific areas that were perceived as important by the Agricultural Extension Officers.

**Table 1**  
**Mean training need perception score and ranks of the different major subject matter areas.**

S. No.	Subject matter area	Mean perception score	Rank
S1	Agronomy	1.143	3
S2	Plant Protection	1.519	2
S3	Engineering	1.673	1
S4	Horticulture	1.104	5
S5	Soil Science	1.130	4
S6	Extension	0.018	6

*Preference for training venue, time, duration and interval*

The data presented in Table 3 reveal that Agricultural College has been preferred as the most suitable venue for the inservice training. This indicates that the Agricultural Extension Officers consider Agricultural College as the seat of new and advanced knowledge in agricultural science. April and May have been preferred by the Agricultural Extension Officers as the time most suitable for the inservice training. The Agricultural

**Table 2****Mean training need perception score of specific subject matter areas**

No.	Specific area	Mean Score
1.	New plant protection <b>chemicals</b>	3.15
2.	New developments in insect control (radiation, sex <b>hormones</b> etc.)	3.14
3.	Operation of farm equipments (tractor, tiller, <b>pumpset</b> etc.)	3.05
4.	Chemical weed control for <b>important</b> crops	2.98
5.	Maintenance of farm equipments (tractor, tiller, <b>pumpset</b> etc.)	2.96
6.	<b>Pesticides</b> —their formulation and correct use	2.93
7.	Important virus diseases and their control	2.91
8.	Important bacterial diseases and their control	2.89
9.	Use of antibiotics in plant disease control	2.85
10.	Identification of important crop pests and their biology and control.	2.84
11.	Methods of integrated control of crop pests and diseases.	2.80
12.	Qualities of seeds of new high yielding varieties.	2.80
13.	Methods of increasing soil productivity	2.77
14.	Mushroom cultivation techniques	2.74
15.	Plant diseases of different crops and their control	2.69
16.	Seed testing techniques and seed certification.	2.67
17.	<b>Fungicides</b> — their formulation and use	2.67
18.	New developments in seed treatment	2.67
19.	New chemical fertilizers	2.66
20.	New development in vegetable cultivation	2.65
21.	Water management practices and irrigation techniques.	2.64
22.	Disease causing fungi and their life history	2.64
23.	Soil sampling, testing and interpretation of data	2.63
24.	Methods of quality seed production	2.52
25.	Recent advances in fruit production	2.50

**Table 3**  
**Preference for training venue, time, duration and interval**

Sl. No.	Mean preference score	Rank
<b>A. Venue</b>		
1. Agricultural College	3.41	1
2. Research Stations	2.50	2
3. District Farms	2.13	3
4. State Headquarters	1.53	4
5. Extension Training Centres	1.42	5
6. Regional Headquarters	1.39	6
7. District Headquarters	1.31	7
8. Block Headquarters	1.17	8
9. Village	1.15	9
<b>B. Time</b>		
1. January	1.25	10
2. February	1.82	4
3. March	2.91	3
4. April	3.43	1
5. May	3.42	2
6. June	1.81	5
7. July	1.01	12
8. August	1.08	11
9. September	1.35	8
10. October	1.73	6
11. November	1.33	9
12. December	1.41	7
<b>C. Duration</b>		
1. One week	1.21	7
2. Two weeks	1.87	5
3. Upto one month	2.21	3
4. Two months	3.21	2
5. Three months	3.70	1
6. Four months	1.93	4
7. More than four months	1.71	6
<b>D. Interval</b>		
1. One year	1.82	4
2. Two years	3.71	1
3. Three years	3.23	2
4. Four years	2.91	3
5. Above four years	1.43	5

Extension Officers prefer these months because they have comparatively less work during this period. Three month duration for training is preferred by the Agricultural Extension Officers. Two year interval has been preferred as most appropriate followed by three year interval.

### **Summary**

To study the inservice training need of the Agricultural Extension Officers data were obtained from 107 officers through a questionnaire which had devices prepared to measure the required variables. The study revealed that Agricultural Extension Officers perceived engineering and plant protection as the important areas where there is need for more inservice training. New plant protection chemicals, use of radiation and sex hormones in insect control, operation and maintenance of farm equipment, chemical weed control, important bacterial and virus diseases were some of the specific areas which were perceived as important areas to be included in an inservice training programme for Agricultural Extension Officers. Agricultural College has been preferred as the most suitable venue for the inservice training, April and May has been perceived as the most suitable period for the inservice training. The Agricultural Extension Officers preferred training of a duration of two to three months. They felt that inservice training will have to be given once in every two to three years.

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