

LESSON NOTE FOR WEEK ONE AND TWO (1\$2) ENDING 19TH SEPT, 2025.

SUBJECT: AGRICULTURAL SCIENCE.
TOPIC: AGRICULTURAL EXTENSION.
CLASS SS2
DATE: 8TH SEPTEMBER, 2025

Meaning of agricultural extension.

Agricultural extension is the process, system or service which assist farmers through educational procedures in improving farming methods and techniques. In other words, agricultural extension is the process whereby the beneficial products of research are taken to the farmers and the problems of farmers are taken to research institution. Agricultural extension is an out – of – school voluntary agricultural educational program that involves the spread out dissemination of information on improvement in agriculture from researchers to farmers.

OBJECTIVES OF AGRICULTURAL EXTENSION.

1. To educate farmers and enable them to abound the old way of farming.
2. To help improve the standard of living of rural dwellers.
3. To help identify proper marketing channel.
4. To help farmers access and supervise agricultural loans
5. To link farmers with researchers etc.

PRINCIPLES OF AGRICULTURAL EXTENSION.

1. Extension education should start where people are.
2. Gain confidence of audience
3. Work together with or involves the farmer in creating a program
4. Extension programs should meet the need of the participant
5. Programs must undergo continuous evaluation
6. Programs should be flexible.

Target groups of extension agents includes and is not restricted to: commercial farmers, community development association, farmers' cooperative societies, fisher men, bee keepers etc.

ROLES OR FUNCTIONS OF AGRICULTURAL EXTENSION.

1. It encourages farmers to increase their production of food crop, cash crops and livestock.
2. It teaches improved practices to farmers in the cultivation, rearing and processing of crops and livestock.
3. It helps to collect and collate basic information relating to rural programs.
4. It acts as an intermediary between farmers and research institutes.
5. It helps to supervise the beneficiaries of agricultural loans.
6. It helps to change people attitude towards their problems etc.

PROBLEMS FACING AGRICULTURAL EXTENSION.

1. Farm inputs are inadequate and often get to the farmers very late.
2. Inadequate transport facilities for extension staff.
3. The agents are not sufficiently motivated.
4. The supervision of the farmers by the extension agents is weak.
5. Poor monitoring of activities or performance of the extension gents
6. Very few extension workers are available to work with too many farmers etc.

EXTENSION METHODS.

Methods used in dissemination new ideas and techniques to farmers are grouped into three classes:

1. Mass media method
2. Individual method
3. Group method.

Mass media method: This is used to create awareness and interest in the new ideas and techniques among the majority of farmers. This method enables many farmers to know the new innovation. This method involves the

use of publications, leaflets, posters, agricultural shows and exhibitions, cinema vans, newspaper, radio and television, new letter, new bulletins, pamphlets, film shows etc.

ADVANTAGES OF MASS MEDIA METHOD

1. Large audience can be reached.
2. Does not necessarily require the presence of an agent
3. It eliminates stress
4. It is not time consuming
5. Print media information last long and can serve as point of reference.

DISADVANTAGES OF MASS METHOD

1. It is very expensive to operate.
2. Language barrier might hinder effective communication.
3. Illiterate farmers might not benefit from this method
4. No effective feed back
5. Poor farmers may not get the information since they do not own radios or television etc.

Individual method: This involves the direct contact between individual farmers and the extension worker. More attention is given to the farmer by the extension worker. Examples of individual method include home visit, farm office visit, telephone call, personal letters and text messages.

ADVANTAGES OF INDIVIDUAL METHOD.

1. More attention is given to the farmers.
2. Dissemination of information is more effective.
3. It gives room for feedback.
4. Farmers have opportunity to ask question.
5. it saves time.
6. It makes adoption of innovation more effective.

DISADVANTAGES OF INDIVIDUAL METHOD.

1. It is time consuming.
2. It is very tedious
3. It is expensive
4. It does not give room for reaching large group of farmer.
5. There may not be enough workers to carry out this task effectively.

Group method: This method enables the extension workers to teach the farmers in group. Example of group methods include group discussion, lectures, workshops method, demonstration method, result demonstration, farm works and excursion, field trips, symposia, short courses, debates, general meeting etc.

ADVANTAGES OF GROUP METHOD.

1. It enables extension workers reach out to large group of farmers at a time.
2. It saves time.
3. It is less tedious
4. It saves money
5. Adoption by one can enhance others.

DISADVANTAGES OF GROUP METHOD

1. Some farmers might easily discourage others from adopting the innovation
2. Farmers may not be regular at meetings.
3. There may not be enough workers to carry out this task effectively.

AGRICULTURAL EXTENSION PROGRAMS IN WEST AFRICA.

These are bodies or agencies which have extension services unit that can teach and train extension workers on the job approved their daily extension services so that they will be transfer these innovations to the rural farmers. Examples of extension programs include:

Agricultural Development Programs (ADP), Farm Settlement Scheme, Agro-Service Centres, Research Institutes. Past and present government food production programs e.g. Operation Feed the Nation (OFN), Green Revolution etc.

AGRICULTURAL EXTENSION OFFICE/WORKER/AGENT.

This is a person who is involved in dissemination of new ideas and techniques to the farmers. He acts as an intermediary between researchers and farmers.

QUALITIES OF EXTENSION OFFICER/ WORKER.

1. He must be knowledgeable in his field of operation to enable him teach farmers.
2. He must understand the local language of the local community he operates because most farmers are illiterate.
3. He must have interest in what he is doing.
4. He must not easily get annoyed because he will come across various categories of farmers that may ask him foolish questions.
5. He must be persuasive in his operation i.e. he should have the ability to always encourage the farmers when introducing new innovation.
6. He must have enough materials and financial resources to carry out his duties.

FUNCTIONS OR ROLES OF AN EXTENSION OFFICER/ WORKER/ AGENT.

1. He consults and reflect on rural or agricultural developments projects.
2. He plans and executes farming educational programs.
3. He organizes and supervises farmers group i.e. meeting, cooperatives and workers' meetings.
4. He liaises with other agencies that may have influence on rural development and the farmers.
5. He helps to improve the outlook of farmers towards the problems or difficulties.
6. He acts as a connecting link between the researchers and the farmers etc.

PROBLEMS OF AGRICULTURAL EXTENSION OFFICER/WORKER/AGENT.

1. High level of illiteracy among farmers may affect the rate of adopting of new farming techniques.
2. Absence of credit facilities to farmers make them uninterested and prevent the implantation of accepted innovation
3. Insufficient motivation of the extension workers by way of better remuneration for his effort tends to retard his work.
4. Language barriers lead to improper dissemination of new innovation by the extension worker.
5. Inadequacy of well-trained extension staff make the extension worker have wider area and more farmers than he can cope with etc.

Diffusion: This a process of spreading new ideas and information from research station to reach farm families. Diffusion is the movement of new ideas and information from area of higher concentration to rear of lower concentration through a medium (extension officer) and extension method. New ideas and techniques are known as innovation.

Five steps or stages of diffusion process include;

1. Awareness
2. Interest
3. Evaluation
4. Trail
5. Adoption/rejection/discontinuation.

Adoption of new innovation: this involves acceptance and practice of new or modern farming technique introduces in the rural area.

This is largely dependent on:

1. Level of education
2. Attitude of farmers
3. Financial status of farmers

4. Size of farm land
5. Presence of extension workers
6. Result of demonstration plot.

Categories of farmers based on adoption of innovation

1. **Innovators:** the introduce new ideas of farming seen in other places to their dwelling. Due to inexperience or error they might suffer losses and can be encouraged by giving expert advice, granting credit facilities, providing and subsidizing farm inputs, granting insurance cover, providing market for sale of produce.
2. **Early adopters:** Are less quick to accepting innovations which might be largely due to some of the aforementioned factors. If percentage of these set is as low as 10% then such innovation has not been uniformly accepted maybe due to hitch during demonstration or idea is too complex to understand.
3. **Late adopters:** this group are very conservative and need assurance before accepting new innovation. They usually have the largest percentage in a group
4. **Never adopters:** They are extremely conservative and will not accept new innovation no matter the persuasion. Their percentage is usually low.

Evaluation.

1. Define agricultural extension
2. State five objective of agricultural extension.
3. Explain the following mass media, individual and group method of extension.
4. What are the steps for diffusion process?

Assignment.

1. The following are extension methods except? A. mass method. B. individual method. C. group method. D. discussion method.
2. Agricultural extension serves as ----- between research institute and farmers. A. gap. B. command centers. C. bridge. D. extension.
3. Categories of farmers based on adoption of innovation are the following except? A. early adopter. B. late adopter. C. never adopter. D. perfect adopter.
4. Television, radio, posters are ----- method of extension. A. group. B. mass. C. mass media. D. individual.
5. Which of the following group of extension method provides feedback? A. mass media method and individual method B. personal method and mass media method. C. individual and group method. D. group and mass media method.

Theory

1. Discuss the following film show, field trips