

The effective extension methods used for agronomic knowledge dissemination and educating the farmers

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Abstract: -

Agricultural extension methods are crucial for improving farmers' knowledge and skills, hence influencing productivity and sustainability in agricultural practices. Efficient extension strategies aided in bridging the knowledge gap among farmers. These strategies promote experiential learning, empower farmers to make educated choices, and adjust to changing agricultural circumstances. The efficacy of these strategies in enhancing productivity is primarily ascribed to their customised implementation, farmer-oriented emphasis, and capacity to meet local requirements. This article emphasises the essential Agronomic extension methods used for educating the farmers contributing to the efficacy of these strategies in improving agricultural output and their wider implications for rural development.

Keywords: Agronomic extension methods, extension, agronomy.

A. Introduction

The primary responsibility of extension workers is to provide education to individuals living in rural areas. Extension approaches are utilized by extension workers. These strategies are referred to as extension-teaching tools.

The selection of a channel or mode of communication, referred to as the extension teaching method, typically relies on the quantity and geographical distribution of the intended recipients, as well as the available time for communication.

The methods are classified into

individual, group, and mass categories.

B. Details with subtopics:

I) Extension through individual contact methods

Introduction

In the individual approach, the extension agent engages in one-on-one communication with individuals, ensuring that each person is treated as a distinct entity. This approach is used when there is a small number of individuals to be reached who are easily

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situated nearby. Effective communication requires a competent communicator and enough time for communication. Examples of individual methods include farm and home visits, farmers' calls, personal letters, adaptive or micro kit trials, and farm clinics.

Benefits,

- ⇒ It assists the extension agent in establishing rapport.
- ⇒ Enables acquiring direct experience and understanding of agricultural and domestic environments.
- ⇒ Facilitates the process of choosing administrators and local leaders.
- ⇒ Facilitates the alteration of individuals' attitudes.

Few disadvantages were, including its

- ⇒ Time-consuming nature and relatively high cost.
- ⇒ The audience coverage is limited.

The specific methods are:

1. **Farm and Home Visit:** This refers to a personal interaction between the extension agent and the farmer or homemaker at their residence or farm, specifically for the purpose of providing extension services.
2. **A Farmers' Call** refers to a request made by a farmer or homemaker at the office of an extension agent to seek information and support.

3. **Personal Letter:** This correspondence is written by the extension agent to a specific farmer or homemaker in relation to extension activities. This should be seen as an alternative to direct human interaction.

4. **The Adaptive or Minikit Trial** is a strategy used to assess the appropriateness of a new agricultural practice in the specific circumstances of farmers. This may be seen as a practice of on-farm participatory technology development, where the farmer's preferences and opinions about the technique have the utmost significance.

5. **The Farm clinic** is a dedicated institution designed to assist farmers in diagnosing and treating agricultural issues, as well as providing specialised guidance to individual farms.

II) Extension through group contact methods

This strategy involves the extension agent engaging with people collectively rather than on an individual basis.

Advantages

- ⇒ Allows extension agents to engage in direct, in-person interactions with multiple individuals simultaneously.

- ⇒ Facilitates targeted outreach to certain segments of the target audience.
- ⇒ Enables the exchange of knowledge and expertise, hence enhancing the learning of all group members.

Few limitations

- ⇒ The presence of a wide range of interests among group participants might lead to a challenging learning environment.
- ⇒ Various factors such as vested interests, caste groups and village factions can impede the open exchange of ideas and decision-making within the community.

a. Method demonstrations

It is used to demonstrate the methodology of doing tasks or implementing new procedures, such as clean milk production, paneer production and so on. This strategy is often used for collective entities.

b. Result demonstration

The purpose of result demonstration is to validate the benefits of proposed techniques and showcase their suitability for local circumstances. The activity is carried out by a farmer under the close supervision of an extension expert.

c. Group meeting

The topic of discussion is group dynamics and communication.

It is an effective approach to engage the local community in fostering local leadership and making decisions on a course of action in a democratic manner.

d. Small group meeting

It is a method of teaching specific skills to a group of individuals who require them by establishing suitable learning conditions. This is a highly efficient approach for the dissemination of technologies.

e. Field day or farmer's day

It is a strategy used to persuade individuals to embrace a new practice by demonstrating the actual results produced via the application of the technique in real-life field situations.

f. Exposure visits

It helps the farmers to learn significant improvements in agriculture and it is guided by agricultural expert.

III) Extension through mass contact method

In this approach, the extension agent engages with a diverse and extensive audience, disregarding their specific individual or collective identities.

Advantages

- ⇒ It is effective for generating widespread awareness among the population. It facilitates the spread of agricultural information and the alteration of opinions.

- ⇒ A significant number of individuals are able to speak with each other in a short period of time.
- ⇒ Enables expedited communication during emergency situations.

Limitations:

- ⇒ There is limited opportunity for personal interaction with the audience.
- ⇒ Challenges in obtaining feedback data and assessing the outcomes.

a. Exhibition

It is designed to captivate the attention of the customers in the items being shown. It is an excellent medium for effectively addressing a vast audience, particularly those who are illiterate or have limited literacy skills.

b. Campaign

A campaign is used to direct the public's attention towards a certain issue, such as milk adulteration, immunisation and prevention of animal illnesses, tick control, and so on.

c. Print media

Newspapers, magazines, bulletins, brochures, folders and pamphlets are other forms of mass media that effectively disseminate information to a substantial audience of literate individuals.

d. Radio

Radio is considered a very influential medium of communication. It is a very effective means of communication that may

reach a vast audience simultaneously, while incurring little cost. Extension experts use radio as a means of disseminating knowledge on novel methodologies and approaches.

e. Television

It has a combination of both auditory and visual elements, making it very ideal for the distribution of agricultural and dairy-related information. Teaching is more effective when focused on a particular task.

C. Best extension education method to educate farmers

In our practical experience, group method demonstration of extension is best for educating farmers at field level. Specially the method demonstration method of extension communication is the best extension method working in field situation and the reasons for creating impact in production are as follows.

Farmers learn best through seeing and doing. Method demonstrations provide a tangible, visual learning experience that theoretical explanations cannot match.

i. Contextual relevance:

Demonstrations are conducted in the actual field conditions that farmers face. This relevance ensures that farmers can see how the new methods perform in their specific environment, addressing local soil, climate, and pest challenges.

ii. Building trust and credibility:

Seeing successful demonstrations builds trust among farmers.

iii. Immediate feedback and adaptation:

Farmers can provide immediate feedback during demonstrations, allowing for real-time adjustments.

iv. Enhanced knowledge retention:

Practical involvement in demonstrations enhances knowledge retention. Farmers are more likely to remember and apply techniques they have physically practiced rather than those they have only heard about.

v. Community learning:

This collective learning helps spread new techniques more rapidly across the community as farmers share their experiences with peers.

D. Case study:

Bhutada et al. 2020 conducted front line method demonstration of improved sorghum technology on sorghum yield and its

production in Banwas village, Vasmat Dist. Parbhani, State Maharashtra. The study suggests strengthening linkages with department and converging the demonstration with Government schemes for large-scale adoption of farmers' fields. FLD can be a good option for enhancing farmers' income.

E. Summary

In short, classification summary of extension methods used for educating farmers (Table -1).

F. Conclusions:

The effectiveness of the extension worker as a teacher in achieving the intended changes in learner behaviour relies on their expertise in selecting the most appropriate extension communication approach strategy for the given scenarios. Comprehend the distinct approaches of individual, group, and mass methods, together with their respective benefits and drawbacks, for implementation in extension program activities. Make informed

Table 1: summary of extension methods used for educating farmers

Individual contact method	Group contact method	Mass contact method
Farm & home visits	Method and result demonstration	Print media (<i>viz.</i> Newspapers, magazines, leaflets, posters, pamphlets, circular letters, bulletins)
Office calls	Group meetings, discussions	Electronic media (<i>viz.</i> , radio, television, cell-phones)
Telephone calls	Conferences, seminars, workshops, etc	Internet-based media
Personal letters	Field trips, field days, campaign	Exhibitions, dairy mela

choices on the utilisation of appropriate extension methods, taking into account the specific requirements and attributes of the target groups. The method demonstration extension method is a highly effective tool for enhancing agricultural production. Its hands-on, practical approach, combined with its ability to address local conditions and build trust among farmers.

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