

CHAPTER SEVENTEEN

MONITORING AND SUPERVISION OF AGRICULTURAL EXTENSION SERVICES

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Meaning of monitoring

Monitoring is defined as the timely gathering of information on project inputs, output and complementary activities that are vital to the attainment of the project objectives. Monitoring assesses whether the inputs of the project are delivered and used for the intended purpose. It also determines the initial effects as planned and alerts project management and policy makers to potential implementation problems requiring corrective measures. Therefore, monitoring has to provide quick and continuous feedback to project management with a view to keeping track of an extension programme and to guide its course of action. Management information needs include six kinds of information: diagnostic information, implementation information, utilization information, impact information, situation information, and information for review (Ajayi, 2006).

Monitoring indicators

i. **Project inputs:** These are the quantities of resources such as capital, manpower, goods, services and technologies required to assist the farmers to increase their production.

ii. **Project outputs:** These are the physical outcomes of the project inputs such as quantities of seeds, fertilizers, chemicals used and the percentage of the farmers who used them.

iii. **Project effects:** These are the effects of the project output of farmers, such as the increase in yield per hectare.

iv. **Project impact:** These are the changes in living standards of the farmers resulting from project input, output and effects. For instance increase in farmer's income and socio-economic status.

Criteria for selecting monitoring indicators:

The criteria for selecting indicators for monitoring purpose depend upon the purpose to be achieved, available resources and time. However, the following criteria are usually suggested:

i. **Simplicity:** The indicator should be simple enough to be understood by non-specialists.

ii. **Unambiguous definition:** It should be clearly defined and have plain meaning that can be understood in the same way by any reasonable person.

iii. **Ready determination:** The data should be obtained without undue difficulty.

iv. **Accurate measurement:** The indicator should be measured accurately.

v. **Validity and Reliability:** The indicator should actually measure what it is supposed to measure and also reliable.

vi. **Relevance:** It should be geared to the specific needs of decision makers and be relevant to project objectives.

vii. **Specificity:** It should reflect changes only in the situation concerned and should measure specific conditions that the project aims to change.

viii. **Consistency:** The value of indicators should stay constant so long as they are collected under uniform conditions. The indicators should be verifiable.

ix. **Sensitivity:** Indicators should be sensitive to changes in the situation being observed. They should be sensitive enough to reflect changes in the phenomenon.

Principles of monitoring extension programme

According to Misra (1994) the following are the principles of monitoring:

1. **Simplicity:** A complex or complicated monitoring system is self-defeating. The basic task of monitoring is to simplify the field-level complexity.

2. **Timeliness:** Timeliness is of great essence in monitoring. Management requires input from the monitoring system so that timely action can be taken because agricultural production is time bound.

3. **Relevance:** It must concern itself only with parameters which are relevant to programme objectives. This also ensures that monitoring does not generate information that is not used or not usable by management.

4. **Reliable information:** Management will rely on monitoring findings only if the information gathered is believed to be reasonable and accurate.

5. **Participatory Monitoring efforts:** Effort should be made to ensure participation by all concerned with extension, including field-level staff, Subject-Matter-Specialists (SMSs) and extension's clients i.e. farm families among others.

6. **Flexibility:** Monitoring procedure should be flexible to give room for changes whenever the need arises. It should not be too rigid.

7. **Action oriented:** Monitoring often leads to action. Consequently, it should follow feasible practical approaches, keeping the immediate needs of extension's clients (farmers) in mind. It is pertinent to note that information for which there is no intended use should not be generated.

8. **Reasonable cost-effectiveness:** Monitoring efforts cost money and time. It is therefore essential to make it cost-effective. While principles of simplicity, time-liness, relevance, and accuracy will lead to cost-effectiveness, computerisation also can help to make monitoring more cost-effective by reducing staff hours in data processing.

9. **Top management oriented:** Monitoring units should keep in mind the requirements of top management when designing and operating a monitoring system.

10. **Monitoring units represent specialised undertakings:** Monitoring is not merely concerned with the collection and analysis of data, but with diagnosing problems and suggesting alternative pragmatic solutions.

Approaches to monitoring of extension activities

Misra (1994) stressed that extension activities can be monitored in four ways as follows:

1. Routine or day to day monitoring

This can be carried out by the use of annual extension plan of work and calendar of operations. The calendar of operations shows month-wise, when the activities will be carried out and who will perform them. The annual extension plan and calendar of operation should be prepared in details well in advance to facilitate routine monitoring to the supervisors. Supervisors can determine the progress and deviations with a view to recommending corrective measures immediately.

2. Completion of quarterly monitoring table

Quarterly monitoring tables can provide information on some basic indicators. This information should indicate the speed and direction of progress against the plan and deviation, if any. Based on this information, appropriate corrective measures could be offered to the project management.

3. Special monitoring surveys of extension activities

The information gathered through routine monitoring and quarterly reports may not be adequate to the project management. Sometimes there may be biases in routine monitoring. More so, not all indicators and aspects of extension can be monitored by routine monitoring and quarterly tables. Empirical surveys and studies are of great value to the project management by providing essential information needed to implement the project. Such surveys should be designed by trained evaluators who are familiar with the functioning of individual project.

4. Monitoring by collecting qualitative information

Certain type of information cannot be quantified, for such information collection, a case study or simple observations and discussion with the concerned persons will provide insight into the problems. The in-

depth case studies for collecting qualitative information, however, require sound preparation by evaluators.

Stakeholders in monitoring

There are many stakeholders in monitoring activities. The funding agency wants to know that the money provided is well spent. The Ministry of Agriculture wants to be sure that efficient and effective service is provided. The target farmer beneficiaries want help to improve their production. And Non-Governmental Organisations (NGOs) need information generated through monitoring activities and also want to contribute information. Therefore, the interest of funding agencies, implementing agency, beneficiaries, and NGOs need to be taken into consideration when designing a system of monitoring.

Monitoring unit of agricultural extension

The agricultural extension monitoring departments should be staffed by technical staff with specialised skills. The personnel should consist of extension specialists, economists, sociologist or anthropologists, statisticians, computer programmers, and supporting staff. The head of the monitoring department may come from any of these disciplines. The head of the monitoring department should report to one of the top managers in the organisation.

Types of monitoring

i Financial monitoring

Financial monitoring entails tracking of actual expenditure made by extension agencies. These agencies are expected to keep financial records and reports for examination periodically as part of financial monitoring aspect of extension programme. Of major interest in financial monitoring is the determination of whether financial allocation is adequate for the extension work at hand, if funds have been disbursed in time and in amounts required for efficient extension project implementation, what the actual expenditures are, and whether or not they are in keeping within approved budget allocations.

whether funds are disbursed according to laid-down procedures for the operation and what financial constraints there may be.

ii **Staff monitoring**

Monitoring of staff in agricultural extension agency helps to determine whether or not, extension project staffing is going on as planned in the time table, provide information about rate of staff turnover and it also monitors the quality of work done by extension staff (ARM11-ARM23, 1993).

iii. **Input monitoring**

Input monitoring involves following up on whether procured inputs, materials and equipment are adequate in quality and quantity and if delivered in time and whether all necessary services essential for successful extension programme implementation are being provided as required. It will also determine whether various activities are being carried out in line with planned schedule and if not determine the battle-necks.

iv. **Outputs/capacity building monitoring**

Inputs will be transformed into outputs by various extension activities. Outputs monitoring will check whether the qualitative and quantitative targets are being achieved and if implementation is in line with the objectives and what physical challenges are being encountered. Output monitoring should establish if extension programme implementation systems are adequate for achieving the outputs. It should also provide information on the efficiency of the implementation process. It would identify capacity gaps and make proposals for building the required capacities where such gap exists. Output should be monitored in close relation with impact.

v. **Impact/sustainability monitoring**

Impact monitoring takes an overall look at extension programme outputs to ascertain their positive and negative effects on the beneficiaries and communities. These measurements can be derived from target beneficiary assessments, extension project workers' assessment or impact surveys. Impact has to be sustained. Sustainability can be defined as the extent to which extension programmes can be taken over and internalised using local resources

and capacities. Sustainability can only be determined when impact monitoring is undertaken on a regular basis. Impact/ sustainability monitoring should cover the following: standard of living, environment, agriculture, technologies and programme linkages integration with other programmes (UNDP, 1997).

Why monitor?

Determine viability of extension programme to facilitate decisions on further resource commitments.
Reinforcement of discipline (accountability).

What is monitored?

Effectiveness

Relevance

Impact

Reaction

Responsiveness of client farmers, deliveries on inputs and outputs, rate of change.

Purpose of monitoring

Ensure that extension programme is making progress

Identify deviations from original plan

Measure effectiveness of management and financial soundness

Measure effectiveness of the delivery of inputs

Online assessment of impact

Assess understanding and interest of stakeholders

Tools for monitoring (Methods of obtaining information)

Observations

Verbal communication

Briefing meetings and committees

Correspondence

Performance reports

Surveys

Inspection at specified intervals

Supervision of extension services

Supervision is defined in many ways by different people as social process, guidance, human relation, leadership or an educational process. It is also the act of controlling or directing human efforts. Supervision is the act of working with certain number of people over whom authority is exercised to achieve the best possible result through their greatest combined efforts. It is a process through which a superior officer assists his/her subordinates staff to carry out their duties more satisfactorily. In addition, extension supervision aimed at making sure that new practices and innovations reach their target farmers in an effective manner. While supervising is the process of helping subordinate staff to discharge their work more satisfactorily, it is concerned with the growth and progress of extension staff. Therefore, a supervisor is a person responsible for the effective performance of work of a certain number of staff lower to his position or rank. However, all the definitions incorporate all factors that are related to administration and management of an organisation. Within this context supervision assumes several definitions:

1. Extension supervision is a link and adviser to management and the worker both as a communication link, an adviser to management and interpreter of policy changes at a lower level. In this sense the supervision is a leader of a group.
2. Extension supervision is the act of working with a group of people over whom authority exercised in such a way as to achieve their greatest combined effectiveness in getting work done.
3. It can be defined as human relation activity by a designated member of staff of an organisation with emphasis on staff direction by individual workers in getting work done.
4. It can also be defined as a process by which workers are helped to achieve greater competence, height and growth.

In all above cases, supervision is best performed in an atmosphere of good-will and mutual cooperation on the part of all concerned. In essence supervision is motivation, direction, guidance, leadership and

control. Extension administration is usually concerned with the successful management of extension staff, particularly the efficient supervision of field extension workers to ensure their effectiveness. The extension supervision is an avenue for the provision of support for workers and farmers. It strengthens link between top and middle level staff as well as farmers' contact with extension agents. The success of the extension agents and indeed the entire extension services depends on the effectiveness of extension supervision. Supervision in an agricultural extension organisation is categorized into two, namely, general and helping type of relationship supervision.

1. The general nature of supervision

This refers to the directives and guidance given by a superior staff to a subordinate in pursuance of extension objectives. This type of supervision is usually common at the headquarters of Agricultural Development Programmes, Ministries of Agriculture and at the Zonal levels.

2. Helping type relationship of supervision

In this situation, the senior officer designated as supervisor guides a specified group or number of junior staff to discharge their works effectively and efficiently. This type of supervision is found at block and cell levels.

Principles of extension supervision

1. Supervision is a vital component of administration.
2. Supervision is a collective task that takes place through the collective ideas and efforts of all members concerned.
3. Supervision is mainly concerned with the cooperative improvement of the organisation through which learning takes place. It seeks improved methods of teaching.

4. Planning is fundamental to supervision, it is cooperative in outlook and orderly in procedure.
5. Supervision is creative, not prescriptive. It determines procedure in the light of the needs of each situation.
6. Supervision is creative. It provides opportunity for originality and self expression. It is scientific in its approach to problem solving.
7. Supervision substitutes leadership for authority. It is based on the democratic philosophy that respects individual differences and that assumes that people are capable to grow. It stimulates initiative, self-reliance and individual responsibility.
8. Supervision provides for the establishment of extension objectives and goals as well as a means of comprehensive and systematic evaluation of the extension programme.
9. Supervision is based on the democratic ideas that respect individual staff differences.
10. Successful supervision is measured in terms of those being supervised.
11. Supervision provides means for comprehensive and systematic evaluation of extension programmes.
12. Employees must clearly understand what is expected of them i.e. an individual must know what his/her job consists of, his duties and responsibilities and importance of his work and the work of other employees in the extension services.
13. Employees must have guidance in doing their work i.e. they must be kept informed of the organisation policies, must be given the chance to develop techniques on how to do a job and must be helped through counseling to achieve personal improvement.
14. Good work should always be recognised by supervisors i.e. they should be acknowledged by telling the staff concerned, promoting him, giving bonus, awarding some awards to him, etc. but do not over do this .
15. A faulty work should be constructively criticized and not harshly.
16. Extension workers should have opportunity to show that they can accept greater responsibilities. The supervisors should create this

opportunity and ensure that each staff is desirous to improving all the time.

17. Finally, all workers should operate in a safe and healthy environment not necessary endangering their lives.

Functions of extension supervisor

An extension supervisor is saddled with the following responsibilities.

- Induction of new members into the system of extension services
- Training of extension workers on the job especially on the routine operations and standards on what, how and when to do basic things.
- Training extension workers on how to secure and develop local leaders and contact farmers.
- Assisting extension workers in modifying and improving non-extension methods.
- Assisting extension workers and farmers to achieve better programmes and better planning.
- Supervisors should coordinate the duties of the extension workers with that of the subject matter specialists and other extension personnel.
- Supervisors must assist extension workers to determine progress and accomplishments i.e. evaluation.
- Supervisors should assist in conducting of planned relevant research on extension problems.

Principles of span of control

Span of control refers to the number of persons or organisational units which individual is responsible for supervision. Usually as one goes up the hierarchy of the organisation, his span of control increases and vice versa. The usually acceptable span of the control is 6 to 15 persons. However, in some cases there is no need to stick to 6 to 15 span of control provided the output is encouraging.

Factors affecting span of control include

1. Extent of delegated authority: The more you delegate, the more subordinate you have.
2. The magnitude of subordinate problems: if problems are very simple and easy they are likely to see you less vice versa.
3. The organisational age and size e.g. a new company has less than older ones.
4. The organisational structure: if simple, the span of control will be less but if complex it will be large.
5. The professional competence and length of service of subordinate.
6. The degree of control that must be exercised.

Roles of the supervisor

The following are some of the roles of the supervisor:
The coordination of staff and work in different locations and at different levels of organisation.

1. Providing information and communication link between supervisor and management.
2. Providing administrative and logistic support to staff.
3. Interpreting programmes and project policies at intermediate level and providing information for policy formulation at management level.
4. Monitoring and appraising production, performance of staff and project.
5. Planning staff development and training programmes.
6. Providing conducive environment for work.
7. Applying sanction, rewards and punishment where necessary to ensure compliance and performance in accordance with agreed standards.

Functions of supervisors-direction and organisation

Two major functions of supervision are task orientation and concern for employees. Therefore direction and organisation of activities, motivation of employees, and management of work groups are the

important functions of extension supervisors. Extension supervisors have to plan the work and maintain a high standard of performance. The whole process of job analysis, identification of key performance areas, and performance appraisal will help in planning and organising extension work. The Training and Visit system of extension has introduced mechanisms for defining goals, planning, and scheduling work at the field level with provisions for monitoring and evaluation (Wiest and Levy, 1982).

Functions of supervisors-motivating the extension personnel

Extension supervisors should have the ability to motivate and lead the field extension workers so that the field agents perform more than routine jobs, and supervisors should be involved in attaining excellence in extension work. This calls for extension managers having an understanding of various theories of motivation as applicable to frontline extension agents. Therefore, knowledge of major theories of motivation is essential.

Functions of supervisors-work group management

Every organisation has formal and informal groups. Formal groups are established by the management, while informal groups are spontaneous and developed to satisfy mutual interest of the members. Because work groups have a considerable influence on the work situation, supervisors should be sensitive to the needs of the group and develop skills to guide and achieve the group's goal, which will benefit the organisation and the members. Effective extension supervision can use work groups in problem solving because they can provide many creative solutions. One way to improve supervisory effectiveness in extension work is to develop a leadership style, which represents the extension workers' group interest at the higher level of work group. This will increase the confidence and morale of the extension supervisors (FAO, 2008).

Importance of supervision

1. Issuing and receiving instruction and directions.
2. Understanding important policies' procedures and rules.
3. Coordinating extension activities.
4. Promote understanding and cooperation among staff, units and levels of the extension organisations.
5. Guiding a smoothly functioning team in action.
6. Providing a relief for emotional tensions.
7. Improved performance through the use of goals and creative discipline.

Facilitation of an effective supervision in agricultural extension services

1. The extension staff under a supervisor should be restricted to the number of staff a supervisor can adequately and effectively supervise.
2. Extension activities that are closely related to each other should be grouped together under the directives of a single supervisor for effective coordination.
3. Keep to a minimum number of supervisory levels.
4. Each supervisor should report to only one superior officer.

Supervision of extension services in Nigeria

Supervision of extension services in Nigeria is in line with the laid down features in Training and Visit (TandV) extension system adopted by all states' ADPs, where Zonal Extension Officer (ZEO) supervises the Block Extension Supervisor (BES) at the extension blocks and the BESs in turn supervise the Village Extension Agents at the extension cell levels.

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