DEPARTMENT OF AGRICULTURAL EXTENSION

GKVK, UAS, Bangalore-560065

Seminar on

Problems and Future of Public Extension Service

Ag.Extn. 551 Seminar (0+1)

II Semester 1999

Submitted to:

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Professor and Seminar Teacher
Department of Agricultural Extension
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Submitted by:

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Class: Sr. M.Sc. (Agril. Extn)

Date: 10.07.99
Time: 9.30 AM
Venue: Seminar Hall

Seminar on

PROBLEMS AND FUTURE OF PUBLIC EXTENSION SERVICE

SYNOPSIS

Agricultural extension is a significant social innovation, an important force in agricultural change which has been created, adopted and developed over the centuries. India's public agricultural extension system is considered to be the largest in the world with vertically downward network, aiming at the integrated development of rural India. The agricultural development work in India had its beginning in the 1860s. Over the years number of rural development experiments and programmes were conducted in India. In spite of all these efforts, green revolution is one of the success stories that ushered in the era of achieving food self-sufficiency and rural prosperity. But, performance of public extension is generally disappointing in transferring agricultural technologies from research to farmers.

The main objectives of this seminar are;

1. Overview of public extension system
2. Problems/short comings of public extension system
3. Strategies for improving public extension system
4. Current trends and developments in Extension
5. Future thrusts in extension

Overview of Public Extension System

- Pre-independence era (1866-1947)
- Post-independence era (1947-1953)
- Community development and extension service era (1953-1960)
- Intensive agricultural development era (after 1960)
- Sustainable agricultural development era (1990s)

Problems/Short Comings

1. Technologies
2. Extension workers
3. Farmers and
4. other factors

Strategies for Improving Public Extension

- Assessing target group needs
- Restructuring research priorities

- Generating location specific technologies
- Evolving demand-driven technologies
- Result-oriented incentives (or) rewards for extension workers
- Providing facilities for extension workers
- Employing participatory techniques in technology development and transfer
- Strengthening input supply credit support and market infrastructure

Current Trends and Developments in Extension

- Sustainable agriculture
- Female farmers
- Agricultural knowledge and information system
- Participatory approaches

Future Thrusts in Extension

- Technological aspect
- Linkages
- Technology transfer
- Agriculture Human Resource Development
- Application of Extension Research
- Privatisation of Extension
- Involvement of NGOs
- Incentives and Awards

Conclusion

Current developments and future thrusts in agricultural extension shows that considerable changes are needed in agricultural extension services to enable farmers to meet the challenges and opportunities of next millennium.

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PROBLEMS AND FUTURE OF PUBLIC EXTENSION SERVICE

Introduction:

Agricultural Extension is a significant social innovation, an important force in agricultural change, which has been created, adapted and developed over the centuries. India's public agricultural extension system is considered to be the largest in the world with vartically down ward network, aiming at the integrated development of rural India. The agricultural development work in the India had its begining in the 1860's Over the period of 60 years number of rural development experiments and programmes were conducted in India. In mid 1970s Training and visit system introduced with emphasis on single purpose professional extension workers, regular training of extension personnel, and transfer of technology through personnel contact with farmers. The concept was further strengthened through establishing research-extension farmer linkages under the National Agricultural Extension Project(NAEP) in 1979, But, inspite of all these efforts, Public Sector extension performance generally disappointing in transfering improved agricultural technologies from research to farmers.

Main objectives of this seminar include.

1. Over view of public extension system
2. Problems/Shortcomings of public extension system
3. Current trends and developments in extension
4. Strategies for improving public extension system
5. Future thrusts in extension.

Concepts of Extension:

According to Ensminger (1957) Extension is education and that its purpose is to charge attitudes and practices of the people with whom the work is done

Leagens (1961) conceptualized extension education as on applied science consisting of content derived from research, accumulated field experiences and relevant principles drawn from the behavioural sciences synthesized with useful technology into a body of philosophy. Principles, content and methods focussed on the problems of out of school education for adults and youth.

Maunder (1973) defines " Agricultural Extension is a service or system which assist farm people, through educational procedures, in improving farming methods and techniques, increasing production efficiency and income, bettering their levels of living and lifting the social and educational standards of rural life.

The National commission on Agriculture (1976) refers to extension as an out of school education and services for the members of the farm family and others directly or indirectly engaged in farm production, to enable them to adopt improved practices in production, management, conservation and marketing.

The National Commission further stated that agricultural extension is not only imparting knowledge and securing adoptition of a particular improved practices but also aims at changing the outlook of the farmers to the point where they will be receptive to,

and on their own initiative, continuously seek means of improving their farm occupation, home and family life in totality.

According to Watts (1984) Extension is basically an educational function, Its job may vary considerably from country to country, but without exception it will be expected to inform advise and educate people in a practical manner.

Bhatnagar and Desai (1987) Stated " Extension is to bring the desirable changes in the behaviour, knowledge, skills, attitude, understanding, goals and confidence of the people through mutual learning.

Extension, according to Vanden Ban and Hawkins (1988), involves the conscious use of communication of information to help people from sound opinions and make good decisions.

Agricultural Extension is an Educational process which has as its goal the Communication of useful information to people , then helping them to learn how to use it to build a better life for themselves, their families and their communities.

From above definitions two dimensions are predominantly emphasised they are,

Communication Dimension:

Extension is an on going process of getting useful information to people.

Educational Dimensions:

Assisting those people to acquire thenecessary knowledge, skills and attitudes to utilise effectively this information or technology.

Over View of Public Extension System:

The planning commission set up by the government of India in 1950. Summarized the reasons for failutre of the earlier efforts by the governmental and non governmental organisations as follows.

1. Most of the schemes were short duration
2. The activities were not properly planned and coordinated
3. Initiative came from the governmental side and from the people.
4. Some basic problems like land tenure, rural credit etc., remained untouched.

Based on the experiences of the early extension efforts; systematic, planned and wountry wide extension system was introduced by the national government in India in 1952. since than the system of extension passed through various steps or stages, in an effort to find out how best it could meet the needs of the country.

Three distinct stages in the development of extension under the management of the national government could be identified. These are community development and development with social justice. Important systems of extension in each of the stages, with their commonly used abbreviations and year of initiation are presented.

Community Development

1952	CDP	Community Development Programme
1953	NES	National Extension Service
1954	CDB	Community Development Block
1957	Panchayath Raj	Democratic Decentralization

Technological Development

1960	IADP	Intensive Agricultural District Programme
1964	IAAP	Intensive Agricultural Area Programme

1964-65	ICDP	Intensive Cattle Development Project
1966	HYVP	High Yielding Variety Programme

Development with Social Justice

1970-71	SFDA	Small Farmers Development Agency
	MFAL	Marginal Farmers and Agricultural Labourers Programme
	DPAP	Drought Prone Areas Programme
1972-73	PPTD	Pilot Project for Tribal Development
1974	T&V	Training and Visit system
1978-79	IRDP	Integrated Rural Development Programme
1983	NAEP	National Agricultural Extension Project
1986		Technology Mission on Oil Seeds
1994		Small farmers Agri-Business consortium

In the Indian context, there are four major organizational streams denoted to extension work for agriculture and rural development. They are,

1. The first line extension system, comprising mainly the Indian council of Agricultural Research(ICAR) institutes and the Agricultural universities.
2. Extension system of the Ministry of Agriculture and State Departments at Agriculture.
3. Extension system of the Ministry of Rural Development and state Development Departments.
4. Development work by Non-Government organisations(NGOs), business houses etc.,

Critical Analysis of India's Community Development Programme:

India's community development programme has not worked more successfully, because of following reasons, they are.

First, the programme was validly conceived but because of its Magnitude, it has been difficult to recruit and train enough persons to play all the essential roles, to adequately staff the many local areas where the programme is operating. Second

Second, it has proved to be not only impossible, but not feasible to attempt to compensate for these inevitable weakness by administrative direction from above; and

Third, the only remedy for these weakness is to reorient the programme and begin strengthening its grass roots foundation component work at the village.

The short comings of the IADP were:

1. Educational approach to reach the cultivators was lacking Emphasis was on any how to make the cultivators join the programme.
2. Training programme of staff was not clear. In many cases the VLWs were not able to impress the farmers.
3. Staff were not clear about the methods to reach the cultivars. The staff were target oriented even in filling up agricultural production plans.
4. Posting of staff was not adequate and timely
5. Workshop, seed testing and soil testing laboratories were not functioning to the required level.
6. Transport and land development programmes were not progressing satisfactorily.

7. Cultivators were not using insecticides, fungicides and seed treatment of their own.
8. There was problem of communication
9. Co-operatives were not functioning well
10. There was lack of action research
11. There was little progress in animal husbandry, fisheries etc.,
12. Stereo typed farm production plans
13. Very little participation by women in the programme.

Limitations of T & V Systems:

1. The programme is staff intensive and had been found to suffer in places where adequate staff are not in position.
2. Except crop production, almost all other enterprises of the farmers have remained untouched by the programme.
3. In states having separate directories of Horticulture, soil conservation etc., flow of information to the farmers relating to these disciplines was scanty.
4. Information for the farmers in many cases were of routine type. Which made sustanance of their interest in the programme difficult.
5. Emphasis was on personal contact of the extension agent with a few selected farmers, to the exclusion of almost all other extension methods and aids.
6. In training, emphasis was on technology and very little on extension methods, management techniques etc., which are also important.
7. The existing village leaders and village institutions have generally been neglected.

8. Lack of adequate interaction between contact farmers and other farmers.

Problems/Short Comings of Public Extension System:

Public extension although not without some success, has generally been disappointing in transferring improved agricultural technologies from research to farmers in developing countries"

(Rogers, 1987)

Governments also beginning to understand very often reluctantly, the real limits of their ability to centrally manage man power intensive, decentralised functions such as agricultural extension.

(Antholt, 1992)

It is necessary to accept that in most developing countries, government is saddled with the difficult task of managing national national extension programmes along with other productive and social services for rural development. Rarely can responsibility be passed on to another body. Government must make the best of a bad job, acquire and internalise necessary management skills and it needed, revise procedures and regulations to suit modern requirements.

(Adams, 1988)

Public extension is particularly vulnerable it is too blamed, rightly or wrongly, for yielding few results, imposed on farmers; run with little consideration for cost effectiveness and operated ill motivated, ill trained, less than competent personnel.

(Charles Ameur, 1994)

In India, there is an alarming knowledge-practice gap in agriculture. Though India has 30,000 scientists who generate stream of scientific information to serve 103 million farm families in the 127 agro climatic zones of the country with a variety of crop and animal production system, while most are not adopted. It is estimated that about 30 per cent of the available technologies are adopted by the farmers.

They commonly indicated causes for this gap are.

TECHNOLOGIES ARE...

* not economically viable
* not operationally feasible
* not suitable
* not matching with farmers needs
* not compatible with farmers over all farming system
* Limited availability of location specific technologies.

EXTENSION WORKERS ARE..

* Poorly motivated
* non-acountability of extension workers to farmers
* lack of encouragement, appreciation and recognition for good work
* lack of result/oriented incentives and rewards
* poor chance of promotion
* un satisfied pay scales
* lack of facilities like house accomodation,conveyance
* more office work
* Target achievement comes in the way of transfer of technology.

* inadequate need based training
* political interference
* inadequate teaching resources.

FARMERS ARE...

* lack of interest in getting quality extension service
* they are careless of a service
* lack of farmers cooperation in extension activity
* Reluctance of farmers towards improved farm practices due to illiteracy, prejudice against innovation.
* Weak economic base of the farmers and poor farm resources.

OTHER FACTORS

* inadequate input supplies
* inadequate credit support
* inadequate market infrastructure
* low degree of ability to understand risk and uncertainity in environmental factors.

Strategies for improving public extension systems:

* The first and foremost thing is to restructive or reorient the research priorities to meet the present needs and future challenges in agriculture. In this direction the farmers should have a "say" in the development of technologies. Participatory technology development methodologies like PRA/FSR should be suitably adopted in to developing innovations.

* Assessing target group needs.
  - needs assessment techniques should be employed.
* Research institutes should aim to generate technologies that are appropriate to particular agro-climate zones and identity differential levels of technologies to cater the needs of different categories at people.
  - Location specific technologies should be generated.
* Technologies should be sound enough to elicit the demand from the farmers (Demand - Driven technologies).
* Result oriented incentives/rewards/promotion chances for extension worker.
* Providing house, conveyance facilities to extension workers.
* Through participatory techniques in need assessment, technology development, technology transfer with farmers, This increase the farmers interest, cooperative, commitment in extension programme.
* Strengthening the input supply, credit support and market infrastructure.

Current Trends and Developments in Extension:

1. Sustainable Agriculture:

The dictionary definitionof "Sustainability" refers to keeping an effort going continuously, the ability to last out and keep from falling.

The Technical Advisory Committee of the consultative group on international agricultural research (TAC/CGIAR 1998) states; "Sustainable agriculture is the successful management of resources for agriculture to satisfy changing human needs while maintaining or enhancing the quality of the environment and conserving natural resources.

GIPS (1986) stated that an agriculture can be called sustainable if the intervention is ecologically sound, economically viable, socially justified and humane and adaptive.

There is need to focus on sustainable agriculture through low-external input:-

This form of agriculture would:

1) Seek to optimise the use of locally available resources by combining the different components of the farm system plants, animals, soil, water, climate and people so that they complement each other and for the greatest possible Synergetic effects.

11) Seek ways of using external inputs only to the extent that they are needed to provide elements that are deficient in the eco-system and to enhance available biological, physical and human resources. In using external inputs, attention is given mainly to maximise recycling and minimum detrimental impact on the environment (Reijntjes, C., Harverkort, B. and Wateves-Bayer, 1994).

Sustainable agriculture may not be a in the short term interest of many farm families. Therefore, collective decision making is needed to prevent pollution, erosion, depletion of acquifers, etc.,

In sustainable agricultural main emphasis on

- Resource conserving technology transfer.
- Identification and incorporating farmer experimentation.

2. <u>Female Farmers</u>:

Investigations in selected states show that more than 60 per cent of agricultural operations are performed by women farmers, yet the fact that "Most farmers in India are women" (Shiva, 1991)

and also many decisions in agriculture with respect to different operations, resource allocation are taken by women themselves and other decisions taken by husband and wife together. But this fact is not reflected in extension provision or training. Women are typically and wrongly, characterized as "economically inactive" and women play only "Supportive role"(Samantha,1994) as farmers wives. But recent years many countries realise that, importance of women in Agriculture. So it is necessary that the extension workers work directly with farm women.

Possibility of improving farm women access to extension may brought by

1. Employing large number of female extension workers
   Eg: Phillippines.

   they ean also freely work with Mahila Mandals or other groups of women.
2. Encouraging women's selection at local meetings and in the media.
3. Selecting the women farmers in extension trainings.

3. Agricultural Knowledge and Information system:

Agricultural extension is often seen as the agency transfering technologies from research to farmers. Now a days, information about new opportunities in the market is as important as information about new production technologies, this includes information about the prices of different products, different qualities of these products delivered at different times and information about the prices, qualities and availability of inputs at different locations, information about Govt.policies, rules and regulations.

Many farmers receive the first information about innovations from their mass media, telephones, etc., This communication facilities changes roles of extension service. Providing information become less important, helping the farmers to choose right kind of information and evaluating the information is important.

4. Participatory Approaches:

Earlier the technology push was the extension approach used i.e., the extension workers took the developed technologies to the farmers irrespective of its applicability and utility. Now emphasis is on participatory approaches. Participatory approach is needed in which the extension agents provide knowledge and information for which farmer feel a need in addition to the knowledge and information that they get from other sources including their own experience for this participatory learning and action (PLA),PRA,RRA etc., techniques used.

Future Thrusts in Extension:

1. Technological Aspects:

Promoting integrated land use technologies in which whole farm approach is followed. In other words we should move from specific extension to broad based extension.

2. Linkages:

Apart from the Research - Extension- Farmer linkage, linkages with NGOs and other development departments linkage is strengthened.

3. Technology Transfer:

Instead of technology push,extension workers and extension scientists should act as a facilitators in transfer of technology.

The technology is assessed, refined and then transfered. For this Technology assessment and refinement through institution village linkage programme (TAR-IVLP) implemented in all states.

4. Agriculture Human Resource Development:

Training need assessment is should be the basis for organising training programmes for farmers, farm women, rural youth and extension functionaries, there is need to use farmers as trainees because they are aware of the local problems, they have experienced the problems. Advanced knformation technologies should be put to use training, strengthening training infrastructure, advanced training to scientists and extension personnel is important.

5. Application of Extension Research:

We should incorporate the implications of the extension research in improving extension.

6. Privatisation of Extension:

In recent years decreasing public budget allocation for extension programmes made extension experts to propose privatisation of extension. In this direction we need to identify the area, types of farmers (target groups) etc., To whom private extension should be done is important. Privatisation is already taken place in the veterinary extension, plantation crops, seed production and Floriculture. However, we should take this step with a caution that in our country is a lot of heterogenity in farming system. Therefore, it is suggested that we may take this step in a phased manner.

7. Involvement of NGOs:

Strengthening partnership with NGOs is important in Agricultural extension. The NGOs can be of great help in identifying indigenous technologies and also act as effective intermediary in transfering technologies to farmers.

8. Incentives and Awards:

There is a need to develop sound policy for giving incentives and awards to the farmers, extension personnel and extension scientists.

Conclusion:

Current developments and future thrusts in agricultural extension shows that considerable changes are needed in the agricultural extension services to enable farmers to meet the challenges and opportunities of next millennium.

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