

CHAPTER - V
SUMMARY AND CONCLUSION

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The creation of knowledge through research and its diffusion is the foundation of scientific, technical and social progress of any nation. Development of farm technology, its communication and utilization are the three vital functions involved in modernizing agriculture and are performed by researchers, extension personnel and farmers respectively. In order to accelerate the process of modernization, it becomes essential to understand the communication linkages of the members of the researchers, extension personnel and farmers in the context of generation and transfer of farm technology. There have been small number of studies on communication linkages of researchers, extension personnel and farmers with reference to generation and transfer of technology. Hence the present study has been undertaken with a view to analyse the communication linkages of researchers, extension personnel and farmers in the context of generation and transfer of technology in modernization of dryland agriculture.

5.1 OBJECTIVES

The present study entitled "A study of communication linkages in the context of generation and transfer of dryland agrotechnology in Anantapur district of Andhra Pradesh" was designed with the following specific objectives.

1. To study the communication linkages used by researchers in respect of generation and transfer of dryland agrotechnology.
2. To find out the communication linkages used by extension personnel with regard to acquisition and transfer of dryland agrotechnology.
3. To explore the communication linkages used by farmers in the context of acquisition of dryland agrotechnology.
4. To assess the relationship between the independent and dependent variables of researchers, extension personnel and farmers.
5. To identify the constraints faced by researchers, extension personnel and farmers in generation acquisition, transfer and utilization of dryland agrotechnology.
6. To know the time lag in transfer and utilization of certain selected dryland management practices among researchers, extension personnel and farmers.
7. To develop an effective model, which would serve as a guide in generation, acquisition and transfer of dryland agrotechnology among researchers, extension personnel and farmers.

5.2 SAMPLING PROCEDURE

Anantapur district in Andhra Pradesh was purposively chosen as the locale for the study.

Exploratory research design was followed in the study. 70 researchers belonging to DARS, Anantapur, CRIDA and ICRISAT of Hyderabad; 90 extension personnel of various categories and 100 dryland farmers belonging to Anantapur district have constituted as sample respondents for the study. The data were collected by mailed questionnaires and interview schedules and were coded, classified and tabulated. Appropriate statistical methods and procedures like mean, analysis of variance of one way classification, coefficient of correlation, multiple linear regression analysis and pathcoefficient analysis were used to analyse and interpret the data

5.3 FINDINGS

5.3.1 Communication linkages used by researchers for generation and transfer of dryland agrotechnology:

5.3.1.1 Communication linkages - modes - used by researchers for generation of technology: Among several alternative modes existing; the present study revealed that "Self observation" was the most used mode followed by:

Research materials

Professional meetings

Superior officers

Colleagues

Farmers

Extension personnel

Farmers meetings
 Extension personnel meetings
 VIPs and administrators
 Field surveys
 Farmers tours
 Demonstrations
 RAWEP
 Farm broadcast, in that order

whereas "Farm telecast" was the least used mode as communication linkage for generation of technology by researchers.

Further, "Self observation" was found to be significantly different from all other modes in its functional use by researchers for generation of technology.

5.3.1.2 Communication linkages - sources - used by researchers for generation of technology: Among several alternative sources existing, the present study revealed that "State level research institutes" was the most used source followed by:

National level research institutes
 Regional level research institutes
 Local level research institutes
 International level research institutes
 Other states research institutes
 Voluntary organisations; in that order

whereas "Private organisations" was the least used source as communication linkage for generation of technology by researchers.

Further "State level research institutes" was found to be significantly different from all other sources in its functional use, by researchers for generation of technology

5.3.1.3 Communication linkages used by researchers for transfer of technology to extension personnel: Among several alternative communication linkages existing, the present study revealed that "Professional meetings" and "Training programmes" were the most used communication linkages followed by

Official calls

Personal contacts

Demonstrations

Extension publications

Farm broadcast

Advisory letters; in that order,

whereas "Telephone calls" was the least used communication linkage for transfer of technology to extension personnel by the researchers.

Further, "Professional meetings" and "Training programmes" were found to be significantly different from all other communication linkages, in their functional use, by researchers for transfer of technology to extension personnel.

5.3.1.4 Communication linkages used by researchers for transfer of technology to the farmers: Among several alternative communication linkages existing, the present study revealed that "Personal contacts" was the most used communication linkage followed by

Demonstrations
 Farmers meetings
 Training programmes
 Farmers tours
 Extension publications
 Office calls
 Farm broadcast
 RAWEP, in that order

whereas "Advisory letters" was the least used communication linkage for transfer of technology to farmers by researchers.

Further, "Personal contacts" was found to be significantly different from all other communication linkages in its functional use, by researchers for transfer of technology to the farmers.

5.3.2 Communication linkages used by extension personnel for acquisition and transfer of dryland agrotechnology:

5.3.2.1 Communication linkages used by extension personnel for acquisition of technology: Among several alternative communication linkages existing, the present study revealed that "Professional meetings" was the most used communication linkage followed by

Superior officers

Farm broadcast

Demonstrations

Extension publications

Training programmes

ICAR schemes

Research scientists

Visit to research stations

Advisory letters, in that order

whereas "Farm telecast" was the least used communication linkage for acquisition of technology by extension personnel.

Further, "Professional meetings" was found to be significantly different from all other communication linkages in its functional use, by extension personnel for acquisition of technology.

5.3.2.2 Communication linkages used by extension personnel for transfer of technology to farmers: Among several alternative communication linkages existing, the present study revealed that "Farm and home visits" and "Demonstrations" were the most used communication linkages followed by

Office calls

Group discussions

Farmers meetings

Extension publications

Training programmes

Advisory letters

Exhibitions

Farmers tours, in that order

whereas "RAWEP" was the least used communication linkage for transfer of technology to farmers by extension personnel.

Further "Farm and home visits" and "Demonstrations" were found to be significantly different from all other communication linkages in their functional use, by extension personnel for transfer of technology to the farmers.

5.3.3 Communication linkages used by farmers for acquisition of technology:

Among several alternative communication linkages existing, the present study revealed that "Demonstrations" was the most used communication linkage followed by

Progressive farmers
 Extension personnel
 Farm broadcast
 Group discussions
 Extension publications
 Farmers meetings
 Farmers training programmes
 ICAR schemes
 Research scientists
 Visit to research stations
 RAWEP
 Farmers tours
 Exhibitions
 Advisory letters, in that order

whereas "Farm telecast" was the least used communication linkage for acquisition of technology by farmers.

5.3.4. Relationship between independent and dependent variables of the researchers:

5.3.4.1 Relationship between independent variable and modes used as communication linkages by researchers for generation of technology: Age, experience and facilities were found to be positively and significantly related with modes used as communication linkages for generation of technology by researchers; whereas work load was found to be negatively significantly related.

5.3.4.2 Relationship between independent variables and sources used as communication linkages by researchers for generation of technology: Age, education, experience, training, cadre, job commitment and facilities were found to have positive and significant relationship with sources used as communication linkages for generation of technology by researchers.

5.3.4.3 Relationship between independent variables and communication linkages used by researchers for transfer of technology to extension personnel: A positive and significant relationship was observed in respect of age, experience, job commitment and facilities, whereas with regard to workload a negative and significant relationship was found with the communication linkages used by researchers for transfer of technology to extension personnel.

5.3.4.4 Relationship between independent variables and communication linkages used by researchers for transfer of technology to farmers: Age, education, experience and facilities were found to be positively and significantly related, whereas cadre and workload were found to be negatively and significantly related with communication linkages used by researchers for transfer of technology to farmers.

5.3.5 Relationship between the independent and dependent variables of extension personnel

5.3.5.1 Relationship between independent variables and communication linkages used by extension personnel for acquisition technology: Job satisfaction, facilities and organisational climate were found to be positively and significantly related with communication linkage used by extension personnel for acquisition of technology whereas workload was found to be negatively and significantly related.

5.3.5.2 Relationship between independent variables and communication linkages used by extension personnel for transfer of technology to farmers: Job commitment was found to be having positive and significant relationship with communication linkages used by extension personnel for transfer of technology to farmers, whereas workload was found to have negative and significant relationship.

5.3.6 Relationship between independent and dependent variables of the farmers:

5.3.6.1 Relationship between independent variables and communication linkages used by farmers for acquisition of technology: Training, innovativeness and achievement motivation were found to be positively and significantly related with communication linkages used by farmers for acquisition of technology.

5.3.7 Combined effect of all independent variables on the dependent variables of researchers:

5.3.7.1 Combined effect of all independent variables on modes used as communication linkages by researchers for generation of technology: All the selected eleven independent variables put together explained about 37 per cent variation in modes used as communication linkages for generation of technology by researchers.

Cadre was the only variable found positively significant.

5.3.7.2 Combined effect of all independent variables on sources used as communication linkages by researchers for generation of technology: All the selected eleven independent variables put together accounted for 48 per cent variation in sources used as communication linkages for generation of technology by researchers.

Cadre was the only variable found positively significant.

5.3.7.3 Combined effect of all independent variables on communication linkages used by researchers for transfer of technology to extension personnel: All the selected eleven independent variables put together explained about 55 per cent variation in communication linkages used by researchers for transfer of technology to extension personnel.

The variables cadre and facilities were found positively significant.

5.3.7.4 Combined effect of all independent variables on communication linkages used by researchers for transfer of technology to farmers: All the selected independent variables put together explained about 56 per cent variation in communication linkages used by researchers for transfer of technology to farmers.

The variables education, and achievement motivation were found positively significant, whereas workload was found negatively significant.

5.3.8 Combined effect of all independent variables on the dependent variables of extension personnel:

5.3.8.1 Combined effect of all independent variables on communication linkages used by extension personnel for acquisition of technology: All the selected nine independent variables put together explained about 60 per cent variation in communication linkages by extension personnel for acquisition of technology.

The variables, job satisfaction, facilities and organizational climate were found positively significant.

5.3.8.2 Combined effect of all independent variables on communication linkages used by extension personnel for transfer of technology to farmers: All the selected nine independent variables put together explained about 26 per cent variation in communication linkages used by extension personnel for transfer of technology to farmers.

Job commitment was the only variable found positively significant.

5.3.9 Combined effect of all independent variables on dependent variable of farmers:

5.3.9.1 Combined effect of all independent variables on communication linkages used by farmers for acquisition of technology: All the selected eleven independent variables put together explained about 16 per cent of variation in communication linkages used by farmers for acquisition of technology.

Achievement motivation was the only variable found positively significant.

5.3.10 Direct and indirect effects of independent variables on the dependent variables of researchers:

5.3.10.1 Direct and indirect effects of independent variables on modes used as communication linkages by researchers for generation of technology: Experience, cadre and achievement motivation in that order, were found to have highest direct

effects; whereas age, facilities and job commitment in descending order had highest total indirect effects; while largest indirect effects were channelled through experience, achievement motivation and cadre on modes used as communication linkages for generation of technology by researchers.

5.3.10.2 Direct and indirect effects of independent variables on sources used as communication linkages by researchers for generation of technology: Cadre, facilities and job commitment in descending order were found to have highest direct effects; whereas age, education and experience in that order had highest total indirect effects; while largest indirect effects were channelled through cadre, facilities and education on sources used as communication linkages for generation of technology by researchers.

5.3.10.3 Direct and indirect effects of independent variables on communication linkages used by researchers for transfer of technology to extension personnel: Age, facilities and cadre in that order, were found to have highest direct effects, whereas experience, facilities and job commitment in descending order, had highest total indirect effects; while largest indirect effects were channelled through cadre, age and job commitment on communication linkages used by researchers for transfer of technology to extension personnel.

5.3.10.4 Direct and indirect effects of independent variables on communication linkages used by researchers for transfer of technology to farmers: Education, age and facilities in descending order, were found to have highest direct effects; whereas facilities, experience and achievement motivation in that order, had highest total indirect effects; while largest indirect effects were channelled through experience, education and achievement motivation on communication linkages used by researchers for transfer of technology to farmers.

5.3.11 Direct and indirect effects of independent variables on dependent variables of extension personnel:

5.3.11.1 Direct and indirect effects of independent variables on communication linkages used by extension personnel for acquisition of technology: Facilities, organisational climate and job satisfaction, in that order were found to have highest direct effects; whereas organisational climate, facilities and job commitment in descending order had highest total indirect effects; while largest indirect effects were channelled through organisational climate, facilities and achievement motivation on communication linkages used by extension personnel for acquisition of technology.

5.3.11.2 Direct and indirect effects of independent variables on communication linkages used by extension personnel for transfer of technology to farmers: Job commitment, training and experience in descending order, were found to have highest

direct effects; whereas facilities, job commitment and job satisfaction in that order had highest total indirect effects; while largest indirect effects were channelled through job commitment, experience and training on communication linkages used by extension personnel for transfer of technology to farmers.

5.3.12 Direct and indirect effects of independent variables on dependent variable for farmers:

5.3.12.1 Direct and indirect effects of independent variables on communication linkages used by farmers for acquisition of technology: Achievement motivation, economic motivation and scientific orientation, in that order, were found to have highest direct effects; whereas innovativeness, socio-economic status and training in descending order had highest total indirect effects; while largest indirect effects were channelled through training, achievement motivation and economic motivation on communication linkages used by farmers for acquisition of technology.

5.3.13 Constraints faced by researchers in generation and transfer of dryland agrotechnology:

5.3.13.1 Constraints faced by researchers in generation of technology: Lack of research facilities, lack of required funds, lack of congenial work environment, administrative problems to undertake research studies on their own, inadequate

research staff and lack of incentives and rewards were observed to be the major constraints faced by researchers for generation of technology.

5.3.13.2 Constraints faced by researchers in transfer of technology: Lack of adequate subject matter knowledge among researchers, improper functioning of diagnostic teams at research stations, administrative problems in use of mass media channel like printed material, radio and television, non-conducting of field days, farmers days/ kisan melas etc. at research stations as per schedule and non-involvement of researchers for formulation of production and contingent plans of extension personnel were found to be the major constraints faced by researchers for transfer of technology to extension personnel and farmers.

5.3.14 Constraints faced by extension personnel in acquisition and transfer of dryland agrotechnology:

5.3.14.1 Constraints faced by extension personnel in acquisition of technology: Administrative problems to visit research farms and to contact researchers, lack of supply of research publications, lack of conduct of short term and preseasonal trainings on locally relevant technology, lack of proper supply of extension publications on field and farmer oriented information, non-availability of radio and television channels

at office level and heavy workload due to diversified activities were found to be the major constraints faced by extension personnel for acquisition of technology.

5.3.14.2 Constraints faced by extension personnel in transfer of technology to farmers: Inadequate field staff, heavy workload due to diversified activities, lack of funds for organising extension activities, non-availability of recommended inputs both locally and timely, inadequate supply/availability of extension publications, administrative problems in use of mass media channels like printed material, radio and television lack of audio-visual equipment in required quantity and inadequate knowledge on crops and subsidiary enterprises were observed to be the major constraints faced by extension personnel for transfer of technology to farmers.

5.3.15 Constraints faced by farmers in acquisition and utilization of dryland agrotechnology:

5.3.15.1 Constraints faced by farmers in acquisition of technology: Lack of awareness/knowledge about latest technology lack of technical guidance, lack of conviction about the utility of the practice, unsatisfactory experience with earlier technology, lack of proper demonstration in use of the latest technology, lack of regular pre-seasonal training on locally relevant technology, lack of innovativeness and illiteracy were observed to be the major constraints faced by farmers for acquisition of technology.

5.3.15.2 Constraints faced by farmers in utilization of technology: Lack of required finance, lack of proper resources, high initial cost of the recommended input, non-availability of recommended input, lack of supply of recommended input on subsidiary/credit basis, lack of market facilities and uneconomic price to the produce, more complexity in use of the technology, personal attitude towards the technology and traditionalism and isolationism characters of the farmers were observed to be the major constraints faced by farmers for utilization of technology.

5.3.16 Timelag in transfer of certain selected dryland management practices from researchers to extension personnel and also to farmers:

5.3.16.1 Timelag in transfer of certain selected dryland management practices from researchers to extension personnel:

A time lag of five years was taken by researchers to transfer the technology to extension personnel, in respect of the practice "Intercropping" and the implement "Eenatigorry"; whereas six years was taken with regard to the practices "Dead furrow" and "Compartmental bunding".

5.3.16.2 Timelag in transfer of certain selected dryland management practices from researchers to farmers: A time lag of five to nine years was taken by researcher to complete the process of transfer the technology to farmers in respect of

the practice "Intercropping" and the implement "Eenatigorry"; whereas six to ten years was taken with regard to the practices "Dead furrow" and "Compartmental bunding".

About 63 per cent, 50 per cent, 59 per cent and 44 per cent of researchers only have made efforts to transfer the practices, "Intercropping", "Dead furrow", "Eenatigorry" and "Compartmental bunding" respectively to the farmers.

5.3.17 Time lag in transfer of certain selected dryland management practices from extension personnel to farmers:

A time lag of one to five years was taken by extension personnel to transfer the technology to farmers in respect of all the four practices, namely, Intercropping, Eenatigorry, Dead furrow and Compartmental bunding.

100 per cent of the sample of extension personnel have transferred all the four practices to farmers.

5.3.18 Time lag in utilization of certain selected dryland management practices by farmers:

Farmers have taken a time lag of one to five years for utilization of the practice "Intercropping" and the implement "Eenatigorry"; whereas two to five years in respect of the practices "Dead furrow" and "Compartmental bunding". The practices "Intercropping", "Dead furrow", "Eenatigorry" and "Compartmental bunding" were utilised by 70 per cent, 32 per cent, 61 per cent and 30 per cent of farmers respectively.

The practices intercropping, dead furrow, eeatigorry and compartmental bunding were aware of but not adopted by 17 per cent, 32 per cent, 24 per cent and 30 per cent of farmers respectively, whereas 13 per cent, 36 per cent, 15 per cent and 40 per cent of farmers respectively were not aware of the practices.

5.4 IMPLICATIONS

1. The findings indicated that "Self observation" was the most significantly used mode as communication linkages for generation of technology by researchers. Hence due importance may be given to this mode and researchers should be encouraged to develop this faculty on scientific lines, so that it would provide proper insights to the researchers in programmes to generate new technology in future.

2. It was also found in this study that "State level research institutes" was the most significantly used source as communication linkage for generation of technology by researchers. Research activity is entirely the responsibility of Agricultural Universities in the State. The Director of Research in the Agricultural Universities formulates common policies and procedures on various research schemes, which provide a common forum for generation of technology. Hence, state level research institutes should be given due importance to get ideas for generation of technology.

3. "Professional meetings" and "Training programmes" were the most significantly used communication linkage by researchers for transfer of technology to extension personnel. Kharif and rabi seasonal meetings, monthly T & V system meetings, zonal research advisory council meetings, provide excellent opportunity to research scientists to discuss the problems faced by extension personnel and to suggest appropriate technology. Hence all efforts should be made to make these meetings more effective by proper planning and ensuring close interaction between researchers and extension personnel.

Training programmes in subject matter fields conducted by research scientists for the benefit of extension personnel provide excellent avenue for transfer of technology from researchers to extension personnel and feed back of problems to researchers. Hence it is advisable to conduct crop-wise training programmes involving researchers regularly.

4. The findings indicated that "Personal contacts" was the most significantly used communication linkage by researchers for transfer of technology to farmers. Therefore efforts should be made to bring greater frequency of contacts between researchers and farmers by conducting kisan melas, field days, exhibitions etc. more frequently thus providing occasions for more frequent and direct personal contacts between researchers and farmers.

5. "Professional meetings" was most significantly used communication linkage by extension personnel for acquisition of technology. Monthly workshops and ZRAC meetings conducted at research stations will help the extension personnel to interact closely with researchers, which fruitfully results in acquisition of new technology. Hence the extension personnel should be encouraged more frequently than at present to participate in such professional meetings, as monthly workshops and ZRAC meetings conducted at research stations, monthly departmental and kharif and rabi seasonal meetings, that facilitates in acquisition of technology.

6. "Farm and home visits" and "Demonstrations" were the most significantly used communication linkage by extension personnel for transfer of technology to farmers. Therefore, efforts should be made to provide more frequent opportunities of farm and home visits and to conduct demonstrations by extension personnel which will facilitate in transfer of technology to a greater degree more effectively and efficiently.

7. The findings indicated that the independent variables of researchers namely, age, experience, facilities, optimal workload, cadre, achievement motivation and job commitment have contributed significantly for effective generation of technology through modes; while the factors like age, education, experience, training, cadre, job commitment and facilities have influenced significantly for effective generation of

technology through sources. Further, for effective transfer of technology to extension personnel, age, experience, job commitment, facilities, optimal workload and cadre have contributed significantly; while for effective transfer of technology to farmers age, education, total experience, facilities, optimal workload, lower cadre and achievement motivation have influenced significantly. Hence the above factors should be taken into consideration for effective generation and transfer of technology by researchers.

8. The findings also indicated that the independent variables of extension personnel, namely, job satisfaction, facilities, organisational climate, optimal workload, job commitment and achievement motivation have contributed significantly for effective acquisition of technology. Further for effective transfer of technology to farmers the factors like job commitment, optimal workload, training, total experience, facilities and job satisfaction have influenced significantly. Hence, the above factors should be taken into consideration for effective acquisition and transfer of technology by extension personnel.

9. The findings, further, indicated that for effective acquisition of technology by farmers the independent variables like training, innovativeness, achievement motivation, economic motivation, scientific orientation and socio-economic status have contributed significantly. Hence the above factors

should be taken into consideration for effective acquisition of technology by farmers.

10. Lack of research facilities, lack of required funds, lack of congenial work environment, administrative problems to undertake research studies on their own, inadequate research staff and lack of incentives and rewards for recognising good work were observed to be the major constraints faced by researchers for generation of technology. If administrators can take care to overcome the above constraints, then the generation of technology by researchers will be more.

11. Lack of adequate subject matter knowledge among researchers, improper functioning of diagnostic team at research stations, administrative problems in use of mass media channels like television, radio and printed material, non-conducting of field days, kisan melas, exhibitions etc. at research stations as per schedule, non-involvement of researchers for formulation of production and contingent plans of extension personnel were observed to be the major constraints faced by researchers for transfer of technology to extension personnel and farmers. Hence efforts should be made by the administrators to overcome the above constraints so as to enhance more transfer of technology by researchers.

12. The findings indicated that the administrative problems to visit research stations and to contact researchers, lack of supply of research publications, lack of conduct of

short term and preseasonal trainings on locally relevant technology, lack of proper supply of extension publications on field and farmer oriented information, non-availability of radio and television channels at office level and heavy workload due to diversified activities were found to be the major constraints faced by extension personnel for acquisition of technology. Therefore the administrators should take suitable measures to overcome the said constraints so as to enable the extension personnel to acquire more farm technology easily and effectively.

13. Inadequate field staff, heavy workload due to diversified activities, lack of funds for organising extension activities, non-availability of recommended inputs both locally and timely, inadequate supply of extension publications, administrative problems in use of mass media channels, lack of audio-visual equipment in required quantity and inadequate knowledge on crops and subsidiary enterprises were observed to be the major constraints faced by extension personnel for transfer of technology to farmers. If the administrators can take care to overcome the above constraints, then the transfer of technology from extension personnel to farmers will be more and effective also.

14. The findings indicated that lack of knowledge/awareness about latest technology, lack of technical guidance, lack of conviction about the utility of the practice, unsatis-

factory experience with earlier technologies, lack of proper demonstrations in use of the latest technology, lack of regular pre-seasonal trainings on locally relevant technology, lack of innovativeness and illiteracy were observed to be the major constraints faced by farmers for acquisition of technology. Therefore the researchers and extension personnel should take suitable measures to overcome the above constraints so as to enable the farmers to acquire more technology efficiently and effectively.

15. Lack of required finance, lack of proper resources, high initial cost, of the recommended input, non-availability of recommended input, lack of supply of recommended input on subsidiary/credit basis, lack of market facilities and uneconomic price to the produce, more complexity in use of technology, personal attributes towards the technology and traditionalism and isolationism characters of the farmers were observed to be the major constraints faced by farmers for utilizing the technology. If the researchers, extension personnel and government can take care to overcome the above constraints then the utilization of technology by farmers will be more.

16. The investigation also revealed that a time lag of five to six years and five to ten years was taken by researchers for transfer of technology to extension personnel and farmers respectively for the four selected practices.

Efforts should be made to reduce this time lag between researchers and farmers by encouraging more frequent contacts between them.

17. A time lag of one to five years was taken by extension personnel for transfer of the selected four practices to farmers. This can be reduced by fixing targets for extension personnel in their job chart and providing proper incentives that would act as motivations and also increasing the strength of extension personnel to have proper scientific ration between the extension personnel and farmers.

18. A time lag of one to five years was taken for utilizing the selected four practices by the farmers. By proper training, demonstration, technical guidance and convincing about the utility of the practice, this time lag can be reduced.

5.5 SUGGESTIONS FOR FUTURE RESEARCH

1. The exploratory research design was followed in this study. In future research attempts may be made with "Before and After" type of experimental studies.

2. There is need to make the cost-benefit analysis of communication linkages used by researchers, extension personnel and farmers.

3. It was found in the study that the percentage of variation explained by selected variables was meagre in respect of some dependent variables. Therefore, there is need to take some other new variables that could explain the higher percentage of variation.

4. Communication linkages of researchers, extension personnel and farmers were analysed in this investigation. Further research is needed to investigate downward and upward flow of information and its distortion at the various levels.

5. Correlation analysis was done in establishing the relationship between independent and dependent variables. Further analysis is needed to determine the communality of variables and their configuration patterns through factor analysis.