CHAPTER VI
SUMMARY AND CONCLUSIONS

In this chapter, a nutshell description of the present study in respect of summary, objectives, review, methodology, hypothesis, major findings and conclusions, major implications and suggestions for future research have been given.

6.1 Summary
6.2 Objectives
6.3 Reviews
6.4 Nutshell methodology
6.5 Hypothesis
6.6 Major findings and conclusion
6.7 Empirical model
6.8 Major implications
6.9 Suggestions for further research

6.1 SUMMARY

Communication - the sharing of ideas and information - forms a large part of the extension agent's job. By passing on ideas, advice and information, he hopes to influence the decisions of farmers. There are many ways in which extension agents and farmers communicate. Feedback is essential in communication so as to know whether the recipient has understood the message in the same terms as intended by the sender and whether he agrees to that message or not. Receivers are not just passive absorbers of messages; they receive the message and respond to them.

Feedback can be conceptualized along multiple dimensions: source, timing, specificity, sign, type and frequency. Most of the existing research on feedback has focused on dimensions other than frequency, and it is generally assumed in the literature that more frequent feedback enhances individual learning and task performance. A common rationale for this assumption is that more feedback provides information that individuals can use to learn and adopt
more effective task strategies, which in turn increases the amount of task effort individuals invest in the task and their subsequent performance.

Now-a-days it is evident that the vital role of knowledge and information are co-determinants (with other factors) of productivity in agriculture. Technological innovation has been a key element in the growth of agriculture throughout the world and technology dissemination is the means of empowering the farmers with knowledge based information for increasing and intensifying agricultural productivity. Policies and programmes necessarily rest on assumptions about how people live, what they need, and how they will respond to new incentives, regulations and opportunities. Feedback gives an opportunity to the technology developers to disseminate the technology and rethink on the issues raised by the clientele the farmer through extension personnel. The possible refinement and modifications could be done by the research scientist which in turn will lead to higher adoption and faster diffusion of the technologies.

Agricultural extension involves the whole gamut of complex interaction between farmers, extension workers and researchers in transfer of technology, eventually resulting in enhancing productivity and profitability to the farmers. The purpose of agricultural extension is to disseminate advice to farmers. Development of need based, location specific and user friendly technologies and their diffusion among farmers are the key issues of Agricultural Extension Services in specific and in general agricultural development.

Feedback plays a vital role in adoption process in which an individual passes from first knowledge of a technology to forming an attitude, to a decision to adopt or reject, to implementation of the technology and finally to confirm the decision. At all these stages of communication channels with inbuilt feedback mechanism plays an important role. Delivering meaningful extension is not easy. Farmers living in widely dispersed communities can be difficult to reach. Farmers’ information needs vary across locations, making extension challenging. Without proper feedback from the end-users of the technologies the communication cycles seems incomplete. By ignoring the views of the clientele, the potential benefit of any technology can’t be harvested by the group for whom it has been developed. In fact, feedback is an integral component of the whole communication process, which takes place in the
arena of agriculture and allied activities. The vast experiences of various initiatives for agricultural development reveals how important feedback is in Agricultural Extension Services through various structural, functional, organizational, institutional and administrative reforms, extension methodologies, approaches and reforms. Thus, the feedback through effective feedback mechanism increases the functional linkage between the clientele, technologies and the development agencies. Hence, the feedback mechanism ought to be used at all level of extension organizations, so that clienteles’ perception and their views could be reached to the planners, policy makers and researchers for the sustainability of the technology in the long run. So far very few efforts were made in this regards. Feedback for sustainable mechanism in Agricultural Extension Services is limited in utilization and literature on this topic is meagre. Therefore, it is essential to analyze the factors and suggest strategies to the stakeholders of feedback mechanism for its effective functioning and use in Agricultural Extension Activities. Considering this fact, the study entitled “A study on Feedback Mechanism of Agricultural Extension Services in Saurashtra Region of Gujarat” was undertaken.

6.2 OBJECTIVES OF THE STUDY

The overall objective of the study was to examine the Feedback Mechanism of the Agricultural Extension Services in Saurashtra Region of Gujarat. The specific objectives of study were:

The overall objective of the study was to examine the Feedback Mechanism of the Agricultural Extension Services in Saurashtra Region of Gujarat. The specific objectives of study were:

1. To analyze the profile characteristics of the respondents on feedback mechanism in Agricultural Extension Services.

2. To develop and standardize a scale to measure the feedback index based on awareness, perception, participation and utilization of the feedback mechanism activities by the respondents in Agricultural Extension Services.

3. To document the present feedback mechanism in Agricultural Extension Services.
4. To study the awareness and perception of the respondents about feedback in Agricultural Extension Services.

5. To study the extent of participation in and utilization of feedback mechanism in Agricultural Extension Services.

6. To assess the relationship between the selected independent variables and participation in and utilization of feedback mechanism of the respondents.

7. To identify the problems and study the suggestions given by the respondents regarding feedback mechanism in Agricultural Extension Services.

8. To suggest strategies to the stakeholders to improve the feedback mechanism for its implementation in Agricultural Extension Services.

6.3 REVIEW OF LITERATURE

A brief account of literature reviewed were presented under five heads viz., selected profile of the farmers, livelihood impact, evaluative perception, constraints faced by the farmers in adoption of improved variety and to seek suggestions to overcome the constraints faced by them.

6.4 NUTSHELL METHODOLOGY

The study was conducted using an ex post facto research design. The present investigation was undertaken in Amreli, Gir Somnath, Jamnagar, Junagadh and Rajkot District of the Saurashtra region. Three villages from one taluka of each district were selected for the study. A Purposive multistage sampling method was used. A sample of total 240 respondents (30 scientists + 60 extension personnel + 150 farmers) were selected for the study. Interview schedule was used for data collection and the statistical measures like mean, frequency, percentage, correlation coefficient were used.

The data were collected through pre-tested Gujarati version of interview schedule. Personal interview schedule is considered to be the most important tool and the researcher could get most authentic first hand information. The interview schedule was prepared keeping in views the objectives of the study and was common for all the respondents. In formulating the questions and statements for the schedule, the investigator brought the opinion and guidance of the major guide, used
available literature and consulted experts of Ph. D. scholars and extension educationist of Junagadh Agricultural University, Junagadh.

The independent variables undertaken in this study were Age, Education, Experience, Farm size, Training received, Extension contact, Socio-political participation, Time, Access to get/give feedback, Feedback during crisis, Reporting, Transport facilities, Job commitment, Role awareness, Motivation, Personality type, Extension service orientation, Participation behavior in a group, Extension teaching methods, Communication media used, Ability to give feedback and Level of interaction.

Feedback Mechanism of the different stakeholders in Agricultural Extension Services was quantified by developing an index called “Feedback Mechanism Index”. Different areas of feedback mechanism was divided into 4 domains with consultation with the researchers, experts and relevant review materials. The Feedback index was developed to measure the dependent variable comprised of the - Awareness of respondents, Perception of respondents, Extent of participation in feedback mechanism and Extent of utilization of feedback mechanism by respondents.

The present feedback mechanism in Agricultural Extension Services was documented through information given by the primary sources i.e. research scientists, extension personnel and farmers by contacting them and through the secondary source also.

A well-structured interview schedule was prepared in consultation with teaching staff of the Department of Agricultural Extension, College of Agriculture, Junagadh Agricultural University, Junagadh, extension managers and guidance provided by the Advisory Committee was used as a tool for collection of data.

The interview schedule was be pre-tested in the field on a separate twenty non-sample respondents and necessary modifications was made in the final draft and it was used as instrument for data collection. Data was collected with the help of interview schedule, contacted personally at their work spot or their residence in an informal way and possible care was taken to maintain congenial atmosphere to get unbiased response of the respondents.
Collected Data was compiled and designed in appropriate tables, charts, graphs in line with the objectives. Statistical inferences was analyzed as per their relative measures adopting the following framework; Percentage, Mean, Standard deviation, Coefficient of Correlation, The SPSS 22 computer software was utilized for various statistical conclusions linking to the profile characteristics of the respondents, Coefficient of Correlation and Multiple Regression was analyzed through the SPAR 2 computer software for path analysis.

6.5 HYPOTHESIS OF STUDY

The following hypothesis was made in view of the objectives under the study, which were tested in light of the finding of the study.

Null Hypothesis – Ho1: There is no relationship between profile characteristics of the respondents with their extent of participation in and utilisation of feedback.

6.6 MAJOR FINDINGS AND CONCLUSION

6.6.1 Profile characteristics of women

6.6.1.1 Socio-personal variables

6.6.1.1.1 Age

From the Table 5.1 it was found that majority of the research scientists were categorized into middle aged (56.67%), followed by young aged (23.33%) and old aged (20.00%) whereas majority of the extension personnel were categorized into middle aged (58.33%), followed by young aged (26.67%) and old aged (15.00%) while the farmers were categorized into middle aged (48.00%), followed by young aged (38.00%) and old aged (14.00%).

6.6.1.1.2 Education

From the Table 5.4 it was known that majority of the research scientists had doctoral degree (80.00%), followed by master degree (20.00%) whereas majority of the extension personnel had a master degree (61.67%), followed by graduate degree (20.00%) and doctoral degree (18.33%) while the farmers were of secondary education (40.00%), followed by illiterate (32.00%), primary education (14.67%), higher education (13.33%).

6.6.1.1.3 Experience

It could be indicated from the Table 5.5 that research scientists were under very medium experience (53.33%), followed by low experience (26.67%) and high
(20.00%) whereas majority of the extension personnel were under medium experience (75.00%), followed by low experience (18.33%) and high (6.67%) while farmers were under medium experience (52.67%), followed by low experience (32.00%) and high experience (15.33%).

6.6.1.1.4 Training undergone

It could be indicated from the Table 5.6. that majority of the research scientists were under low training received (60.00%), followed by medium training received (26.67%) and high training received (13.33%). Whereas majority of the extension personnel were under low training received (55.00%), followed by medium training received (30.00%) and high training received (15.00%) while the farmers were under low training received (58.00%), followed by medium training received (28.67%) and high training received (13.33%).

6.6.1.1.5 Extension Contact

It could be indicated from the Table 5.7 that majority of the research scientists were under low extension contact (50.00%), followed by medium extension contact (26.67%) and high extension contact (23.33%) whereas majority of the extension personnel were medium extension contact (66.67%), followed by high extension contact (18.33%) and low extension contact (15.00%) while majority of the farmers were falling under medium extension contact (69.33%), followed by low extension contact (22.67%) and high extension contact (8.0%).

6.6.1.1.6 Farm size

It could be indicated from the Table 5.8. that majority of the farmers were falling under medium farmers (45.33%), followed by small farmers (34.67%), and big farmers (20.00%).

6.6.1.1.7 Socio political participation

It could be indicated from the Table 5.9. that majority of the research scientists were under medium socio political participation (53.33%) followed by low socio political participation (26.67 %) and high socio political participation (20.00%) whereas majority of the extension personnel were under medium socio political participation (50.00%), followed by low socio political participation (41.67%) and high socio political participation (8.33%) while that majority of the farmers were under low socio political participation (70.00%), followed by medium socio political participation (24.67%) and had high socio political participation (5.33%).
6.6.1.2 Situational Variables

6.6.1.2.1 Preferred time for giving feedback

It could be indicated from the Table 5.10. that less than majority of the research scientists were under medium time (46.67%), followed by low time (33.33%) and high time (20.00%) whereas the extension personnel were under medium time (56.67%), followed low time (35.00%) and high time (8.33%) while the farmers were under low time (70.00%), medium time (23.33%) and high time (6.67 %).

6.6.1.2.2 Access to get/give feedback

It could be indicated from the Table 5.11. that research scientists were falling under medium access to get /give feedback (40.00%), followed by high access to get /give feedback (33.33%) and low access to get /give feedback (26.67%) where as majority of the extension personnel were falling under medium access to get /give feedback (68.33%) followed by high access to get /give feedback (21.67%) and low access to get /give feedback (10.00%) while majority of the farmers were falling under medium access to get /give feedback (44.67%) followed by high access to get /give feedback (30.00%) and low access to get /give feedback (25.33%).

6.6.1.2.3 Feedback during crisis

It could be indicated from the Table 5.12. that majority of the research scientists were falling under medium feedback during crisis (65.00%), followed by low feedback during crisis (20.00%), and high feedback during crisis (15.00%) whereas extension personnel were falling under medium feedback during crisis (76.67%), followed by low feedback during crisis (13.33%) and high feedback during crisis (10.00%) while majority of the farmers were falling under medium feedback during crisis (68.67%), followed by low feedback during crisis (21.33%) and high feedback during crisis (10.00%).

6.6.1.2.4 Reporting

It could be indicated from the Table 5.13 that research scientists were falling under medium reporting (46.67%), followed by high reporting (30.00%) and low reporting (23.33%) where majority of the extension personnel were falling under medium reporting (53.33%), followed by low reporting (26.67%) and high reporting (20.00%) while majority of the farmers were falling under low reporting (63.33%),
followed by medium reporting (26.67%) and high reporting (20.00%).

6.6.1.2.5 Transport facilities

It could be indicated from the Table 5.14 that research scientists were falling under medium transport facilities (53.33%), followed by high transport facilities (30.00%) and low transport facilities (16.67%) whereas majority of the extension personnel were under medium transport facilities (46.67%), followed by low transport facilities (28.33%) and high transport facilities (25.00%). It could be indicated from the Table 5.14 that majority of the farmers were grouped under low transport facilities (60.00%), followed by medium transport facilities (32.67%) and high transport facilities (7.33%).

6.6.1.3 Psychological Variables

6.6.1.3.1 Job commitment

It could be indicated from the Table 5.15 that majority of the research scientists were falling under medium job commitment (56.67%), followed by low job commitment (23.33%) and high job commitment (20.00%) whereas majority of the extension personnel were falling under medium job commitment (70.00%), followed by low job commitment (20.00%) and high job commitment (10.00%) while majority of the farmers were falling under high job commitment (59.33%), followed by medium job commitment (34.00%) and low job commitment (6.67%).

6.6.1.3.2 Role awareness

It could be indicated from the Table 5.16 that majority of the research scientists were falling under medium role awareness (53.33%), followed by role awareness (23.33%) and low role awareness (20.00%) while majority of the extension personnel were falling under medium role awareness (63.33%), followed by high role awareness (21.67%) and low role awareness (15.00%) and the farmers were distributed equally under low role awareness (36.00%), followed by medium role awareness (33.33%), and high role awareness equally (30.67%).

6.6.1.3.3 Achievement Motivation

It could be indicated from the Table 5.17 that research scientists were falling under medium achievement motivation (53.33%), followed by very low achievement motivation (30.00%) and high achievement motivation (16.67%) whereas extension personnel were falling under medium achievement motivation (58.33%), followed by low achievement motivation (31.67%) and high achievement motivation (10.00%) while farmers were falling
under low achievement motivation (65.33%), followed by medium achievement motivation (26.67%) and low achievement motivation (8.00%).

6.6.1.3.4 Personality type

The respondents were administered items related to all the three types of personalities. Farmers were under 1st rank based on the mean score in Table 5.18 for responding more for response "Always" for extrovert statements. The reason might be lack of hesitation to say whatever they feel regarding technology (i.e. high feedback giving ability), hence choosing their frequently manifested behavior which is falling in one category that is extrovert type. While research scientists the dominated frequently manifested behaviour was introvert type and in case of extension personnel belonged to ambivert type.

6.6.1.3.5 Extension service orientation

It could be indicated from the Table 5.19 that majority of the research scientists were falling under medium extension service orientation (60.00%), followed by low extension service orientation (25.00%) and high extension service orientation (15.00%) whereas majority of the extension personnel were falling under medium extension service orientation (73.33%), followed by low extension service orientation (20.00%) and high extension service orientation (6.67%) while majority of the and the farmers were distributed equally under low role awareness (36.00%), followed by medium role awareness (33.33%) and high role awareness equally (30.67%).

6.6.1.3.6 Participation behavior in group

It could be indicated from the Table 5.2 that research scientists were falling under medium participation behavior in a group (73.00%), followed by low participation behavior in a group (16.67%) and high participation behavior in a group (10.00%) whereas majority of the extension personnel were falling under medium participation behavior in a group (61.67%), followed by low participation behavior in a group (28.33%) and high participation behavior in a group (10.00%) while majority of the farmers were falling under low participation behavior in a group (65.33%), followed by medium participation behavior in a group (22.67%) and low participation behavior in a group (12.00%).

6.6.1.4 Communicative Variables
6.6.1.4.1 Extension teaching methods

It could be indicated from the Table 5.27 that research scientists were falling under medium use (46.67%), followed by low use (33.33%) and high use (20.00%) whereas extension personnel were falling under medium use (55.00%), followed by low use (25.00%) and high use (20.00%) while majority of the farmers were falling under medium use (51.33%), followed by low use (42.00%) and high use (6.67%).

6.6.1.4.2 Communication media used

It could be indicated from the Table 5.28 that majority of the research scientists were falling under medium communication media used (80.00%), followed by high communication media used (13.33%) and low communication media used (6.67%) whereas majority of the extension personnel were falling under medium communication media used (63.33%), followed by high communication media used (25.00%) and low communication media used (11.67%) while of the farmers were falling under medium communication media used (43.33%), followed by low communication media used (36.67%) and high communication media used (20.50%).

6.6.1.4.3 Ability to give feedback

It could be indicated from the Table 5.29 that majority of the research scientists were falling under high ability (50.00%), followed by low ability (36.67%) and medium ability (13.33%) whereas extension personnel were grouped under medium ability (53.33%) followed by low ability (26.67%) and high ability (20.00%) while majority of the farmers were falling under medium ability (51.33%) followed by low ability (38.67%) and high ability (10.00%).

6.6.1.4.4 Level of Interaction

It could be indicated from the Table 5.30. that research scientists were falling under medium level of interaction (63.33%), followed by high level of interaction (20.00%) and low level of interaction (16.67%) whereas extension personnel were falling under medium level of interaction (66.67%), followed by high level of interaction (18.33%) and low level of interaction (15.00%) while farmers were falling under medium level of interaction (48.00%), followed by low level of interaction (43.33%) and high level of interaction (8.67%).
6.6.2 Documentation of present feedback mechanism

The present feedback mechanism was documented by contacting the research scientists, extension personnel and also from secondary sources. Various extension activities are being conducted by the state agriculture university and state department of agriculture under collaboration of ATMA in which research scientists, extension personnel and farmers are the stakeholders for getting/giving feedback.

6.6.3 Awareness and Perception of Respondents the about Feedback Mechanism in Agricultural Extension Services

6.6.3.1 Extent of awareness the by respondents of feedback mechanism in Agricultural Extension Services

It could be indicated from the Table 5.1 that majority of the research scientists had medium awareness (76.67%) followed by high (13.33%) and low awareness (10.00%) about feedback mechanism in Agricultural Extension Services whereas majority of the extension personnel had medium awareness (58.33%) followed by low (26.67%) and high (15.00%) awareness while majority of the farmers had medium awareness (64.00%), followed by high (26.67%) and low (9.33%) awareness about feedback mechanism in Agricultural Extension Services.

6.6.3.2 Extent of perception awareness the by respondents of feedback mechanism in Agricultural Extension Services

It could be indicated from the Table 5.2 that majority of the research scientists had medium perception (73.33%), followed by high perception (20.00%), and low perception (6.67%) whereas more than half of the extension personnel had medium perception (67.33%), followed by high (20.00%) and low perception (16.67%) while majority of the farmers had medium perception (58.67%), followed by high (24.00%) and low perception (17.33%) about feedback mechanism in Agricultural Extension Services.

6.6.4 Extent of Participation and Utilization of Feedback Mechanism in Agricultural Extension Services by the Respondents
6.6.4.1 Extent of participation by respondents in feedback mechanism in Agricultural Extension Services.

It could be indicated from the Table 5.32, that majority of the research scientists had medium participation (63.33%), followed by low participation (20.00%) and high participation (16.67%) in feedback mechanism in Agricultural Extension Services. Whereas 66.67 per cent of the extension personnel had medium participation, followed by low (18.33%) and high participation (15.00%) in feedback mechanism in Agricultural Extension Services. While farmers had low participation (51.33%), followed by medium (32.67%) and high participation (16.00%) in feedback mechanism in Agricultural Extension Services.

6.6.3.2 Extent of utilization by respondents of feedback mechanism in Agricultural Extension Services.

It could be indicated from the Table 5.33, that majority of the research scientists had medium utilization (73.33%), followed by high utilization (20.00%) and low utilization (16.67%) of feedback mechanism in Agricultural Extension Services. Whereas more than half of the extension personnel had medium utilization (53.33%), followed by low (25.00%) and high utilization (21.67%) of feedback mechanism while more than half of the farmers had low utilization (52.00%) followed by medium(28.00%) and high utilization (26.00%) of feedback mechanism in Agricultural Extension Services.

6.6.3.3 Overall Extent of Feedback Mechanism in Agricultural Extension Services by The Respondents

It could be indicated from the Table 5.34 that majority of the research scientists had medium (70.00%), followed by high (16.67%) and low (13.33%) feedback mechanism in Agricultural Extension Services. Whereas more than slightly half of the extension personnel had medium (51.67%), followed by low (23.33%) and high (20.00%) feedback mechanism while more than half of the farmers had low utilization (52.00%) followed by medium(28.00%) and high utilization (26.00%) of feedback mechanism in Agricultural Extension Services.
Summary and conclusion

6.6.4 Factors influencing extent of participation in and utilization of feedback mechanism in Agricultural Extension Services

The correlation analysis revealed that the variables like extension teaching methods, ability to give feedback, level of interaction, socio-political participation, reporting, extension service orientation were positively and significantly associated with extent of participation in feedback mechanism by research scientists. Whereas for extension personnel the analysis revealed that the variables like extension contact, reporting, extension teaching methods and level of interaction were positively significant with extent of participation feedback mechanism. While for farmers the variables like education, experience, training undergone, reporting, participation behaviour in group, extension teaching methods, communication media used, farm size, ability to give feedback, level of interaction were positively significant with extent of participation in feedback mechanism.

The correlation revealed that the variables like extension teaching methods, ability to give feedback, level of interaction, socio-political participation, reporting, extension service orientation were positively and significantly associated with extent of utilisation in feedback mechanism by research scientists. Whereas for extension personnel the analysis revealed that the variables like extension contact, reporting, extension teaching methods and level of interaction were positively significant with extent of utilisation feedback mechanism. While for farmers the variables like education, experience, training undergone, reporting, participation behaviour in group, extension teaching methods, communication media used, farm size, ability to give feedback, level of interaction were positively significant with extent of utilisation in feedback mechanism.

6.6.5 Problems given by the respondents in giving / receiving feedback through present feedback mechanism

During the study the major problems expressed by research scientists were during the workshops and other meetings the farmers/ extension personnel do not provide sufficient feedback”, “Limited field visits with farmers resulting in accurate reflection of real field problems in research programmes”, “Proper feedback is not taken after conducting meeting/ programmes”, “Lack of proper importance and attention given by administration- Policy makers and top level management in
feedback”, whereas in case of extension personnel major problems were “Insufficient extension personnel to cover huge farm population”, “Extension personnel burdened with other duties besides departmental work”, “No follow up of feedback after conducting extension activities” and “Monotonic and reiterative official meetings conducted leading to poor feedback on genuine field problems while in case of farmers the problems were Lack of techniques and skills to give feedback to the extension personnel/ researchers”, “Farmers feedback are not given due attention after conducting meeting/ programmes and “In adequate contacts by the extension personnel and the research scientists with farmers.

6.6.6. Suggestions given by the respondents in giving / receiving feedback through present feedback mechanism

The major suggestions offered by research scientists, extension personnel and farmers were Ensure/Train the farmers and extension personnel in giving accurate feedback during workshops and other meetings in written form” “Arrange more interactive meetings between extension personnel and research scientists and “Coordination and avoiding of overlap implementation of programmes to sustain long term benefits in solving farmers problems” Recruitment of field level staff to fill up the vacant posts to ensure better service, Job Specification should be harmonized by reducing the allotment of other department duties, Regular monitoring and evaluation should be conducted to collect feedback on extension activities. As a part of the regular job, routine based activity should be undertaken to collect feedback from the farmers after conducting every program, Teach / guide the farmers to use the feedback mechanisms to express freely and accurately of extension activities in a comfortable way, Increase awareness of the farmers on feedback mechanisms through proper education based modules regarding feedback.

6.6.7. Strategies to the stakeholders of feedback mechanism for its effective functioning and use in Agricultural Extension Services

Documenting the feedback given at various level by staff as well as other stakeholders, improve the extension contacts by utilizing the existing ICTs like mobile telephony(SMS), networking of farmers groups and specific need based trainings for effective getting/giving feedback, conduct ZREAC, SAS meetings, farmers organisations /groups may be initiated and strengthened which would act as a
platform for effective feedback at farmers/village level are the strategies suggested to improve the effective utilization of feedback mechanism in Agricultural Extension Services.

6.7 **EMPIRICAL MODEL**

Based on results of relationship of independent variables with feedback mechanism of the respondents, empirical models were prepared and given in Figure 6.1.

6.8 **IMPLICATIONS OF THE STUDY**

In the light of findings of the study and from the personal experiences of researcher gained by the respondents, following implications are made for the effective improvement in activities carried out in rural area, to the extension and field level personal and policymakers.

1. The findings reveal that perception regarding feedback mechanism is medium and trainings on the methodologies and techniques of technology assessment, its importance in feedback mechanism helps the research scientists and extension personnel for effective utilization of feedback in Agricultural Extension Services.

2. The findings of the study reveal that extent of participation was medium and extent of utilization of feedback mechanism was medium and thus there is need to improvise participation in and utilization of feedback mechanism in agricultural extension services by the respondents by increasing frequency of participation mandatory in extension activities at various levels of organisation regarding feedback for effective utilization of feedback mechanism.

3. The findings revealed that majority of the farmers had secondary education followed by illiteracy leading to low utilization and for this increase of literacy levels of farmers is to be urgently addressed by the policy makers to undergo functional literacy programmes which will leads to high utilization of
feedback. It will also help the farmers to fully utilize the print media also for effective feedback getting/giving.

4. The findings reveal that all the respondents had medium extension contact and it was positively significant with extent of utilization of feedback mechanism and thus findings give an effective base for ATMA to enable all the stakeholders to provide feedback and encourage for better participation in and utilization of feedback mechanism in evolving SREP plans.

5. The findings reveal that low socio political participation and low participation behavior in group by the farmers and thus there is a need of strengthening Farmer co-operatives, Farmer Interest Groups and Commodity Interest Groups for improving their social participation and develop participation behavior in group by the farmers thus leading to effective utilization of feedback mechanism in Agricultural extension services. Formal and non-formal leadership should help to encourage the farmers to participate in social institutions.

6. The developed scale may be administered to other respondents providing extension services with due modification to measure feedback index.

7. The extension agencies working in the area should make intensive efforts to organize extension activities such as field demonstration, farmers' days, discussion meetings, specialized farmers' training, timely public intimation and campaign etc. should be organized at village level for this purpose which will help farmers to be more aware about the feedback mechanism practices and to establish in depth extension contact with the farmers. Such practices should be encouraged among the peasantry and sufficient research should be conducted to find out the rationality behind these practices.

8. Even though farmers had undergone training, majority of respondents were lacking regular, proper and need based training which concentrate on utilizing local resources and feedback mechanism techniques. Hence, training programmes should be organized by developing and increasing awareness of the farmers on feedback mechanisms through proper education based modules regarding feedback and feedback mechanism.
Summary and conclusions

9. The study facilitates in knowing the characteristics of the respondents and it would help to serve as a guideline for the policy makers, planners and rural development associations. Background factor of the farmers showing relationship in participation and utilization of feedback techniques must be reckon while formulating and planning any programme for farmers.

6.9 SUGGESTIONS FOR FURTHER RESEARCH

It is true that findings of single study are not adequate to make any generalizations. An attempt has been made to suggest some topics for the future studies, which are considered important by the investigator and some of the new areas in which research work may be undertaken are as under:

1. The study was carried out under certain limitations of time and resources available with researcher, covering only Saurashtra region of Gujarat state. Therefore, it is necessary to replicate the same study in other districts of the state.

2. Such studies should be repeated after some laps of time.

3. The study was limited to 5 districts and 5 talukas only but to strengthen the findings of this study, similar study may be carried out to the other area of the state.

4. The area of research can be extended and size of sample of the respondents also can be increased in any further study to draw more valid and generalized conclusions.

5. The study opens new vistas for such studies in other dimensions of feedback such as source, timing, specificity, sign, type and frequency.

6. Further study could be conducted to ascertain the comparative analysis of the personnel working in private sector agricultural extension services to know their feedback mechanism for better understanding of the overall extension service providing system.

7. The area of research could be extended further and significantly large number of respondents could be studied to draw valid conclusions.