CHAPTER - VI

SUMMARY, CONCLUSIONS AND SUGGESTIONS
The progress of research in agricultural fields and improvement of production essentially requires timely supply of information to agricultural scientists. It is not possible to achieve self-sufficiency in food production without adequate information supply to agricultural scientists.

The concentration of efforts is probably efficacious in informing agricultural scientists of improved methods in agriculture. It also indicates an unfortunate parochialism affecting both the agricultural scientists and the information handling industry. To promote an effective working relationship between research workers who generate new agricultural knowledge, and farmers who stand in need of such knowledge, the information system acts as 'middlemen' in a position to deliver such knowledge to the required points of distribution. The sources of agricultural information are varied in kind and widely scattered in location with an equally widespread distribution. In the same way agricultural information users are also equally scattered. To bridge this gap, we need agricultural information system.

So far as the structure of the Agricultural Information Service is concerned, we should remember that in this complex world it is not possible for any individual agricultural library to meet the complete information requirements of the users. The users requirements are becoming more and more diverse in the quantities and qualities. We also find time factor as pressure on the supply of agricultural information. There is also an imperative need for widening information coverage, extending the sphere of services and accelerating the speed in the supply of information.

It is essential to build the requisite information infrastructure for agricultural scientists within the state and nation. This is particularly relevant in the context of
“food for all”. In pursuit of scientific excellence, agricultural information infrastructure is a must and agricultural information service facility keeps track of the latest scientific, agricultural and technological advances all over the world.

The current agricultural information is dispersed in large number periodicals, e-resources, research reports and other documents. The varied formation needs a level of sophistication and capacity for effective application of information among the agriculture information users. It becomes difficult for agricultural scientists, students and teachers to have timely access to reliable information.

Planning of computerized agricultural college libraries information system for Andhra Pradesh state is the utmost necessity. The agricultural students are using the existing Information system for their information needs. Hence, at this stage it may not be possible to do away with the conventional system and to switch over to modern computerized web based agricultural information system. Both the aspects are taken due consideration in this study while planning agricultural information networks for Andhra Pradesh.

Planning of computerized agricultural information system for Andhra Pradesh state is the utmost necessity. The agricultural students, teachers and scientists are using the existing Information System for their information needs. Hence, at this stage it is necessary to create awareness among agricultural students, teachers and scientists to utilize web based agricultural information system to acquire latest information.
In this present study an attempt is made to find out:

- Various types of information needs and to find out the information needs of the Agricultural College Students.
- Existing information sources available in the Agricultural College Students.
- Awareness of e-Resources and Online Services of Agricultural Students.
- Extent of the services rendered by the Agricultural College Libraries.
- Design a suitable Information System and a photo-type networking model of web page of Agricultural College Libraries of Andhra Pradesh.

The population sample selected for this study consists of two groups. The first group consists of agricultural college libraries in Andhra Pradesh and the second consists of agricultural college students. The investigator has taken maximum efforts for acquisition of reliable data from the respondents by employing the combination of several methods i.e. questionnaire, interview and observation. The primary data, thus collected was analyzed by using statistical techniques and graphical representations.

The following hypotheses were formulated:

1. The existing information sources in various agricultural college libraries in Andhra Pradesh are not adequate to meet the requirements of the users.
2. The services rendered by agricultural college libraries in Andhra Pradesh are satisfactory.
3. Users are aware of the various services rendered by agricultural college libraries in Andhra Pradesh.
4. The Agricultural Information sources available in agricultural college libraries in Andhra Pradesh are sufficient to meet the requirements of the users.
5. The information resources and online services available at agricultural college libraries are satisfactory.
6. There is a need of designing a suitable Information System and Networking of Agricultural College Libraries.
The study is limited to six agricultural college libraries of Andhra Pradesh. The present study intended to study the agricultural resources and services of Agricultural College Libraries of Andhra Pradesh by collecting the opinions of the users. The present study is limited to make the survey of the Undergraduate students of Agriculture only. The inference drawn basically refers to the information needs of Undergraduate students of Agriculture. The investigator also made an attempt to plan and design agricultural information system which is a useful system to provide agricultural information to students, teachers, scientists and extension specialists.

CONCLUSIONS

The following conclusions are drawn from the analysis of data obtained from agricultural college libraries in Andhra Pradesh.

1. ANGRAU Central Library has a large number of users in U.G. and P.G. (724). Agricultural College, Aswaraopet Library has the lowest numbers of users (120). It can be concluded ANGRAU Central Library has the highest number of user.

2. ANGRAU Central Library has the largest collection of books (86,797), followed by ANGRAU Regional Library, Bapatla (49,502). ANGRAU Central Library is subscribing to highest number of periodicals (278), followed by ANGRAU Regional Library, Tirupati (184). Agricultural College, Mahanandi is subscribing to less number of periodicals (35). It is observed
that ANGRAU Central Library is subscribing to the highest number of periodicals.

3. Agricultural College Libraries were receiving finance from ICAR and State Government.

4. 50% of libraries have indicated that funds were adequate to meet the requirements and 50% of libraries have expressed that funds are inadequate. It can be concluded that new Agricultural College Libraries were facing problem of adequacy of funds.

5. 100% of libraries have suggested to ask for more funds from Government and other sources and to come under Consortia.

6. Out six libraries, all the libraries were providing Reference Services, Current Awareness Services, Inter-Library Loan and Reprographic Services. Three libraries (ANGRAU Central Library, Hyderabad; ANGRAU Regional Library, Tirupati and ANGRAU Regional Library, Bapatla were providing all the services.

7. Six libraries have responded that the services provided by them were completely utilized. The analysis reveals that 100% of library services provided by the libraries were being completely utilized.

8. The services of 3 libraries were fully manual operations, 2 libraries were partly computer based and one library was fully computer based. Thus it can be concluded that majority of libraries operations were manual.

9. Six libraries (100%) were purchasing books by inviting quotations. Hence cent percentages of libraries were purchasing books by inviting quotations.

10. All the libraries were subscribing Indian Periodicals direct to the publishers.
11. Only three libraries were subscribing foreign periodicals and they were subscribing through agents. Three libraries were not subscribing foreign periodicals, since they are offering P.G. Courses.

12. 100% of libraries were following Dewey Decimal Classification Scheme. It is clear that all the Agricultural College Libraries in Andhra Pradesh were following Dewey Decimal Classification Scheme for arranging the documents in order.

13. All libraries were following Anglo-American Catalogue Rules. The analysis reveals that 100% of libraries were following Anglo-American Catalogue Rules for preparing catalogue cards.

14. 66.67% of libraries were compiling bibliographies and 33.33% of libraries were not compiling bibliographies. Thus, it is clear that majority of libraries were not preparing bibliographies.

15. Five (83.33%) of libraries are following Brown System and one library is following Computerized system for circulation of documents. The analysis shows that majority of libraries are following Brown System for circulation of documents.

16. 83.33% of libraries do not have sufficient staff. Only one library expressed that present staff was sufficient. The analysis shows that majority of libraries do not have sufficient staff. This may be due to lack of funds, ban on recruitment etc.

17. 100% of libraries were using computers. It is observed that all the agricultural college libraries were using computers.

18. 100% of libraries were using computers for Reference Services, Internet, E-Resources and Clerical and administration and 50% of libraries were using for
Storage and retrieval of agricultural information and OPAC. It concluded that all the libraries were using computers for Reference Services, Internet, E-Resources and Clerical and administration.

The following conclusions are drawn from the analysis of data obtained from students of agricultural college in Andhra Pradesh.

1. 42.27% of the respondents visited library once in a week and 6.67 visited occasionally or once a month. Further 4.09% (16) visited the library every day.

2. 33.79% of respondents spent two hours a week at an average in the library and 36.37% of respondents spent one hour and less than it. It is to say the respondents were not properly utilizing library materials. However, it is learnt that most of the respondents got information from the library at doorsteps.

3. Majority (75.15%) of respondents was collecting reading material through library, followed by 72.57 are through seniors, 71.51% were through teachers and 69.67% are through friends.

4. Majority 86.82% of respondents were visiting newspaper section and 85.60% were visiting lending section.

5. 514 (77.88) students sought information for preparing examination, 72.12% percent for updating knowledge, and 66.82 percent for preparing competitive exams.
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7. Majority (80 percent) of respondents used library catalogue to access documents, followed by 60.90 percentage through bibliographies reduced by library staff, 42.27 percent through references from books and 29.09 percent through references from articles.

8. Majority of students 29.55 percent faced the same common problem i.e. unavailability of information. 25.91 percent faced lack of time for searching. 7.23 percent of them faced incomplete information material.

9. 36 percent of the respondents were ‘completely’ benefiting from the lending services. 51 percent of the respondents were ‘marginally’ utilizing Selective Dissemination of Information Services followed by Inter Library Loan Services 47 percent. Further 58 percent of the respondents were ‘substantially’ using the reference services.

10. Majority of respondents i.e. 58 percent received substantial help from the library staff in searching and collecting information. 8 percent of respondents expressed that they did not receive any help. In this regard library staff themselves take interest to provide assistance to the needy students.

11. Majority (88.03 percent) of the respondents had not visited other libraries, because they were satisfied with the information available in their Libraries.
12. 74.55 percent of respondents were collecting current information through library staff, followed by 71.82 percent through seniors, 70 percent through teachers and 62.27 percent through friends.

13. Majority of students (71.82 percent) were using information for writing assignments and 70 percent of respondents for demonstrations.

14. 87 percent of the respondents were satisfied about the existing working hours i.e., 8.00 a.m. to 6.30 p.m. Therefore, it was not necessary to change Library timings.

15. More than 80 percent of the respondents have expressed high adequacy regarding Books, Reference Books, Journals/Periodicals, Newspapers, General Magazines, and Competitive Exams Magazines and less than 15 percent of respondents have expressed inadequate and less than 5 percent of respondents had not mentioned their opinion.

16. Majority of the respondents 68.33 percent were satisfied regarding number of Reader’s Tickets issued. Only 31.67 percent of respondents expressed dissatisfaction and they there were requesting for more tickets. 51.27 percent indicated that they were not satisfied with the loan period of books issued and remaining (48.79 percent) replied satisfaction. The respondents requested to extent loan period from 15 days to 30 days.

17. 59.70 percent have expressed that they were satisfied with the present arrangement of the books on the shelves and 40.30 percent of respondents were not satisfied.
18. 79.5 percent of them were satisfied and 20.76 percent of them were not satisfied. Therefore, it can be concluded from the above data that majority of respondents were satisfied with Library Services.

19. More than 90 percent of students were satisfied with the library facilities and remaining 10 percent students were not satisfied and neither satisfied nor dissatisfied.

20. 86.97 percent of students were consulting catalogue for information. And the remaining 13.03 percent of the students were not consulting catalogue. It is also evident that majority of the respondents were consulting catalogue.

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22. 81.97 percent of the respondents were satisfied and 18.03 percent of the respondents were not satisfied regarding latest editions of books available in the library.

23. Most of the respondents (86.97 percent) indicated that they required library orientation programme to utilize the resources effectively and the remaining (13.03 percent) replied negatively. It reveals that the library orientation programme was required by of the respondents.
24. Majority of the respondents (86.97 percent) indicated that they required library orientation programme to utilize the resources effectively and the remaining (13.03 percent) replied negatively. It reveals that the library orientation programme was required by of the respondents.

25. 91.06 percent indicated that they are getting required material for writing assignments from library and the remaining (8.94 percent) replied negatively. It reveals that the majority of respondents are getting required information for assignments from library.

26. 96.44 percent of students are of the opinion that catalogues are helpful for locating required reading material. And the remaining 3.56 percent of the students replied negatively. It is also evident that majority of the respondents felt that catalogue were helpful for in locating required reading material.

27. More than 95 percent of the respondents have expressed that the location of reading material was helpful and less than 5 percent respondents have expressed not helpful.

28. Majority of respondents i.e. 62.12 percent received substantial help from the library staff in searching and collecting information. 6.67 percent of respondents expressed that they did not receive any help. In this regard library staff themselves take interest to provide assistance to the needy students.
29. Most of the respondents (90.00%) indicated that they received formal training in the use of library and search of scientific information and the remaining (10.00%) replied negatively. 100% percent of respondents have expressed that the training programmes were useful in locating information.

30. Majority (89.39%) of the respondents were satisfied with overall services and facilities of the library and 10.61% of them were not satisfied. Therefore it can be concluded that from the above data that the respondents were more satisfied with the overall library services and facilities.

31. Majority (89.39%) of the respondents were satisfied with overall services and facilities of the library and 10.61% of them were not satisfied. Therefore it can be concluded that from the above data that the respondents were more satisfied for the overall library services and facilities.

32. 90.7 percent of respondents have expressed that networking of agricultural information system was very essential and 9.3 percent of respondents replied negatively. The analysis shows that majority of respondents were interested in networking of agricultural information system.

33. Majorities (91.83%) of the respondents were satisfied with overall services and facilities of the library and 8.17% of them were not satisfied. Therefore it can be concluded that from the above data that the
respondents were more satisfied for the overall library services and facilities.

34. Suggestions given by the respondents.

a. There should be orientation programmes for the benefit of the library users.

b. Number of books issue should be increased.

c. Separate section should be established for competitive examination books.

d. Systems should be increased in Internet Lab.

e. User awareness programmes should be organized to utilize e-resources in agriculture effectively.

f. Recently published books should be processed and kept as quickly as possible.

g. Monograms of various subjects should be available.

h. All the facilities provided by the modern libraries should also be provided in this library.

i. Providing indexing and bibliography services.

j. Separate reading rooms with facilities for undergraduates, postgraduate and teaching staff.

k. Display of agricultural videocassettes (most useful audio-visual aids). All agricultural programmes can be recorded from different channels and preserved.

l. Xerox facilities and computer printing must be available during holidays also.
SUGGESTIONS

Based on the conclusions the following suggestions are made.

1. The collection of documents in the agricultural college libraries of Andhra Pradesh should be improved in order to meet the needs of the agricultural students, teachers and scientists.

2. The Agricultural College Libraries should be kept open for longer hours to enable the readers use the library at optimum level.

3. Duplication of document sources are to be avoided to save money.

4. The manpower provision in agricultural college libraries should be in accordance with the standards.

5. It is suggested that agricultural libraries should provide current awareness services and SDI services to all its users.

6. The Library orientation programme should be made part of the curriculum so to give the students the proper understanding of the use of Library and information services the environment of information technology.

7. The Library schools of the country should train suitable manpower to Agricultural Information Systems.

8. Expert system in the different specializations of agricultural should be developed and its services should be accessible to agricultural students, scientists, extension specialists and farmers.

9. It is essential that retrospective bibliographies of all agricultural information should be brought out besides the current lists in order to exploit the information from these sources.
10. It is suggested that reference services should be provided not only to the agricultural students, scientists and extension specialists but also to the farmers in order to utilize the agricultural information of the extent possible.

11. As part of awareness programme, the agricultural college libraries of the Andhra Pradesh should conduct small courses so as to enable them to be aware of the e-resources in agriculture.

12. Agricultural information materials available in all agricultural college libraries and agricultural research centers are to be accessible to all agricultural students, scientists and extension specialists residing in the Andhra Pradesh State irrespective of their belongs to any particular institute.

13. Indian Council for Agricultural Research (ICAR) should undertake the responsibility in networking of agricultural libraries in India.

14. The Indian Council for Agricultural Research should establish agricultural resource centres in specialized disciplines to meet the individual information requirements of the agricultural students, scientists and extension specialists.

15. The agricultural college libraries in the Andhra Pradesh should develop the collection of non-book materials eg. DVDs, CDs, Audio Visual materials etc.

16. To overcome the financial crisis being faced by the agricultural libraries it is suggested to encourage in mobilizing their own financial resources either by marketing information or information consultation services.

17. By introducing free Internet facility for agricultural students in the agricultural college libraries to enable the students to retrieve more current information.

18. Collaborating among the Libraries for the electronic collection is found to be gaining importance to share the cost of infrastructure facilities to enhance the individual library electronic collections.
19. Agricultural college libraries should conduct intensive training programmes for users regarding how to use online journals and databases etc.

20. The library personnel have to be trained periodically in helping the users.

21. Studies should be conducted for accessing the impact of using e-resources i.e. CeRA, CABI etc.

22. Necessary steps should be initiated for establishing networking of Agriculture Information System, which is very helpful information sharing.

FURTHER AREAS OF RESEARCH

The investigator could not do investigation on the all facets related to the problem under study. Hence, it is proposed for others to investigate into the following areas related to the present study.

1. Use of Information Communication Technology by agricultural libraries.

2. The study can be extended to other State in India by which National Agricultural Information Networks can be planned.

3. Information needs of agricultural scientists and teachers in Andhra Pradesh.

4. Planning and development of Veterinary Information System can also be investigated.