CHAPTER 6

FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 INTRODUCTION

The libraries are important and their importance is better realized when information stored in different forms in the library is properly put into use by its users. This calls for different tools and techniques that help in organizing, identifying and disseminating the required information from the library without of delaying time. One of such important tools is the Institutional Repositories- a primary key to the intellectual output of corresponding university. In academic libraries, librarians have always adapted to the evolving needs of faculty and students while navigate the changes in technology and the information scenery at large. This trend has continued as library professionals, who were originally "focused on reference services, and collection development," are taking on responsibilities for Institutional Repositories (IR) development. They have become influential in software implementation, and their skills and knowledge are effective in IR project management and planning overall. Advocacy and promotion are also essential IR development activities for librarians.

6.2 ISSUES STUDIED AND ANALYSED

The investigator primarily studied the existence of the Institutional Repositories in various universities under study and their use by the students, research scholars and faculty in respective universities, in doing so researcher analyses various issues relating to this theme. These include facility and services in university libraries, the educational and other background of the academic scholars, their knowledge about the Institutional Repository, the use of Institutional Repositories by the academic scholars, their purpose of access, the approaches in depositing in Institutional Repositories, opinion about the helpfulness of Institutional Repositories, storage of documents, file formats, software used for Repositories, awareness about Open

access publishing, motivations for contributing to Institutional Repositories, barriers for not to depositing in Institutional Repositories. Thus, the study resolves around the status of Institutional Repository in different universities under study and attitude towards awareness and deposit to Institutional Repositories by different category of users, viz., faculty, research scholars and students. It attempts to find out the limitations if any and to suggest measures to overcome these limitations.

6.3 METHODOLOGY ADOPTED

Having carried out detailed literature search, using LISA database, UGC-Infonet, emerald database was used as basic source for literature search, the investigator used mailed questionnaire to collect primary data from the University Librarians/Repository administrator and the academic scholars viz., faculty, research scholars and postgraduate students. Two types of questionnaires were designed for this purpose. These were supplemented by the personal interview both with University Librarian and some selected users to ensure clarity and authority of data. In selecting user population for the study, the investigator used representative sampling method based on the number of users and the size of the university. Mailed questionnaires were served to academic scholars' viz., faculty, research scholars and postgraduate students, the being considered as the main users of university Institutional Repositories. Having received filled in questionnaires these were coded and data was tabulated and analysed using Statistical Packages for Social Sciences (SPSS) version 17.0. They are interpreted in the light of the objectives stated in the first chapter. Tables and graphs are used to make the presentation clear and simple.

6.4 FINDINGS

1. Out of six general university libraries only Mysore university library have maintained publicly available Institutional Repository and Gulbarga university maintained Intranet based Institutional Repository.(Figure 4.5)
2. While Mysore, Gulbarga university libraries have used Dspace software for their Institutional Repositories and Bangalore and Kuvempu University Institutional Repositories uses eprints (Figure 4.6).

3. All six universities would like add research output of their university in the form of research articles, conference proceeding and thesis abstract 100% (Table 4.3).
4. "To enhance the visibility of the University research output" is the major motivation to establish university Institutional Repository for all six universities in Karnataka with mean score of 4.67 out of 5 point rating scale (Table 4.4) .
5. More than half (63.65%, n=1105) of the academic scholars had between 1-2 years of experience, about one fourth (23.21%, n=403) had between 2-4 years, 1.96 %(n=34) of the respondents were having more than twenty years and the largest group were post-graduate students (Table 5.4) .
6. Out of 1736 respondents 1381 respondents (79.55%) were found to be aware of Open access concept. This indicates that most of the academic scholars are aware about Open access publishing (Table 5.5).
7. The most well known terms (77.71%) were the general terms, 'Google Scholar' 'the Open access movement' 'Indian national science academy' and 'Institutional Repositories.' Also known by more than half of the respondents were familiar with Registry of Open access Repositories (ROAR) and Directory of Open access journals (DOAJ) (Figure 5.2).
8. Academic scholars' rate first order characteristics of Open access publishing in terms of free to access as it secures mean score 3.82 on a five point rating scale (Table 5.11).
9. Of the total 1736 respondents, majority of the academic scholars (1211; 69.76%) are aware of Institutional Repository concept, 100 % Professors and Associate professors are aware of Institutional Repositories, where as only 55.53 % (n=422) of postgraduate students are aware about IRs concepts (Table 5.14).
10. 75.93% (n=773) science discipline scholars having highest awareness on IRs among all other disciplines (Table 5.15).
11. Out of 1736 scholars of Mysore university 24.04 %(n=81) are not aware of IRs, 76.49 % (n=244) scholars from Bangalore university are aware about IRs, similarly 68.21 % (n=191) scholars from Mangalore university are

aware about IR concept. Scholars from Bangalore University took first position in awareness about IR concept with 76.49 %(n=244) and Kuvempu University scholars took last position in understand the concept of IR (59.53%, n=153) (Table 5.16).

12. Majority of the professors 53.23% (n=33) are heard on IRs terms through academic journals and secondly through Internet (27.42%, n=17). Library and other sources are least preferred ways to find out Institutional Repositories by professors. 29.76% (n=139) academic scholars are heard about Institutional Repositories through Internet (Table 5.18).
13. Of 1736 respondents, 45.22 % (n=785) of the respondents claimed to have had access to IRs materials (Table 5.22).
14. Out of 1736 respondents 1005 academic scholars responded to this question. Interestingly, more professors were very much interested in contributing conference papers (93.55%, n=58) than thesis (30.65%, n=19). The least frequent type of materials to be contributed by the researchers was found to be software programme (Table 5.26).
15. Out of the 1736 respondents from different universities, 275 academic scholars from Mysore University are willing to deposit post prints research material in respective Repositories, which is highest ratio among all other type of research material willing to deposit in Institutional Repositories (Table 5.28).
16. A considerable male respondents (69.18%, n=651) willing to deposit thesis full text to Institutional Repositories. Majority of the female academic scholars (82.26%, n=654) are willing to deposits conference papers to their respective institutional Repositories (Table 5.29).
17. Only 2.21% (n=4) of respondents from Arts & Humanities discipline scholars targeted their research funder, 36.15% (n=124) scholars of social science discipline concentrated on a same academic community in their discipline, and over 57.70 %(n=536) of science Scholars chose in same discipline (Table 5.31).

18 49.66% (n=146) Mysore university scholars intended to reach within the same discipline scholars' community, Gulbarga university scholars (61.51%, n=147) intended to reach all scholars of concerned academic community (Table 5.32).

19. More than half of the male academic scholars' (54.06%, n=413) states that they prefer to have scholars from same discipline as target audience for their research output. 20.68% (n=158) of male respondents intended to reach small group of academic scholars, but only 12.57% (n=96) male scholars would like have funding or sponsoring agency as target audience. 49.06% (n=338) female respondents would concentrate same discipline scholars (Table 5.33).

20 The research scholars take the first position with respect to their overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 3.49 on 5 point rating scales. The Assistant Professor ranking scholars have the second position with respect to overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 3.47 on 5 point rating scales. Associate professor from academic scholars category holds the third position with respect to their overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 3.31 on 5 point rating scales (Table 5.34)

21. The science discipline takes the first position with respect to overall perceptions on reasons to contributing to Institutional Repositories as it secured mean score 3.64 on 5 point rating scales. The social Sciences discipline scholars have the second position with respect to overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 2.88 on 5 point rating scales. Arts & Humanities academic scholars' category holds the third position with respect to their overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 2.37 on 5 point rating scales (Table 5.35).

22. The Mysore University takes the first position with respect to overall perceptions on reasons to contributing to Institutional Repositories as it secured mean score 3.37 on 5 point rating scales. Both Karnataka and Bangalore

Universities have the second position with respect to overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 3.29 on 5 point rating scales. Kuvempu University holds the third position with respect to their overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 3.29 on 5 point rating scales (Table 5.36).

23. The female respondents take the first position with respect to their reasons to contribute to Institutional Repositories as they secured mean score 3.40 on a 5 point rating scale. The male respondents take the second position with respect to their overall perceptions on motivations for deposit in Institutional Repositories as they secured mean 3.22 on a 5 point scale (Table 5.37).
24. Assistant professors take the first position with respect to their overall perceptions on reasons for not contributing to Institutional Repositories as they secured mean score 3.99 on 5 point rating scales. The research scholars ranking scholars have the second position with respect to overall perceptions on reasons to not contributing to Institutional Repositories as they secured mean score 3.91 on 5 point rating scales. Associate professor from academic scholars category holds the third position with respect to their overall perceptions on reasons for not contributing to Institutional Repositories as they secured mean score 3.90 on 5 point rating scales (Table 5.38).
25. Social sciences discipline takes the first position with respect to their overall perceptions on reasons for not contributing to Institutional Repositories as they secured mean score 3.86 on 5 point rating scales. The science discipline have the second position with respect to overall perceptions on reasons to contributing to Institutional Repositories as they secured mean score 3.82 on 5 point rating scales. . Arts & Humanities holds the third position with respect to their overall perceptions on reasons for not contributing to Institutional Repositories as they secured mean score 3.70 each on 5 point rating scales (Table 5.39).
26. Of 1736 total respondents, the male respondents take the first position with respect to their reasons for not contributing to Institutional Repositories as they secured mean score 3.83 on a 5 point rating scale. The female respondents

take the second position with respect to their overall perceptions on motivations for not deposit in Institutional Repositories as they secured mean 3.69 on a 5 point scale. The t test is applied for further discussion. The computed t value is lesser than its tabulated value at 5 % level of significance. Hence, there is no significant relationship between male and female academic scholars with respect to their perceptions on reasons to not to deposit in Institutional Repositories (Table 5.41).

27. Pdf file format takes the first position with respect to their overall file formats to deposit in IRs with 82.49%(n=1432) Audio and video formats like mp3, mp4 and wmv file formats takes second position to deposit in IRs (76.15%, n=1322). Microsoft word takes third position among all other file formats preferred to deposit in IRs with 74.42% (n=1292). Other popular file formats are PPT presentation (72.47%, n=1258), HTML (30.29%, n=526). Post script files are least preferred file formats of academic scholars to deposit in IRs (13.42%, n=233) (Table 5.42).
28. 32.65 %(n=287) of scholars from Arts and Humanities prefers audio and video file formats like mp3, mp4and wmv to deposit in IRs, Pdf file formats takes second position to deposit in IR (20.36%, n=179). In case of Social science discipline also prefers audio and video file formats (23.39%, n=359). Science discipline scholars preferred PDF format to deposit in IRs (20.38%, n=963), which is highest type of file format preferred by science discipline scholars (Table 5.43).
29. Mysore University scholars prefers Pdf file formats to deposit in IRs(22.04%, n=283), which is highest ratio among all other file formats and Microsoft Word takes second position with 19.39% (n=249) and Post script file format is the least preferred file format to deposit in IRs(3.81%, n=49) for the Mysore university scholars. MS-Word is the most suitable file format to deposit in Irs for Bangalore University Scholars (21.45%, 275), Scholars from Mangalore university trusts pdf format (20.89%, n=239), interestingly Kuvempu and Karnataka university scholars comfortable with Power point presentation (ppt) formats (19.61%, n=201) , (20.30%, n=223) respectively. Again Pdf format is

most comfortable and secured format for the Gulbarga University Scholars (20.14%, n=237) (Table 5.44).

6.5 SUGGESTIONS

Based on the observations and findings of the analysis of the study reported in chapter 5 and 6, the investigator has made the following suggestions for improve user awareness and use of Institutional Repositories in university level in Karnataka state in India.

1. All universities have to take a policy decision for setting up of Open access Institutional Repositories in their respective institution.
2. An intensive awareness about use of Institutional Repositories should be brought among researchers by arranging seminars and workshops in respective departments of university.
3. Orientation programme should be conducted at regular intervals regarding the benefits and effective use of Institutional Repositories.
4. University libraries should integrate OPACs with their respective Institutional Repositories.
5. Teaching faculty should encourage the students to make deposit of their research work in Open access Repositories.
6. Universities should conduct training programmes for research scholars and post graduate students on how to deposit and access research articles from Open access Institutional Repositories.
7. Links to Open access Repositories, databases and online journals must be provided on the library's web page.
8. Inclusion on the topic Institutional Repository of syllabus in Indian Library and Information Science curriculum.
9. Making policy on mandatory at individual Institutional level for contribution.
10. Setting up of metadata harvesting services covering different sectors both by university and subject.

11. Solutions to be found for restricted reports, access to copyrighted materials and proper review process required for yet to be reviewed research materials.
12. The self-archiving of research materials by the creators is yet to elevate in national as well as international level.
13. At national level, we need to develop the capacity of customizing the Open access software to meet local requirements.
14. Government should mandate the self –deposit of any research output it funds ensures research councils monitor deposits.
15. Government should encourage universities to self-archive scholarly output in an OAI compliant format as a matter of course especially where this has been publicly funded.
16. Universities should develop policies that ensure publicly funded research is made freely available and accessible to anyone with internet access.
17. Metadata harvesters should engage with universities to develop Institutional archives from which they can harvest metadata.
18. Academic scholars should engage actively in self-archiving to Institutional and subject Repositories.
19. There is a need to set up a Registry of Indian Repositories in line with ROAR and OPENDOAR registries.

6.6 SUGGESTIONS FOR FUTURE RESEARCH

Bases on the present study, the following areas have been identified for undertaking further research.

1. Carry out of academic scholars' attitude towards access and deposit to Institutional Repositories of universities with special character and deemed-to-be universities in Karnataka.
2. Accomplish of scholars' attitude towards Repositories of various universities in different states in India.

3. An investigation into the features of the emerging Institutional Repository software and their acceptance by the university library or Repository administrator staff and users and their impact on the user of intellectual output of their university.
4. An examination into the metadata harvesting of resources in the university libraries and their impact.

6.7 CONCLUSION

In conclusion as it has been identified in the survey study that most of the researchers found to have low in depth awareness of the Institutional Repository, high interest in contributing contents to the University Institutional Repository and have positive attitude to make free access of their research results, therefore, all universities should have used this opportunity to make the academic community aware of the Institutional Repository.

Researchers' interest to contribute to the university was found to be high and their attitude to make their research work free access is positive, by improving the website functionality and its usability more researchers would have been attracted to contribute their content to the University Institutional Repository. Besides, these days' simplicity and ease of use is required of the technology in order to save users time and attract more users to the services.

Preliminary findings has shown that an IR, is an extremely useful endeavor, and is a feasible proposition for the University's support for a new pattern for scholarly communication, apart from growing its scholarly work and low cost interoperability among various faculty web portals.

The researchers who did publish in Institutional Repositories claimed as the main advantages full and free access for all readers, perception of larger audience, shorter publication periods and great prestige of the Repositories . It was interesting that this latter aspect was considered a problem by the authors involved in most of the studies about this issue. Those researchers who did not publish their articles attributed to a lack of knowledge and difficulties in finding a suitable platform for

publishing according to their personal interest as the fundamental reasons. The great majority of polled researchers agree to place a copy of their research materials in an Institutional Repository if their university requests so. However, this excellent attitude towards deposit in IRs confronts the nonexistence of Institutional Repositories in the higher education sector.

The university administration would profit by supporting a structure that reinforces the efficiency, output, and intellectual status. Providing better service to all these stakeholders is in the university's best interest.

And finally, of course, libraries could benefit in many ways. They would acquire content over which they can exert more control, enabling better delivery of it to their users. By collaborating effectively with these stakeholders, the library would also reinforce its position on campus as a vital partner in the university's overall mission. The library could establish itself as a trend setter and change agent, entering fully into the scholarly communications process rather than simply responding to its shifts and trends.