# A Study of Library and Information Services for Agriculture Universities Researchers of Gujarat State

**Dr. Bharat Kumar D. Patel**
Librarian,
LDRP-ITR
Bharatd_1970@yahoo.com

***Abstract***

*India is agricultural base country and major share of agricultural in our GDP. So agricultural is most valuable industry in our economics. After the independent, the Govt of India gives the first priority to agricultural development due to the scarcity of food and gain. In 1966, ICAR drafted model of agricultural university act. Under this act, Govt. of India has established some agricultural universities and colleges in India. For the development of agricultural university library, ICAR has appointed a committee on "The Indo American Agricultural Library Survey and Study" in 1967 chairmanship of Dorathi Parkar, ICAR has published the suggestions under title on "The ICAR Institute of Agricultural University Library". Thus we understand the valuable roll of library and information services in agricultural education and research.*

**Key Words :** Library Service, Agricultural University, Gujarat State

**Introduction**

Agriculture is the oldest and largest industry of the world, according Food and Agricultural Organization 6.916.185 billion peoples are engaged in 2010 in the agriculture. India is the primarily an agricultural country and 68.7 % of total population live in 593615 villages. Agriculture and allied sectors provide 41% employment and contribute 13.7% to GDP in 2012-13. India was facing numbers of problems at the time of independence and food for all was the major problem among all. Agriculture was given prime importance from the second five year plan. It has launched numbers of schemes for agricultural development like Green Revolution, White revolution, Yellow Revolution, Brown Revolution etc. This has been resulted in to increase the production of food grains by 4 times**,** horticultural crops by 6 times**,** fish by 9 times (marine 5 times and inland 17 times)**,** milk 6 times and eggs 27 times since 1950-51, thus making a visible impact on the national food and nutritional security. It has played a major role in promoting excellence in higher education in agriculture. It is engaged in cutting edge areas of science and technology development and its scientists are internationally acknowledged in their fields Agricultural education system in India distinctly evolved during pre independence era on the British educational system and on the recommendation of university education commission headed by Dr.Radhakrishanan and Indo-Amecican joint visit it had developed on the pattern of the US Land Grant Colleges. The available records show that the earliest agriculture college was established at Saidapet in 1877. According to Singh,K.P.(2012) there were only 17 agricultural colleges, three veterinary colleges and one agricultural engineering college in 1950 in India. These colleges were affiliated to the general universities. On the recommendation of Kothari commission ICAR draft a model agricultural university act which was passed by Indian Parliament and agricultural university were established in the different states of India. On the recommendation of Royal Commission on Agricultural in 1928, Imperial Council of Agricultural Research was established under the society registration act 1860 in 1929 to provide the support to existing agricultural research institute. It is responsible for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries, and animal sciences in the entire country. In 1947, it was renamed as Indian Council of Agricultural Research.

The ICAR has played a pioneering role in ushering Green Revolution and a Subsequent development in agriculture in India through its research and technology development that has enabled the country. ICAR has established 17 NRC, 51 ICAR research institutes, 6 National Bureaux, 22 Project Directorate and 60 AICRP in the country for enhancing the agricultural research in the various fields. It has launched National Agricultural Technology Project (NATP), National Agricultural Innovation Project (NAIP), KrishiPrabha, and Consortium for e-resource (CeRA), e-Grantha Consortium etc, for the agricultural research. KrishiPrabha, Consortium for e-resource (CeRA), e-Grantha Consortium are the innovative project

sponsored by ICAR for the agricultural information dissemination in the country, besides the AGRIS.

**Objectives of the Study**

The goal of this research work is provide the library and information services to agricultural universities researcher for directly or indirectly help to discover answers to question.

- To study the different kind of library and information service offer by agricultural library in Gujarat.
- To study the infrastructure of agricultural library in the Gujarat State.
- To study the different kind of AGRIS services provided by agricultural library in Gujarat.
- To study the different field of agricultural research in Gujarat state.
- To investigate which kind of different information resources are used by the agricultural researchers.
- To study the problems faced by agricultural researchers.

**Review of Literature**

Review of literature is a collective body of works done by earlier scientists and published in the form of books or in the form of articles in journals or published as monograph etc. Every scientific investigation starts with a review of literature. In this study, the investigator uses the books, research article, thesis, reports and website for his research works.

- Carrie de Silva (2012**)** provides information about agricultural education and research development at global in his book "A Short History of Agricultural education and Research". In the book, the author discusses the agricultural education development in European countries, when it was started and describe its development in the previous year at global.
- Tamboli, Prabhaka and Y.L.Nene (2011) highlight the information about the higher agricultural education challenges in India is timely for several reasons in their book. First, India's experience of the green revolution is based on the human capital investments it made in the early stages of its development after independence. This book contained the information about agricultural education and research development in India.
- Singh,K.P (2012**)** describes that **a**gricultural is the most crucial sector for ensuring food and nutritional security, sustainable development and for the alleviation of poverty in India. It is the key sector in India for generating employment opportunities for the vast majority of the population particularly in rural areas. The research paper is very useful for valuable information in present research study. The paper aims to explore the many facets related to agricultural education, research, training, and libraries in India in order to provide a historical account on these aspects. In the researcher paper, the author discusses in detail the various committees and commissions and their salient recommendations leading to the expansive growth and development of agricultural education, research, and libraries in India. Further, the paper also highlights the critical role of the Indian Council of Agricultural Research in the growth and development of agricultural education, research, extension, and libraries.
- Anwesha Borthakar and Singh, Pradeep (2012) in their article on "History Agricultural Research in India", discuss that agriculture is the backbone of the Indian economy which plays the most decisive role in the socioeconomic development of the country. Indian agriculture is a miscellaneous and extensive sector involving a large number of actors. India has one of the largest and institutionally most complex agricultural research systems in the world. This paper is provides the valuable information for present research study. The author provides the information about agricultural education and research after freedom in India.

**Research Method**

In this study, the researcher selected a surveying research method in his research work as his research problems depends on collection of primary data on library and information services provided by agricultural university libraries to researches. The researcher used questionnaire for data collection tools. The researcher distributed 502 questionnaires in research community like registered Ph.D students, Research Officer and Teachers and received back 276 questionnaires with feedback i.e. 54.98% response receive. The investigator has used the SPSS-16 software for to create a tables and charts. For this purpose investigator has created 143 variables using version 16 of SPSS.

**Data Analysis and Interpretation**

In the research study, data analysis and interpretation is very valuable chapter for find out the answer of research problems/question. Here the investigator divides two parts for data analysis like library data analysis and researcher data analysis.

**1. College and Research Station**

**Table-1 : College and Research Center**

| Sr. No | Name of University | College | Research Station |
|---|---|---|---|
| 1 | Anand Agricultural University | 14 | 28 |
| 2 | *Navsari Agricultural University* | 14 | 21 |
| 3 | *Junagadh Agricultural University* | 9 | 25 |
| 4 | *SardarKrishinagar Agriculturalniversity* | 8 | 29 |

(Resource: Primary data collection)

Above table shows that number of colleges and research stations affiliated with agricultural universities. Anand agricultural university has 14 colleges and 28 research stations, Navsari Agricultural universities has 14 colleges and 21 research station, Junagadh agricultural university has 9 colleges and 25 research station and Sardar Krishinagar Dantiwada agricultural university has 8 colleges and 29 research stations in North Gujarat.

**2. University wise Course Analysis**

**Table-2 : University wise Subject (Course) Analysis**

| Sr. No | Name of Courses | NAU | AAU | SDAU | JAU |
|---|---|---|---|---|---|
| 1 | Agricultural Science (Included Crop science) | ✓ | ✓ | ✓ | ✓ |
| 2 | Veterinary Science & Animal Husbandry | ✓ | ✓ | ✓ | ✓ |
| 3 | Home Science & Nutrition(including Polytechnic courses ) | --- | ✓ | ✓ | ✓ |
| 4 | AGRIS-Business Management | ✓ | ✓ | ✓ | ✓ |
| 5 | Fishery Science | --- | --- | --- | ✓ |
| 6 | Agricultural Engineering (Included Agri-Information Technology) | ✓ | ✓ | ✓ | ✓ |
| 7 | Co-Operative & Banking(Including Polytechnic | ✓ | --- | --- | --- |
| 9 | Forestry Science | ✓ | --- | --- | --- |
| 10 | Agricultural Bio-Technology | ✓ | --- | --- | |
| 11 | Horticultural Science(Include Polytechnic) | ✓ | ✓ | ✓ | ✓ |
| 12 | Dairy Technology and Food | --- | ✓ | ✓ | --- |

(Resource: Primary data collection)

On observation of above table, the investigator analysis the course wise agricultural universities. Here the researcher takes some agricultural polytechnic institute because diploma courses run by polytechnic like Home Science, Horticultural, and Co-operative & Banking etc. The researcher used tick Mark means 'YES' response and Dot-line means 'NO' response. All agricultural universities run like Agricultural Science, Veterinary Science &A.H, Agri-Business Management, Agricultural Engineering, and Horticultural Science. Only Junagadh Agricultural University (JAU) runs a Fishery Science and Forestry science runs by Navsari Agricultural University in Gujarat. Only two agricultural universities AAU and SDAU run Dairy Science. Anand Agricultural University and Sardar Krishinagar Agricultural University conducted Home Science & Nutrition Courses and Junagadh Agricultural University runs a Home Science course in Polytechnic Institute.NAU and JAU run Agricultural Bio-Technology courses in Gujarat.

**5.3 Study of Age of Respondents:-**

Learning, education and research are a lifelong learning process. Man can learn, relearn and make research throughout the life. The young researcher are enthusiastic so investigator has collected the data regarding the age of researcher which are classified in the class interval of five year as shown in following table.

**Table-3 : Age group-wise Respondent**

| Age Group Year | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| 21 - 25 | 107 | 38.8 | 38.8 | 38.8 |
| 26 – 30 | 66 | 23.9 | 23.9 | 62.7 |
| 31 - 35 | 19 | 6.9 | 6.9 | 69.6 |
| 36 - 40 | 16 | 5.8 | 5.8 | 75.4 |
| 41 - 45 | 23 | 8.3 | 8.3 | 83.7 |
| 46 - 50 | 25 | 9.1 | 9.1 | 92.8 |
| 51 - 55 | 14 | 5.1 | 5.1 | 97.8 |
| 56 - 60 | 6 | 2.2 | 2.2 | 100.0 |
| **Total** | 276 | 100.0 | 100.0 | |

The above table and graph reflects that 107(38.8%) respondent is between 21 to 25 year. In the age group 26-30 year respondents are 66(23.9) whereas in the age group 31-35 there are 19(6.9%) respondents. The table reflects that major part of the researcher i.e. 69.6% have less than 35 years that indicate that in the agricultural research young researcher are more engaged than senior. As the age the increases the numbers of researcher decrease.

**4. Study of Gender**

Observation of following table shows that NAU has 16.67%, AAU has 12.12%, JAU has 22.22% and SDAU has 15.9% female researchers. It can be conclude that SDAU has highest and AAU has lowest female researchers. Among all researchers 84.1% are male whereas 15.9% are female researchers. Overall male female ratio is 5.28.

**Table-4 : University wise Gander**

| 26 – 30 | Institute | | | | Total |
|---|---|---|---|---|---|
| | 31 - 35 | 2 AAU | 3 JAU | 4 SDAU | |
| 36 - 40 | 65 (83.33%) | 58 (87.88%) | 60 (86.96%) | 49 (77.78%) | 232 (84.1%) |
| 41 - 45 | 13 (16.67%) | 8 (12.12%) | 9 (13.04%) | 14 (22.22%) | 44 (15.9%) |
| 46 - 50 | 5 | 7.25 | 6.67 | 3.5 | 5.28 |
| 51 - 55 | 78 | 66 | 69 | 63 | 276 |
| 56 - 60 | | | | | |
| Total | | | | | |

(Resource: Primary Data collection)

**5. Qualification of Respondents**

**Table-5 : Gander * Qualification Cross Tabulation**

| Gander | | Qualification | | Total |
|---|---|---|---|---|
| | | Ph. D | Pursuing Ph .D | |
| Male | Count | 65 | 167 | 232 |
| % within Gander | 75.6% | 87.9% | 84.06% | |
| Female | Count | 21 | 23 | 44 |
| % within Gander | 24.4% | 12.1% | 15.94% | |
| Total | Count | 86 | 190 | 276 |
| | % within Gander | 100% | 100% | 100.0% |

(Resource: Primary Data collection)

Above table reveals gender-wise qualification of respondents. It shows that Ph. D completed respondents are 31.2% , among them 75.6% are male whereas 24.4% are female respondent. It also shows that pursuing Ph. D respondents are 68.8%, among them 87.9% are male whereas 12.1% are female respondents.

**6. Facing Problems during the Library Use**

Following table reflects that the users have rated highest scaling mean value in sufficient latest resource and Internet connectivity. They also have rated mean value more than 2.5 for Sufficient Infrastructure and Sufficient collection of print document. This suggests that these are effective problems in research. The users are very neutral to Retrieval of information and Attitude of library personnel. The users have rated mean value between 2.1 to 2.2 for scaling the e-journals & e-books, Guidance to use resource, Computer & Internet literacy and insufficient manpower.

**Table -6 : Facing Problems**

| Problems | N | Mean | Std. Deviation | Co-efficient of Variation |
|---|---|---|---|---|
| Sufficient Infrastructure | 276 | 2.68 | 1.191 | 44.44 |
| Sufficient collection of print document | 276 | 2.56 | 1.065 | 41.60 |
| e-journals & e-books | 276 | 2.14 | 0.968 | 45.23 |
| Sufficient Database | 276 | 2.19 | 1.009 | 46.07 |
| Sufficient latest resource | 276 | 2.76 | 1.024 | 37.10 |
| Guidance to use resource | 276 | 2.14 | 1.127 | 52.66 |
| Computer & Internet literacy | 276 | 2.15 | .912 | 42.42 |
| Retrieval of information | 276 | 2.05 | 1.076 | 52.49 |
| Internet connectivity | 276 | 2.76 | 0.944 | 34.33 |
| Insufficient manpower | 276 | 2.16 | 1.154 | 53.43 |
| Attitude of library personnel | 276 | 2.05 | 1.212 | 59.13 |
| Valid N (list-wise) | 276 | | | |

(Resource: Primary data collection)

**7. Use for Library Collection**

**Table-7 : Use of Library Collection**

| Library Collection N-Value= 276 | Never | Rarely | Sometime | Often | Frequently | Total |
|---|---|---|---|---|---|---|
| | Row N % | Row N % | Row N % | Row N % | Row N % | Row N % |
| Text-Book | 1.1% | 4.0% | 31.2% | 46.7% | 17.0% | 100.0% |
| Reference Book | .0% | 2.9% | 19.9% | 55.8% | 21.4% | 100.0% |
| Printed Journal | 2.2% | 10.5% | 26.1% | 39.1% | 22.1% | 100.0% |
| e-journal | 6.5% | 12.0% | 58.3% | 16.3% | 6.9% | 100.0% |
| Back-volume | 14.5% | 61.2% | 13.0% | 9.1% | 2.2% | 100.0% |
| Thesis | 38.0% | 48.6% | 9.8% | 2.9% | .7% | 100.0% |
| Research Report | 13.8% | 59.1% | 18.8% | 6.9% | 1.4% | 100.0% |
| CDROM | 22.8% | 59.8% | 13.0% | 3.6% | .7% | 100.0% |
| Online-Database | 8.7% | 27.2% | 39.5% | 20.3% | 4.3% | 100.0% |
| CDDVD | 47.5% | 42.8% | 7.6% | 2.2% | .0% | 100.0% |

(Resource: Primary data collection)

Above table depict that more than 17% users frequently used Printed Journal. Reference Book and Text-Book and less than 7% used Online-Database, e-journal and Back-volume etc. More than 35% users

often used Reference Book, Text-Book and Printed Journal and less than 20% used Online-Database, e-journal, Back-volume etc. 58.3% users sometime used e-journals and 39.5% used online database but less than 25% users sometime used Printed Journal, Reference Book, Research Report, Back-volume etc. above table also depict that more than 50% users rarely used CDROM, Research Report and Back-volume etc. and less than 45% used Thesis, CDDVD, online database and e-journal etc. It is also noted that more than 30% researcher never used CDDVD and Thesis and less than 25% used CDROM, Back-volume and Research Report etc.

**8. Provide the Library Services to Users:-**

**Table-8 : Library Service Provide to Users**

| Library Services N-Value =276 | Never | Rarely | Sometime | Often | Frequently | Total |
|---|---|---|---|---|---|---|
| | Row N % | Row N % | Row N % | Row N % | Row N % | Row N % |
| Circulation | 1.4% | 2.2% | 24.3% | 51.8% | 20.3% | 100.0% |
| Reference service | .0% | 9.1% | 42.0% | 38.8% | 10.1% | 100.0% |
| Interlibrary loan physical | 35.1% | 55.4% | 9.4% | .0% | .0% | 100.0% |
| Personalized service | 4.7% | 45.3% | 22.5% | 26.8% | .7% | 100.0% |
| Current-Awareness Service | 2.5% | 27.5% | 55.4% | 10.9% | 3.6% | 100.0% |
| Selective Dissemination Service | 14.9% | 62.0% | 20.7% | 2.5% | .0% | 100.0% |
| Referral Service | 27.9% | 64.1% | 5.4% | 1.8% | .7% | 100.0% |
| Translation Service | 36.6% | 52.5% | 9.1% | .4% | 1.4% | 100.0% |
| Interlibrary loan digital document | 50.0% | 44.2% | 4.3% | .7% | .7% | 100.0% |
| Bibliography Service | 41.3% | 51.4% | 5.1% | 1.4% | .7% | 100.0% |
| Photocopy Service | .7% | 13.0% | 69.6% | 15.2% | 1.4% | 100.0% |
| Internet surfing Service | .0% | 8.3% | 24.3% | 62.7% | 4.7% | 100.0% |
| News-clipping Service | 4.7% | 76.4% | 13.0% | 4.0% | 1.8% | 100.0% |
| Indexing &Abstracting Service | 41.7% | 48.2% | 7.6% | 1.4% | 1.1% | 100.0% |
| Book Reserve Service | 23.9% | 57.6% | 13.4% | 3.6% | 1.4% | 100.0% |
| Screening Document Service | 30.8% | 47.8% | 19.2% | 2.2% | .0% | 100.0% |
| OPAC Service | 15.6% | 76.8% | 4.0% | 1.4% | 2.2% | 100.0% |

(Resource: Primary data collection)

Above table reveals that more than 10.1% users frequently used circulation service and reference service and less than 5% users frequently used Internet surfing Service, Current Awareness Service, OPAC Service and News-clipping Service. It also shows that more than 25% users often used Internet surfing Service, Circulation, Reference service, personalized service and 15.2% used Photocopy Service and 10.9% used Current Awareness Service. More than 40% respondents sometime used Photocopy Service, Current Awareness Service and Reference service and less than 24% used Circulation, Internet surfing Service, Personalized service, Screening Document Service and Book Reserve Service etc. It is also

found that more than 50% users rarely used News-clipping Service, Selective Dissemination Service, Referral Service, Translation Service, Bibliography Service, Book Reserve Service and OPAC Service etc. and less than 48% users rarely used above mention library services. It is also noted that more than 35% researcher never used Interlibrary loan digital document, Bibliography Service, Indexing &Abstracting Service, and Interlibrary loan physical.

**9. Use of AGRIS Database:-**

**Table-9 : AGRIS-Database**

| AGRIS Database N-Value=276 | Never | Rarely | Sometime | Often | Frequently | Total |
|---|---|---|---|---|---|---|
| | Row N % | Row N % | Row N % | Row N % | Row N % | Row N % |
| AGRIS e- Book | 0.4% | 12.0% | 30.8% | 40.9% | 15.9% | 100.0% |
| Agrovoc | 11.6% | 61.2% | 19.6% | 4.7% | 2.9% | 100.0% |
| AGRIS-online Database | 6.9% | 29.7% | 42.4% | 17.4% | 3.6% | 100.0% |
| Agricola | 30.4% | 52.2% | 13.0% | 4.0% | 0.4% | 100.0% |
| AgNet Databank | 8.0% | 32.6% | 46.0% | 13.0% | 0.4% | 100.0% |
| AGRIS CDROM | 29.3% | 58.7% | 9.1% | 2.9% | .0% | 100.0% |

(Resource: Primary data collection)

Above table shows that 15.9% users frequently used AGRIS e-books and 3.6% used AGRIS online database and less than 3% users frequently used Agrovoc, Agricola and AgNet Databank. More than 13% users often used AgNet Databank, AGRIS online Database and AGRIS e- Book and less than 5% used Agrovoc, Agricola and AGRIS CDROM. Above table also shows that more than 30% respondents sometime used AgNet Databank, AGRIS online Database and AGRIS e- Book and less than 19% used Agrovoc, Agricola and AGRIS CDROM. More than 50% researcher rarely used AGRIS CDROM, Agricola and Agrovoc but less than 12% users never used Agrovoc, AgNet Databank, AGRIS online Database and AGRIS e- Book.

**Major Findings and Suggestions**

Investigator has collected the primary data from four agricultural university libraries and researchers and analyzed the data using SPSS software and statistical methods and interpreted using some standards and specification.

- ❖ All agricultural universities in Gujarat have their constituent colleges and research station. The constituent colleges vary from 8 to 14 whereas research stations vary from 21 to 29.
- ❖ Agriculture Science, Veterinary & AH Science, Agri-Business Management, Agri-Engineering, and Horticultural Science education offered in all four agricultural universities whereas education of agricultural Information Technology, Fisheries Science, Co-operative & Banking are offer in AAU, JAU and SDAU respectively. Home Science & Nutrition education is available in 3 agricultural universities except NAU. Forestry Science, Dairy Technology and Food Science education is available in one and two agricultural university respectively.
- ❖ 38.8% researcher's age group is 21-25 and 23.9% researcher's age group is 26-30.The Young researchers are more engaged in agricultural research. As the age increase, the numbers of researchers decrease.
- ❖ 15.9% Female research respondents are engaged in agricultural research. Male female ratio is 5.28 which are very low in agricultural research than general education and engineering education field. SDAU has highest female researchers.
- ❖ Among the agricultural researcher, major research community is registered Ph. D students. The professor, associated professor and researcher officer are engaged in applied and experimental agricultural research.
- ❖ Among the various AGRIS resource like AGRIS e-book, AGRIS online database and Agnet database are widely used with mean value of 2.60, 1.81, and 1.65 Likert 5 point rating scale. Respectively whereas other resources like Agrovoc, Agricola and AGRIS CDROM are comparatively less used by the agricultural researchers.

**1. Major Suggestion**

The investigator analysis the collected data received from users and gives findings for researcher and

library study. Study of the findings the researcher gives few suggestions as under.

- ICAR should force the State Government for the appointment of university librarian in the state agricultural university library.
- The researcher should be motivated to use AGRIS service, the feedback survey should be conducted and result of the survey should be sent to nodal agency.
- The state government and Ministry of Agricultural should appointed agricultural university librarian and deputy librarian.
- State government should start a specialize university like Veterinary & AH, Forestry, Dairy technology etc.
- New course like Nano Agricultural technology, Plant Genetic, Agricultural IT should be introduced. Fisheries Science recommended to start NAU.
- All university should implement RFID technology for its library security and provide the funding.
- University should provide fund for library digitization and Institutional repository.
- The university library should develop co-operation and resource sharing through the networking with NAL (USA) and FAO library like chaina.
- All agricultural university libraries should start a content delivery services for to its client particular research community.
- Library professional should develop their skill and competence in Information Technology.
- The library professional should be aware about ICT application use into the library and to make their library globally competent.
- Library personnel should adopt fully automation policy and fully automation should be completed as early as possible.
- The present era is ICT dominant and more and more users more use mobile, tablets, so e-resources should be made available.
- It is suggested that to provide the motivation by financial support, reservation in admission by changing the policy and change the mind set in among the female student, job opportunity for female researcher to joint research study.
- The rate of computer literacy decrease as the age increase. The university should start learn and relearn programme in computer application for young and senior researcher.

**Conclusion**

In this study, the researcher mentions the development of agricultural during Harappan culture, chalcolithic culture, Aryan, Moghal period, British period and after independent. Due to the food security, the government gives the first priority for agricultural development in first five year planning. In 1966, ICAR drafted a Model Agricultural University Act for established new agricultural universities and as the part of result 56 SAUs, 1 CAU, 4 CAUs with agricultural faculty, 05 Deemed-to-be-Universities, 17 National Research Centers (NRC), 51 ICAR Institutes.06 National Bureaux (NB), 22 Project Directorates (PD), 60 All India Coordinate Research Projects (AICRP) was started in last 50 year in India. Due to the development of agricultural education and research, agriculture concept was change. The farmers used latest research information and technology and hybrid seeds in his farms. As the part of result agriculture production was increased after 1960s. This time call green revolution in India. The rise of agricultural production, the share of agricultural in GDP was 51.9% in 1950-51.Thus we believe that batter library and information services directly or indirectly motivate the agricultural research activity and increase the share of agricultural in GDP.

**References**


1. Carrie, de Silva.(2012). A Short History of Agriculture Education and Research. Newport, Shropshire: Harper Adams University College.
2. Naik, K.C. (1961).Agricultural Education in India. New Delhi: India Council of Agricultural Research.
3. Nair, Raman.R. (2000). Kerala Agricultural University: Library and Information Services-2020.Thrissur: Agricultural Information System, IASLICSC.
4. Prabhakar, Tamboli & Y. L. Nene. (2011). Revitalizing Higher Agricultural Education in India: Journey towards Excellence. Secunderabad: Asian Agricultural-History Foundation.
5. Randhawa,M.S.(1979).A History of Indian Council of Agricultural Research : 1929-1979. New Delhi:ICAR.
6. Singh,K.P.(2012).Growth and Development of Agricultural Education, Research, and Libraries in India. DESIDOC Journal of Library & Information Technology,32(1), 5-14.
7. Visakhi,P.(2009).Consortium for e-Resources in Agriculture.DESIDOC Journal of Library & Information Technology, 29(5) 24-30.