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1.1 Preface:-

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-Ameiccan 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 run under the union minister of agricultural as a president assisted by Director General (DG) and also by secretary to government of India of the DARE. The general body is the supreme authority of ICAR. The ICAR established. 49 research institutes in various states and provide fund for agricultural education and research in the country. At present there are 56 SAUs, 5 DUs and 1 CAU, 4 Central University with Agricultural Faculty in India. ICAR has held 9 divisions like

1. Crop Science
2. Horticultural Science
3. Soil Science & Water
4. Animal Science
5. Fishery Science
6. Agricultural Engineering
7. General Extension
8. Agricultural Education
9. Resource Management

The education division has three section as (a) Human Resources Development (HRD), (b) Education Planning and (c) Education Quality Assurance and Reforms. They are headed by deputy director general to each section. Besides these sections it has a NAARM for facilitating capacity building of the National Agricultural Research System (NARS) in research and education policy, planning and management and a National Centre for Agricultural Economics and Policy Research.

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. The ICAR acts as a repository and nodal agency of information and provides consultancy on all branches of agricultural education and research. The libraries established in the agricultural universities NRC, NB, PD and field stations (KVK) are functioning under aegis of ICAR and DARE. The library provides agricultural information to the scientist, teachers, researchers, research
scholar, decision makers and students – both UG & PG. This community entirely depends on their library for the agricultural information.

In Gujarat there are 4 state agricultural universities which have 6 Agricultural Colleges, 4 Veterinary & AH, 2 Horticultural, 2 Home Science & Nutrition, 1 Basic Sc.& Humanities, 7 Agri. Eng./Bio. Tech/Agri. Inf. Tech, 4 Agri-business, 2 Dairy Sc & Food Tech, 1 Forestry, 1 Fisheries, 14 Polytechnic in various subjects, 1 E-PG Courses. In these institutes there are numbers of the scientist, teachers, researchers, research scholar, decision makers and students – both UG & PG. They are engaged in their educational and research activities. For the requirement of agricultural information the universities has their university library in the campus. The university library provide information using their own resources and online resources available through KrishiPrabha, Consortium for e-resource(CeRA), e-Grantha Consortium etc, and AGRIS services.

The research community include, agricultural scientist, agricultural researchers, teachers engaged in agricultural research projects and registered Ph. D students. The investigator has curiosity to know how this community get there required information, by which channel they get information, which services they use, which type of resources they use, what problems they are facing etc. To get the solution of these major problems to the investigator has under taken the following research topic for his Ph. D degree.

“A Study of Library and Information Services for Agriculture Universities Researcher of Gujarat State”

1.2 Statement of the Problem:-

In light of above research topic the investigator intends to find out the solutions to the following research problem which generated a curiosity while selecting the above mentioned research topic.

(1) What is the status quo of the agricultural universities and their library in the Gujarat?

(2) What types of different kind of documents in what quantity are available in the library?
(3) Which different library and information services are available for the users?
(4) What is the infrastructure and ICT applications are available in the libraries?
(5) Which AGRIS Services are provided by libraries?
(6) Why different users group use the library?
(7) How many users use the library for the research purpose?
(8) To study the feedback of the users on their library?
(9) Which channels, services are used by the researchers?
(10) How the researchers access the library and information resources?

1.3 Definition of Terms:-

Research is scientific and systematic process and always expressed in a language which deals with the respective language vocabulary and has lot of flexibility. The occurrence of synonyms, homonyms and other such concept may result in confusion. To avoid confusion a researcher should defined the terms with operational definition. Here some important terms in the title are defined with following operational definitions.

- **Library and Information Service:-**
  Directly or indirectly provide the help by the library to its users for finding his information or document. This service is providing by manually or mechanically.

- **Agriculture University:-**
  A university is an institution of higher education and research which grants academic degrees in a variety of subjects and provides both undergraduate education and postgraduate education. The agricultural university provides the variety of agricultural related subjects, like Crop science, Agriculture science, Horticulture science, Forestry, Veterinary & Animal science, Fisheries and Marine product, Food science and Technology, Home science and Agriculture Engineering.
➢ **Researcher:-**

Researcher mean a persons who doing the research i.e. to find out new thing or phenomenon having designation like Assistant Professor, Associate Professor, Professor, research scientist and a registered Ph. D students.

➢ **Gujarat State:-**

Gujarat is the one of state of republic of India which is surrounded by Rajasthan, Madhya Pradesh and Maharashtra state and Arabian Sea.

### 1.4 Objectives of Research:-

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

1. To study the different kind of library and information service offer by agricultural library in Gujarat.
2. To explore the quantity of different kind of library and information resources / document available to the agricultural research community in Gujarat.
3. To study the infrastructure of agricultural library in the Gujarat State.
4. To study the different kind of AGRIS services provided by agricultural library in Gujarat.
5. To study the different field of agricultural research in Gujarat state.
6. To study the primary information of researchers in Gujarat.
7. To investigate which kind of different information resources are used by the agricultural researchers.
8. To study the problems faced by agricultural researchers.

### 1.5 Significant of Research:-

India is the agriculture base country, The share of agricultural in GDP was 13.7% and provide the employment 41%.Government of India provides the motivation for agriculture education and research through the establish of ICAR.(“Indian Council of Agriculture Research”). In the 1966, ICAR prepared a model act for establish agriculture universities in India. In 1978, The ICAR setup a review committee on agricultural universities to critically assess the
growth and development of agricultural universities in India. The committee made eleven recommendations with regard to the development of libraries and library services of the agriculture universities. To promote information services in the agriculture libraries, the ICAR had sponsored a number of workshops and seminars at the different places from time to time. These workshops and seminars formulated a numbers of recommendations for the development of agriculture libraries and their services. The role of ICAR is really very commendable for the development of agriculture libraries and information services. So library and information services are directly or indirectly to motivate research activities and help to researcher for find out valuable information resources. Agriculture university library provide the online and offline library services to his users.

The number of research paper have been published in research journals on different states of India but not a single research paper available on agricultural library and its services in Gujarat. So this research wills bridge the gap in the research on agricultural library in the Gujarat.

1.6 Scope and Limitation of Research:-

Scope and limitations are the compliments of each other. The define scope of research helps the leaders to decided to usefulness. It also leads the research in a decision making of inclusion and exclusive aspect of the subject. Investigator must decide the scope and limitation at the initial stage of the research. Here investigator has defined the research scope as under.

➤ Subject dimension of the research

**Limitation**

The experts believe that to admit the limitation in the research is noted drawback. Of course universal research is an ideal thing but it is always not possible. So every researcher admits limitations in terms of subject area, geographical area and time period.

Here following limitations have been admitted by the researchers

1. There are some institution and organization offer research study in agricultural related field like agricultural economics, management aspect of agricultural resources, sociology of agriculture etc. But not entirely on agriculture. This institution and its researchers are excluded in this study.

2. The respondents who are actively engaged in research work including UGC, ICAR and like that apex body, central government and state government sponsored research project and Ph.D registration students during the year 2012-2013 and 2013-2014 are included in the study.

3. The agricultural university in Gujarat is included in the study. The corporate sectors engaged in agricultural research in Gujarat are excluded.

**1.7 Hypothesis:**

The Hypothesis is usually considered as the valuable instrument in research. Its main function is to suggest new experiments and observations. In fact, many experiments are carried out with the deliberate object of testing hypothesis. Hypothesis mean a good guess at the best answer to a question, based on the most reliable facts available a guess that will be tested. Generally we believe that hypothesis is the tentative solution of the research problems. A Hypothesis is an important scientific concept in the research work. A hypothesis is a tentative statement about relationship between two or more variable. Here investigator has formulated following hypothesis.

1. Male researcher spent more time in library for research work than female.
2. Users are less interested in different kind of research publication i.e. Books and research papers.
3. Female researchers are more facing problems than male researcher for using the library.
(4) The researchers more prefer e-mail channel for provides library service than other channels.

(5) All the researcher community used all type of AGRIS online services equally i.e. there is no difference in the usage of AGRIS online services by different categories of research community.

1.8 Research Design:-

A research design helps to decide about issues like what, when, where, how much, by what means etc, with regard to an enquiry or a research study. The research design provides an outline of what the researcher is going to do the terms of framing hypothesis. A research design provides the strategy in the research work. In this study, the researcher used a descriptive research method in his research study and covered the following points in the research design.

1.8.1 Research Method:-

The research method may be understood as all those method or techniques that are used for conduction of research. In the other words, all those methods which are used by the researcher during the course of studying his problem are termed as research methods Following are some important research methods generally used in social science research.

➤ Scientific Research methods
➤ Experimental Research Method
➤ Historical Research Method
➤ Descriptive Research Method
➤ Surveying 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 and how far, what type of a particular service the agricultural researchers use for their research that can be only collected by using surveying method. Generally it is used when require to describe the ground realities or current state of art of a situation, group of persons or institutions. The descriptive survey pertain both to qualitative and quantitative research. It may also be used to collect huge data to be used later for multiple purposes. Here the
respondents are scattered in four agricultural universities in different parts of Gujarat and information regarding various aspects is required so descriptive surveying method is the best suited for this research.

1.8.2 Research Data:

The research required two types of data (1) primary and (2) secondary.

(1) Primary data are those which are collected afresh and for the first time and thus happen to be original in character. Here in this study, researcher has collected the primary data from the agricultural researcher community in the agricultural university in Gujarat. He has also collected primary data regarding the agricultural university libraries from their librarian.

(2) Secondary data means those data are already available, these data which have already been collected and analyzed by someone else. Secondary data may be either published data or unpublished data. Generally secondary data are published in journals, magazine, technical report, trade report, books etc and unpublished biographies and autobiographies. The secondary data was process from statistical method. Here investigator collected the secondary data from the agricultural research journals, research report, survey report, annual report of the institution etc.

1.8.3 Data Collection Tools:

The primary data can be collected either in experiment or in surveying it can be collected by using following any one tool or more.

(1) Observation
(2) Personal Interview
(3) Telephonic Interview.
(4) Questionnaire

In this study, the researcher has used a questionnaire for collection of primary data from the respondents. This method of data collection is quite popular, particularly in case of big enquiries. The researcher administers a questionnaire to research population for answering the questions framed in the questionnaire. The questionnaire contains the set of questions pertaining to research problems. When the respondents are literate high response rate is achieved using questionnaire.
1.8.4 Construction and Pretesting of Questionnaire:-

A questionnaire consists of a number of questions printed or typed in a particular order on a form or set of forms. The question should be very clear to understand and not leading to any of misunderstanding. The investigator has constructed two questionnaires, one for librarian and second for researchers. Investigator has drafted questionnaires in consultation with the guide Dr.Vaishaliben.L Bhavsar. As per guidance of Dr. Bhavsar the questionnaire were sent to two experts and three for respondents each questionnaire explaining the objectives of the research. They were asked to suggest the changes, add new questions, removal of unnecessary questions and clarity where they have any problem in understanding. After few days investigator meet them personally and discussed about the questionnaire, their suggestions were implemented with the consultation of Dr. (Mrs) Bhavsar and finalized the questionnaire. Both questionnaires contain open ended and closed ended questions with sufficient options. Investigator has also used Likert 5 and 3 points scaling rate. The questionnaire for librarian has total 40 question in 6 section(see appendix-1) and questionnaire for researchers has total 40 question in 6 section(see appendix-2).

1.8.5 Population and Sampling:-

In surveying method population and sampling plays an important role. The population is entire community of respondents and when out of it limited respondents are selected using suitable method, the selection of sample is known as sampling.

1.8.5.1 Population:-

Investigator has to find out the total population for selection suitable sampling method. Here investigator has find out total population for both type of respondents as under.

As there are four agricultural universities in Gujarat total population for first type of respondent i.e. librarian population is four

To know the total population of researchers in agricultural universities investigator has visited the universities and collected the data of researchers as shown in the following table.
### Table-1

**Category-wise Research Population**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of University</th>
<th>Register Ph.D Students</th>
<th>Research Officer</th>
<th>Teacher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Navsari Agriculture University</td>
<td>55</td>
<td>5</td>
<td>18</td>
<td>78</td>
</tr>
<tr>
<td>2</td>
<td>Anand Agriculture University</td>
<td>48</td>
<td>2</td>
<td>16</td>
<td>66</td>
</tr>
<tr>
<td>3</td>
<td>Junagath Agriculture University</td>
<td>40</td>
<td>3</td>
<td>26</td>
<td>69</td>
</tr>
<tr>
<td>4</td>
<td>Dantiwada Agriculture University</td>
<td>47</td>
<td>2</td>
<td>14</td>
<td>63</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>190</strong></td>
<td><strong>12</strong></td>
<td><strong>74</strong></td>
<td><strong>276</strong></td>
</tr>
</tbody>
</table>

### 1.8.5.2 Sampling and sample:-

As total population in the first type of population all for librarians were selected as a sample. The researcher community is 502 but it is distributed 12+ discipline in four universities so average per university per discipline respondent is about 8 which is also a small number of respondent so all the researcher were consider as a sample. In short entire population is selected as a respondent.

### 1.8.6 Data Collection Method & Response Rate:-

The data collection in the questionnaire can be collected by various methods like personal visit, post or mailing, e-mail or web base etc. Here investigator has used the mailing method for data collection. The questionnaire can be send by post to the target population with a self addressed envelope stamped pre paid so that respondents can return the filled questionnaire in time without hassle. Mail questionnaire should also accompany a covering letter stating the objective of the survey requesting the respondent to fill in time etc. Investigator has posted total 502 to the all respondents in the month June and July 2013. After a few remainder and personal visit total 276 i.e.54.98% responses received. As shown following table
Table-2
Category-wise Response Rate.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of University</th>
<th>Register Ph.D Students Send</th>
<th>Rec</th>
<th>Rate%</th>
<th>Research Officer Send</th>
<th>Rec</th>
<th>Rate%</th>
<th>Teacher Send</th>
<th>Rec</th>
<th>Rate%</th>
<th>Total Send</th>
<th>Rec</th>
<th>Rate%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NAU</td>
<td>80</td>
<td>55</td>
<td>68.75%</td>
<td>14</td>
<td>5</td>
<td>35.71%</td>
<td>22</td>
<td>18</td>
<td>81.8%</td>
<td>116</td>
<td>78</td>
<td>67.2%</td>
</tr>
<tr>
<td>2</td>
<td>AAU</td>
<td>94</td>
<td>48</td>
<td>51.06%</td>
<td>12</td>
<td>2</td>
<td>16.66%</td>
<td>26</td>
<td>16</td>
<td>61.53%</td>
<td>132</td>
<td>66</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>JAU</td>
<td>83</td>
<td>40</td>
<td>48.19%</td>
<td>16</td>
<td>3</td>
<td>18.75%</td>
<td>43</td>
<td>26</td>
<td>60.46%</td>
<td>142</td>
<td>69</td>
<td>48.5%</td>
</tr>
<tr>
<td>4</td>
<td>SDAU</td>
<td>54</td>
<td>47</td>
<td>87.03%</td>
<td>16</td>
<td>2</td>
<td>12.5</td>
<td>42</td>
<td>14</td>
<td>33.33%</td>
<td>112</td>
<td>63</td>
<td>56.2%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>311</td>
<td>190</td>
<td>61.09%</td>
<td>58</td>
<td>12</td>
<td>20.68%</td>
<td>133</td>
<td>74</td>
<td>55.63%</td>
<td>502</td>
<td>276</td>
<td>54.9%</td>
</tr>
</tbody>
</table>

1.8.7 Co-ordination and Tabulation:-

The collected data from the respondents are required to coordinate for analysis and interpretation of data. This procedure is referred to as tabulation. Thus, tabulation is the process of summarizing raw data and displaying the same in compact form for further analysis. Tabulation can be done by manual or by mechanical or electronic devices i.e. spread sheet. The choice depends on the size and type of study, cost considerations, time pressures and the availability of researcher for tabulating using machines or computers. The researcher has created the tables and different types of graphs in a meaningful and processed and analyzed in accordance with outline laid down for the purpose at the time of developing the research plan. This is essential for a scientific study and for ensuring that we have all relevant data for making contemplated comparisons and analysis. The researcher has used the SPSS software for to create a tables and charts. For this purpose investigator has created 143 variables (10 other variables create) using version 16 of SPSS.

1.8.8 Data Analysis & Interpretation:-

After classification and tabulation, certain indices or measures are to be developed to summarize the classified data. Only after this we can adopt the
process of generalization from small groups (i.e. samples) to population. Various statistical methods can be used for this purpose. In facts, there are two major areas of statistics viz., descriptive statistical and inferential statistics. Descriptive statistics concern the development of certain indices from the raw data whereas inferential statics concern with the process of generalization (Kothari, C.R. 2004c), both descriptive statistics and inferential statistics have been used in the study. The data on analysis has helped to draw conclusions and suggest remedies for the problems. It has also helped to highlight the prospects of automation and its advantages in terms of money, manpower and time.

1. **Measure of Central Tendency**

One of the most important objectives of statistical analysis is to get one single value that describes the characteristic of the entire mass or unwieldy data. Such a value is called the central value or an average (Gupta, 1998b). Central tendency of the tabulated data has been calculated, where found necessary, in the study.

The following are the important types of averages:

(i) **Arithmetic Mean**: It is defined as the value that we get by dividing the total of the values of various given items in a series by the total numbers of items.

\[
\text{Mean (or } X) = \frac{\sum X_i}{n} \quad \text{where } \sum = \text{Symbol for summation} \quad \text{Xi= value of the ith item } X, = 1, 2, 3, \ldots \ldots \ldots \ldots n \quad n = \text{total number of items}
\]

Arithmetic mean is the simplest average to understand and easiest to compute. It is also a calculated value, and not based on position in the series. But, extreme items in the series affect it and in case of a U-shaped distribution the mean is not likely to serve a useful purpose (Gupta, 1998c).
(ii) **Median:** It is the value of the middle item of series when it is arranged in ascending or descending order of magnitude.

\[
\text{Value of (n+1) th item} \quad \text{Median (M)} = \frac{\text{Value of (n+1) th item}}{2}
\]

When the items are arranged in continuous series, median is calculated using the formula:

\[
\frac{N/2 - \text{c.f.}}{F} \quad \text{Median (M)} = \frac{\text{L} + \frac{X \cdot I}{F}}{2}
\]

Where,

- \(L\) = \((N/2)\) the item Lower limit of the median class i.e. the class in which the middle item of the distribution lies.
- c.f. = cumulative frequency of the class preceding the median class.
- \(F\) = simple frequency of the median class.
- \(I\) = the class interval of the median class.

The extreme items do not affect Median, being positional average. It is also recommended if the distribution has unequal classes (Gupta, 1998d).

### 2. Chi-square Test \(X^2\)

The quality \(X^2\) describes the magnitude of the discrepancy between theory and observation (Gupta, 1998,e). It is defined as:

\[
\text{Chi-square}(X^2) = \frac{\sum (O - E)^2}{E}
\]
Where,
\[ \sum = \text{Symbol for summation} \quad E = \text{the expected frequency} \]
\[ O = \text{the observed frequency} \]

1.9 Planning of Research Report:-

Research report is considered an important part of the research study for the research task remains incomplete till the report has been presented or written. There are people, who do not consider writing of report as an integral part of the research process. But the general opinion is in favour of treating the presentation of research results or the writing of research report as part and parcel of the research project. Writing of research report is the last step in a research study. Layout of research report divided in three steps as (1) Preliminary pages (2) Main text and (3) end matter.

(1) **Preliminary Pages**: Preliminary pages covered declaration, acknowledge, content of tables, list of table and illustration etc.

(2) **Main text**: The main text provides the complete outline of the research report along with all details. Title of the research study is repeated at the top of the first page of the main text and after follows the other details on sequence pages number. Each main section of the report should begin on a new page. The main text of the report have five sections like as (i) Introduction; (ii) Statement of findings and recommendations; (iii) The results; (iv) The implications drawn from the results; and (v) The summary.

(3) **End Matter**: End matter covered an appendix, questionnaire, mathematical derivation, bibliography resource, abbreviation etc.

Here the investigator has prepared a research report as per above mention steps. In the preliminary pages, the researchers cover a declaration, certificate, content of table, list of table and acknowledge.

In the main text, the investigator covered a following chapter.

**Chapter -1 Introduction:-**

Purpose of introduction is clarification of research topic background of research topic, why selects the topic, objective of research, limitation of research and prepared a research design.
Chapter-2 Review of Literature:-
Before selection of research topic, the researcher survey of the review of literature available to his subject related. The investigator used the books, research papers / articles, thesis, research report and website etc.

Chapter-3 An Overview of Agriculture Education and Research:-
The researcher mentions the outline of agricultural development in the world and India. The investigator provides the information on development of agricultural education and research and established an agricultural colleges, institutes and research centers in India and Gujarat.

Chapter-4 Library and Information Service for Agriculture Education and Research:-
The researcher gave the description about library and Information service in the chapter-4. The investigator mention the need of agricultural Information services, growth of library development in India, development of agricultural information system at global and India and consortium of agricultural e-resources etc.

Chapter-5 Data Analysis and Interpretation:-
The researchers do the data analysis and interpretation from the collected data through questionnaire. The investigator used the SPSS Package for data analysis.

Chapter-6 Findings, Suggestion and Conclusion:-
In this chapter, the investigator findings some problems and gave his some suggestion as per his findings. The researchers gave the conclusion about this chapter.
At the end matter, the investigator gave an Appendix, Questionnaire, Bibliography resource, Abbreviation, Photo Gallery etc.
Conclusion:-

In the problem of research “A Study of Library and Information Services for Agriculture Universities Researcher of Gujarat State” the researcher discusses a library and information services provides to agriculture universities researcher and how to help directly or indirectly in the research study. Here researcher mentions the aims and objects of this study. The researcher discusses brief history agricultural invention, research, agricultural development, agricultural education and research in India and abroad. The researcher mentions the research methodology which is used in this research study.

-: Reference:-


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