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Research Methodology

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Summary
Introduction

Agricultural sector is performing a key role in the development of India. Agriculture is described as the backbone of our economy. The percentage share of agriculture in the GDP of India is around 13.9 percent. In spite of the rigorous efforts for industrialization, agriculture still generates direct and indirect employment to 66% of the total functioning population. Thus, agriculture still occupies a place of pride in Indian economy.

Credit is like a life blood for the health of Indian economy. Credit is barely essential for all the operations in agriculture. So, as per the old saying, it is rightly remarked that “Credit supports the farmers as the hangman’s rope supports the hanged”. This axiom is fully applicable to Indian farmers. The fact is that, the farmers in India cannot save sufficient for their agricultural expenses. Hence, they have to borrow for meeting agricultural as well as consumption expenses also. The Green Revolution and use of modern farm technology has further intensified the need of outside finance.

Recognizing the importance of credit in agricultural growth, the Government of India and the RBI have taken different steps for creating a wider institutional framework for improving the credit supply of agriculture.

Research Methodology helps in deciding the scope of the topic selected. The researcher gets the information of the process of research to be used. He also knows the techniques of analysis, interpretation and presentation of the data composed for the particular study. He can also formulate the aims and objectives of the study to be undertaken. The Study of research methodology also helps the research student to clarify time, scope and sources of data for his proposed study. In the short, the study of research methodology helps the researcher to decide his path of research work.

The research is generally defined as ‘the investigation for knowledge in a systematic way’. Clifford Woody, therefore rightly argues that ‘the research includes defining and redefining the problem, formulating hypothesis, collecting, tabulating, analyzing and evaluating the data collected, making deductions, drawing conclusions, making suggestions and suggesting solutions. Hence, research methodology becomes a scientific and systematic way of defining the problem for suggesting concrete solutions.
The current chapter deals with details about research methodology and its applications in solving predefined problem with the help of scientific method. This chapter includes meaning of research, objectives, scope and details about library research with limitations encountered by the researcher.

2.1 Meaning of Research:

In simple term, Research means searching knowledge and finding applications of knowledge to make it information for common understanding of tools & figures. Research is defined as scientific & systematic study of specific information to investigate problem & amylase the situation.

As per the advanced dictionary research is “a careful investigation”. Further, research is described as ‘the continuous search for knowledge or endless investigation for true faith’. Thus, research throws light on the search of new knowledge. It corrects previous errors and misconceptions. It also makes additions to the existing stock of knowledge. Therefore knowledge obtained through the research methodology is scientific and objective oriented that helps to understand the magnitude of the problem selected. It also helps for the verification and in-depth of analysis.

It needs the deliberate efforts for collecting data and analyzing it accordingly. Therefore research is the well structured and designed scientific hard work taken by the researcher on a previously well defined problem to justify the statements of hypothesis formulated initially and to draw accurate conclusions for making useful suggestions. Therefore, research methodology should be used carefully.

The famous definition that researcher would like to include in his thesis are; As per P. M. Cook, research is an honest execution and intelligent search for facts and its meaningful implication as related to the problem. It is the process of arriving to dependable solutions with the help of planned and systematic collection of data, analysis of tools & figures and draws a conclusion therein.

As per J. W. Best research is considered as formed, systematic, process of scientific method for analysis of data. It involves structural investigation result into conclusion with the help of formed records and investigations.

As per C. C. Crow Ford, defines research as systematic and refined technique of thinking, specialized tools, investment and procedure in order to obtain more prominent solution to the predefined problem. It starts with problem with the help of
collection of data, tools, analysis of them & reaches the decision based on actual evidences.

As defined by Travers in this study, educational research is an Endeavour to discover develop and verify to knowledge based on the study. It is therefore an intellectual process developed over hundreds of years ever changing in purpose and always searching for truth behind it.

Further, Clifford woody has defined research is careful inquiry or investigation or examination for seeking tocks or principles as per the investigation method adapted by the researcher.

As observed by R.M. Hutchins, research is the sense of development, elaboration and refinement of principles with the help of collection of material and process. The final the conclusion and suggestions therein if also process that it is to activity per training to university curriculum and a study material for precursors. Rust has defined research as a attitude of inquiry with to help of scientific question and definite procedures. It is the activity from theory to practical applications of certain fact and figures that suits to the research environment.

2.2 Major Steps Involved in Research:

Following are the most important steps related to the process of research for the topic selected.

a. Selection of the of the research problem.
b. Deciding the exact scope of the research problem.
c. Extensive and intensive survey of literature related to the research problem already selected. Finding the secondary sources of data collection for obtaining essential, authentic and reliable information is of utmost importance.
d. Formation of hypotheses in the form of null and alternative designed under the investigation of the design a method for formal acceptance of facts & figures.
e. Design a process for mental elaboration of hypothesis checking for agreement to toots, variable and logical consistency.
f. Collection of additional data as required by other means for butter understanding.
g. Analysis & summarization of data.
h. Formulation of new explanatory principle of scientific laws.

The researcher has studied following major characteristics of research for thorough understanding of topic and gathered relevant information to draw concrete & meaningful research proposals.

a. Research gathers new knowledge from first hand sources and analyzed them accordingly.

b. Research is an expert, systematic investigation with follow up of careful procedures and standardized valid data. It employs mechanical means to improve accuracy in human observations & recordings.

c. Research is a logical, objective procedure applicable to collect the data, from personal opinions, telling & bias in his activities. These activities support his hypothesis with an unguent to prove or falsify the facts as per available information.

d. It endeavors organized data in quantitative terms as passion as in a meaningful way. It also tries to put all in a meaningful numerical figures.

e. Research is willing to make painstaking efforts while gathering the Data and patiently towards sound conclusion.

f. Research is devoid of hurried & careless procedures. Moreover, researcher is not afraid of unpleasant consequences in his finding & putting the truths put forward. He is always willing to follow the procedure to some conclusion that may be unpopular & may bring social disapproval.

g. Research is purposive which demand volition to specific problem.

h. Research is a branch that provides discovery of general principle & generalization of scientific touts that can be applicable to wide range of problems.

i. Research maintains high level of standards in writing & scholarly effort with high level & integrity. It is a job with high responsibilities and carrying meaningfully explication.

j. Research also builds hypostasis that construes knowledge base for application to wide range of theoretical assumptions.
2.3 Classification of Research:

a) Basic or Fundamental Research:

Basic or fundamental research also called as pure research may not be used in daily activities in research. It concerns with solution to fundamental problems results in the forms of broad summarization or theory or principle of certain facts based on assumed data. It emplaces to controls and precision with fewer efforts on directs application of results for a specific situation.

In the field of education it involves concepts as motivation, reinforcement, formation in learning and results into fundamental type of research. The best example in pure or basic research is in psychology, sociological philosophy. It is done by outstanding experts with procedures, tools, controls, analysis etc. to reach desired conclusions.

b) Applied Research:

Applied research or field research primarily deals with research work in field with direct applications in the field with direct with theories, laws that have practical applications.

Application research is concern with testing of theories or laws in the actual field setting and is however bound to sacrifice controls and precision to same extent as compared with fundamental research. Topics on research on applied research are effect of various devices on learning use of text books, day to day testing, important in examination systems library search, library facility etc.

c) Action Research:

It is similar to many ways to applied research. The major difference is sample size. Action research conducted on the immediate available small samples in order to solve the immediate problem for the same group. Action research is preliminary concerned with field works only.

d) Library Research:

Library research is also called the research entirely dependent on the secondary data. It is defined "as a methodical study undertaken for the examination of certain aspects of information where conclusions are based on the investigation of the secondary data collected". The required secondary data is collected from reference books, reports, periodicals, research articles and internet. There is no need of using
techniques of selecting sample as is necessary in case study research for collecting primary data.

The selection of effective research design is critical in every research process.

The goals of library research are summarized as;


b. Developing multiple solution & selection of best suitable solution.

c. Feasibility of solution.

2.4 Statement of the Problem:

The researcher has evaluated the institutional agricultural credit in India during the post-reform period i.e. after 1991 by using secondary data as this research is purely library research. It will surely help to understand the facts of institutional credit to agriculture. Before starting the research, the researcher tried to emphasize on the following points-

a. Need of institutional credit to farmers.

b. Type and nature of credit to agriculture.

c. Share of various sources in agricultural credit.

d. To make comparative study of the share of various sources in agricultural credit.

It is very much clear that more problems of agricultural credit emerged in the last 23 years especially after the adoption of the New Economic Policy in July; 1991. These problems became more severe due to the inadequacy of credit and poor implementation of the policies formulated. For a better understanding of the problem, detailed examination of the agricultural credit becomes essential. Important features of agricultural credit are-

a) Inadequate number of beneficiaries.

b) High interest rate.

c) Uneven distribution of agricultural credit.

d) Inadequate and inefficient monitoring and evaluation.

e) Underdeveloped production base and

f) Uncoordinated and cheap credit policies.

Depending on the problems faced by the researcher, the study has taken further to solve and suggest the improvements therein.
2.5 Relevance of the Study:

As per the knowledge of the researcher there no individual or institutional research on the aspects covering in this research plan for the period suggested. This is totally new topic that will evaluate institutional credit. It will be an addition of fresh knowledge.

The purpose of research is to study the present scenario of agricultural credit, inform action and suggest the measures to solve the predefined problems. Thus, the study contextualizes the findings of institutional credit for strengthening further research.

The researcher has made all the attempts for rediscovering findings for suggesting plan of action for the expansion of institutional credit to socially unprivileged sections like small farmers and marginal farmers. In addition, the results of my study have implications for policy and project implementation within the outlook of institutional credit system.

The researcher found that there was slow transformation of research into practice. He further experienced that this problem often hinders the progress of agriculture. Those who are positioned to implement the research findings are totally inactive and stationary. Thus the underlying problem is “the way in which the institutional agricultural credit system accorded the growth of the sector”.

Thus, for the researcher, it is vital to take urgent steps to overcome these barriers. For the wide publicity it is also essential to make ones research known to the global community. Agricultural credit is allocated mainly to agricultural and non-agricultural productive activities as well as to consumption purposes. though at varying allocate proportions and that constraint to agriculture financing due to lack of aces to credit may be reduced if innovative and sustainable smallholder farmers Consequently, this study would contribute to the literature on the extent of farmers’ credit allocation to the farm sector and the factors influencing the credit allocations. This research would also contribute to the body of literature on the credit constraint condition of farmers in developing countries.

Further to discuss, the topic is more important and relevant in following ways-

a. This research will help to understand the nature of agricultural credit and different concepts used in it.
b. It is more useful for studying recent developments and trends in agricultural credit.
c. It helped to examine in detail the institutional agricultural credit
d. The current study will make available updated information for policy formation.
e. Hassel free, cheap and adequate availability of institutional credit will be effective remedy on farmers' suicides in India.

The scope of the study is for institutional credit rather than non institutional credit for the period ranges from 1991-92 to 2008-09 with comparison of short, medium and long-term institutional credit to agricultural. Here direct institutional credit rather than indirect institutional credit has been studied. Various agricultural credit studies revealed that although, the general performance of the institutional credit improved but there were several gaps, disparities and imbalances which were to be corrected for the proper expansion of agricultural credit.

Therefore this study has helped to find out the various reasons for weak performance of institutional credit with suggestive measures and reasons for suicides of farmers in India.

2.6. Principal Objectives of the Study:

Before started the study all the sincere attempts has been made to complete the study in all respect and make this study a most comprehensive and useful from all the angles. The researcher has summarized following objective precisely to come to solve the problem and draw final conclusion. These objectives are as,

a. To analyze the different sources of agricultural credit in India.
b. To explain the concepts used in agricultural credit.
c. To compare the different sources of agricultural credit
d. To assess the performance of institutions supplying farm credit
e. To study the recent developments in agricultural credit
f. To find our weaknesses and suggest measures for the improvement of these institutions.

All the attempts have been made to cover all the aspects taking into considering above objectives and it has been found that above objectives are fulfilled in the coming chapters.
These objectives are discussed in detail in the next chapter and used at appropriate place to come to final conclusion and make this study more meaningful.

2.7 Statements of Hypothesis:

Hypothesis is an assumption based on secondary data. It is a combination of two words hypo and thesis. Hypo means tentative and thesis means statement. Thus hypothesis is the tentative statement which has to be tested. According to Webster, ‘hypothesis is a guess made by the researcher which either solve the problem or guide him in further investigation’. The literature such as reference books, research journals, magazines, seminar proceedings, banking reports, reports of various committees etc. are the major sources of hypothesis. There is particular process for formulating and developing the hypothesis. This process consists of four steps. These four steps are observation, reflection, deduction or induction and verification. Observation is the first stage of hypothesis formulation. Reflection: means drawing common statement based on observations.

Likewise deduction is going from the general to specific, In contrast induction is the process that begins from specific observation and proceeds toward general statement. Hypothesis verification is the last stage in which tentative statement is tested with scientific techniques.

Statement of hypothesis gives direction to research. To make the study more elaborative and fact factual the researcher has proposed following hypothesis to solve the problem as stated initially,

1. Agricultural credit institutions have succeeded in making farmers free from the clutches of non-institutional lenders.
2. Agricultural credit institutions usually fulfill the targets set for agricultural lending.
3. Institutional credit still remains the most important source of agricultural credit till date.

The researcher desires that the above statements of hypothesis will help to draw the concrete conclusions. To make the study more relevant and complete, all the above statements of hypothesis will be tested in the coming chapters, using secondary data for arriving to the relevant and concrete conclusions. The secondary data will be obtained from the various statistical reports, RBI and Government of India publications.
2.8 Universal and Sample:

The research design is the structure within which research is conducted. A research design is useful for the collection and analysis of the data to combine to the research purpose and fulfill it accordingly. It constitutes the collection, classification and analysis of data. The research design gives us an outline of the research report. Thus, defining the problem, deciding the objectives, formulating hypothesis, collecting and analyzing the data include in the research design.

This research study is entirely dependent on secondary data. So, the population or scope of the study consists of all institutions providing direct credit to agriculture. Thus, this study includes all the credit institutions that supply credit to farm sector in India. Being analytical cum descriptive, this study is based purely on secondary information.

The secondary data regarding Co-operative banks, Commercial banks and Regional Rural Banks is collected from various publications and reports. Then this data is arranged for convenience. Further this data was analyzed for drawing consistent conclusions. Data scrutiny and examination is an effort to arrange and recapitulate the data in order to increase the usefulness of the results.

For the analysis of the data, the statistical tools such as percentage, average, growth rate etc. are used. For presenting this data graphs, charts and bar diagrams are also used. A comparative analysis based on different parameters is also made while analyzing the data.

2.9. Sources of Data Collection and Techniques of Analysis:

Data collection is key part of any research. Data means facts. Conclusions are based on collection of data. Secondary sources are used for the data collection. For analysis of data, the techniques such as ratio analysis, average, percentage and growth rate are used. This data is presented with the help of graphs and charts. Secondary data is collected from the following sources-

a. Annual Reports of NABARD
b. Annual Reports of RBI, NABARD
c. Central Statistical Organization data.
d. Periodicals and News Papers
e. Reference Books and Research Journals
f. Report on Currency and Finance
Secondary sources of information are also called as the used information. These types of sources are sometime used to analyze and interpret the primary data. They are very useful for data analysis and interpretations in library research.

To state further that the secondary data is the information compiled by someone else who is not present at the time of the happening. Generally, the user of secondary data is not related to the collection and publication of such data. But the researcher uses such secondary data for testing the statement of hypothesis prepared by him. Such interpretation helps to draw conclusions and make suggestions. Secondary data is collected and published in the past but used for the present research. For example, at present, the historian writes about the women’s rights in the past by collecting, classifying and analyzing the required secondary information to support his/her argument.

2.10. Limitations:

Though the study has been undertaken with enormous responsibility, appropriate attempt has been made to investigate all aspects. Precautions have also been taken to develop a systematic approach towards the conduct of the study. However every study has its limitations and this study is also no exception.

The researchers will study only institutional credit to agricultural. Though non-institutional credit to agricultural is remarkable. However, only institutional credit to agricultural will cover by the researcher and other non-institutional credit to agricultural will not study in depth.

The present study has the following limitations:-

a. The study is limited to available of secondary data obtained from published annual reports form limited numbers, thus its authenticity primarily depends on quality of secondary data where it is collected and compared.

b. The study is restricted to a period of seventeen years i.e. from 1991-92 to 2008-09.
c. The study is limited to institutional credit to agricultural only.
d. Data of non-institutional sources of credit is not updated and authentic.
e. The researcher has selected post-reform period. So, he could not include the pre-reform period for the study
f. The scope of the research is confined to the statistics related to entire country. Therefore the researcher could not concentrate at micro level. Therefore, the researcher desires that in future researcher may concentrate on micro level.

Therefore, whilst implementing the conclusions/suggestions of the study one should be vigilant enough and make use of this study thoughtfully only by taking these limitations duly into consideration.

2.11. Chapter Scheme:

The researcher has divided the research work leading to Ph.D. entitled, “An Evaluation of the Institutional Credit to Agriculture in India – (1991-92 to 2008-09)” into the following chapters:

The first chapter of the research deals with the introductory part includes role, meaning, significance, classification, sources and need of agricultural credit as well as the overview of agricultural credit.

Second chapter deals with research methodology that includes objectives, study, significance, scope, and relevance, and need analysis, statement of hypothesis with justification, analysis techniques and limitations. In this chapter, the researcher has made an attempt to examine various aspects of research methodology and use of statistical tools.

The third chapter, it deals with review of literature. That includes introduction, literature review related to institutional credit. The literature reviewed is classified in to reports of various committees, research papers and thesis related to the research topic selected.

The fourth chapter titled ‘Theorization of the Topic’ consists the working and performance of various institutional credit sources like Commercial banks, Regional Rural Banks, Microfinance, PACS,DCCBs,SCBs in detail for a given period.
The fifth topic is used for analysing the data collected. This analysis is used for the justification of hypothesis. In this chapter research techniques such as arithmetic average, percentage, ratio, growth rate etc. are used for the analysis of data. Further in Chapter six, the researcher discussed conclusions drawn on the basis of data analysed.

The last i.e. Seventh chapter includes the suggestions based on the findings and observations. These suggestions will be useful for policy formulation. Besides bibliography of references used for writing the thesis is also enclosed at the end of the thesis.

Thus, entire thesis is divided into seven chapters.

**Summing up:**

In this chapter, while describing the research methodology, the researcher tried to explain the meaning of research, major steps involved in research, characteristics of the statements of hypothesis and their justification, sampling methods, sources of secondary information, statistical techniques of data examination, restrictions of the study and scheme of chapters. A review of literature related to the research topic will be made in the next Chapter-III.
Select References: