

CHAPTER 3

RESEARCH METHODOLOGY OF THE STUDY

3.1 Introduction

This chapter is concerned with the methodology used during the study, it represented the type and source of data, tools and techniques and sampling methods used in the study. It also describes the process of data collection and analysis. As per the study concern secondary data has used in study to fulfil all three objectives of study. The three objectives of study are: to study the trend and performance of Kisan Credit Card Issued by three different agencies in India, to study the State wise progress of Kisan Credit Card in India and to find out the impact of Kisan Credit Card scheme on Agricultural Productivity in India. To fulfil the first and second objective of study data has taken since 2000-01 to 2012-13 .Because the unavailability of some period data for third objective data has taken since 2005-06 to 2012-13. Data has been collected from different sources. To make the study reliable and efficient year wise data has taken. Data has taken at macro as well as micro level. To fulfil first and second objective CAGR (Compound Annual Growth Rate) and percentage of the total has used and to fulfil the third objective Multiple Regression has used with the help of SPSS software.

3.2 Methodology of Study

Methodology of study can be explained through following points.

- Agency wise trend and performance of KCC.
- State wise progress of KCC.

- Impact of Kisan credit card scheme on agricultural productivity.
- Data source of study
- Variables used in the study.

Three agencies have taken for analysis which are: RRBs, Commercial banks and Cooperative banks.

Agency- wise Trend and Performance of KCC

To fulfil this objective percentage growth rate and Compound Annual Growth Rate has used. For this analysis following formula has used:

$$\text{Growth Rate} = (\text{Present Value} - \text{Past Year Value}) / \text{Past Year Value} * 100$$

CAGR is the rate at which something (e.g. revenue, savings and population) grows over a period of years, by considering the effect of annual compounding.

The formula for Compound Annual Growth Rate is:

$$\text{CAGR} = (\text{Ending Value} / \text{Beginning Value})^{1/(\text{No. of years}-1)} - 1$$

State- wise Progress of Kisan Credit card

State wise progress of KCC in India has analysed by taking the 15 states who major involved in KCC issuing in India. CAGR (Compound Annual Growth Rate) is used for seeing the compound growth because there are many fluctuations in year to year growth.

Impact of KCC Scheme on Agricultural Productivity

To see the impact of Kisan credit card scheme on agricultural productivity through number of Kisan credit card issued and amount sanctioned of KCC by the fifteen states. These fifteen states are Andhra Pradesh, Assam, Bihar, Gujarat, Haryana,

Karnataka, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal which are representing the above the 70% of total KCC issued and amount sanctioned in India. Agriculture productivity has taken as dependent variable and KCC amount sanctioned and number of KCC issued have taken as independent variables. For the analysis of this objective the Multiple regression has done in SPSS software.

Multiple Regression is further extension of simple linear regression. It tells about the relationship between one dependent variable and many independent variables. It tells about the change in one dependent due to the other independents.

Regression equation

$$Y = a + b_1 X_1 + b_2 X_2 + \dots + b_n X_n$$

Where

Y = dependent variable

a = constant or intercept

b_i = Coefficient

X_i = independent variable

3.3 Data Source of the Study

To fulfil the above objectives of study various data sources have used. Data has collected from NABARD database, Report on Trend and Progress of Banking in India (RBI) and India stat.

3.4 Variables used in Study

For the analysis various variables are used in the study. Numbers of Kisan credit card issued, amount of Kisan credit card sanctioned and agricultural productivity are taken as variables in the study. Number of KCCs issued and Amount of KCCs sanctioned are taken as independent variables. The agricultural productivity (Total Food grains per hectare) is taken as dependent variables.