Chapter - 1

Database and Research Methodology

1.1 Introduction:

The 73rd and 74th Amendments of the Indian Constitution, brought the local level governance into prominence, which in turn focused attention on the regional problems and planning to solve them. For a more effective approach in dealing with local level problems, the existence of a reliable database pertaining to all local regions has become essential. This has not only received much importance in relatively centralised two tier governance system, which we have since long. However, this is a rapidly changing. An effort to incorporate Panchayats and Nagarpallikas into the planning system has begun to gather momentum. The fact that the 74th amendment has provisions of District Planning Committee which in deed gives an impetus to the local planning.

The National Statistical Commission has emphasised the importance of local database. The Commission is of the view that in each of these areas there are major deficiencies of data, which can largely be attributed to the near collapse of the administrative statistical system. The deficiencies common to all the sectors includes; poor quality of data collected by the statistical system, inordinate delays, lack of effective checks, incomplete coverage, inconsistent data, inadequate infrastructure and staff for statistical work and lack of computerisation, processing and dissemination of data produced by different agencies.

Agriculture is usually the largest commodity producing sector of a district economy. It includes all agricultural products like crops, vegetables, horticulture and floriculture output and their residues.

District Domestic Product (DDP) is one of the most important indicators to measure the economic development of the district. It measures in monetary terms the value of all goods and services produced during a given period of time within the geographical boundaries of the district.

Sugarcane is the main cash crop in Kolhapur district and hence, it is considered to be a major source of income to the farmer. The area under sugarcane crop has boost up from 98,400 hectares in year 2002-03 to 1,72,242 hectares in year 2007-08, it's production also increased from 84,21,000 M.T. to 1,27,23,000 M.T. in the same period.

1.2 Scope of the Study:

As there was little or no local level planning for provision of public goods and facilities, there seemed to be little or no need or demand for local level database. Conditions have changed now and as the constitution has given power to the local bodies for preparation of local level plans and implementation, it is becoming increasingly necessary to have decentralised database for micro-level planning of various development programmes.

The research was designed to study the importance of sugarcane crop in the district economy and also disaggregate the district income (District Domestic Product) by cropping pattern in the study area and calculate the contribution of various crops in the District Domestic Product. For comparison the National and State level database has also been used. To calculate the net contribution to the district income of particular crop, it is very much essential to deduct the cost of cultivation from the gross revenue earned out of it. Therefore, the database on the cost of cultivation has also been collected from the sugarcane cultivators in the study area. Researcher has attempted to correlate the availability of irrigation facilities; prices of sugarcane and the area under the sugarcane.

1.3 Statement of the Problem:

The availability of district wise basic data required for estimation of income at the district level is still not satisfactory in India. The data in respect of commodity producing sector, viz. primary sector and manufacturing sector is partially available but in respect of remaining sectors it is very scanty. Further, in some of the commodity producing sectors, though district-wise production data are available, the corresponding prices are not available.

In this respect researcher's intention was to disaggregate the district income by cropping pattern by selecting a study area. The main focus was on sugarcane crop and its contribution to the district income.

1.4 Objectives of the Study:

The main objectives of this study were as given below.

1. to disaggregate the Kolhapur district income by cropping pattern.

2. to study the contribution of sugarcane in the overall district income in general and primary sector in particular.

3. to study the trends in area under sugarcane crop and its production and prices.

4. to compare district income to the State's SGDP and Nation's GDP.

5. to find out problems occurring in estimating the district income and suggest some measures to solve them.

1.5 Hypothesis:

The study is having following the hypothesis for conducting the field work.

1. Sugarcane occupies major share in the cropping pattern in irrigated area and hence it is considered as the major source of income in the Kolhapur district.

2. Variation in the prices of sugarcane leads to change in the share of sugarcane in the cropping pattern vis-à-vis share of income from sugarcane to total agriculture income.

1.6 Period of the Study:

The period of study has been confined to five years from 2002-03 to 2006-07. Researcher has made each and every effort to collect all required data in the context of objectives and hypothesis so far given above.

1.7 Database and Methodology:

The key issues to any research work are its methodology and steps which are being applied to collect the relevant data and analyse them for reaching to a proper conclusion. The steps there under are design in the methodology, which must be appropriate to answer the question or test the hypothesis of the research. In its most general form, the methodology should include the explanation of the research activities, data collection and data analysis.

The present study has been mainly depending upon secondary source of data which includes both published and unpublished references were used. Secondary source of data has been collected from the sources, like publications of Ministry of Agriculture (both Central and State Govt.),

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Vasantdada Sugar Institute, Pune, Central Statistical Organisation, Directorate of Economics and Statistics, Mumbai and also from various local Govt. Offices in Kolhapur city which includes District Statistical Office, Agriculture Extinction Office, APMC, District Superintendent of Agriculture Office and Agriculture Department of Kolhapur Zilla Parishad, etc.

In addition to this researcher has used primary data to check the reliability of secondary source of data by administrating cross check questionnaires and conducting interviews of the farmers and a dialogue with the academicians and researchers who have wide range of experiences in sugarcane pricing.

1.8   Data analysis:

The collected data has been classified and tabulated in the light of the objectives and chapter scheme of the study. The data was processed by employing suitable statistical tools like percentage, arthemetic mean, range, standard deviation, Karl-Pearson's coefficient of correlation, regression by using least square method, simple and compound growth rate, etc. Besides, the uses of computer softwares like Indical, which has been specially designed to estimate district income in India. It has been specially developed by the Centre for Budgetary and Policy Studies, Bangalore. Ms-Excel and SPSS (Statistical Package for Social Sciences) was also employed.

1.9   Limitations of the Study:

The study limits itself to only Kolhapur district and particularly to the sugarcane crop. Some Govt. offices were unable to provide up-to-date data. Consequently, the analysis has been made with the gap of such reference years.

1.10   Chapter Scheme:

The dissertation has been divided into five chapters.

The second chapter accounts for the economy of the Kolhapur district.

Third chapter gives an idea of methodology so far adopted for estimating district income.

The desaggregation of district income by cropping pattern has been analysed in chapter IV

The fifth chapter describe about the trade off between development process and the environmental quality for the study area and

Last chapter gives the major items of conclusions and suggestions.