CHAPTER 2

OBJECTIVES, METHODOLOGY AND SCOPE

1. Objectives

2. Scope

3. Methodology
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1. Objectives:

The discussion in chapter 1 was aimed at outlining the basic purpose of the present study. The objective may be restated as below:

To carry out an evaluation of SCBA methodologies for rural development projects in India by analysing the theory and empirical practice with respect to:

(a) Accounting prices (shadow wage rates) of unskilled labour
(b) Discounting rate for finding out present value of future benefits and costs
(c) Quantification of risks and uncertainty.
(d) Reliability of numerical measures of desirability of a project.
(e) Nature of value judgements.

2. Scope:

The thesis is titled 'Evaluating Cost Effectiveness of Rural Development Projects'.

The meaning and content of 'evaluation' has been discussed in detail in chapter 1. To have a broad idea regarding tho
scope of this thesis, a preliminary set of definitions of the term 'Project' and 'Rural Development' is also warranted.

(i) Project:
Little and Mirrlees mean by a 'project', "any scheme, or part of a scheme, for investing resource which can reasonably be analysed and evaluated as an independent unit". As they acknowledge, this definition is 'arbitrary'. The arbitrariness mainly arises through choice of boundaries, within which if analysis is carried out, it would be 'reasonable'. This choice of boundaries has three major aspects; viz. spatial, temporal and socio-economic. The spatial boundaries would involve delineating the geographic area. The temporal boundaries would specify the time-span being considered. The socio-economic boundaries would separate the specific socio-economic activities being studied within a spatio-temporal zone from other socio-economic activities being practised within the same zone. The major consideration while specifying these boundaries is that the project be so demarcated that it becomes relatively 'independent'. This independence is to be judged by the likely effect of what has been excluded from the project. The excluded aspects should not have a major influence. More precisely, the sensitivity of the project to the variation in externalities should not be of such a magnitude which would seriously change major findings of the project analysis.
Defining such boundaries is not very easy, and there is no completely objective method of doing it. We would prefer to define project in such a fashion that these considerations are explicitly brought out. We, therefore, mean by 'project': 'any scheme, or part of scheme, for investing resources, whose spatial, temporal and socio-economic boundaries are so defined that the structural parameters of the open-system so defined are not expected to be affected significantly by normal changes in the external environment'.

Clarification of the Terms Used:

(a) **Structural Parameters**: The term 'structural parameters' is used in the technical sense of econometrics. For instance, according to Christ, "The features of the problem being studied that do change during the period will be called variables, and the whole complex of features that do not change will be called the economic structure, or often simply the structure. Numerical constants characterizing the structure are called structural parameters". We cannot tell which are the variables and which are the parameters of the structure, until we know what problem and what period are being discussed.

It is also important to note that the word 'period' is being used here in a much more broader sense than it is normally used. To quote Christ again: "In a time-series study the period from which these observations come is called the observation-period or the sample-period. The period from
which predictions are made is called the prediction-period or the forecast period. It will be convenient to use this same terminology to refer to cross-section studies, and in that case the word 'period' will be understood to refer to the set of individuals, firms, regions, or what not that make up the cross-section in question. ³

(b) Open System: The term 'Open System' is also used in the technical sense as is used in current literature on systems analysis. The important characteristics of an 'Open System' is that it is a goal seeking system in which equilibrium exists amongst its component parts. Any disturbance of this equilibrium initiates compensating reactions which immediately lead to the establishment of new equilibrium. In other words, the system will search for equilibrium every time its balance is disturbed.

(ii) Rural Development:
Desai very rightly observes: "As has happened with many concepts of social sciences, the precise definition of the concept of rural development is very difficult to state, and hence there are many versions of rural development. For our purpose, rural development essentially means development of rural population in general, and development of rural poor in particular."

(iii) Rural Area:
Though what constitutes rural area in India is broadly
understood, for the sake of clarity, we may define rural area as defined by the Census.

"In India the smallest area of rural habitation is the village. It generally follows the limits of a revenue village that is recognised by the district administration ....."\(^5\)

It is in defining the urban areas that problems arise. The definition adopted for an urban area for the 1971 census\(^6\) which followed the 1961 pattern was as follows:

(a) All places with a municipality, corporation, cantonment or notified town area;

(b) All other places which satisfied the following criteria:
   1. a minimum population of 5,000.
   2. at least 75% of male working population being non-agricultural,
   d. Population density at least 400 per km\(^2\) (ie 1000 per sq.mile).

(iv) Development of Rural Population:

Development of rural population in general and rural poor in particular must also be clearly understood. We are concerned with only those projects which aim at generating higher income in the hands of rural population by providing them gainful employment, and which do not exclude (at the least) the rural poor. The project must aim to do this without causing rural people to migrate to urban area or converting a specific area
into an urban centre. We may clarify this by illustrative examples of a few programmes which as per this definition are not rural development projects. Charitable or social projects like adult education, or supplementary nutrition programmes are excluded since they do not directly aim at improving incomes through productive employment. It is not our contention that they do not lead to development of rural population. But evaluation of such programmes would involve considerations which are substantially beyond the scope of present study.

An industrial project, like a steel plant, situated in rural area would be also excluded according to our definition. This is because primary object of such a project is not to provide productive employment to rural poor. It would mainly employ people having sophisticated skills from urban areas, and would create an urban centre in a rural area. This again does not mean that we do not realise that such a project may eventually create a number of employment opportunities to rural population in secondary activities. However, it would primarily be a project for 'industrialisation'; its location in rural area is only a secondary factor. It is not primarily a rural development project.

* This restraint is quite common. For instance, Guide to Practical Project Appraisal is prefaced by 'The reader should note that neither this 'Guide' nor the 'Guidelines' is intended for appraisal of humanitarian assistance projects.'
(v) Characteristics of a Rural Development Project:

In context of the present study, therefore, a rural development project must satisfy the following conditions:

(a) It must directly lead to gainful employment and increased income for rural population.
(b) Rural poor must not be excluded.
(c) It should not be essentially charitable or social in character. It must be an economic activity.
(d) It must not necessarily lead to urbanisation of a rural area.

Some of the illustrative rural development projects which prima-facie satisfy the above conditions would be following:

(a) Irrigation schemes
(b) Projects for improved agricultural practices
(c) Employment Guarantee Scheme of the Government of Maharashtra.
(d) Afforestation Programmes
(e) Cow-Cross Breeding Programmes, etc.,

3. Methodology:

For carrying out a comparative analysis of the methodologies, ideally, a project should be analysed by different methods and such analysis should be extended to many projects. It would then be easier to compare and evaluate the different evaluation methodologies. However, here we run into problems. Despite our extensive and careful search we could not
locate a single study which evaluates the same project through different methodologies. The main reason for this is evaluation is a costly and time-consuming process. It cannot normally be undertaken without the support of a funding agency. The funding agencies are primarily interested in evaluating a project which they have funded, or intend to fund, through a methodology that is acceptable to them. As Elzinge says, "The evaluation will most often reflect the standpoint and perspective of those commissioning it". This is a major lacuna in the development of 'evaluation research'. It may be worthwhile to launch such comparative studies. However, this would involve a major team effort and would require good amount of time and money.

What can be done in the absence of such comparative studies? The next best option would be to compare the evaluation studies of different projects carried out by using different methodologies. Here, we must choose projects which are designed to operate within similar socio-economic environment, and which have been carried out by 'competent' evaluators. Due to the necessity of similar socio-economic environment, we restrict ourselves to studies carried out in India.

Even the SCB studies carried out in India must be divided between two groups viz.: studies of industrial projects and studies of rural development projects. This is because, firstly, the socio-economic and political considerations and environment of industrial projects differ greatly from those
of rural development projects; and secondly the methodologies and evaluation of industrial projects also differ from those of rural development projects.

In the present study, we concentrate on SCBA studies of rural development projects in India. There are certain reasons for this choice.

Firstly, there are more SCBA studies of rural development projects than industrial projects in India. Therefore, by choosing rural development projects we have a larger sample.

Secondly, SCBA methodology is mainly concerned with public investment decisions under 'imperfect' market conditions. The problems encountered with SCBA studies are likely to become more apparent while evaluating rural development projects in which most of the investments are through public exchequer and market conditions are highly imperfect.

Thirdly, from the Second Five Year Plan onwards, there has been a shift at the planning level towards greater emphasis on evaluating rural development projects. For instance, the Second Five Year Plan states, "With the progress of land reform, co-operation, village and small industries and with the rapid pace of industrial and urban development, fundamental changes are already taking place in the country-side. These are likely to be accelerated in the Second Plan. It is of utmost importance that social and economic changes should be
analysed objectively as they occur and the impact of economic development on different sections of rural population observed at first hand .... Evaluation has, therefore, to be increasingly oriented towards studies of selective and intensive type motivated by and leading to a purposive action\(^9\). In this context, it is also pertinent to note the observation made by the Programme Evaluation Organisation: "In the Second Five Year Plan, evaluation was more specifically linked to the field of rural development, though its need in other fields was not overlooked."

The Studies to be Evaluated:

We would evaluate the following eight studies of Cost Benefit Analysis of Rural Development Projects in India:

1. D.K. Gadgil: Criteria for Appraising the Feasibility of Irrigation Projects.\(^10\)


3. S.N. Mishra: Cost Benefit Analysis of Intensive Cattle Development Project, Pune, Maharashtra.\(^12\)

4. A. Mitra: Cost-Benefit Analysis of Rural Electrification Programme.\(^13\)
5. A.D. James & F.R. Ellis: Benefit-Cost Analysis in Foot and Mouth Disease Control Programmes.\textsuperscript{14}


8. S.K. Gandhe: A Social Cost Benefit Analysis of a Sugar Production and Refining Project in Goa.\textsuperscript{17}
REFERENCES FOR CHAPTER 2


3. ibid.


6. ibid.


