

Arie Kuyvenhoven and L. B. M. Mennes. *Guidelines for Project Appraisal.* The Hague: Directorate-General for International Co-operation, Ministry of Foreign Affairs. 1985. x + 190 pp. Price: fl. 19.50.

There has lately been an increasing emphasis on methods of evaluating development projects in the developing countries. The traditional focus, which relies on only a financial appraisal of projects, is no longer a favourite topic with project analysts, especially in the public sector. In order to capture the full impact of projects, several methodologies, focusing on the economic and social aspects, have been introduced in the literature during the late Sixties and early Seventies. Moreover, to enhance/facilitate the applicability of these methods to actual projects, the need for Manuals, Guidelines, and Guides of project appraisal has been felt from time to time. Some well known attempts in this area have been made by OECD [2], UNIDO [1; 5], ODA [6] and ODM [7].

The book under review is another such attempt to make this complex subject more easily applicable to real-world situations. It is an introductory guide to the application of cost-benefit analysis for project preparers and appraisers in a practical-oriented environment. It is essentially an outcome of the demand expressed by the participants in training courses organized by the Directorate-General for International Co-operation, Ministry of Foreign Affairs, the Hague, Netherlands, on the preparation, formulation and appraisal of projects. Because the book is aimed at practitioners who prepare projects, it is non-technical and easy to follow. However, its non-technical nature does not detract from the general usefulness of the book for project analysts.

Chapter One of the *Guidelines* introduces the subject of cost-benefit analysis and discusses its relative strengths and weaknesses. Chapter Two gives a brief account of the various stages in project planning and appraisal from the point of view of a donor country. The core of the book, however, comprises Chapters Three, Four, and Five.

Chapter Three deals with the financial appraisal of projects wherein the basic topic of cash-flow accounting is introduced. The derivation of the cash-flow statement, which is the first step towards an analysis of liquidity and profitability of a project, is shown in a simple manner. The discounted cash-flow analysis has been introduced with an arithmetical explanation of two measures of a project's worth, viz.

Net Present Worth (NPW) and the Internal Rate of Return (IRR). The authors, while discussing the two measures, mention two major disadvantages of the IRR, namely its inability to provide a unique solution if positive and negative values in a cash flow alternate, and its unsuitability as a criterion of profitability in cases of mutually exclusive options. As the latter cases are of frequent occurrence in project appraisal, the authors recommend and give an arithmetical explanation of the use of incremental IRR. Nothing, however, has been said to overcome the former type of disadvantage. It may be pointed out that although the cases of former type, i.e. the presence of multiple solutions of IRR, are relatively rare in practice, they do nevertheless exist. Therefore, it would have been useful for teachers of project appraisal if a reference were made to the extended yield method given in Merret and Sykes [3].

Other relevant topics that are discussed in Chapter Three include inflation, depreciation, sensitivity analysis and the issue of subsidies. These topics are important in cost-benefit analysis as they can affect the profitability of projects. The chapter also deals with different types of cash flow, a subject that is expanded in the subsequent chapters which discuss the economic and social analysis of projects.

Chapter Four marks transition from financial to economic analysis, thus substituting efficient allocation of resources for profitability as an objective of development. The differences between the two types of analyses are brought out and explained with the use of examples. The valuation of efficiency prices for outputs and inputs, such as labour, capital and land, forms the basis of economic analysis. Efficiency prices are calculated with the use of conversion factors operating in a distortion-free environment. An explanation of the general principles lying behind the factors is given. Various conversion factors have been derived but the derivation is not based on actual data from countries from where the case-study projects have been taken. Of course, one feels that this sort of explanation can be found in any standard book on project appraisal. What the authors have done is to make them simple with the help of arithmetical examples borrowed from other authors.

The annex to Chapter Four makes a brief comparative study of the systems of economic analysis used by Little & Mirrlees [2], Lyn Squire & van der Tak [4] [L-M & S-T] and the United Nations Industrial Development Organization (UNIDO). Examples are given of how these methodologies can be used in practice.

Chapter Five focuses on social analysis of projects which concerns itself primarily with the distribution of income among different social groups and different regions and between present and future generations. Valuation of inputs and outputs is done with the use of social accounting prices. Consumption distribution weights taken from Squire and van der Tak have been used to estimate shadow wage rates

for social analysis. A simple and practicable method, based on hypothetical data, has been used to calculate the value of the savings premium (V). It has been shown that the introduction of saving constraints in the calculation of the shadow wage rate increases the social price of labour. On the other hand, the authors demonstrate that the incorporation of consumption distribution weights does the opposite if the value of distribution weights is greater than 1 for a given value of savings premium which itself should be greater than one to become a constraining factor. The Accounting Rate of Interest and the Critical Consumption Level have also been discussed but the treatment is quite inadequate. The chapter concludes with a discussion of a multi-purpose river project from Sri Lanka. The social cost-benefit analysis of this project is shown to have raised some very interesting issues for the government of Sri Lanka in terms of providing information about the interaction between elements of macro-economic policy and project selection.

The three appendices of the book present detailed case-studies showing the three different stages of appraisal: financial, economic and social. Out of the three, the second one, namely "The Rehabilitation of Solar Salt Works on East Madura, Indonesia", has been analysed more comprehensively from the financial, economic, and social points of view. The social aspect is elaborated in terms of introducing regional income distribution weights. The island of Madura, where the project is located, is shown to have a per capita income only two-fifths of the average for Indonesia as a whole. Consequently, an increase in per capita consumption in Madura is valued more than twice as high as an equal increase in per capita consumption in the rest of the country. This method of calculating regional income distribution weights is a very practicable way of solving some of the complex problems which regional project planners face. By incorporating this new distributional element in the social analysis, the project becomes acceptable, which shows that a complete social appraisal should be undertaken whenever data permit. Financial appraisal, and sometimes even economic/efficiency analysis, tends to be narrow-based, as can be seen from the Madura project.

Project appraisal is a technical subject. The use of case studies and worked examples to illustrate its various aspects can be extremely useful. This is exactly what this book should intend to do when citing actual projects as case studies from Indonesia, Mexico and Sri Lanka. But somehow the format of the case-study presentation leaves a lot to be desired. The analytical description of the projects is, no doubt, excellently and exhaustively done. But, when it comes to co-ordinating it with the section illustrating the application of social cost-benefit analysis techniques to the actual projects through arithmetical examples, the reader is left wandering between the main text and the three appendices given at the end of the book.

It must be appreciated, however, that in the appendices various tables have been painstakingly prepared, showing the breakdown of various cost items into tradeable, labour and residual components. But since no integrated cash-flow statement is

given in any one of the case studies, it seems to give the impression of a disjointed attempt when it comes to the interpretation of the results section. This feeling of uneasiness on the part of readers may be because of the fact that no attempt has been made to demonstrate a step-wise application of any one of the available appraisal methodologies to case-study projects. However, when looking at the calculation of shadow wage rates and consumption distribution weights, one is strongly convinced that the book under review implicitly adopts the L-M & S-T method in appraising projects.

A positive feature of the book is its relatively detailed treatment of the evaluation of labour (the shadow wage rate) in economic as well as social appraisal. In economic analysis, where the emphasis is on an efficient allocation of resources, opportunity cost considerations determine the shadow wage rate. In social analysis, both inter- and intra-temporal income distribution issues are taken into consideration when estimating the shadow wage rate.

It may also be mentioned here that if this book has been written with the objective of making social cost-benefit analysis (SCBA) simpler and easier to follow and apply, then it has partially achieved its purpose. But, in the light of what the authors state in their preface ("the main purpose of the *Guidelines* is to explain how to improve and maintain the quality of project and programme preparation through the introduction and systematic application of cost-benefit analysis with particular reference to the Netherlands technical and financial aid programme"), the book does not appear to act as a 'real' guide for project analysts.

Also, a very brief attempt has been made to discuss cost-effectiveness analysis as a second-best tool for decision making. Perhaps a case study illustrating the application of cost-effectiveness analysis would have been useful as it would have broadened the scope of the book to include other sectors of the economy. Further, the treatment of the question of risk and uncertainty in project analysis is far from satisfactory.

To conclude, the book emphasizes the appraisal stage of the project cycle in evaluating projects. It is a very basic introductory guide to the subject and the subject matter deals largely with projects in the industrial sector whose costs and benefits are readily identifiable and quantifiable. Other sectors, such as education, health, agriculture and transport, are largely ignored and we feel that the Dutch Government's interest in income redistribution through human-resource development would definitely demand some concrete guidelines for project appraisal in the social sectors.

However, a positive feature of the book is its very practical approach to a very complex subject in that worked examples are presented to illustrate the application of the techniques of cost-benefit analysis. This is particularly true when the two different methodologies of appraisal are being considered in Chapter Four of the

book. Also, the list of references provided at the end of each chapter is extremely useful and comprehensive. One would find it difficult to add to it. Finally, the book's utility can be maximized if it could be made to serve as a training aid to teachers of project appraisal and also if it could help independent readers in clarifying their ideas about the estimation of some shadow prices.

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