

AN ECONOMIC ASSESSMENT OF THE SPLIT ROCK DAM
OF NEW SOUTH WALES

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fulfillment of the requirements
for the Degree of
Master of Economics

by

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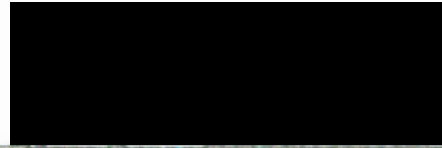
January 1986

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Dedicated to my beloved father whom I lost during my study in Australia
(Oh God, the Merciful, let his soul be rest in peace).

I certify that:

- (a) the substance of this dissertation has not already been submitted for any degree and is not being currently submitted for any other degree.
- (b) any help received in preparing this dissertation and all sources used have been acknowledged herein.



Signature

ABSTRACT

This study investigates the relative profitability of the Split Rock dam in New South Wales from the view point of the participating new irrigators and society. A review of the economic literature on contemporary project appraisal techniques, in an attempt to justify the choice of the analytical method and the Conventional Efficiency Analysis (Gittinger 1982) is presented in detail. In the appraisals, the net present value, internal rate of return and benefit-cost ratio are calculated based on direct costs and benefits related to agriculture with social discount rate of 7, 10 and 13 per cent in real terms. Secondary/intangible costs and benefits are not included in the analysis, but identified with a view to make the decision maker aware of their impacts on the society. The implications of the project are also highlighted.

The main conclusion of the study is that investment in Split Rock dam is economically unsound from the view point of society, but would be highly profitable to new irrigators, based on the assumptions underlying the appraisals. It is also concluded that even if the water price is increased to the extent of full economic water development cost, irrigated production at the farm level would still be profitable at a rate greater than the opportunity cost of private investment. Increased water price at an appropriate level would help improve efficiency in irrigation water utilization, reduce wastage and facilitate the effective use of sleeper licenses.

The study has outlined policy guides on how to maximise efficiency per dollar invested in the project.

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