

CENTRAL BOARD OF IRRIGATION AND POWER

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SYMPOSIUM  
ON  
DETERMINATION OF COSTS AND BENEFITS  
OF  
RIVER VALLEY PROJECTS  
1953

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## FOREWORD

The Board has great pleasure in bringing out in book form the proceedings of the Symposium on 'Determination of Costs and Benefits of River Valley Projects' held in October 1953 during the 24th Annual Meeting of the Board. This subject was proposed to be discussed under the following aspects though the papers actually presented do not confine themselves strictly to the subjects as defined.

(1) *Costs*—

- (a) General review of costs of different items of the Projects and their general variation with different factors such as location, etc.
- (b) Speed of construction and costs.
- (c) Economies that can be effected by—
  - (i) Mechanisation.
  - (ii) Research and Model experiments.
  - (iii) Central Design Office—Standardisation of Designs.
  - (iv) Foreign aid in equipment.
  - (v) Foreign aid in technical personnel.
  - (vi) Special training of engineers.
  - (vii) Suitable executive and administrative control of project execution.
  - (viii) Phased programme of construction of various projects.
  - (ix) Different constructing agencies like foreign contractors, big Indian constructing firms, small local contractors, labour co-operatives and department work.
  - (x) Different agencies for purchase of store and equipment.
- (d) Allocation of costs between different aspects of projects.

(2) *Direct Revenue*—

- (a) Irrigation.
- (b) Power.
- (c) Flood Control.
- (d) Navigation.
- (e) Domestic and industrial water supply.

(3) *Indirect Revenue*.

(4) *Benefits to the Community*—

- (a) Increase in agricultural and industrial production.
- (b) Subsidiary developments resulting therefrom.

- (c) Increase in per capita income.
- (d) New avenues of development.
  - (i) During construction.
  - (ii) After construction.
- (5) *Criteria for fixing Priorities.*
  - (a) General needs of the country.
  - (b) Needs of specific locality.
  - (c) Famine protection.
  - (d) Financial considerations.

In all 17 papers were contributed by various officers including one paper from Gokhale Institute of Politics and Economics on the "Problems presented by an investigation of the economic effects on large irrigation and power projects and the possible ways of dealing with them and another paper by Mr. Thompson of the T.C.A. on the "Criteria for fixing project priorities".

The Symposium was inaugurated by Shri V.T. Krishnamachari, Deputy Chairman of the Planning Commission and presided over by Shri G.L. Nanda, Minister for Irrigation and Power and Member Planning Commission. The Symposium elicited lively discussion especially on the question of best way of levying betterment fee and on the use of machinery *versus* manual labour. Shri V.T. Krishnamachari in an illuminating address laid emphasis on the points which a welfare State has to keep in view for country's development. He pointed out the conflicts between various ideas and how at different times priorities for projects may have to be fixed from different considerations. In the beginning the pressing need of the country was to make itself self-sufficient in food and emphasis had to be laid on projects which promised to make the country self-sufficient in food in the quickest possible time. Later on, however perhaps sooner than later, regional developments may require greater emphasis.

The Board takes this opportunity of thanking Shri C.L. Handa who acted as General Reporter and all the officers who took part in the discussions and Shri V.T. Krishnamachari and Shri Gulzari Lal Nanda for sparing their valuable time in inaugurating and presiding over the Symposium to make it a success.

M.L. AGGARWAL, ISE., MIE.,  
*Secretary,*

Dated August, 1954.

*Central Board of Irrigation and Power*

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\* As this paper was received late no discussions could be held on this paper.