

**INFLUENCE OF THE
METTUR IRRIGATION AND HYDRO-
ELECTRIC PROJECT
ON
AGRICULTURE AND AGRO-INDUSTRIES**

(Report of a Pilot Survey into benefits of Mettur Project
conducted under the auspices of the Research Programmes
Committee, Planning Commission, Government of India.)

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PREFACE

This pilot survey was sponsored by the Research Programmes Committee of the Planning Commission and was financed by a grant from it. It was undertaken in the year 1956-57. The completion of the survey and report took about nine months. The survey was concentrated in the Pattukottai Taluk, which comprised of dry lands prior to the implementation of the Project. The important findings which emerged out of the survey are furnished below:—

(1) The cent per cent increase in the yield of paddy has enabled Pattukottai taluk to sustain a much larger population than it did prior to the Project. Between 1931 and 1951, while the average increase in population in Madras State was about 27 per cent, in Pattukottai it was about 44 per cent. In the villages surveyed, there have been instances of increase in the population upto about 370 per cent between 1931 and 1951.

(2) One of the indirect benefits to the agriculturists as the result of the Mettur Canal has been the prevention of floods and saving of fertile lands in the delta from the damages previously caused by the floods.

(3) One of the important benefits which the Project conferred on the agricultural economy of the Tanjore District was that about 3½ lakh acres were freshly brought under irrigation which is an increase of about 44 per cent over the previous area under irrigation. The area under irrigation could be further increased if there was more economic use of water from the canal system by the farmers. The area under paddy rose by about 29 per cent and in Pattukottai Taluk itself by about 211 per cent. As indicated by the surveyed holdings in Pattukottai Taluk, about 89 per cent of the total area has been brought under wetland cultivation, whereas in the non-Project area it is only about 23 per cent.

(4) The area under cultivation itself increased as a result of the Project by about 27 per cent in the Pattukottai Taluk. The cultivated area in the villages under the Project is about 47 per cent of the total area, whereas it is only 27 per cent in the non-Project area. The Project also has made it possible that a significant proportion of the wetland area in Pattukottai taluk can grow two crops of paddy in a year instead of only one prior to the Project. Among the holdings surveyed, about 35 per cent of the wetland area is under double crop compared to only a single crop in all the wetland area in the non-Project zone in the same taluk.

(5) The percentage of population under agricultural employment has also increased as a result of the project. The Pilot survey reveals that about 94 per cent of the population in the canal-fed area have taken to Agriculture as against 88 per cent in the non-Project area.

(6) The crop pattern considerably changed as a result of the project whereas prior to the project, the Pattukottai taluk under the stress of lack of water facilities had to have recourse to growing of

varied crops to suit the changing and uncertain seasonal conditions. This taluk now has become an area of almost mono-culture of paddy. The area under paddy has gone up from about 38 per cent of the total cultivated area in 1931 to about 81 per cent in 1951.

(7) In the holdings surveyed, it was estimated that only about 1 per cent of the total area under paddy grew improved strains and only 8 per cent of the total area under paddy received an effective dose of ammonium sulphate. It was evident that improved agricultural practices have not yet been adopted in the area surveyed to any significant extent and what increase in yield has been obtained since the introduction of the Project has been mainly what water supply by itself can achieve.

(8) From the statistical analysis of data obtained, the average net profit from paddy cultivation has been more than three times the net profit obtained prior to the Project. This gives an indication of the comparative economic prosperity of the farmers in the Project area and the scope for better capital formation and credit-worthiness of the farmer under the Project. In the Pilot survey, out of nearly 600 samples investigated, there was some amount of indebtedness only in about 12 samples. It has, however, revealed that the ultimate savings have not been in a very satisfactory proportion to the returns per acre in the Project area and the average holding is not adequate in area as an economic unit. There were only about 40 families among 600 surveyed which had holdings of more than 18 acres per head while there were 44 families which owned less than half acre per head.

(9) There has been no drive for savings, which could have been sponsored by the authorities and credit facilities through cooperative credit societies have been neither adequate nor efficient. Adequate advantage has not been taken of the electricity from the Project for starting more industries and release of pressure on land which now exists in this area. Only about one per cent of the population is engaged either whole-time or part-time in these rural industries. Only 10 out of the 600 villages surveyed have been electrified. The possibilities for small-scale industries in Pattukottai taluk such as mat-making, cloth-weaving, manufacture of palmyrah jaggery, fishing, salt-manufacture, bee-keeping and poultry-rearing etc., have not been fully exploited.

(10) The lack of proper road communications in almost all the villages surveyed seems to be mainly responsible for the unsatisfactory progress in cultivation techniques in the villages.

The Survey reveals certain pointers for achieving the maximum benefit out of such projects in future planning and development. It is suggested that at the very commencement of the introduction of such projects, a dynamic organisation should be set up for effective multi-purpose developments to achieve the following:—

- (i) To see that every farmer carried out at least the most profitable agricultural practices such as application of green manures and artificial fertilisers, use of high-yielding and disease-resistant strains, and protection of plants against pests and diseases.

(iii)

- (ii) To see that there was some amount of diversified agriculture so as not only to raise the all-round economic strength of the farmer but also to assist in more economic use of water compared to the exorbitantly high amounts of water required for the growing of paddy.
- (iii) Introduction of an active campaign for savings among the farmers and establishment of a more active co-operative movement to make facilities for both savings and credit accessible to each farmer.
- (iv) To see that a drive was made to increase rural, and cottage industries suitable for the area and to remove the excessive pressure on land and to undertake all measures which would increase the size of the average holding to more economic levels than exist at present.
- (v) Improvement of communications and transport in the rural areas for better marketing and transport of agriculturists and agricultural products.
- (vi) An agricultural extension organisation so as to reach every farmer.
- (vii) A co-ordinating agency for a balanced development of the economy of agriculture and prosperity of the agriculturists and agricultural labourers.

The Director was entirely responsible for the general pattern of investigation, organisation and technique of study, analysis etc. followed in this survey. No responsibility rests with the Planning Commission or the Research Programmes Committee for the facts and opinion stated in the report.

I have acknowledged at the end of the report in detail the assistance received in the conduct of the survey from the several institutions, organisations and persons. I take this opportunity to acknowledge my gratitude to them all, particularly the Research Programmes Committee of the Planning Commission who made this survey possible.

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