

Planning and Programming

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What does acceleration of the Mahaweli Development Scheme mean?

Acceleration of the Mahaweli Development Project means that instead of sequencing the programme of financing, construction, etc., the Government has decided that the major projects must be carried out simultaneously. This implies that a large concentration of resources such as men, money, machinery, material, etc. must be made available over a short time span. The quality of the resources must be adequate to meet the needs of the work and the management of the vast complexity of activities.

Financing

The President, the Minister of Irrigation Power and Highways, and the Minister of Finance and Planning have convinced this nation, the World Bank and the developed countries that the Mahaweli Development Scheme is worthy of their aid and financing. There were many who were sceptical that the Rs. 12 billion of assistance could be found. The sceptics have been proved wrong.

The sequencing of the construction may be examined, considering the main parameters i.e. Finance, Agro benefits, Social benefits, Employment benefits, Power demand and supply, Cost-benefits, etc. The lead times are inter-dependent and complex. In fact, financing and resource availability are so variable in their lead times—and outside the control of the Government of Sri Lanka at the present time -- it is my opinion that any attempt to rationalise the sequencing would be futile. It is likely that the sequencing of the construction of major reservoirs like Kotmale, Victoria, Randenigala and Moragahakanda will follow the sequencing of financing.

The construction of the Minipe Right Bank Canal, Ulthiya Reservoir, Madura Oya, Minipe and Kandakadu anicuis, and the irrigation systems A, B, and C will have to follow the sequencing of the completion of the major construction works. The order of this should be clear in the next few months, subsequent to the programmes of donor countries and their contractors being available.

Construction

The resources for construction, in other words, the machinery, men, materials and management available in this country cannot in any field meet the demands (or the peak requirements) over the time scale of 6 years.

This constraint has been solved by the offer of donor countries to execute work through their own national contractors, using their own resources.

The main elements of construction may be briefly summarised as follows:—

- | | | |
|-----------------------------------|---|--------------------|
| 1. Dams, Reservoirs and Headworks | } | Machine intensive. |
| 2. Power Stations | | |
| 3. Irrigation systems | | Labour intensive |

The first two elements lend themselves to execution by foreign contractors. The third is best handled by Sri Lankans with labour and knowledge of local conditions.

*To illustrate this

	Man Years	
	Manual	Mechanical
Earth excavation 44,000 m ³	125	3
Rock excavation 60,000 tons	100	6
Rock crushing 84,000 tons	500	6

A balance could therefore be struck between delayed realisation of social and economic benefits, and the need to solve the immediate unemployment problem.

Irrigation Infrastructure

The design of the irrigation system and its construction must fit not only hydraulic and engineering requirements, but should also meet the demands of crops, cropping patterns, water duties and the periods of cultivation.

Settlement

The selection of farmers will depend on their suitability to adapt themselves to the crops that can be grown on the areas to be settled.

In any event, farmer training programmes are to be instituted to train farmer groups on rotational irrigation. It has been proposed that settlers should be trained on the growing of crops they are not familiar with, before they are settled on lands planned for special crops.

Agriculture

The optimum use of available water is a vital part of the Mahaweli Development Project. In fact, the scheme is designed to be cultivated on a mix of paddy on suitable soils (with low infiltration rates), and other crops requiring less water than the traditional flooded paddy.

The problem of weaning farmers away from flooded paddy on all soils, in all seasons, has yet to be

successfully worked out. This must be done, as reservoir capacities and canal systems are designed for conveying water on predetermined water duties with limited flooded paddy cultivation in Yala.

Community Development (and Social Infrastructure)

The planning of community development precedes, and in many ways, encompasses both Agriculture and Settlement. In fact, the planning of infrastructure roads, transport, housing, communication, supplies, provision of inputs and services for agriculture, marketing and distribution should commence quite early. So much so, this planning and its part execution must take place even before commencement of construction-for obvious reasons.

In fact, this is the very reason I have chosen to show Community Development and Social Infrastructure as an all embracing activity linked directly to the early stages of irrigation systems — (See 'Major Activities').

Programming, Reporting and Evaluation

Programming is being refined with a view to achieving realistic dates of completion, using historical and factual data. Networks for each of the main activities are being drawn up, and their inter-relationships and inter-dependencies being worked out. The co-ordination of

the construction of irrigation systems, settlement, agriculture and development is now being done by the Mahaweli Development Board.

Reporting

A visual reporting system has been worked out. I have been encouraged by the fact that Board Members and others in the Mahaweli Development Board and outside it, find it easy to follow progress with this system. This presentation is supplemented by the use of figures in the usual way.

Evaluation

Simple evaluation of progress is now being done both in the 'H' areas already being developed, and in the 'accelerated programme'. The Planning and Evaluation Division is being enlarged with a view to evaluating the benefits from the developed areas, and reviewing achievements in relation to objectives.

Conclusion

Better minds than mine, and more competent persons such as Consultants — both local and foreign — will be working on the different aspects of planning this visionary development effort. Needless to say, each of us, who is associated, will be just one small link in this chain of activities which encompasses the globe.



Appendix 1

Processes, Planning and Execution of the Project

Time →

POLITICAL & ECONOMIC ASPIRATIONS

POLITICAL HUNCHES,
ECONOMIC & SOCIAL
PRESSURES

FEASIBILITY

STUDIES

MASTER PLAN

(UNDP/FAO DATA,
INPUT—OUTPUT
RELIABILITY,
COSTS, RETURNS)

1969

OVERALL ECONOMIC & FINANCIAL PLANNING

(BUDGETARY,
EMPLOYMENT, SOCIAL
BENEFITS, ETC.)

STUDY OF SELECTED PROJECTS

FINANCING (LOCAL & FOREIGN)

CONSTRUCTION

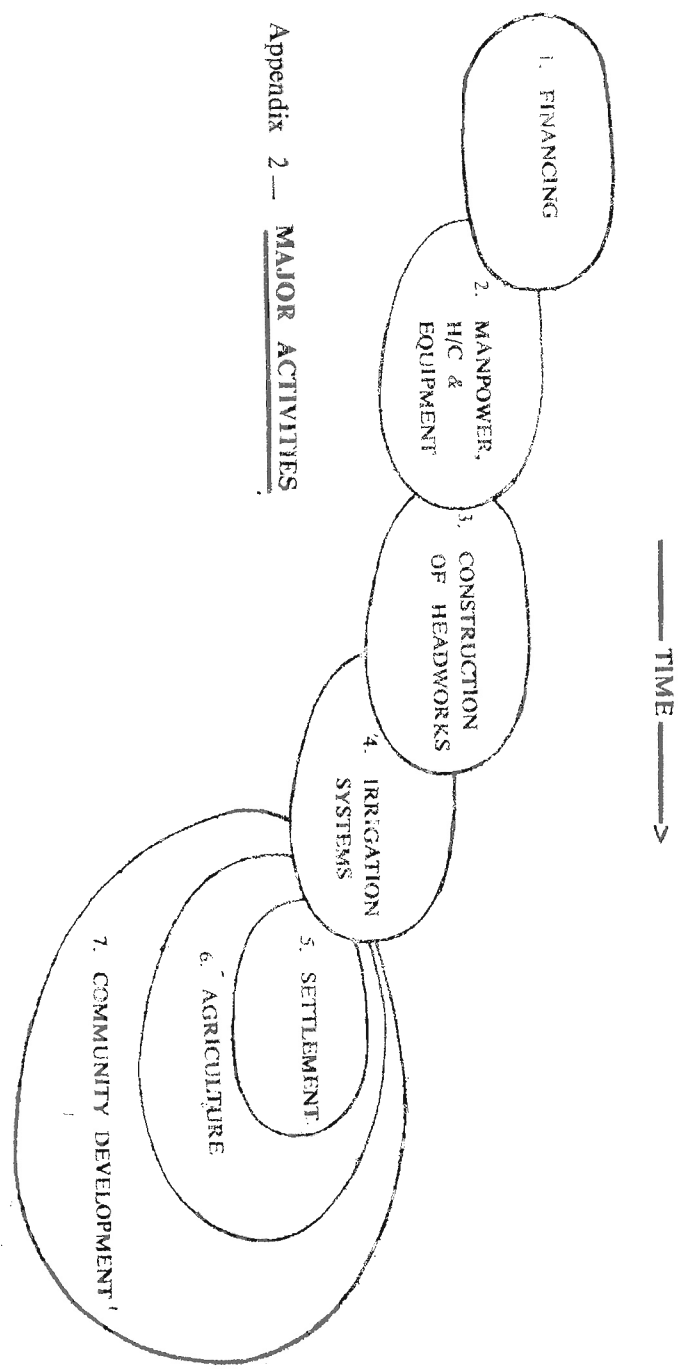
(LOCAL & FOREIGN) AGENCIES

SETTLEMENT AGRICULTURE & POWER GENERATION

DEVELOPMENT

EVALUATION OF BENEFITS

Appendix 2



Appendix 2 — MAJOR ACTIVITIES

Appendix 3

1977 — 1983

PERIOD →

1983

POLITICAL & SOCIAL COMMITMENTS

1977

FINANCING

(LOCAL & FOREIGN)

CONSTRUCTION

(LOCAL & FOREIGN AGENCIES)

MAINTENANCE & OPERATION

OF IRRIGATION & OTHER FACILITIES

SETTLEMENT

AGRICULTURE

POWER GENERATION & DISTRIBUTION

COMMUNITY DEVELOPMENT

& INFRASTRUCTURE SERVICES

EVALUATION

OF BENEFITS & RESULTS