

The Largest Ever Development Project

The diversion of the waters of the Mahaweli Ganga to irrigate the Dry Zone is by far the most ambitious project undertaken to redevelop this region. The inauguration of the Stage 1 of the Mahaweli on January 8, 1976 ushered in a novel phase in the agrarian history of Sri Lanka. It is envisaged that the implementation of the Mahaweli Development Project will enable 825,000 people to be settled in agriculture alone together with the establishment of agro-based industries and service functions in support of the agricultural development. The cost of stage 1 of the project has been estimated at Rs. 325 million. The total cost of the 3 stages of the project was estimated at Rs. 6,700 million and its implementation has been phased over a period of 30 years. It is the largest and costliest single project ever undertaken in Sri Lanka.

The Mahaweli Region covers the Mahaweli River Basin, the adjacent Basins of the rivers of the North Central part of the island and the Maduru Oya of the East. The area is bounded by the watershed of the Mahaweli Ganga in the South, the Maduru Oya in the South East and the Kala Oya basin in the South West, the groundwater irrigation zone in the north and the south coast on the north-east. The gross area is 6.32 million acres (2.53 million hectares) which is 55% of the dry zone and 39% of the island.

Within the project area the land classified as being suitable for irrigated agriculture covers some 1.5 million acres of which about 1.2 million acres are undeveloped forest lands owned by the State and 300,000 acres are currently under cultivation. The water resources available after full development would however only be enough for year round irrigation of about 900,000 acres. A

major limiting factor therefore is the availability of water and not of land.

In order to ensure that the available water resources are distributed as effectively as possible throughout the project area, the *Master Plan* has recommended that the irrigation requirements of both new and existing cultivated areas of the Mahaweli and Maduru water (estimated at 40% of the regulated quantum) should then be diverted to the North-central part where too, existing irrigated areas would be fully supplied with water before expanding the area under irrigation. The plan foresees the irrigation of the 900,000 acres by a total of 14 irrigation systems. Eight of these with a total irrigated area of 470,000 acres would be located in the basins of the Mahaweli and Maduru rivers. The remaining 6 would be in the north-central part.

The plan envisages the construction of 15 reservoirs (i.e. 15 dams) located on the Mahaweli Ganga, its tributaries and the Maduru Oya. 11 of these reservoirs would include power stations near the dams and another power station is planned to be located on a transbasin canal.

Human settlement on the new lands is planned largely on the basis of small farms of 5 acre holdings to support a family of 6 persons and provide a sample of produce for sale, using occasional hired labour and machinery. Also, a certain number of more mechanized medium sized farms of 10 acres and large farms of 200-500 acres are envisaged for greater production and for demonstration of advanced farming methods, using residents and hired labour. The proposal for human settlement on these lands suggests the feasibility of planning a village unit as a composite settlement of 500-600 households farmed of 4-5 "Sub-Villages" one of

which being centrally located, could be chosen as the site for the supporting services.

The Master Plan proposes 3 phases of development over a period of 30 years. Each phase consists of a number of projects. The main features of the 3 phases reveals in summary the following picture upto 1986-98.

1. Irrigated area—900,000 acres.
2. Hydro-electric power—2037 million kwh. per year.
3. Cost capital—Rs. 5583 million.
4. Total benefits—Rs. 1,102 million.
5. Revenue from sale of hydro-power—Rs. 114 million.
6. Value added in agriculture—Rs. 988 million.
7. Capital cost/benefit—

ratios	5.1
agricultural	4.9
power	6.8

The Master Plan envisages that an annual average of about 23,000 acres of land will be brought into economic use in the coming decade. In the next period for the next 5-6 years the average rate is expected to be around 29,000 acres per year. Subsequently, the ultimate rate is to be in the region of 33,000 acres per year.

One of the basic aims of the project is the maximisation of agricultural production. This is to be achieved by the introduction of double cropping and improvements in agricultural practices on new and existing irrigable areas. This, with the development of the three phases of the project, the irrigated area of the island is expected to increase from the present 0.94 million acres to 1.59 million acres (an increase of 70%) with a further 0.25 million acres benefitting from improved irrigation. Rice, sugar, maize, chillies, vegetables, and fruits have been identified as major agricultural crops. Industrial crops like kenaf, sunn hemp, cotton, castor, mango, lime, groundnuts, sunflower, cashew, mulberry, papaw, bananas have also been identified. Potential industries are building materials such as bricks, tiles, timber products and domestic lime, also fertilizer, mixing plants, castor oil crushing, castor oil based industries, cotton seed oil, livestock feed, gunny bag and straw bag making, cassava flour, industrial starch, fruit canning, tractor repair plants and similar service industries.

Total area proposed for irrigated development—		'000 Acres	
(a) Existing irrigated areas within the control of the proposed irrigation systems:—			
(i) in the Mahaweli and Maduru river basins	110		
(ii) in the North-Central part	136	246	
(b) New areas to be irrigated:			
(i) in the Mahaweli and Maduru river basins	360		
(ii) in the North-Central part	294	654	900