

C-12: Planning concepts in the provision of infrastructure facilities under the Mahaweli Ganga Development Scheme

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The implementation of the Mahaweli Ganga Development Scheme was launched with the inauguration of the construction work on the Polgolla Diversion Unit in February, 1970.

The maiden development area which was provided with new irrigation and social infrastructure facilities, was the area defined as "System-H", which includes lands in the Kala Oya Basin. The irrigation of commandable lands in System-H, was achieved through a trans-basin diversion of Mahaweli waters into Kala Oya, across which Kala Wewa and Kandalama Wewa have been built.

The principal planning concept in the design of the irrigation systems over the entire area of System-H was the canal dependent phenomenon, which was however, amended slightly in the second half of the area to incorporate a few minor reservoirs, which were serving the "Old Villages".

One of the most important features in the settlement planning aspects in System-H was that the number of settler families contained in a Unit, which was derived from the cluster-villages principle was kept around 125.

The basis for provision of civic amenities was in accordance with the needs of the smallest settlement unit. This was so, even in the management, operation and maintenance of the system. Almost all the above mentioned features, scenarios have been subjected to significant changes in the implementation of the integrated development exercises in System-C, System-B, System-G and System-L over the last 15 years, due to various reasons.

The noteworthy changes or modifications in the provision of infrastructure facilities, in the areas which were developed subsequent to System-H, have been in respect of the following:

(a) Suitability of soils for paddy and other crops, (b) Appropriate size of a Hamlet in terms of settler families, (c) Operation and maintenance of irrigation and canal system, (d) Direct and indirect social benefits, (e) Marketing of farm produce and enhancement of settler income, (f) Enterprise development, (g) Environmental considerations.

In respect of irrigation of cultivable lands by the canal system, it was considered worthwhile to integrate a substantial number of minor reservoirs, with the canal system, as the combined effect would be multipurpose. This modification to the canal system has, however, been effected meaningfully, only in System-C and

System-B. An area which is totally dependent on a canal system for irrigation is **System-G**, where the tertiary or minor drainages have been obstructed by cross-anicuts to augment the canal system.

The development area, which is currently being provided with infrastructure facilities, long before Mahaweli waters flow into the basin of Ma-Oya is known as **System-L**, and the methodology presently being adopted is to establish as many minor reservoirs, as feasible, mainly to provide irrigation water and the domestic needs of the settlers.

In planning concepts, which have been subjected to evolution over the years, a cardinal principle which always remained in the core was the cultural practice and social background of the settlers.