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**A SURVEY OF EXISTING BANK RESERVATIONS
IN SOME MAJOR NATURAL STREAMS
IN MAHAWELI SYSTEM B**

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ABSTRACT

Demarcation of the reservations on stream banks is based on the width of the stream. In Mahaweli system B the existing stream reservations should be larger than those shown in maps. Therefore, more accurate maps are necessary for better planning, management and implementation of project. In demarcation of reservations in various locations, many factors should be considered such as biodiversity conservation, soil types, climate and traditional practices etc. Presently, there is no coordination among the institutions involved in demarcation of reservations. For instance Department of Agriculture, Department of survey and Ministry of Land (presently coming under the purview of the Ministry of Lands, Forestry and Agriculture) can be cited. Encroachment of reservations depends mainly on suitability of land (Land Mapping Unit) for the different crops (Land Use

Type) that could be grown in the area. Many farmers are practicing agroforestry in encroached stream reservations. Apparently there has not been any legal action against the encroachers.

Forty five different woody species were found in the area. The number of flora species found in the area sampled is somewhat higher than what is normally characteristic to dry zone and includes species commonly found in arid zone, dry zone and intermediate zone. Calotropis gigantea, Glycosmis angusifolia, Euphorbia antiquorum are species commonly found in the wet zone, whilst Vitex leucoxydon, Maduca longifolia, Ternstroemia arjuna, Diospyros malabarica, Ixora grandis and Zizyphus nepeca, are species which commonly occur in the intermediate zone species and dry zone species and arid species respectively. Although there are not much endemic species found in this area, it is essentially that survey on flora and fauna be carried out during the planning stage of the project. Due to encroachment of reservations siltation of reservoirs and soil erosion could be observed. All farmers encroaching are secondary encroachers of reservations who came to Aralaganwila (which is an area nearby research site) from various parts of the country such as Galagedara, Narammala, Hanguranketha, Nuwara-Eliya, Polonnaruwa and Kurunegala etc. The encroachment of reservations was found to be due to the following reasons based on decreasing order of priority.

- i. Usefulness (suitability) of reservation to farmers.

ii. Leaving such lands suitable for agriculture unattended is an opportunity lost.

iii. Damage to crops by animals which tend to inhabit such areas.

iv. As others too encroach state lands. Average family size was five and average age of husband was 45 years and wife 35 years and their average education level was grade six. The average annual family income is Rs.89,000.00, average expenditure is Rs. 68,500.00 and average savings Rs 20,500.00.

The study entails that in the next generation of the settlers that there will be critical problems in the area. Some major factors need to be looked into in depth are decrease in soil fertility due to soil erosion, and hence decrease in productivity. The provision of irrigation facilities is also another factor to be looked into for cultivation of various crops. The decrease in productivity will also have an impact on their income levels. Further, with increase in population in the area the land to man ratio will also decrease further aggravating the problems in the area. Hence, in future there is an urgent need for all these issues undertaken in the study to be carefully addressed and monitored for the success of the Mahaweli Project.