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## FACTORS AFFECTING AGRICULTURAL PERFORMANCE IN THE SMALL TANK CASCADE SYSTEMS IN NORTH CENTRAL PROVINCE OF SRI LANKA

155340

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## Abstract

At times of water scarcity, farmers of small tank cascade systems face crop failures or reduction in crop yields. Water is one of the most critical factors for their paddy cultivation. However, water is not the only factor that sets limit to their cultivation activities and crop yield. For example, there are occasions in which farmers fail to reap a considerably good harvest even when water is available in sufficient quantities. This is due to the adverse impact of other factors, which too affect the performance of paddy cultivation in a significant way.

The study reveals that small farms produce higher yield per acre compared to larger ones. This may be due to the fact that most of the farmers in small tank cascades can not afford to use modern techniques and technologies in their land when the land are large in extent. Also, they can not do a proper kind of a land preparation with their simple agricultural implements within a limited time when their lands are larger. Also, financial constraints adversely affect the use of inputs like fertilizer in recommended quantities. In addition, they face problems such as shortage of family labor for the work in the field, as the grown-up children of these families work as migrant laborers in outside areas. These factors contribute to yield reduction in large paddy plots held by poor villagers.

The other main finding is that farmers with other income sources, such as high land cultivation etc. give more priority to such activities than to paddy cultivation and are able to obtain a better harvest from their paddy lands. This is mainly because they can use the money earned through other means on paddy cultivation in their land. But the farmers depending on paddy cultivation alone fail to complete the work in their land in time and also to apply other inputs as and when they are required. They get comparatively poorer yields due to lack of funds for investment on the production activities in their lands.