

INTRODUCTION

This dissertation is submitted as a partial fulfilment in requirement for the M.Sc course in Environmental science, to the Natural Science Faculty - University of Colombo.

The main purpose of choosing this particular subject is due to the fact, that urgent need for development and management of water resources in Sri Lanka. To meet the basic necessity of the growing population demands for more production which relies on more water and land. Though history has recorded many number of irrigation projects, self sufficiency is yet an unreachd target. One of the contributory course for this is poor water management or lack of water management. A proper water management should have a mutual relationship between the farmlevel and high level management. So, it is clear that water, as well as the other inputs used in a farm are very important which should be managed well in order to achieve high production rates.

In this report, it is discussed the importance of farm power use in a water management scheme which helps to give a good result like the other inputs. For case-studies "Kandulla" project area in the dry zone was chosen, ample information about the area was gathered and also observations were made

where ever necessary and possible, Fresh data about the usage of farm power at Kandulla was collected, With this as a background the problems are discussed and solutions suggested, The first part of the report is the literature review of the water management objectives as carried out in the irrigation projects of the dry zone, Since the pattern of management is similar in all schemes the problems are quite identical,so, a general view is discribed quoting some special examples, An appendix is attached behind, containing the relevant tables and graphs in order to illustrate the review further, The main report of the study area and the discussion follows this, It is further enriched by maps and tables.