

**FARMER'S SATISFACTION AND PROBLEMS ASSOCIATED
WITH MAHAVILACHCHIYA TANK IRRIGATION AMONG
PADDY FARMERS IN ANURADHAPURA DISTRICT**

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ABSTRACT

Paddy farming is a direct source of income for the majority of the rural farmers, as well as it is the staple food in Sri Lanka. Irrigation plays a vital role in improving the yield or productivity in the agricultural sector and the impact of irrigation on reducing poverty is striking.

A study on farmer's satisfaction and problem associated with Mahavilachchiya tank irrigation was carried out to find out the satisfaction level of the farmers, to identify the problems associated with the paddy cultivation, to explore the problems related to officials in order to solve those problems for efficient use in future.

Primary and secondary data were used to collect data in this study. Pre-tested, structured questionnaires were used to collect primary data through personal interviews of farmers. Further, direct observations and community consultations were also carried out to collect more information. Questionnaire was mainly designed to collect information about the level of satisfaction and problem associated with the Mahavilachchiya tank irrigation system in this district. Secondary data were collected from Divisional Irrigation department of Mahavilachchiya, and the Agriculture instructors who are working in the region. The study was conducted in both right and left bank canal command area of Mahavilachchiya tank's Stratified simple random sampling method was used for the primary data collection among the 150 farmers in the selected seven farmer's organization according to their population.

The results of the study indicate, that majority of the farmers were below 50 years old and paddy cultivation was predominantly a male occupation (98%) as full time (57%) farmers. Most of the respondents' (81%) monthly income was more than Rs. 20, 000. Farmers who irrigated from Mahavilachchiya tank cultivated paddy in both *yala* and *maha* season. The average extent of land cultivated was 2 acres.

Study further revealed that, tank water used for various purposes like irrigation, bathing, washing, cooking and cleaning and small amount of the respondents used tank water for drinking, animal and livestock rearing. Poor canal distribution (57.3%), problems due to unseasonal cultivation (2%), damaged distribution canal (99.3%), not enough slope to water distribution (1%), poor attention by irrigation department (95%), misbehavior of farmers (97%), tank and canal system bund damaging problem (73.3%) and problem of increasing cultivable land extent (49%) were some of the problems reported by the farmers in the study area. It was also observed that respondents had siltation problem in canal system (100%), weeds or plant disturbs water flow in canal system (100%), broken down canal that disturbing water flow (100%), damages in the canal bund due to rat or some animal (100%).

Based on the respondents view, water quality of receiving water from tank for domestic purposes was questioned due to the absence of water treatment system at home level (100%), poor attention by irrigation department (98%), washing tractors and other vehicles (95%) using canal water. They also expressed that no one using canal water to wash their livestock and they are not disposing the waste in to the water source.

In general, more number of the farmers (88.1%) from Left bank canal command area satisfied (77.9%) the water allocation for agricultural purpose than the right bank farmers. And also, tail end farmers of the left bank (80%) canal command area satisfied the water allocation for irrigation purpose than the tail end farmers of the right bank canal (46.4%). Due to short length of left bank channel (5km) than right bank channel (13.5km) might be the reason for the water allocation satisfactorily. Weeds disturbing the flow of water, siltation problem, canal break down are some reason for poor allocation in tail end of the right bank canal command area. Therefore, proper management and development of canal distribution by the relevant officials as well as the care and maintenance by the farmer's organization and their support towards the water allocation is to be improved in this area for future efficient use of water.

Table of Contents

ABSTRACT.....	i
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT.....	v
LIST OF TABLES	ix
LIST OF FIGURES.....	x
CHAPTER 1	1
INTRODUCTION	1
1.1 Background of the study	1
1.2 Problem statement.....	4
1.3 Scope of study	4
1.4 Objective of study	5
CHAPTER 02	6
REVIEWOF LITERATURE	6
2.1 Global water sources.....	6
2.2 Water sources of Sri Lanka.....	8
2.2.1 Surface water	10
2.2.2 Groundwater	13
2.3 Description and structure of irrigation tanks	17
2.3.1 Classification of irrigation system based on command area.....	20
2.4 Components of irrigation tank	21
2.5 Importance of tanks in Sri Lanka.....	21
2.6 Paddy cultivation in Sri Lanka.....	24
2.6.1 Tank irrigation to the paddy field in Sri Lanka.....	24
2.7 Major Water resource in Anuradhapura district: Mahavillachchiya tank.....	26
2.8 Community involvement in tank irrigation and development	27
2.9 Problem associated with tank irrigation.....	28

2.9.1 Tank bund	28
2.9.2 Tank Sluice	29
2.9.3 Surplus weir (Waste Weirs)	30
CHAPTER 03	31
MATERIALS AND METHODS	31
3.1 Method of Data Collection	31
3.2 Description of the Study Area	31
3.3 Location of the study area	33
3.4 Sampling selection	33
3.5 Data Collection	34
3.6 Data analysis	34
CHAPTER 04	35
RESULTS AND DISCUSSION	35
4.1 Socio-Economic condition of farmers	35
4.1.1 Age of the respondents	35
4.1.2 Gender distribution	36
4.1.3 Marital status of the respondents	36
4.1.4 Ethnicity of the respondent	37
4.1.5 Involvement in agriculture	37
4.1.6 Educational level of the respondents	37
4.1.7 Number of family members	38
4.1.8 Average monthly income	38
4.1.9 Type of farming activity	39
4.1.10 Land ownership	39
4.1.11 Variety used for paddy cultivation	40
4.1.12 Type of labour used for paddy cultivation	40
4.2 Use of water source and associated problems	41

4.2.1 Irrigation source used for paddy cultivation	41
4.2.2 Location of studied sample population	41
4.2.3 Distance between canal and cultivation area	42
4.2.4 Purpose of using tank water	42
4.2.5 Satisfaction of the farmers regarding tank water allocation for the above purposes	43
4.2.6 Satisfaction about the water allocation for agriculture	43
4.2.7 Tank irrigation related problems for water supplies upto the field.....	44
4.2.8 Reason for the lower yield	47
4.3 Awareness on water use efficiency	48
4.4 Awareness on the activities performed by irrigation department	49
4.5 Activities performed by farmer's organization	50
4.6 Environmental impacts of the water source	51
4.7 Farmers satisfaction level regarding the use of Mahavillachchiya tank for various purposes.....	51
4.7.1 Farmers' satisfaction on irrigation using Mahavillachchiya tank water ...	51
4.7.2 Farmers' satisfaction on drinking water use	52
4.7.3 Farmers' satisfaction on water use for cooking	53
4.7.4: Farmers' satisfaction on tank water use for bathing purpose	53
4.7.5 Farmers' satisfaction on the use of tank water for livestock rearing	54
4.8 Farmer's satisfaction on the use of irrigation water using Mahavillachchiya tank water at different parts of the canal system.....	54
4.9 Farmer's satisfaction on Domestic purpose (cooking, Washing, bathing, cleaning) using Mahavillachchiya tank water.....	56
CHAPTER 5	57
CONCLUSIONS AND RECOMMENDATIONS	57
5.1 Conclusions.....	57
5.2 Suggestion and Recommendation.....	58