DIFFERENT LIFT IRRIGATION METHODS ADOPTED IN JAFFNA PENINSULA

FOR AGRICULTURAL PURPOSES



BY

KRISHNAPILLAI INDRAKUMAREN

A SURVEY STUDY REPORT

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT

OF THE

ADVANCED COURSE

IN

AGRICULTURAL ENGINEERING

FOR THE DEGREE OF

BACHELOR OF SCIENCE IN AGRICULTURE

UNIVERSITY OF PERADENIYA

PERADENIYA

SRILANKA

1986





APPROVED

MR.S.KATHIRGAMATNAMBY.

SUPERINTENDING ENGINEER,

ENGINEERING RESEARCH AND

DEVELOPMENT DIVISION,

DEPARTMENT OF AGRICULTURE.

PERADENIYA.

SRILANKA.

DATE:-

THE COLUMN COLUM

DR.S.SANDANAM

HEAD OF THE DEPARTMENT,

DEPARTMENT OF AGRONOMY.

FACULTY OF AGRICULTURE.

BATTICALOA UNIVERSITY COLLEG

VANTHARUMOOLAI,

SRILANKA.

DATE: 10.9.86

04

22713

PROCESSED Main Library, EUSL

ABSTRACT

This survey was conducted in four Agrarian Service Centre divisions namely Mallur, Pulloly, Chavakachcheri and Puttur in the Jaffna Peninsula which is located in the nothern part of Srilanka. The basic study objectives are described and the selection of methodologies are discussed.

The Socio Economic characteristics of the farming community are also discussed and analysed eventhough it is not the primary objective of this study. High literacy rates were observed in all the study locations. More than 80% of the farmers were identified as full time farmers. Farming experience, Number of family members involved in farming, Overage holding size and land use and type of soil are also discussed under the Socio Economic characteristics.

The observed Lift irrigation methods at the Study locations are analysed. The present percentages of the different irrigation methods are compared with that in the past to asses the degree of adaptation of new methods. It is evident that more than 95% of the farmers are presently using either kerosene or electric water pumps. The well sweep which once characterized the agricultural landscape of this region is now considered inefficient. Presently kerosene and electricity are the main sources of power for irrigation pumps. Unavailability of electricity supply at the field level is found to be limiting the use of electric pumps. Information collected to estimate the cost of irrigation u using kerosene pumps show that the rates are now at a high level reflecting the recent increases in fuel prices

4.6 Lift Irrigation Methods	-	31
4.7 Availability of Power Source	400	32
4.8 Cost of Irrigation		32
4.9 Source of Water		34
5. CONCLUSION & SUGGESTIONS	-	36
5.1 Conclusion	do	36
5.2 Suggestions	400	36
6. BIBILIOGRAPHY	***	38
APPENDIX	***	39