

A STUDY OF THE PRESENT AND POTENTIAL
LAND USE
IN
SRI LANKA

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by

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF
ENGINEERING

50609

DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING
UNIVERSITY OF MORATUWA
SRI LANKA

50609

April 1988

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ACKNOWLEDGEMENT

I wish to express my sincere gratitude to all those who assisted me in completing this project, but special appreciations are given for the persons mention below.

- * Staff of the University of Moratuwa, the Chancellor, the vice Chancellor, the Dean of the faculty of Engineering, the head of the Civil Engineering Department and course co-ordinator Dr. C. Kariyawasam.
- * Eng. N. Madusuthanan, Deputy Director (Computer Servicers and Publication) Irrigation Department, who guide me to write the computer programmes and allocating the computer for the project.
- * Mr. Sunil Dimantha, Senior Soil Specialist Irrigation Department, who helped me for the project providing all the data required and the methodology for completing successfully.



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SUMMARY

The Government had initiated a National Agricultural, Food and Nutrition Strategy to assess Sri Lanka's agricultural and food situation and establish priorities for sectoral development. Since the plan involves the use of land, a computerized Land Information System was set up to facilitate the analysis and evaluation of land use in Sri Lanka. A Radio Shack Model II micro-computer was used for this purpose.

Data on Soils, climate, topography and present land use were fed into the computerised data bank. The grid cell system of data storage was used. The dimensions of a grid cell are 1.05 x 2.1 Km covering an extent of 224 hectares. The final maps are plotted to a scale of 1:500,000.

The soil data were obtained from the manuscript copies of reconnaissance soil maps drawn to a scale of 1:63,630 available at the Land Use Division. The climatic data were obtained from the agro-climatic data and rainfall probability maps produced by the Land and Water Use Division in 1976 and 1983 respectively. Slope data were compiled with the help of contour lines on Topographic maps of scale 1:63,360. Data on present land use were obtained from three sources viz. (a) Survey Department (1981) 1:100,000 and 1:50,000 scale maps of Polonnaruwa, Batticaloa, Kandy and Colombo (final maps) and Puttalam, Gampaha, Kegalle, Kurunegala, Badulla, Ampara and Matale Districts (preliminary maps) (b) Land Use Division (1980 to 1983) 1: 63,360 and 1:50,000 scale maps of Matara, Nuwara Eliya, part of Ratnapura and Hambantota Districts (c) Huntings Survey Corporation (1956) 1:63,360 scale maps for the balance Districts updated by date from Topographic sheets of 1970s and data on Irrigation schemes implemented by the Irrigation Department and Mahaweli Authority.

Data on soils, climate and topography were assessed to determine suitability of lands for (a) rainfed annual crops (b) irrigation upland annual crops (c) rainfed paddy under puddled conditions (d) irrigated paddy under puddled conditions (e) rainfed sugar cane (f) irrigated sugar cane (g) rainfed minor perennial crops. Four classes of suitability as recommended in the FAO Framework for Land Evaluation viz S1 Highly Suitable, S2 Moderately Suitable, S3 Marginally Suitable and N Unsuitable were recognized in this exercise. A table of districtwise of land suitability classes were also compiled.

Secondly the present land use was analysed with respect to the suitability classes. The map compiled for this purpose shows

locations at which the analysed land use is practised giving the symbol of the suitability class. A table giving the districtwise extents is also compiled.

Thirdly the potential locations for expansion of the considered land use is compiled. Only locations of class S1 and S2 suitability are considered. Lands under forest reserves, wild life parks, land earmarked for Mahaweli and other development projects and other reserves are shown with separate symbols F, P, M, D and R respectively for class S1 lands and f, p, m, d and r for class S2 lands. A districtwise extents table too is compiled.



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