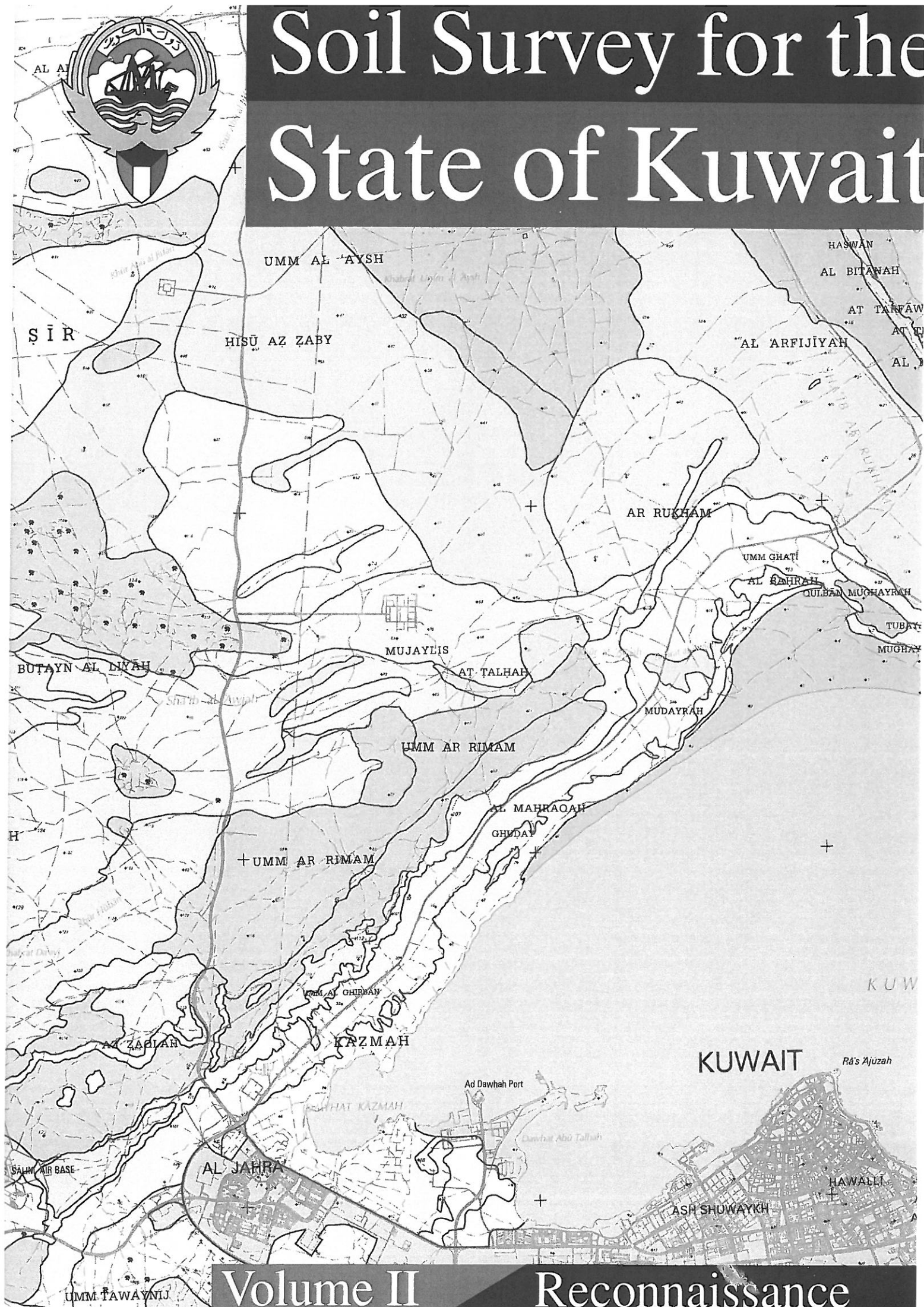


Soil Survey for the State of Kuwait



Soil Survey for the State of Kuwait
Volume II. Reconnaissance Survey

Kuwait Institute for Scientific Research
Public Authority for Agriculture and Fish
Resources

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AACM International Pty Ltd
Adelaide, Australia

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Volume II: Reconnaissance Survey

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Preface

The soil survey and associated activities for the State of Kuwait were initiated in 1990 when the Public Authority for Agriculture and Fish Resources (PAAFR) commissioned the Kuwait Institute for Scientific Research (KISR) to provide a comprehensive soil survey of the country. KISR was also requested to carry out several other activities including selection of sites and establishment of three demonstration farms, upgrading of the PAAFR soil laboratory and computing facilities and soil survey and data management capabilities.

Because of the Iraqi invasion and occupation of Kuwait in August 1990, project activities ceased. Following liberation, the presence of unexploded mines and ordnance in the desert remained a threat to the life and safety of field operations associated with the soil survey project. It was not until 1995 that the desert was declared safe for re-activating the project. In November 1995 KISR signed an agreement with AACM International Pty. Limited to conduct the soil survey project.

The main objectives of the soil survey were to conduct a reconnaissance survey at a scale 1:100,000 for the entire State of Kuwait (excluding urban, industrial and restricted areas). The principal outcome of the reconnaissance survey was the identification of 200,000 ha of land containing soils with the highest potential for irrigated agricultural development. This area was subsequently surveyed at a semi-detailed scale of 1:25,000.

The entire project was executed in three years and six months. Field work for the reconnaissance 1:100,000 regional soil survey and land use assessment was carried out during 1996. Soil names and descriptions were finalized in 1998. Unless otherwise indicated, statements in this publication refer to the soil and landform conditions and land use in the survey area in 1996. Soils were described according to the USDA Soil Survey guidelines and classified according to the *Keys to Soil Taxonomy*, 1994. Characterization and classification of Kuwaiti soils according to Soil Taxonomy, as practiced in many developed and developing countries, will enable us to take advantage of research work conducted in those countries on similar soils, and extend research findings on Kuwaiti soils into the international arena.

Soil and land use maps are based on field work, air photograph and satellite imagery interpretation and collation of existing published information. They are published at a scale of 1:100,000 and are designed for regional planning purposes.

The soil survey was completed and reviewed by many scientists and professionals from KISR and PAAFR. Further, soil scientists from the United States Department of Agriculture joined the KISR team and together conducted the quality assurance task. These efforts resulted in modification and improvement of maps, reports and soil laboratory analyses. The KISR team feels very confident of the project results and is pleased to present them in five volumes.

- Volume I: Executive Summary
- Volume II: Reconnaissance scale 1:100,000 survey report
- Volume III: Reconnaissance scale 1:100,000 survey maps
- Volume IV: Semi-detailed scale 1:25,000 survey report
- Volume V: Semi-detailed scale 1:25,000 soil survey maps

The soil survey report presents information that can be used for future land use planning in Kuwait. It also contains predictions based on measurements of soil characteristics and their behaviour. The soil survey highlights limitations inherent in the soils of Kuwait and improvements needed to overcome these limitations. It is hoped that countless numbers of individuals throughout Kuwait will use the information contained in the soil survey document and in so doing help improve land management in the country.

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