

Proceedings of
The ICALRD - JIRCAS WORKSHOP
On
Enhancement of Remote Sensing and GIS Technologies for Sustainable
Utilization of Agricultural Resources in Indonesia

Edited by S. Uchida, A. Hirano, Wahyunto, and R. Shofiyati



Indonesian Center for Agricultural Land Resources Research and Development (ICALRD)

Ministry of Agriculture

Japan International Research Center for Agricultural Sciences (JIRCAS)

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Bogor, June 25th, 2008

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FOREWORD

The proceedings of Workshop on "Enhancement of remote sensing and GIS technologies for Sustainable Utilization of Agricultural Resources in Indonesia", has been prepared as an output of the framework of Japan International Research Center for Agricultural Sciences (JIRCAS) Japan and Indonesian Center for Agricultural Land Resources Research and Development (ICALRD) research collaboration in the period of 2007 to 2010, aiming at the application of remote sensing and GIS technologies for sustainable utilization of agricultural system in Indonesia.

In Indonesia, increasing the supply of agricultural products and stabilizing agricultural productivity are matters of great urgency due to population pressure and improvement in the standard of living. The major challenge for agriculture today is to sustain production under adverse soil and climatic condition. On the other hand, recently many attempts have been made to increase food production but these efforts have led to a deterioration of agricultural environments and global environment problems such as global warming, pollution of water, soil degradation, deforestation etc. Accordingly, sustainable agricultural technologies compatible with environmental preservation should be developed.

Remote sensing and Geographic Information System (GIS) Technologies have a great potency to speed up agricultural land resources inventory and are as up to date actual information for sustainable agricultural and environmental protection. These technologies can provide information to monitor "food vulnerability" in certain areas. Information of cropping extent, drought area, the sensitive and critical areas associated with food availability is really needed. Such information will be very useful for the national food stock policy.

I do hope that the proceedings will be very useful in order to obtain a better understanding in remote sensing and GIS technologies and their applications, especially on assessing food safety for sustainable agricultural land resources and its environment.

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TABLE OF CONTENTS

Foreword	i
Table of Contents	iii
Welcome Address and Message from the Director of ICALRD <i>Irsal Las</i>	1
Opening Speech of the Director of Development Research Division of JIRCAS	3
<i>Masuo Ando</i>	
Opening Address of the Secretary General of IAARD, Ministry of Agriculture.....	5
<i>Haryono</i>	
Overview of Collaborative Research Project: Enhancement of Remote Sensing and GIS Technology for Sustainable Utilization of Agricultural Resources in Indonesia	7
<i>Satoshi Uchida</i>	
Agricultural Land Use and Crops Classification using Leaf Water Content Index (LWCI): A Case Study in Thailand	10
<i>Ryota Nagasawa</i>	
The National Land Cover Database in Indonesia	19
<i>Aris Poniman and Nurwadjedi</i>	
Food Security Monitoring using Remote Sensing Data	29
<i>Ratih Dewanti Dimiyati and Rizatus Shofiyati</i>	
Application of Remote Sensing in Demography, Land Use and Land Cover and Disaster: An Indonesian Experience	37
<i>Ketut Wikantika, Soni Darmawan, and Firman Hadi</i>	
Environmental Impacts of Urbanization in Jabodetabek Area	44
<i>Ernan Rustiandi, Dyah R. Panudju, and Bambang H. Trisasongko</i>	
Assessment of Degraded Land in Tea Plantation	56
<i>Pudjorahardjo and Arkat Agus Salim</i>	
Discrimination of Agricultural Landuse Especially Tea Plantation Based on Spectral and Textural Characteristics using Aster Imagery <i>Soni Darmawan, Akira Hirano, Satoshi Uchida, Ketut Wikantika, and Ishak H. Ismulloh</i>	77
Proceedings of the ICALRD-JIRCAS Workshop on Enhancement of Remote Sensing and GIS Technologies for Sustainable Utilization of Agricultural Resources in Indonesia	77

Utilization of Hazard Maps for Regional Agricultural Planning	79
<i>Widianto Nugroho Adi</i>	
Understanding of Hazardous State Indicated in Hazard Maps: Urgency for Extension Workers	92
<i>Kasdi Subagyono</i>	
Identification of Seasonal Features of Crop Planting	104
<i>Satoshi Uchida</i>	
Characterization of Paddy Rice Planting	121
<i>Rizatus Shofiyati</i>	
Mapping of Coffee Plantation in Lampung	134
<i>Akira Hirano</i>	
Concluding Remarks and Recommendations	141
Program of the Workshop on JIRCAS-Indonesia Collaborative Research Project	142
List of Workshop Participants	144

