

"Gheorghe Asachi" Technical University of Iasi, Romania



## DYNAMICS OF LAND USE/ COVER CHANGE IN IRAQI MARSHLANDS USING REMOTE SENSING TECHNIQUES

Hongxia Zhang<sup>1\*</sup>, Falah H. Abed<sup>2</sup>

<sup>1</sup>Economics School of Shandong University of Technology, 12 Zhangzhou Road, 255049 Zibo, China <sup>2</sup>Technical College / Baghdad, Foundation of Technical Education, 100001 Baghdad, Iraq

## **Abstract**

The Iraqi Marshlands, the largest wetland in the Middle East and one of the most outstanding in the world have been lost mainly as result of drainage and damming. This study analyzed the dynamics of land use/cover change in Iraqi Marshlands Region from 1973 to 2011. In this process, we established the land use/cover classification system and remote sensing interpretation characteristics. A laminar extraction technique was used in the identification of typical attributes of land use/cover types. The results showed that the Marshlands region had been subject to much change. This resulted from direct and indirect impacts of human activities. The direct impacts, resulting in marsh loss were associated with drainage of wetlands and diversion of water supplies for agricultural purposes and for military reasons. The marsh ecosystem maws degraded due to indirect impacts arising from alterations to the marsh hydrology.

Key words: land use/cover change, laminar extraction, marshlands area, remote sensing

Received: August, 2012; Revised final: July, 2013; Accepted: August, 2013

\_