Studies Regarding Peat Land Monitoring

Anca Leonora SOTROPA, Ioan PACURAR, Mihai BUTA, Cristian IEDERAN

Faculty of Agriculture, University of Agricultural Sciences and Veterinary Medicine, 3-5 Mănăștur Street, 400372 Cluj-Napoca, Romania, e-mail: anca_sotropa@yahoo.com

Keywords: peat lands, monitoring, peat land resource.

SUMMARY

Covering an estimated area of 400 million hectares in some 180 countries, equivalent to 3% of the Earth’s land surface, peat lands are not only valued for their ecological services (water quality and storage, biodiversity, carbon deposits) but, historically, have met human needs for food, energy, construction material, livestock bedding and in arts and health. Most of peat lands (c.350 million ha) are in the northern hemisphere, covering large areas in North America, Russia and Europe. Tropical peat lands occur in mainland East Asia, Southeast Asia, the Caribbean and Central America, South America and southern Africa where the current estimate of undisturbed peat land is 30-45 million ha or 10-12% of the global peat land resource. Globally, natural peat lands are destroyed at a rate of 4,000 km² per year; the global peat volume decreases by 20 km³ per year. These losses largely occurred (and occur) in the temperate and tropical zones. Fifty per cent of natural peat land loss has been attributable to agriculture, 30% to forestry and 10% to peat extraction. About 14% of European peat lands are currently used for agriculture, the great majority being used as meadows and pastures. In countries such as Hungary (98%), Greece (90%), The Netherlands, (85%), Germany (85%) and Poland (70%), almost all organic soils are cultivated. In Finland, United Kingdom and Sweden only small areas of peat land are currently under agricultural use (2%; 4%; and 5% respectively), the great majority of this peat land being used as meadow and pasture. In Romania, there are just over 70 km² of peat lands, representing 0.03% of the country surface, of which 2,000 hectares are situated in Mures and Olt sources. The proved amount of peat in place is reported by the Romanian WEC Member Committee to be 25 million tonnes, of which just over half is deemed to be economically recoverable.

REFERENCES