World Academy of Science, Engineering and Technology International Journal of Energy and Environmental Engineering Vol:10, No:07, 2016

Assessment of Conditions and Experience for Plantation of Agro-Energy Crops on Degraded Agricultural Land in Serbia

Authors: Djordjevic J. Sladjana, Djordjevic-Milošević B. Suzana, Milošević M. Slobodan

Abstract : The potential of biomass as a renewable energy source leads Serbia to be the top of European countries by the amount of available but unused biomass. Technologies for its use are available and ecologically acceptable. Moreover, they are not expensive high-tech solutions even for the poor investment environment of Serbia, while other options seem to be less achievable. From the other point of view, Serbia has a huge percentage of unused agriculture land. Agricultural production in Serbia languishes: a large share of agricultural land therefore remains untreated, and there is a significant proportion of degraded land. From all the above, biomass intended for energy production is becoming an increasingly important factor in the stabilization of agricultural activities. Orientation towards the growing bioenergy crops versus conventional crop cultivation becomes an interesting option. The aim of this paper is to point out the possibility of growing energy crops in accordance with the conditions and cultural practice in rural areas of Serbia. First of all, the cultivation of energy crops on lower quality land is being discussed, in order to revitalize the rural areas of crops through their inclusion into potential energy sector. Next is the theme of throwing more light on the increase in the area under this competitive agricultural production to correct land use in terms of climate change in Serbia. The goal of this paper is to point out the contribution of the share of biomass in energy production and consumption, and the effect of reducing the negative environmental impact.

Keywords: agro-energy crops, conditions for plantation, revitalization of rural areas, degraded and unused soils **Conference Title:** ICREET 2016: International Conference on Renewable Energy and Environmental Technology

Conference Location: London, United Kingdom

Conference Dates: July 28-29, 2016