

## **AGRICULTURE AND RENEWABLE ENERGY MANAGEMENT IN URBAN AND PERI URBAN OF ADDIS ABABA**

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### **ABSTRACT**

Ethiopia is one of the countries which are **on transition / developing** / process, but still with great problem of energy supply, however it has huge hydraulic potential. In 1990 the source and type of supply was covered 94% cultural and 6% improved energy. This can directly affect the natural resource, the national development, as well as the environment. Thus the government was forced to formulate policy, law and regulations that can lead to develop and utilize the resource sustainably. Some of the directions are Expansion of hydroelectric power /small scale to large scale, natural gas and oil development, agro-forestry and forest development, promote energy saving, supply and utilization efficiency, development. Supply and utilization should not affect the natural balance and environment, each sector has to get alternative energy source, rural energy development has to cooperate with agriculture and environment development.

Addis Ababa is the capital and largest city of Ethiopia. It is the country's commercial, manufacturing, and cultural center, which is situated in central high land at an elevation 2000-3100m as. With the total area of **54, 000 hectares**, about 41% of the total area i.e. 22,000 ha is green frame, out of which **12,500 hectares** of the land is expected to be covered with forests. The remaining **9300 hectares** for urban agriculture & and **200 hectares** woodland species plantation. Human population of the city is more than 2.8 million with growth rate of 3.79%. Thus rapid growth of pop has negative impacts on natural resource /biodiversity/ utilization associated with climate change. Urban and peri-Urban agriculture is one of component of Urban and peri-urban ecosystem, which practices mainly for income generating, and food producing.

There are mixed farming such as Horticulture; cereal crops; bee keeping and animal husbandry having an area of 351 hectares. National Energy policy was formulated in 1994, and implemented in rural area. In urban energy management was started lately in a wide range. Currently the city, structured a team well up to the district /grassroots. It has models of various alternative energy resources such as improve stove (lakech, tekel, mert, biogas), solar power, wind at office and some schools, and some institutions for awareness creation/ promotion, Private organizations, small scale enterprises also participate on biogas plants construction and preparing some improved stoves. Managing both the inter-related components of the urban city /agriculture and Energy/ sustainably has great role on the development and safe for its dwellers. Thus, there are great changes and improvements in the urban life.

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