

Chapter 7

Urbanization and Its Implication for Sustainable Development in a Circular Economy: In Particular Food Production

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ABSTRACT

Only about 25% of the world's land area and soil can be viewed as sustainable for agriculture. The rest of the soils are too dry, too wet, steep, rocky, cold, shallow, acidic, alkaline, or saline to allow the growing of crops. The major problems lie on the harshly increasing need for agricultural products due to rising populations as well as to the world desire to attain ever higher living standards. Food shortage, increase in toxic chemical in production, and urbanization are three inseparable things. One way to solve food shortage is to increase agricultural production. However, increase of agricultural production involves a package of measures that must be fitted to the specific situations in each case. Those measures are the use of high-yielding crops like cassava and varieties and a set of treatments designed to optimize growing conditions. Among such treatments is the use of nature-based solution like the use of cassava waste in feeding of livestock, use of cassava waste as a manure, minimizing losses of water and nutrients due to runoffs.

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INTRODUCTION

The urbanized world has led to social, economic, and ecological sustainability into progressively challenged surroundings, which require the exploration on their intertwined connections, especially in the rapidly rising nations. A progression of eco-environmental problems, like resource consumption, biodiversity, climate change, and environmental debasement have risen and sprawled (Chen et al., 2016). *Urbanization is defined as the demographic procedure whereby an increasing share of the national populace lives inside urban settlements.* All throughout history, urbanization has been a key power in human and economic development (Mohamed et al., 2014). *Whereas sustainable development is improvement that delivers fundamental ecological, social and economic services to all residents of a group without undermining the viability of the natural, constructed and social frameworks whereupon the distribution of these services relies* (Kates et al., 2016).

As indicated by a report by the United Nations (2010), the proportion of urban populace ascended from 13% in 1900, to 29% in 1950, to half in 2009, and it is anticipated to be 69% in 2050. Urbanization brings numerous advantages, such as diversity, market effectiveness, jobs, education, and health improvement. It is these advantages that draw in a persistent stream of individuals from rural to urban regions, which is now in turn undermining agriculture due to migrations. However, because of the fast pace of urbanization, regular environments are progressively supplanted by urban communities. It has been progressively noticed that urbanization prompts numerous issues and these issues present hindrances to accomplishing sustainable development. In accordance with these developments, sustainable urbanization is advanced as a vital part of sustainable development. An urbanization procedure that satisfies the standards of sustainable development portrays sustainable urbanization (Liyin et al., 2012).

As already mentioned above, only about twenty-five percent of the world's land area and soil can be viewed as sustainable for agriculture. The major problems lie on the harshly increasing need for agricultural products due to increasing populations as well as to the world desire to attain ever higher living standards. Food shortage, increase in toxic chemical in production to meet the need of the populace and urbanization are three inseparable things. One way to solve food shortage is to increase agricultural production either by extending the area under cultivation, by strengthening production on chose tracts without further extension or by utilization of high-yielding products and assortments, and an arrangement of treatments intended to improve growing conditions (Daniel et al., 2013). One example of a high-yielding crops is cassava. Cassava is recyclable. It is mostly seen in tropical areas of the world like Brazil, Caribbean, Nigeria, Ghana and some parts of Africa. It is a turberous starchy root and called Manioc. Cassava production contains no

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