



Sustainable Food Systems for Ensuring Food Security and Safety

Grihalakshmi Kakani

School of Management, Centurion University of Technology and Management, Odisha, India

Corresponding Email: kakani.grihalakshmi@cutm.ac.in

Abstract

The population is estimated to increase to about 9.3 billion by 2050 and the area of agricultural land per person is declining with about 1.4 billion living in regions with reduced ground water levels and about two-thirds of the agricultural ecosystems are close to complete degradation resulting in loss of natural resources. Agriculture is at the core of sustainable development with food and agricultural sectors being accorded priority status and is considered to be driving the targets of Sustainable Development Goals (SDG's). Green revolution emphasized indiscriminate use of chemical fertilizers and pesticides and this has resulted in disruption of the soil environment reducing the rich biodiverse microbial inhabitation. It is widely known that genetic modification (GM technology) of plants for increased pest tolerance is claimed to be natural however, it is protected by patents and a technology that is deeply mired in controversies and not regulated adequately cannot ensure safety and sustainability. Food security is linked to agricultural productivity, and good production practices (safe food) are to be adopted to assure food that is produced is high in nutritive content and safe for consumption. The changed regime mandates a more comprehensive and holistic approach requiring fine harmonization of environment, ecosystems, economic and social entities. Large scale cultivation and consumption of local indigenous varieties especially millets should be encouraged and other sustainable production systems such as Agroecology, Agroforestry, Zero Budget Natural Farming to be adopted as alternative options for sustaining the sustainability of agri and food systems. Supporting activities such as processing technologies and effective value-added supply chains have a pivotal role in attaining sustainable targets and this requires an integrative approach linking environmental, socio-cultural, and economical policy framework.

Keywords: Sustainability, Safety, Security, SDG's, Food Systems

Food and Agricultural Organization (FAO) defines food security as follows – “Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy lifestyle” (FAO World Food Summit, 1996). Although not precise, a glance into the food and nutritional insecurity portrays a disturbing scenario - about 850 million being chronically undernourished, 1.4 billion living on less than \$1.25/day (Ravallion M, 2011), more than 2 billion being deficient in micronutrients,

while approximately 30 percent of children below five years of age in developing countries are malnourished (underweight) causing about 4.5 million child deaths, about 43 million children under five are obese (WHO, 2011a). World's population is estimated to increase to about 9.3 billion by 2050 and the area of agricultural land per person is declining

How to cite this Article: Grihalakshmi Kakani, 2020, Sustainable Food Systems for Ensuring Food Security and Safety, 8(Special Issue) : p 47–50.

Source of Support: None; **Conflict of Interest:** None