



Tropentag, September 9-11, 2020, virtual conference

“Food and nutrition security and its resilience
to global crises”

Depth of Hunger Across the World and Costs Required for the Eradication

BEKCHANOV MAKSUD

Center for Development Research (ZEF) / Bonn University, Economic and Technological Change, Germany

Abstract

Increasing water scarcity and land degradation are key threats for global food security. Undernourishment and consequent human health damage are acute problems especially in developing countries which host over 800 million people at the risk of hunger. Achieving zero hunger targets by 2030 as postulated through Sustainability Development Goals (SDGs) would thus require considerable efforts and investments to improve nutrition supply and enhance fairer distribution of food and incomes. This study assesses the tendencies of the undernourishment under various environmental change and economic intervention scenarios. Considering the depth of hunger (difference between actual and minimal dietary energy requirements) and number of people at risk of hunger, this work compares the severity of the undernourishment and social protection costs required to eliminate food deficit across the countries. As estimated, regional shares of South Asia, East Asia - Pacific, and Sub-Saharan Africa in global food deficit are 38 %, 31 %, and 22 % respectively. Ratios of food deficit to total food supply are high in South Asia and Sub-Saharan Africa leveling at 4.5 and 5.2 % respectively. To fill this food deficit in these regions would cost US\$ 364 and 174 per undernourished. The findings can be useful for designing social protection and agricultural investment policies in developing regions. As food deficit and number of the undernourished are expected to decrease largely for the regions except Sub-Saharan Africa by 2030 under the reference scenario, efforts of enhancing rural development and helping the marginalised groups of people are anticipated to be concentrated in rural areas of Africa.

Keywords: Depth of hunger, SDG 2, social protection cost, undernourishment