

Chapter 5

Food Security in Asia: Is There Convergence?

Sebak K. Jana
Vidyasagar University, India

Asim K. Karmakar
Jadavpur University, India

ABSTRACT

Food security has emerged as one of the most significant and complex challenges of the twenty-first century. The region has made impressive achievements in reducing poverty and hunger in the past two decades, driven by impressive economic growth and rising incomes over the last few decades. This progress has however been uneven within and across states, and the region remains home to over 60% of undernourished people in the world. The objective of the chapter is to examine the status of food security of Asian economies. For that purpose, we have assessed and taken into account food security situation according to various indicators across different regions of Asia as well as average food production as indicator of food security for our analysis. We then endeavor to find whether there is any convergence of average food production across Asian countries. Lastly, we have tested whether average food production is a significant determinant of undernourishment for Asian countries. The results reveal that there is no convergence in average food production in Asia. However the panel regression exercise reveals that there is significant relationship between food security and undernourishment.

The quest for food security can be the common thread that links the different challenges we face and helps build a sustainable future. – José Graziano da Silva, United Nations Food and Agriculture Organization (FAO) Director-General

INTRODUCTION

Food security has emerged as one of the most significant and complex challenges of the twenty-first century. Since the mid-2000s, overall global food prices have increased substantially with the global

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food price crisis of 2007-2008 and again in early 2011, global food prices reached a historic peak. Asia is central to meeting the challenge of sustainable food security at the global level. The region has made impressive achievements in reducing poverty and hunger in the past two decades, driven by impressive economic growth and rising incomes over the last few decades. This progress has, however, been uneven within and across states, and the region remains home to over 60% of undernourished people in the world. Many issues are coming up posing challenges in food security in the Asian Region. Climate change is expected to have particularly harmful impacts for agriculture, health, food security, water supply, sea levels, diseases and living conditions in Asia as it will inevitably affect the four dimensions of food security: food availability, food stability, food utilization. The IPCC (2015) report classifies South Asia as highly vulnerable to climate change in terms of food and fibre, bio-diversity, water resources, coastal eco-systems and settlements and highly vulnerable as regards health. The phenomenon is already making itself felt through occurrences such as changes in precipitation patterns and more frequent and intense. Though Green Revolution brought food security to millions of people, evidence shows that the Green Revolution led to increase in inequality, worsened absolute poverty, and resulted in environmental degradation. According to the Global Assessment of Soil Degradation (GLASOD), 18% of Asia's land is degraded. In South and Southeast Asia, almost 75% of all agricultural land has already been severely affected by wind or water erosion, and chemical pollution. Asia relies heavily on irrigation for agricultural production, and half of the world's total irrigated cropland is in China, South Asia and Southeast Asia. However, over extraction of groundwater and other poor irrigation practices have resulted in widespread water logging and salinisation of irrigated areas in these parts.

Bereft of these, the Asian region is one of the most diverse in the world as well as the most rapidly growing regions of the global economy, no doubt. It contains the world's two largest countries—China and India—which, in line with their vast populations, are the world's biggest producers and consumers of many types of food.

Many countries in Asia are disaster-prone countries with the possible exception of Thailand. They face periodically, rather frequently, floods, droughts and cyclones, etc. The worst sufferers of these calamities are agricultural producers and rural workers. Countries have prepared, and some have indeed perfected, the strategies to meet natural calamities. Every country in the region should have a Disaster Preparedness Plan. The status of food security as reviewed in the country studies suggests that by and large the countries have made significant progress in eliminating starvation, and to a large extent in filling the calorie gap. But no country, with the possible exception of Thailand could record any remarkable reduction in malnutrition. Despite significant progress over the past two decades, stunting of children remains a serious problem, with the rate of prevalence over 40 percent in several countries. The problem of stunting of children prevails in all countries in Southern Asia, with the incidence ranging from 20 to 43 percent. High rates of stunting also prevail in most countries of South-Eastern Asia (FAO, 2015).

LITERATURE SURVEY

The growth rates of average food production differ among countries for various reasons. The Special Programme for Food Security (SPFS) approach in Cambodia is composed of four interrelated and complementary components: water control and irrigation, agricultural intensification and diversification, farm integration systems through livestock and aquaculture and constraint analysis. The Royal Government of Cambodia (RGC) has solemnly proclaimed its concrete political platform in the framework of

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