The Future of Food and Agriculture in India: Trends and Challenges

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Abstract: India's economy is agriculture dominated. About 70% of the total population depends on practicing agriculture. Out of an estimated 140.3 million ha net cultivated area, 79.44 million ha (57%) is rain-fed, contributing 44% of the total food grain production. Meanwhile, India ranks second and shares 11.3% of the arable land of the world. It means that India has a high potential to harness agricultural resources for present and future food security. However, about 21.9% of people are living below the poverty line, and similarly, a large number of people are deprived or insecure about food. This situation is most critical in rural areas, where about 70% population lives. The study examines the present status, future trends, and challenges of food and agriculture in India. Time series data of the last three decades was gathered from secondary sources on area, production, and yield of crops; irrigated area; production of major crops; area, production, and yield of crops in the major food-producing states of India; food storage and poverty. The data were analyzed using descriptive statistics, correlation methods, and a regression model. State-level data on area, production, and yield of crops and irrigation facilities were indexed into levels, and the potentials of food production in the major food-producing states were observed. It was noted that the progressive growth rate of food production is higher than the population, which means that food is enough to feed the population; however, it is not accessible to all optimally because of wastage, leakage, lack of food storage, and proper distribution of food. If food is stored and distributed properly, there would not be any food shortage in India, the study revealed.

Keywords: agriculture, food production, population growth, poverty, future trends

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