Book Reviews 183

Paul Roberts (ed). *The End of Food.* New York: Mariner Books Houghton Mifflin Harcourt, Bosten. 2009. xv+330 pages. (Price not given).

The modern food economy has evolved over time. The calorie dense food (meat) has taken the place of plants and a technologically driven agriculture system has replaced the traditional food system. Several factors such as industrial revolution, opening of trade, end of communism, female market participation and technological change have contributed in shaping the rules of modern food production system. The endless efforts of the scientists geared towards discoveries has led to a green revolution in the field of agriculture and have done enough to untrue the earlier predictions of mass famine by Thomas Malthus. However, all such man made progress has not done much to resolve challenges of food security, food economy liberalisation and food safety being faced by every country today. This book presents well researched answers to questions raised at every forum on global food security such as; how did the primitive food system evolve into its present shape, what has motivated less spending on food, what has promoted the idea of convenience food in retail business, what has led to technology driven revolution in agriculture output, what radical steps are needed to escape from evils of hunger and malnutrition in the present world, what provokes food producers in developed countries to rule out unfettered functioning of food trade, and finally what turns around the progress that has ever been made in agriculture.

The book is divided into three sections each of which elaborates on the global food economy, its operations, its integrity and its interactions with the economic system. Part-1 has four chapters which discuss the evolution of the food economy, the forces that determine the functioning of food economic system in modern world, development of inputs in agriculture revolution and above all the marketing strategies of the big food companies in retail. Chapter 1 begins with the story of the shift from hunting to farming and gradually the discussion explores the first ever agriculture revolution that occurred between 10000BC and 6000BC. The revolution in wheat and barley production across Asia, Central America, and South East Asia at different times not only doubled the grain output but also provided the opportunity to farmers to make use of surplus grain as fodder for their livestock. The growth in grain production coupled with livestock growth brought double blessing for consumers in terms of lower food prices and higher volume of grain and meat. However, the author does not find a good reason behind this ever celebrated food revolution as centuries of malnutrition, wars and diseases (together termed as demographic accident in book) outpaced factors such as technology and capitalism.

Chapter 2 gives details on the true drivers of agriculture output growth in the times after the pessimistic forecast of Thomas Malthus. The use of fertiliser and dust Bowl phenomena turned around the abysmal performance of agriculture and led to explosive booms in agricultural output. The author surmises on the evolution of food production economy into food processing economy and elaborates the emergence of the idea of "convenience in food". This idea works through food manufacturing companies like Néstle, General food and Heinz which take care of processing calories, and market their products as a time saving alterative to home cooking. Chapter 3 highlights the benefits of

184 Book Reviews

high volumes and low prices of food items that provide the building block for the modern economy. Food processing companies venture into innovative production lines of food not because of competition or consumer desperation for product use but to exploit the surplus grain. The author discusses the discovery of instant coffee by Néstle, which he finds was not the outcome of consumer time shortage but was made to make use of the cheap raw coffee beans available at that time. The author also points out to another interesting implication of low food prices as the compulsion of food manufacturing companies to embark on cost cutting strategies. Wall Mart (Food manufacturing company) that has stretched his operations to China, India and some Middle East countries is a glaring example. It accounts for one percent of the US labour force and has largely cursed unionisation and lowered its labour cost to a third of its competitors.

Chapter 4 highlights the importance of processed food in making agriculture history and at the same time reveals the pitfalls associated with the use of packaged food. The author mentions that processed foods are often packed with large quantities of salt, fats and additives some of which are linked to medical problems such as hyper activity. In addition to this, supersizing of food commodities by food processing companies created indulgence for more or non stop eating in consumer. This trend has caused the problem of obesity. According to research findings quoted in this book, obesity afflicts one billion people worldwide whereas roughly the same number is found to be malnourished.

The Section 2 of the books looks broadly at the implications of food production. This section contains four chapters. Chapter 5 discusses the "Newly accepted concept of self sufficiency" by which a country is not self sufficient if it produces enough to feed its people but is self sufficient only if it can import enough to feed its population. In fact the story of comparative advantage governs the rule of business in agriculture by which importing corn, chickens and cherries from producers who could grow them more cheaply not only lowers food prices but also free up resources for other uses. Moreover, the author discuses new dangers such as transformation of disease vulnerability, rising energy cost, and growing competition among the handful of food super powers that comes with food trade. Chapter 6 explains the persistence of global hunger in the presence of food abundance, and reveals the facts and figures mostly from sub Saharan Africa on how one billion people are being excluded from the food economy. Chapter 7 looks into the food born disease or pathogens that killed tens of thousands of people in a year. Moreover the author reveals the importance of food safety laws for the prevention of food borne diseases.

The third section has two chapters and each of them gives insights into required discoveries in agriculture to sustain the burgeoning population and required to meet with future food challenges. Chapter 8 concludes this section with a survey of several factors like farm soil contamination and land capacity to decay, supplies of energy etc. These factors undoubtedly demand from scientists to completely re-engineer the current food system. Finally, Chapter 9 presents a comparison of the primary contenders in the battle in the next food system-transgenic and organic food.

This is a well researched volume on the past, present and future of the global food economy and students, researchers, and policy-makers can equally benefit from it. The

Book Reviews 185

only drawback it faces is its overemphasis on the biological and technological driven development in agriculture while overlooking the lives of those who live in developing part of the world and draw their livelihood directly from agriculture itself.

Lubna Naz

Pakistan Institute of Development Economics, Islamabad.