

## Chapter 7

# Value-Added Agriculture for Central Asian Countries

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### ABSTRACT

*The goal of this chapter is to analyze the socio-economic role of value-added agriculture (VAA) for Central Asian (CA) countries. The agricultural sector of the region provides raw materials for the food, textile, and leather industry. Cotton, wheat, rice, and fruit (fresh and dried) play an important role in the foreign trade of each CA country. These countries have unrealized potential for storing, freezing, processing, and packaging of the wide nomenclature of fruit, food production, and drinks with the organization of their further exports to perspective markets. Adding value to agricultural products lead to increasing the share of finished goods in export, supplying import-substituting products, improving infrastructure in rural areas, providing new jobs, and growing farmers' income. Based on the analysis, the authors recommend using value-added agriculture for the CA countries by attracting domestic and foreign investments to rural areas, establishing tax incentives, and allocating preferential credits for agribusiness.*

### INTRODUCTION

The chapter describes the introduction of Central Asia (CA) region, the theoretical aspects of value-added agriculture (VAA), foreign trade analysis of cotton and wheat, as well as the volume of main fruit production in Central Asian countries (CACs). Assessing the high competitive advantage and great potential of CACs in the agricultural sector, the implementation of VAA in the region is recommended to improve socio-economic conditions in rural areas. The database of the Asian Development Bank Institute

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(ADB), the Food and Agriculture Organization of the United Nations (FAO), the International Trade Center (ITC), the United Nations Industrial Development Organization (UNIDO), the United States Department of Agriculture (USDA), World Factbook – Central Intelligence Agency (CIA Factbook), and the World Bank (WB) are represented as the sources of numerical data.

There are several publications on value-added agriculture for developing countries. Prominent studies in the related literature include those from Anderson and Hanselka (2009), Dani (2015), Goletti and Samman (2002), Jaffee and Gordon (1993). The studies were conducted on value-added processes, food supply chain from management and social perspectives, exporting high-value food commodities, as well as post-harvest systems in world agriculture in general. Focus on the value-added agriculture, innovations and integration perspectives on the case of Central Asian countries can be found in scientific works of Bobokulov (2006), Bloch (2002), Pomfret (2010), Rakhimov (2010), Shtaltovna (2016), and Turaeva and Hornidge (2013). Babu and Tashmatov (1999) as well as Lioubimtseva and Henerbry (2009) have mentioned that agricultural challenges lead to food insecurity in the region. The intensification of VAA drives to provide more processed food products within the region that have longer food durability while protecting raw agricultural products from the risk of early deterioration. The goal of the chapter is to examine the potential and development of VAA for CACs and give recommendations for its wide implementation. Firstly, the major terms of the topic are described. Next, the focus is made on Central Asian countries as well as the socio-economic role and prospective development of value-added agriculture in this region. In the conclusion part, recommendations are provided.

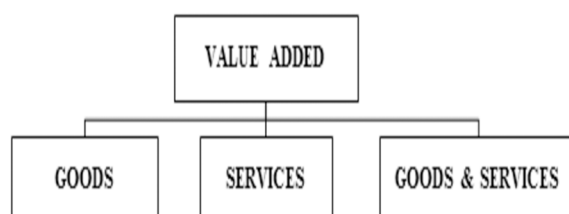
## **BACKGROUND**

Value added (value-added, value add, added value) can be defined within marketing and economics studies. From the marketing point of view, value added specifies the increase in the value of a product or/and service while passing through the stages of being developed, processed or produced. Value added is oriented for goods, services or with the combination of goods and services (Figure 1).

All activities during preparing the products/services are divided into value add and non-value add. Both of them require cost and time from producers, but customers pay only for value-added activities. The main non-value activities include overproduction, transportation, over-processing, inventory, defects, motion, and creativity (Ohno, 1988). In order to create value-added action, it is essential to pay attention to three criteria. Firstly, customers intend to pay for the activity. Secondly, it should be done right for the first time. Thirdly, the action should change the product/service to some extent. The studies of the US enterprises revealed that up to 95% of the activities related to a given process do not add value to

*Figure 1. Value added divisions in the categories of production and offer*

*Source: Authors' own development*



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