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## Sharing Korea's Experience of Developing Agricultural Value Chains with Africa



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Needless to say, agriculture is the mainstay of most countries in sub-Saharan Africa (SSA). The agricultural sector in SSA employs about 60-70% of the workforce. However, poverty is wide-spread in the sector. That is, approximately 90% of the population in absolute poverty is found in agricultural rural areas. Hence, it can be said that agriculture is directly associated with poverty and the national economy in Africa. It then follows that the amelioration of poverty needs to be preceded by the development of the agricultural sector. Indeed, it seems that a low national income occurs, ceteris paribus, in those SSA countries in which agriculture accounts for a relatively high share in the national economy. Productivity in the agricultural sector is still low in SSA and the agricultural value chain is underdeveloped. Agricultural land with access to an irrigation system is estimated to be only about 4%. In this context, it is not so surprising that a large proportion of the rural population in SSA hardly meets even the daily needs for food, let alone food security at the national level. Africa is largely dependent on external sources, such as imports, food aid, and the like, for its grain consumption needs in spite of the fact that agriculture is the dominant sector of the continent. For example, the total grain imports in Africa in terms of total grain consumption

has increased to more than 25% today from about 5% in 1961. Food aid has also increased to reach more than 10%. Africa used to be a net exporter of agricultural products up to the 1970s; however, starting from the 1980s it has transitioned into a net importer. Africa's trade deficit in agricultural products is increasing and will not likely diminish any time soon.

The agricultural sector in Korea, too, has been plagued by numerous challenges. In fact, Korea's economy was basically an agrarian one until it began to transform itself starting from the mid-1970s. The share of agriculture in the 1960s was about 40% of the nation's GDP. Since then, it has gradually declined and in 2014 posted about 2% of GDP. The manufacturing sector has ascended as a major industrial sector accounting for about 30% of GDP in 2014, from 14% in 1965. However, a strong argument in the school of developmental economics in Korea exists that the rise of the sector has been at the expense of the agricultural sector. The challenges began with the migration of labor to the manufacturing sector, an inevitable consequence of rapid development in the manufacturing sector, as is aptly posited in the Lewis Dual-Sector Model. The agricultural sector in Korea suffered from population loss; in contrast, cities experienced a rapid increase in population as a result of population influx, especially youths of working age from the rural agricultural areas. Such a phenomenon not only caused imbalance in the population structure between urban centers and agricultural rural areas, but has also exacerbated income inequality between these areas. The damage done in demographic structure could not be easily corrected and an imbalance in demographic structure between urban and rural area still lingers even today - in the agricultural rural areas, the population over the age of 65 accounted for 20% in the 1980s but increased to over 30% in the 2000s. This phenomenon is being exacerbated by the rapidly declining population, in conjunction of a sagging birth rate, of the country as a whole. On the other hand, food security in Korea has re-emerged as an important national agenda, as the food self-sufficiency at the national level dropped from worse to the worst – about 45.3% in 2012, the lowest rate among the OECD countries, from 56.2% in 2009. As briefly elucidated thus far, it has become an issue of exigency to build up the devastated agricultural sector in order to address income inequality and imbalanced growth. The priority focus has been to correct market failures that appeared in almost all the components of the agricultural commodity market structure.

The legacy of the national development of Korea is in fact attributable to the lopsided allocation of national resources in favor of strategic industries such as the manufacturing sector. Nonetheless, one hardly questions today whether the advent of the formidable manufacturing sector would have been possible without sacrifices made by the agricultural sector. Agricultural products had to be supplied at a low price in order to maintain low urban wages, which was obviously an important element of the competitive edge formed in the early days of Korea's industrialization. Even though the underlying causes of their challenges may be different, the agricultural sectors of both Africa and Korea share a large number of fundamental commonalities. This becomes more visible when portraying the value chain of the sector in their respective regions. Thus is formed a logical ground that Korea's experiences to develop an effective value chain in the agricultural sector can be shared with African countries for the benefit of the agricultural sector as a whole in Africa and Korea. There are many useful policies that can be extrapolated into the African context, even though the initial conditions of agriculture development may fundamentally differ between Africa and Korea. Indeed, it is true that Korea's agricultural development diverged from that of Africa's in terms of innate conditions such as soil quality, crop species, climate, etc. There are numerous policies and technological attributes – for example, agricultural support policies, refrigeration technology, agro-processing technology, financing schemes and models, and other physical and institutional infrastructure for the agricultural sector - that have effectively helped resuscitate Korea's agricultural sector and that can be shared with African countries. Korea's policy experiences, gained from its agricultural product price stabilization policy, export promotion policy, market access policy, food safety certification schemes, and the like, will also be a helpful source of reference for the coining-up of agricultural support policy for Africa. It is widely believed that the agricultural sectors in Africa and Korea fundamentally share a large number of commonalities. Korea's efforts to build the rice value chain are a case in point. Rice still remains the main crop in Korea. As of 2009, about 827,000 households, or 69.2% of all farm households in Korea, are still farming rice. However, both the amount of production and the land under rice tillage are shrinking. Production amounts of rice recorded 5,606 metric tons in 1990 but fell to about 4,241 tons in 2014. The sagging amount of rice production is largely attributable to the Minimum Market Access (MMA) scheme which Korea espoused back in 1994 when the World Trade Organization (WTO) regime was conceived. Imports of rice tend to increase under the MMA scheme, evidenced by the increase to about 408,700 tons in 2014, up from approximately 306,904 tons in 2009. Facing competition from relatively cheaper imported rice, a large number of the rice farmers in Korea have switched their main crops from rice to other products. In addition, such factors as market-opening pressure, urbanization, increased demands as a result of rapid industrialization, changes in dietary patterns and the like are germane to the reduction of rice tillage, and subsequently the amount of rice production. Nevertheless, rice farming cannot be abandoned, as some radical economists argue based on the logic of comparative advantage. Rice farming is not only the major rural farming activity of the nation, it is also directly related to its food security. As such, rice is a strategic crop and still an important industry in Korea. The production of rice itself constitutes about US\$ 9.3 billion in value chains; it gives rise to more than US\$ 26 billion value chains when accounting for forward linkages. Hence, the government and supporting institutions, i.e. the agricultural cooperative, have adopted measures to enhance the rice value chain. As a result, rice has now emerged as an important input in numerous components in the value chain. In Africa, rice has emerged as an important grain along with maize. This change of diet has been particularly noticeable in West Africa since 1995. It is a daily food staple in many African countries and in Western African countries in particular. Rice was included in a list of strategic crops within the Economic Community of Western African States' (ECOWAS) agricultural policy known as ECOWAP (Regional Agricultural Policy for West Africa). While economic growth in Africa in general has triggered the increase in demand for foods, production has not been able to meet growing demand. As a result, imports of rice in sub-Saharan Africa have been increasing. For example, in 2014, Nigeria imported about 3 million tons of rice and Senegal approximately 1.1 million. Indeed, Africa is spending more than US\$ 5 billion each year on the importation of about 12.5 million tons of rice, accounting for about 32% of the world's rice imports. Thus, it has become an agenda of exigency to reduce reliance on rice imports. Among the various constraints that rice farmers in Africa face, unfavorable government policies are often cited as one of the major constraints that deter the increase of rice production. Specifically, they include diverse factors such as resource allocation, cropping priorities, provision of adequate credits, low interest rates, creation of incentives and input subsidies, pricing and marketing policies, provision of modern milling facilities to improve rice milling quality and out-turn. Currently KIEP is conducting research on agricultural commodities value chains that will identify the areas in which Korea's policy experiences in promoting rice production and enhancing the rice value chain can be applied to African countries in order to address these constraints. KEP