

A STRATEGIC FRAMEWORK FOR MANAGING RICE SUPPLY CHAINS

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The agriculture sector will continue to play an important role in the application of strategies targeted towards socio-economic development of Sri Lanka. At present, rice sector in Sri Lanka faces a number of constraints related to production, technical, institutional and natural resource base and socio-economic policy. Need for improving quality of rice, mechanization of operational processes in the supply chain of paddy and rice production, and facing climate uncertainty are major challenges of the rice sector. The rice sector continues to rely on productivity improvement without considering quality. This is the correct time to improve quality rice production system to cater to local market as well as unseen potential of the export market. This study develops a strategic framework for rice supply chain by introducing key pillars of the rice supply chain along with action plans to leverage the vision, mission and values of the rice sector and defines internal and external drivers to success. An exploratory survey was conducted in Pollonaruwa district with 50 farmers randomly selected from a group of 380 and 8 agriculture officers in order to identify current performance and operational strategies in rice sector. Based on the statistical analysis of the rankings given by survey participants, key success factors of the rice supply chain were identified and validated with expert opinion. In this study, strategies have been extracted from similar manufacturing and agricultural domains, agriculture strategic plans developed by other countries and innovative ideas obtained in a survey of industry experts and agriculture experts. The strategic framework is based on generic supply chain reference models available in the literature. The findings which were qualitatively validated, mainly point to the need for developing the knowledge and skills of the supply chain players, availability and accessibility of information to stakeholders, need to identify the rice consumer needs and formal and integrated planning of the supply chains, the need of sourcing and operations preplanning, the need for mechanization and the need for innovative product development with regard to increased quality and sustainability.

Keywords: Managing agriculture, Strategic supply chains, Supply chain for rice production