

Prospects for Improving the Cinnamon Industry in Sri Lanka Through ICT: A Case Study in Matara District

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Abstract

Sri Lanka accounts for over 80% of the global trade of true cinnamon. In view of its industrial applications and medicinal properties, there is growing demand for true cinnamon in the world. However, the average yield of cinnamon (*Cinnamomum zeylanicum* Blume) in Sri Lanka is only around 250-300 kgha-1year-1 as against a potential yield of more than 1,000 kgha-1year-1 under good management. Besides, the total annual production is only around 22,000 Mt of which over 60% is exported. Major drawbacks of cinnamon industry are low productivity and quality, poor value addition, lack of market information, small holding size, poor accessibility and inadequate and unsatisfactory extension service. However, ICT can be used as an effective tool in addressing the above issues. Many developing countries use ICT assisting to improve yield and quality for agricultural crops as well as giving precise, timely, relevant information and services to the farmers at a decreased cost. Therefore, a questionnaire-based study was carried out to ascertain the usage of smart phones by cinnamon growers in some major cinnamon growing areas in the Matara district, analyse the gaps in the local value chain of cinnamon and determine the gaps that can be effectively addressed through ICT. It involved interviewing the key stakeholders in the local value chain, including 100 cinnamon farmers, peelers, input suppliers, processors, traders, exporters and service providers. Farm families were selected by simple random sampling while purposive sampling was used to select five Extension Officer Ranges and five Divisional Secretariat Divisions. Ci Results showed that nearly 75% of farmers got a yield less than 650 kgha-1year-1 and around 15% of the farmers got a yield less than 300 kgha-1year-1. Low yield was mainly due to poor management, use of unsuitable lands, non-adoption of recommended agro-technology, poor accessibility due to majority of holdings (nearly 60%) situated in interior side, large number of small holdings (88%), unsatisfactory extension service and lack of weather and market information. Ninety one percent of the farmers used mobile phones and 32% of them used smart phones while 22% had Wi-Fi facility. Around 90% of the stakeholders expressed keen interest to receive relevant information related to weather, agro-technology, support services, market information etc. on a mobile platform. Therefore, ICT enabled m- platform shows great promise in improving yield, quality and profitability of cinnamon. A model for and functions of the proposed integrated mobile application are presented and discussed. This application will prove important in addressing the gaps in the local cinnamon value chain, thereby will contribute to enhancing the cinnamon industry in Sri Lanka.

Keywords: Cinnamon, ICT, Mobile phones, m-platform , Value chain

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