# Challenges Faced by Farmers in Digitalising the Organic Vgetables and Fruit Supply Chain in Sri Lanka

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Digitalisation, which emerged with the introduction of electronic technologies and computers in the mid-20th century, has profoundly impacted industries globally. However, Sri Lanka's agricultural sector remains notably underdeveloped in this regard. This study analysed the challenges faced by organic farmers in the digitalisation of the supply chain for fruits and vegetables and explords the potential role of artificial intelligence (AI) in overcoming these obstacles. Snowball sampling was used to conduct in-depth interviews with organic farmers. Braun and Clarke's Thematic analysis for data evaluation theories were consulted. The study identifies a critical barrier: the limited technological knowledge among farmers, which undermines the effectiveness of digital tools. This paper outlines the key challenges faced by organic farmers and proposes a strategic framework for incorporating AI to boost efficiency and sustainability within the organic supply chain. The recommendations aim to bridge existing knowledge gaps and facilitate the integration of digital technologies, with the potential to significantly enhance both the efficiency and sustainability of Sri Lanka's organic vegetable and fruit sectors.

**Keywords**: *digitalisation, organic farming sector, challenges*