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National assessment of the impacts of COVID-19 pandemic on the vegetable crop production in Sri Lanka

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Abstract

Vegetable production subsector plays an important role in food and nutritional security, employment, and reduction of rural poverty in Sri Lanka. Successful cultivation of vegetable crops usually requires intensive management because of the requirement of special management practices, fertilization, irrigation, and frequent crop scouting to manage pests, diseases, and weeds. However, the measures taken to curtail the spread of the ongoing COVID-19 pandemic such as travel restrictions, import controls, policy alterations, associated supply chain disruptions and economic crisis are discussed to impact the production of vegetable crops in the public domain. To assess the validity of this general perception, we used the national scale data on the extent of cultivation and total production of 13 vegetable crops namely, Tomato, Brinjal, Okra, Snake gourd, Bitter gourd, Red pumpkin, Ash pumpkin, Beans, Cabbage, Capsicum, Carrot, Beetroot and Raddish for both *Yala* (2020) and *Maha* (2020/21) seasons. The data were obtained from the Department of Census and Statistics, Sri Lanka and statistically compared to the pre-pandemic national scale, long-term average (2001-2019) of the extent of cultivation and production of the same crops during both seasons. Results showed that, most of the vegetable crops were resilient to the shocks created by COVID-19 pandemic during *Yala* 2020 and *Maha* 2020/21. Although the extent of cultivation decreased for Ash pumpkin, Beet root, Snake gourd and Radish, the production has increased, highlighting the increased productivity. Travel restrictions, closure of local markets and work from home lifestyle during the pandemic may have motivated local growers to produce vegetables at home gardens. Furthermore, several promotional programs to produce vegetables aiming the food and nutritional security may have supported for the resilience demonstrated by the vegetable sector despite of market closures and supply chain disruptions. Future studies should focus on holistically evaluating the effects of this pandemic on the vegetable production, marketing, and supply chain across the country.

Keywords: Agriculture, COVID-19, Home gardens, Resilience, Vegetables

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