A slowdown pattern of agricultural TFP growth among the OECD countries for the past two decades

Agricultural TFP in OECD countries has exhibited a relatively high growth rate over the past four decades, contributing to agricultural development throughout the world. Figure 1 shows the relative levels of agricultural TFP for 17 OECD countries over the 1973-2011 period. Over this period, agricultural TFP for the 17 OECD countries has grown at an average rate of 2 percent a year, which is about twice the global average for agriculture for the same time period and comparable to manufacturing and service sectors in the same OECD countries (Sheng et al. 2022; Ball et al. 2022). Agricultural TFP levels in OECD countries are relatively higher than those in their developing country counterparts.

However, recent statistics show that agricultural TFP growth has been slowing down in major OECD countries after 2000 (Alston et al. 2010; Sheng et al. 2015; Ball et al. 2018; Pardey and Alston 2019; Chambers et al. 2020). As is reported in Ball et al. (2018), average agricultural TFP for 17 OECD countries (including 14 EU countries and Australia, Canada and the United States) has grown at a sluggish rate of 0.5 percent a year after 2000, approximately one-third of its longterm average since 1973. The counter-intuitive observation of slowdown agricultural productivity growth stimulated a renewed interest in questions about how new technological revolution may affect agricultural productivity growth.