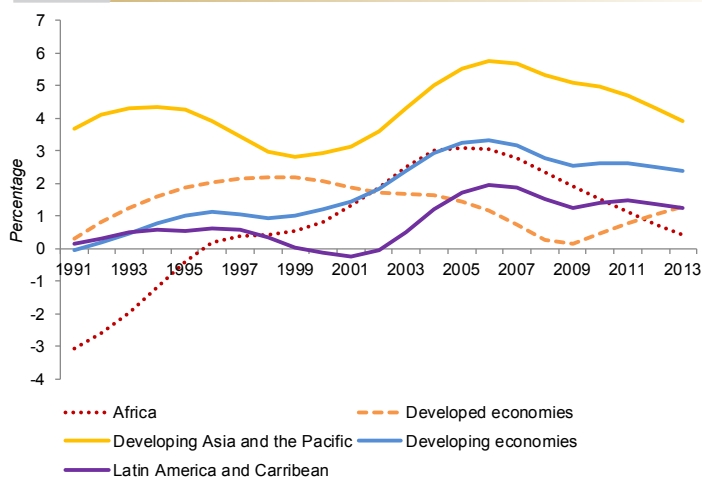


Linking productivity to Sustainable Development

The *Economic and Social Survey for Asia and the Pacific 2016* highlights that developing countries in the region should move from a development model that is currently driven by exports to developed economies to one in which domestic and regional demand plays a greater role. This would make development more sustainable and less vulnerable to an at times volatile external sector. Indeed, emphasis on domestic and regional demand becomes all the more important and relevant considering the recent decline in trade flows.

While sustained productivity growth that is coupled to higher wages is necessary to strengthen domestic demand, continued and inclusive economic growth is necessary to close the region's development gaps. However, economic growth in the developing economies of the Asia-Pacific region has declined to an estimated 4.6 per cent in 2015, which is less than half of the rate of 9.4% that had been the average in the pre-crisis period of 2005-2007. Worryingly, growth of productivity has also declined in the region: in the developing countries, annual average growth of total factor productivity declined from 2.8 per cent in 2000-2007 to just below 1 per cent in 2008-2014. Similarly, though it remains the highest among developing regions of the world, labour productivity growth in developing Asia-Pacific economies has also declined in recent years, whereas it has in fact accelerated in developed economies (see figure 1). Strengthening productivity growth is particularly important to revitalize rates of economic growth as almost a fifth of the economic slowdown can be attributed to the deceleration in total factor productivity growth that took place during the period 2008-2013.

Figure 1. Trend in labour productivity growth, by region



Source: ESCAP calculations, based on data from the ESCAP Statistical Database and the World Development Indicators database of the World Bank.

Note: The trend in labour productivity growth is a result of using the Hodrick-Prescott filter.

It is important to understand what drives productivity to be able to take steps to accelerate productivity growth and enhance levels of productivity. For instance, international trade is considered a key source of technology transmission and adoption, which has a positive impact on productivity. Thus, as firms are exposed to different products, processes and practices through imports and exports, they are more likely to innovate in order to compete. Similarly, foreign direct investment is a crucial channel for the transfer of technology, which generates knowledge spillovers by, for instance, linking local to foreign firms, thereby increasing productivity growth.

The availability of infrastructure is also important for sustained productivity growth. Public infrastructure is a crucial factor for enhancing productivity. This includes transport and energy infrastructure but also social infrastructure such as educational infrastructure (schools and universities) and health infrastructure (hospitals and health services). Indeed, labour quality in terms of knowledge and skills are essential factors that contribute to productivity growth. The quality of education is a critical factor, especially as a shortage of skills would constrain the abilities of economies to take advantage of technological change, thereby limiting productivity growth, particularly in manufacturing, as well as limiting economic diversification. Indeed, while levels of education, measured in terms of enrolment, literacy and years in schooling, have increased in most countries in the region, more efforts to increase the quality of education would contribute to accelerating productivity growth.

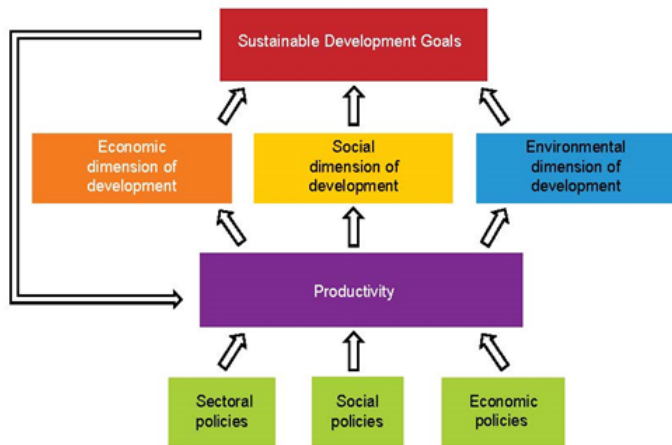
Sustainable Development and Productivity

Focusing on productivity provides an overarching framework for countries to tackle the achievement of several of the Sustainable Development Goals. For instance, greater levels of productivity (if also coupled to higher wages), especially in the rural and agricultural sector, will help countries “end poverty in all its forms everywhere” (**Goal 1**); “end hunger, achieve food security and improved nutrition and promote sustainable agriculture” (**Goal 2**); and “reduce inequality within and among countries” (**Goal 10**).¹

The relationship between productivity and sustainable development is, however, two-way, as investing in the Sustainable Development Goals can also foster productivity growth (see figure 2 on the next page).

¹ See MPFD Policy Brief No. 38 entitled “Increasing agricultural productivity for sustainable development”, April 2016 (Bangkok, ESCAP).

Figure 2. Framework linking productivity to the Sustainable Development Goals



Source: ESCAP.

For instance, social policies that contribute to expanding investment in health and education to reach **Goal 3** (“ensure healthy lives and promote well-being for all at all ages”) and **Goal 4** (“ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”) will strengthen productivity of the labour force. In this regard, strengthening research and development comprises one avenue to strengthen skills of the labour force. Another is to expand undergraduate and technical education to raise the overall level of skills, particularly as higher education is critical to providing the skills required to apply current technologies as well as to be able to assimilate, adapt and develop new technologies. At the same time, vocational schools must be strengthened and teaching curricula reformed to make them more relevant to today’s environment.

These aspects are particularly relevant as the skill bias of modern technology reduces the pace of absorption of unskilled labour, particularly from the rural sector, to find productive employment. Indeed, a large number of countries in Asia and the Pacific have been unsuccessful in integrating “surplus labour” into the rest of the economy. Thus, while the value added of agriculture in GDP declined by almost half from 19.1% for the developing countries in the region in 1990 to 9.9% in 2013, the share of total employment agriculture declined only by about 20 percentage points to 36% of the labour force.

Overall, developing economies in the region are deindustrializing and becoming more oriented towards services at an early stage in the region’s development process, leap-frogging the manufacturing stage in their transition. Indeed, the share of services in value added has increased by a quarter in ESCAP developing economies since the 1990s accounting for more than 53.1% of total value added in 2013, yet the average level of income per capita is barely a fifth of that in developed economies (in constant 2005 terms at PPP) when services contributed more than half of value added in their GDP.

Such an early shift to a service-oriented economy may not be conducive for fostering development, especially as services are not as tradable as manufactured goods and as services usually do not exhibit the same technological dynamism. Also, it is worth pointing out that countries that have developed successfully, including, for instance, the Republic of Korea, have done so on the back of rapid industrialization. Moreover, with almost 4 of every 10 workers still engaged in agriculture and more than half the developing region’s population living in rural areas, sustainable development of the rural economy remains pivotal to reaching the SDGs.

Increasing productivity in agriculture and industrializing the rural sector will of course require better access to infrastructure. Indeed, investments in infrastructure – transport, irrigation, energy, and information and communications technology – are crucial in achieving sustainable development and in strengthening productivity. Economic and sectoral policies that foster such investment would “ensure access to affordable, reliable, sustainable and modern energy” (**Goal 7**) and “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation” (**Goal 9**). For instance, in terms of the power infrastructure, losses due to electrical outages are estimated by firms to amount to 33.8% of total annual sales. Improving both access and the reliability of such infrastructure would increase firms’ profitability and would encourage additional investment. Thus, increasing investment in these two goals would contribute to strengthening productivity.

In a similar vein, urgent action is required to combat climate change and its impacts (**Goal 13**), because climate change is expected to have significant negative impacts on productivity. For one, climate change is expected to adversely affect agricultural productivity in the North and Central Asian and South and South-West Asian subregions, where yields might decrease by up to 30% in Central and South Asia. This will have an important impact on rural livelihoods where even a small percentage loss in agricultural productivity could impose large income losses. In addition, the impact of greater increases in average temperature resulting from climate change may negatively impact labour productivity, which would produce a disproportionately stronger effect on the world’s poor, especially as warmer-than-average years generally contribute to negative output shocks in hot countries, but positive output experiences in cold countries.

Thus, while economic growth and productivity growth have been declining in the Asia-Pacific region, which is worrying as both are critical for development, especially if the region wants to shift to a development model that is driven more by domestic demand rather than excessive reliance on exports, the Sustainable Development Goals provide a critical entry point to strengthening productivity and thus economic growth. Indeed, while strengthening productivity will contribute to the success of a number of the Sustainable Development Goals, investing in their achievement will also nurture productivity growth, creating a virtuous cycle between sustainable development, productivity and economic growth.

The MPFD Policy Briefs aim at generating a forward-looking discussion among policymakers, researchers and other stakeholders to help forge political will and build a regional consensus on needed policy actions and pressing reforms. Policy Briefs are issued without formal editing. This issue was prepared by Oliver Paddison and Steve Gui-Diby. This policy brief benefitted from comments by Hamza Ali Malik, and Vatcharin Sirimaneetham. For further information on this issue, please contact Aynul Hasan, Director, Macroeconomic Policy and Financing for Development Division, ESCAP (escap-mpdd@un.org).