

The rate of agricultural productivity growth must increase if the world is to sustain a expected population growth, a report has warned.

The 2019 [Global Agricultural Productivity \(GAP\) Report](#) productivity must grow at an average annual rate of 1.73%, but that currently it is 1.63%.

The report by [Virginia Tech's College of Agriculture and Life Sciences](#) said the higher rate will be necessary to produce food, feed, fiber, and bioenergy for 10 billion people in 2050.

This conclusion is [consistent with the past five years](#) which suggest that growth is not accelerating fast enough to sustainably meet the food needs of the world.

Ann Steensland, author of the 2019 GAP report and coordinator of GAP Report Initiative at Virginia Tech, commented on productivity gaps. She said that, if they persist, they "will have serious ramifications for environmental sustainability".

Further, "the economic vitality of the agriculture sector and the prospects for reducing poverty, malnutrition and obesity" will be impacted.

China and South Asia report strong productivity growth. On the other hand, North America, Latin America and Europe are slowing in productivity, the report found.

Questions of food insecurity, malnutrition and rural poverty are highlighted in the report. It calls attention to the "alarmingly low levels of productivity growth in low-income countries".

The report focuses on countries which demonstrate low levels of agricultural productivity, high population growth and shifts in consumption patterns.

The report considers these three elements to be indicative of underlying unsustainable agricultural practices.

Results of global agricultural productivity growth report

GAP Report summarized six strategies to accelerate productivity. They include: "Investing in public agricultural R&D and extension, embracing science- and information-based technologies, improving infrastructure and market access, cultivating partnerships for sustainable agriculture and nutrition, expanding regional and global trade, and reducing post-harvest loss and food waste."

Specifically, authors see innovation as critical to growth. They point to agriculture

technology, improved seeds and best practices for nutrient management and animal health as examples.

The report claims that productivity growth has historically been strongest in high-income countries.

Additionally, it notes an increase of 60% in agricultural output during the last 40 years, despite only a 5% increase in global cropland.

The authors attribute this to the widespread adoption of improved technologies and farm management practices, particularly in high-income countries.

Research states that without further productivity gains, farmers will need more land and water to increase production.

ScienceDaily goes on to add that the report suggests that consumers will rely on cheaper cereal grains in the future. This is because of an inability to afford more expensive nutrient-dense foods.