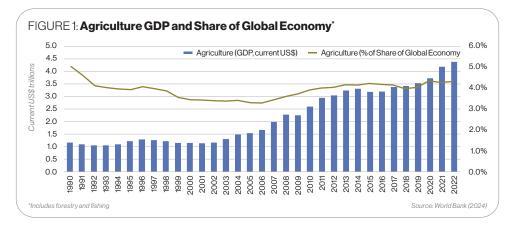
Oil and gas in the agriculture sector

ENERGY PERSPECTIVES

The agriculture sector plays a significant role in the global economy, contributing more than four percent of world GDP in 2021. Global GDP reached US\$86.0 trillion in 2021, of which the GDP of the agriculture sector accounted for US\$4.3 trillion, an increase from US\$1.16 trillion in 1990. Along with forestry and fishing, the agriculture sector, which includes the production of crops and livestock, has seen demand for its products increase in recent years (see Figure 1). The COVID-19 pandemic emphasized the importance of the sector to the world's economy.

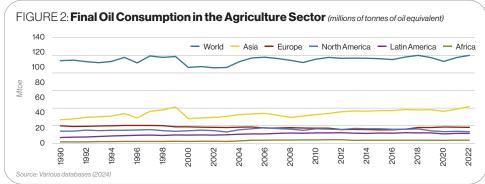


For the past 100 years, fossil fuels have been essential to the agriculture sector. Today's food system depends heavily on oil and gas to feed billions of people across the planet.

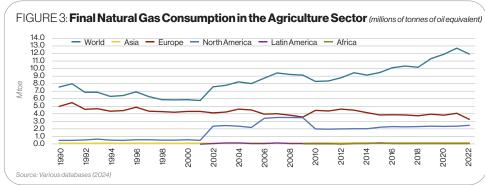
The sector uses oil and gas both as raw materials and as energy in all stages of agriculture production from planting, irrigation, feeding, and harvesting, to processing, distribution, and packaging. Farm machinery, processing facilities, storage, and shipping all rely on fossil fuels.

DEMAND FOR OIL AND NATURAL GAS IN THE AGRICULTURE SECTOR

Worldwide, demand for oil in the agriculture sector increased from 110 million tonnes of oil equivalent (Mtoe) in 1990 to 118 Mtoe in 2022. The most significant increase was in Africa, with demand increasing by 150 percent, followed by a 78 percent rise in Latin America. In Asia, demand increased from 31 Mtoe to 50 Mtoe between 1990 and 2022, a 58 percent increase. Worldwide, demand between 1990 and 2022 rose from 110 Mtoe to 118 Mtoe (see Figure 2).



Demand for natural gas by the world's agriculture sector also increased—from 7.5 Mtoe in 1990 to 11 Mtoe in 2022. In North America, the agricultural sector's demand for natural gas increased from 0.5 Mtoe in 1990 to 2.6 Mtoe in 2022. In Europe, the demand for natural gas in the agriculture sector was 3.3 Mtoe in 2022 (see Figure 3).



In recent years, food price increases have renewed the world's focus on the agriculture sector. The sector consumes a significant amount of fossil fuels for its operations and is highly dependent on energy for its production. The need for stable food sources is critical to a global economy whose population is set to reach 9.7 billion people by 2050. Fossil fuel energy is critical to production in the agriculture sector.

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