FIGURE 18.
CHEMICAL FERTILIZER USE BY NUTRIENT AND REGION

FIGURE 19.
CHEMICAL FERTILIZER USE PER CROPLAND AREA BY NUTRIENT AND REGION

Source: FAOSTAT
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higher for nitrogen, 26 percent higher for phosphorus, and 80 percent higher for potassium).

Asia represented 55 percent of world total agricultural use of chemical fertilizers in 2018, followed by the Americas (27 percent), Europe (12 percent), Africa (4 percent) and Oceania (2 percent). This ranking of the regions is the same for all nutrients.

The main users of chemical fertilizers are China, India, the United States of America and Brazil (see Table 15), with China the largest user of any type of fertilizer.

Fertilizer use increased in all regions between 2000 and 2018 (see Figure 18). It went up 32 million tonnes – the largest increase in absolute terms – in Asia, or 44 percent. The fastest increase took place in Africa, with a growth of 74 percent equivalent to just 3 million tonnes due to the low starting level. In the Americas, fertilizer use posted a 51 percent increase, or 17 million tonnes, while in Oceania it went up 17 percent (or 0.5 million tonnes) compared to 4 percent in Europe (or 1 million tonnes).

The mix of nutrients varies across the regions. Nitrogen is the dominant nutrient, accounting for more than 60 percent of fertilizer use in Europe (64 percent), Africa (64 percent) and Asia (61 percent), and around half of the total in Oceania (52 percent) and the Americas (48 percent). The use of phosphorus accounts for 17 to 25 percent of the total in all the regions except Oceania, where its share is 35 percent. The share of potassium in fertilizer use is the highest in the Americas with 26 percent, followed by Asia and Europe (19 percent each), Africa and Oceania (13 percent each).

The use of phosphorus declined in Europe and Oceania between 2000 and 2018, while the use of potassium declined only in Europe over the same period.

World agricultural use of chemical fertilizers per cropland area rose by 33 percent during the 2000–2018 period, to 121 kg of nutrients per hectare – expressed as the sum of nitrogen, phosphorus and potassium (see Figure 19).

This corresponds to an additional 30 kg/ha compared with 2000. Of the total amount, 70 kg/ha correspond to nitrogen (up 28 percent), 26 kg/ha to phosphorus (up 19 percent) and 25 kg/ha to potassium (up 68 percent).

Fertilizer use per cropland area in 2018 was the highest in Asia, at 178 kg/ha, followed by the Americas (135 kg/ha), Oceania (83 kg/ha), Europe (77 kg/ha) and Africa (25 kg/ha). With a growth rate of 47 percent between 2000 and 2018, the Americas were the region with the fastest increase in fertilizer use per cropland area, ahead of Africa (+44 percent), Asia (+35 percent) and Europe (+10 percent) – Oceania is the only region showing a decrease (-10 percent).