

## Dataset Information:

<b>Title</b>	<b>Agri-environmental indicators: Fertilizers</b>
<b>Abstract</b>	This “Agri-environmental indicators: Fertilizers” domain provides the ratio between the totals by nutrient of agricultural use of chemical or mineral fertilizers, reported in the FAOSTAT domain “Inputs/Fertilizers by Nutrient” for nitrogen (N), phosphorus (expressed as P <sub>2</sub> O <sub>5</sub> ) and potassium (expressed as K <sub>2</sub> O), the area of cropland reported in the FAOSTAT domain “Inputs/Land Use”, the value of agricultural production reported in the FAOSTAT domain “Production/Value of Agricultural Production”, and population reported in the FAOSTAT domain “Population and Employment/Population”. The ratios are provided at country level, as well as for regional and global aggregations.
<b>Supplemental</b>	FAOSTAT Agri-environmental indicators are calculated by FAO and may not coincide with data reported by member countries to relevant international processes. They are intended primarily as a useful international reference.
<b>International Standards</b>	For information about compliance with the System of Environmental-Economic Accounting (SEEA) and with the Framework for the Development of Environmental Statistics (FDES 2013), see the corresponding notes in the documentation of the two source domains: <a href="#">Fertilizers by Nutrient</a> and <a href="#">Land Use</a> .
<b>Creation Date</b>	2011
<b>Last Update</b>	2022
<b>Data Type</b>	Agri-environmental indicators
<b>Category</b>	Agriculture; Environment
<b>Time Period</b>	1961 - 2020
<b>Periodicity</b>	Annual
<b>Geographical Coverage</b>	World
<b>Spatial Unit</b>	Country
<b>Language</b>	Multilingual (EN, FR, ES)

## Methodology and Quality Information:

### Methods

The indicator *Use per area of cropland* is calculated as:

$$U_{(i,c,y)} = \frac{F_{(i,c,y)}}{Area_{(c,y)}}$$

Where:

$U_{(i,c,y)}$  Use per area of cropland of fertilizer nutrient  $i$  in country  $c$  and year  $y$  (in kg/ha)

$F_{(i,c,y)}$  Total agricultural use of fertilizer nutrient  $i$  in country  $c$  and year  $y$  (in tonnes)

$Area_{(c,y)}$  Cropland area (corresponding to the sum of arable land and permanent crops) in country  $c$  and year  $y$  (in 1 000 ha)

$i =$  Nutrient: nitrogen (N), phosphorus (expressed as  $P_2O_5$ ) or potassium (expressed as  $K_2O$ ).

The indicator *Use per capita* is calculated as:

$$U_{(i,c,y)} = \frac{F_{(i,c,y)}}{Population_{(c,y)}}$$

Where:

$U_{(i,c,y)}$  Use per capita of fertilizer nutrient  $i$  in country  $c$  and year  $y$  (in kg/capita)

$F_{(i,c,y)}$  Total agricultural use of fertilizer nutrient  $i$  in country  $c$  and year  $y$  (in tonnes)

$Population_{(c,y)}$  Population in country  $c$  and year  $y$  (in 1 000 persons)

$i =$  Nutrient: nitrogen (N), phosphorus (expressed as  $P_2O_5$ ) or potassium (expressed as  $K_2O$ ).

The indicator *Use per value of agricultural production* is calculated as:

$$U_{(i,c,y)} = \frac{F_{(i,c,y)}}{Value\ of\ agricultural\ production_{(c,y)}}$$

Where:

$U_{(i,c,y)}$  Use per value of agricultural production of fertilizer nutrient  $i$  in country  $c$  and year  $y$  (in kg/1000 Int. \$)

$F_{(i,c,y)}$  Total agricultural use of fertilizer nutrient  $i$  in country  $c$  and year  $y$  (in tonnes)

$Value\ of\ agricultural\ production_{(c,y)}$  Value of agricultural production in country  $c$  and year  $y$  (in 1 000 Int. \$)

$i =$  Nutrient: nitrogen (N), phosphorus (expressed as  $P_2O_5$ ) or potassium (expressed as  $K_2O$ ).

### **Data sources**

Data used in the calculation of this agro-environmental indicator are sourced from the FAOSTAT Inputs domains “[Fertilizers by Nutrient](#)”, “[Land Use](#)”, [Population](#) and [Value of agricultural production](#). Trends in the derived agro-environmental indicator are thus directly associated with the trends of the underlying data sources.

For the aggregations (regions and special groups), only countries with data for both agricultural use (numerator) and cropland area (denominator) are included in the calculation.

**Data Collection Method** Computed data.

**Useful links** Fertilizers by Nutrient: <http://www.fao.org/faostat/en/#data/RFN>  
Land Use: <http://www.fao.org/faostat/en/#data/RL>

---

### **Distribution Information:**

**Owner** FAO

**Provider** FAO

**Source** FAO

**Copyright Policy** FAOSTAT is part of the FAO corporate statistical databases under FAO Open Data Licensing Policy. Terms of use are available at: <http://www.fao.org/contact-us/terms/db-terms-of-use/en>.

**Citation** FAO. 2022. FAOSTAT: Fertilizers indicators. (License: CC BY-NC-SA 3.0 IGO). In: FAO.org [online]. Cited [insert date that the dataset was accessed in the following format: DD-MM-YEAR]. Available at: <http://www.fao.org/faostat/en/#data/EF>.

**Acknowledgments** FAOSTAT Agri-Environmental Indicators domains are developed and maintained by the Environment Statistics Team, FAO Statistics Division (ESS), with Regular Programme Funding under Strategic Objective 2 and Objective 6.

---

[Statistical Database Terms of Use](#)



*This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO license (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>). In addition to this license, some database specific terms of use are listed: [Terms of Use of Datasets](#).*