



Food and Agriculture
Organization of the
United Nations

ISSN 2709-006X [Print]
ISSN 2709-0078 [Online]



FAOSTAT ANALYTICAL BRIEF 85

Gross domestic product and agriculture value added 2013–2022

Global and regional trends

HIGHLIGHTS

- The global gross domestic product (GDP) grew from USD 70.5 trillion* in 2013 to USD 89.5 trillion in 2022, at an average annual rate of 2.7 percent that is 0.5 percent lower than in the 2003–2012 decade. The COVID-19 pandemic years of 2020 and 2021 deviated from this upward trend, as GDP fell by 3.0 percent in 2020 then soared by 6.2 percent in 2021.
- The global GDP grew by 3.1 percent in 2022, as the war in Ukraine, the aftereffects of the pandemic and the increase in interest rates to fight inflation hampered the recovery.
- Investment in capital, measured by the share of the gross fixed capital formation (GFCF) in GDP, grew from 24.8 percent in 2013 to 26.0 percent in 2022.
- The global agriculture** value added increased by 2.9 percent on average each year from USD 3.0 trillion in 2013 to USD 3.8 trillion in 2022.
- After surging in 2020, the global share of agriculture value added in GDP resumed its declining trend and reached 4.3 percent in 2022, which is still above the pre-pandemic level.

* All values are measured in 2015 constant USD.

** Agriculture includes agriculture, forestry and fishing (ISIC Rev. 4, A 01-03).

FAOSTAT MACROECONOMIC INDICATORS

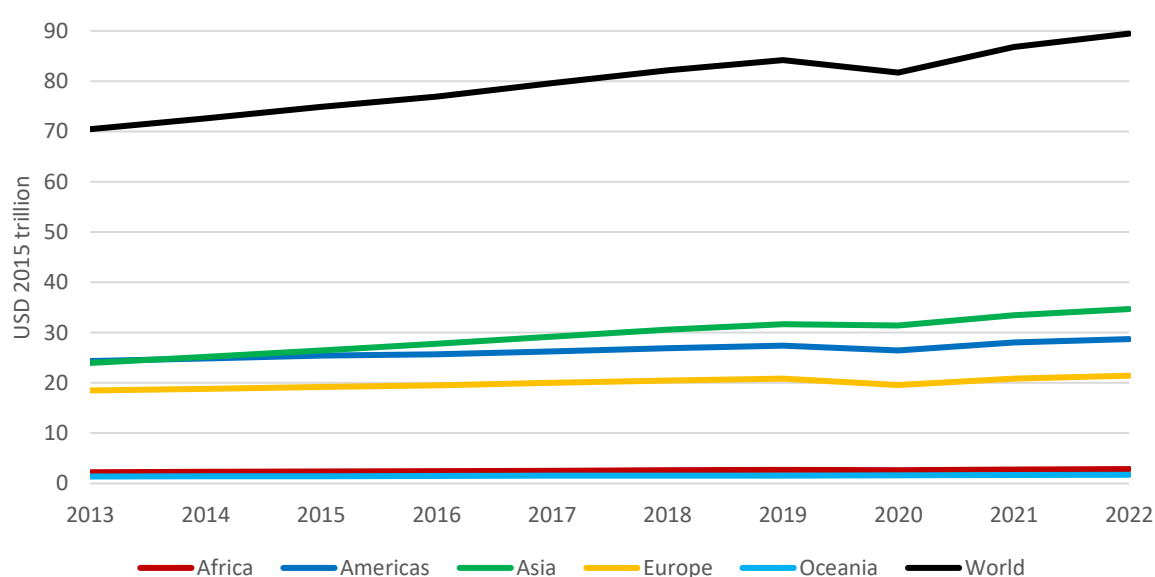
GLOBAL

Global GDP grew by 3.1 percent annually on average from USD 18.1 trillion in 1970 to USD 89.5 trillion in 2022. During the 2013–2022 decade, the average annual growth rate of global GDP decreased to 2.7 percent, compared with 3.2 percent in 2003–2012. Due to the COVID-19 pandemic, GDP plummeted by 3.0 percent from USD 84.2 trillion in 2019 to USD 81.7 trillion in 2020, although global GDP soared by 6.2 percent in 2021 as the global economy was recovering from the pandemic. The recovery was more limited in 2022 as growth slowed down due to a combination of factors that include the war in Ukraine, the aftereffects of the pandemic and the increase in interest rates to fight inflation.

Europe's GDP growth rate of 1.6 percent on average between 2013 and 2022 was the smallest among all regions. This significant decrease is mainly due to the 5.9 percent drop in 2020, from USD 20.8 trillion in 2019 to USD 19.6 trillion in 2020, led by Spain (–11.2 percent), the United Kingdom of Great Britain and Northern Ireland (–10.4 percent) and Italy (–9.0 percent). The GDP of Europe bounced back to USD 20.8 trillion in 2021 – an increase of 6.3 percent – led by the United Kingdom of Great Britain and Northern Ireland (8.7 percent), Italy (8.3 percent) and France (6.4 percent). Growth was slower in 2022 (3.0 percent, to USD 21.4 trillion); GDP declined in Eastern Europe due to the war in Ukraine, as the Russian Federation and Ukraine posted decreases of –2.1 percent and –29.1 percent, respectively. By contrast, Asia had the highest GDP growth rate among all regions (4.3 percent on average between

2013 and 2022), showing the lowest drop in GDP (–1.0 percent) in 2020 and the largest rebound (6.6 percent) in 2021, led by Southern Asia (7.8 percent) and Eastern Asia (6.8 percent). It also had the highest growth in 2022 (3.7 percent), led by Western Asia (6.6 percent) and Southern Asia (6.3 percent). While the average annual GDP growth rate of the Americas registered 1.9 percent between 2013 and 2022, the region’s GDP fell by 3.4 percent in 2020, bounced by 6.0 percent in 2021 and grew by 2.4 percent in 2022. Africa followed a similar pattern as the other regions with an average GDP growth rate of 3.0 percent between 2013 and 2022. Its growth rate in 2022 (3.5 percent) was the second highest among regions, led by Eastern Africa (5.0 percent). Oceania is the only region where GDP increased in 2020 (1.6 percent from USD 1.6 trillion in 2019 to USD 1.6 trillion in 2020). This was followed by increases of 4.1 percent in 2021 and 3.1 percent in 2022. Overall, GDP in Oceania grew by 2.5 percent on average between 2013 and 2022 (Figures 1 and 2, and Table 1).

Figure 1: Global and regional GDP



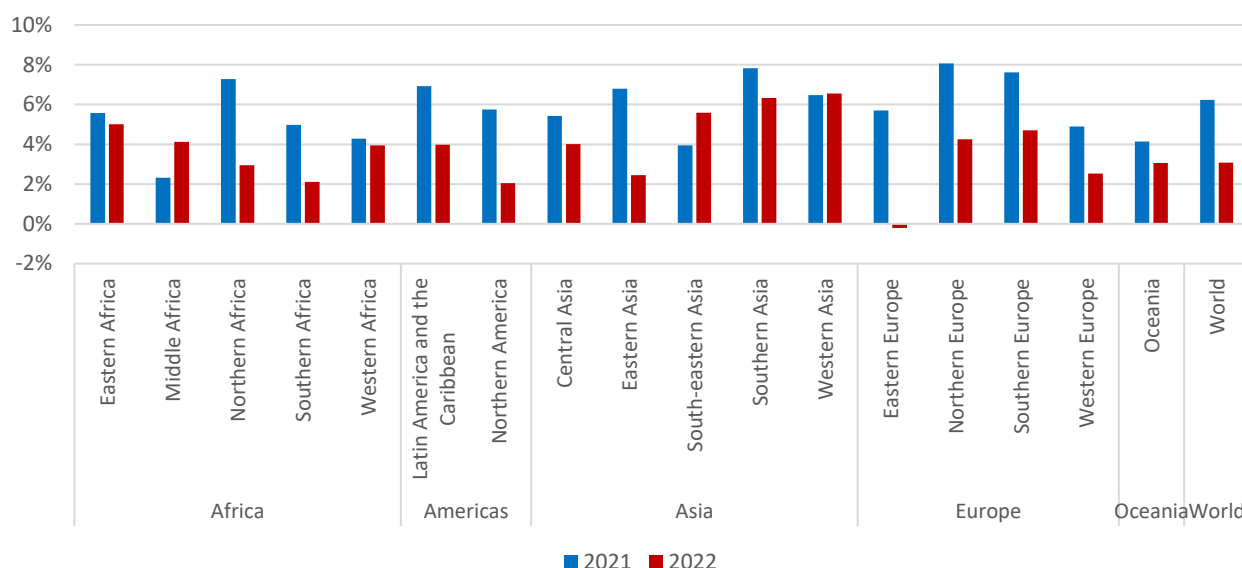
Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Table 1: Average annual growth rate of GDP (percent)

	1973–1982	1983–1992	1993–2002	2003–2012	2013–2022	1973–2022
Africa	3.4	2.4	3.3	5.2	3.0	3.4
Americas	2.9	3.2	3.2	2.3	1.9	2.7
Asia	4.4	5.4	4.1	5.9	4.3	4.8
Europe	2.8	2.2	2.1	1.5	1.6	2.0
Oceania	2.3	3.1	3.8	3.0	2.5	2.9
World	3.1	3.2	3.1	3.2	2.7	3.1

Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Figure 2: Regional growth rate of GDP

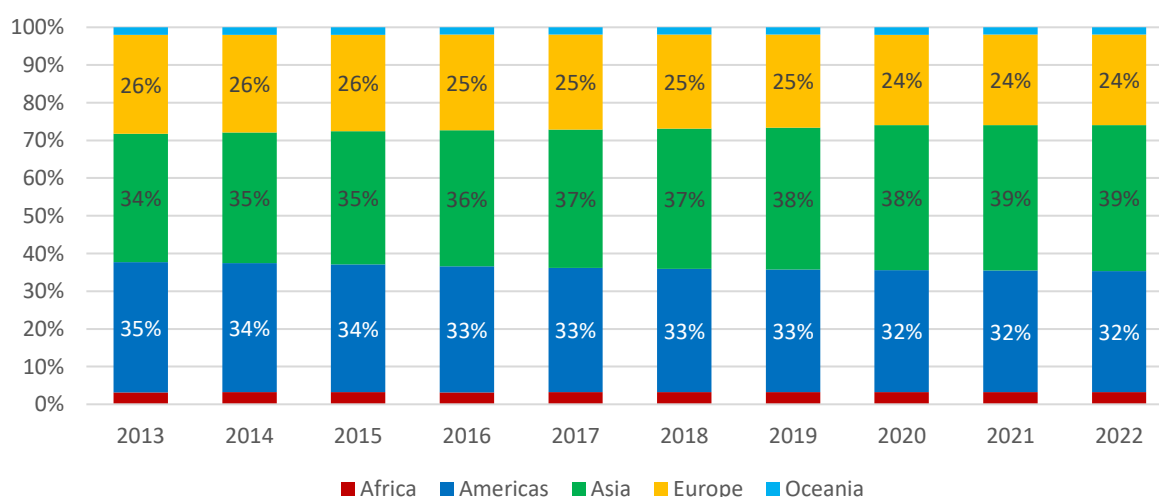


Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

During the last decade, Asia's contribution to global GDP increased from 34 percent in 2013 to 39 percent in 2022, with Eastern Asia (which includes China, Japan and the Republic of Korea) accounting for 26 percent of global GDP in 2022. During the same period, Europe's share in global GDP shrank from 26 percent to 24 percent, and the America's share decreased from 35 percent to 32 percent. The contributions of Africa and Oceania to global GDP remained stable at around 3 percent and 2 percent, respectively (Figure 3).

Figure 3: GDP by region



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Global GDP per capita increased by 15.4 percent over the last decade, from USD 9 753 in 2013 to USD 11 255 in 2022. Asia experienced the largest increase (33.7 percent), followed by Europe (15.3 percent), the Americas (9.7 percent), Oceania (8.1 percent) and Africa (2.7 percent) (Table 2).

Table 2: Global and regional GDP per capita (USD 2015)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Africa	1 966	1 994	2 009	1 997	2 017	2 033	2 036	1 940	1 996	2 018
Americas	25 265	25 568	25 872	25 906	26 225	26 638	26 915	25 820	27 214	27 719
Asia	5 520	5 732	5 959	6 200	6 450	6 693	6 882	6 764	7 164	7 381
Europe	25 013	25 421	25 856	26 284	26 947	27 463	27 922	26 269	27 961	28 852
Oceania	35 895	36 174	36 631	36 920	37 407	37 631	37 024	37 055	38 100	38 789
World	9 753	9 933	10 123	10 280	10 509	10 727	10 882	10 455	11 010	11 255

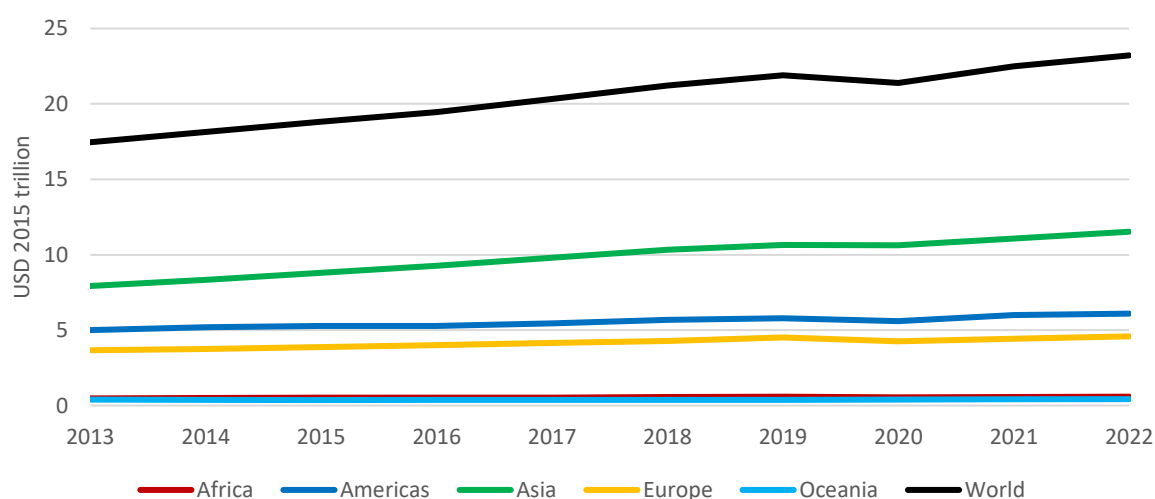
Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

INVESTMENT DRIVES GDP GROWTH

Investment in capital, measured by the gross fixed capital formation (GFCF), was a key driver of GDP growth globally. Over the last decade, GFCF went up by 33.0 percent from USD 17.5 trillion in 2013 to USD 23.2 trillion in 2022. Because of the COVID-19 pandemic, the GFCF dropped by 2.3 percent from USD 21.9 trillion in 2019 to USD 21.4 trillion in 2020 before bouncing back by 5.2 percent in 2021, with the highest increases observed in Middle Africa (30.9 percent), Latin America and the Caribbean (16.1 percent), Southern Asia (12.8 percent) and Southern Europe (12.7 percent). The growth of global GFCF was 3.2 in 2022, led by Western Asia (14.0 percent) and Southern Asia (8.7 percent) (Figures 4 and 5).

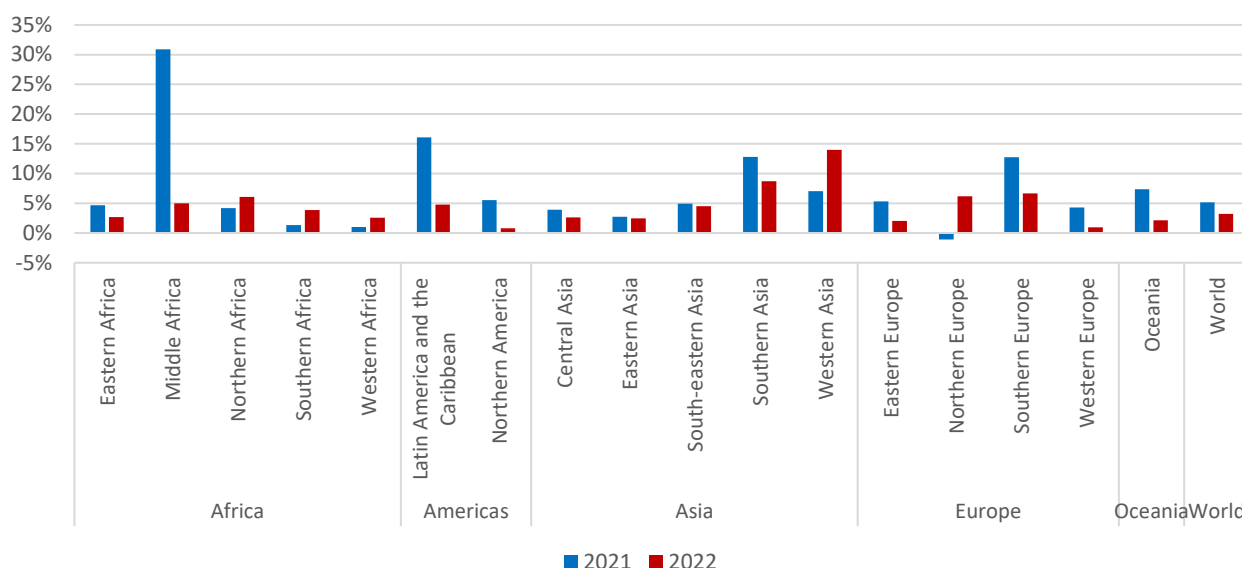
Figure 4: Global and regional gross fixed capital formation



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Figure 5: Regional growth rate of gross fixed capital formation

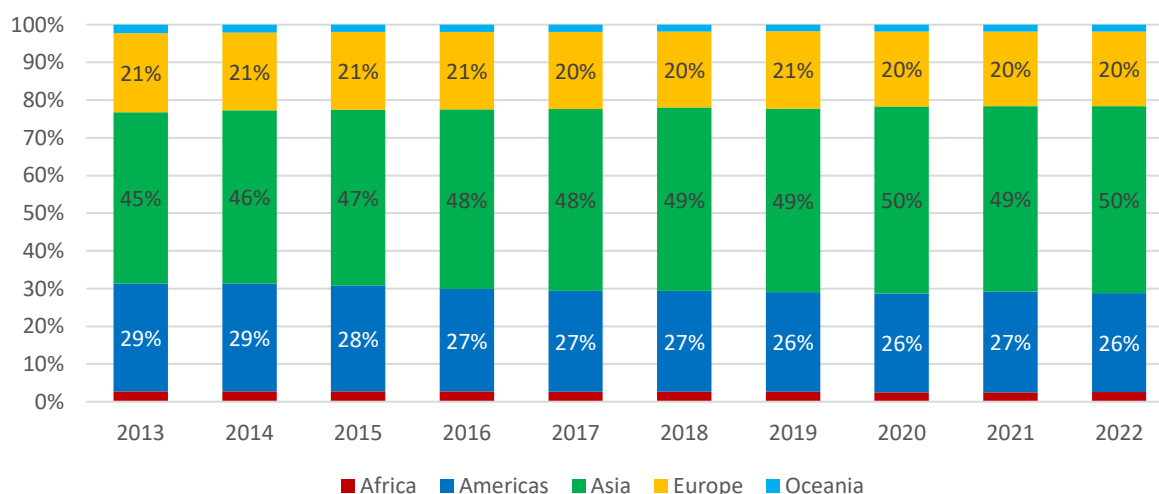


Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Over the last decade, Asia presented the highest increase in investment (45.4 percent from USD 7.9 trillion in 2013 to USD 11.5 trillion in 2022), thus increasing the region's share in global investment from 45 percent to 50 percent. The share of all the other regions in the world decreased during the same period (Figure 6).

Figure 6: Gross fixed capital formation by region



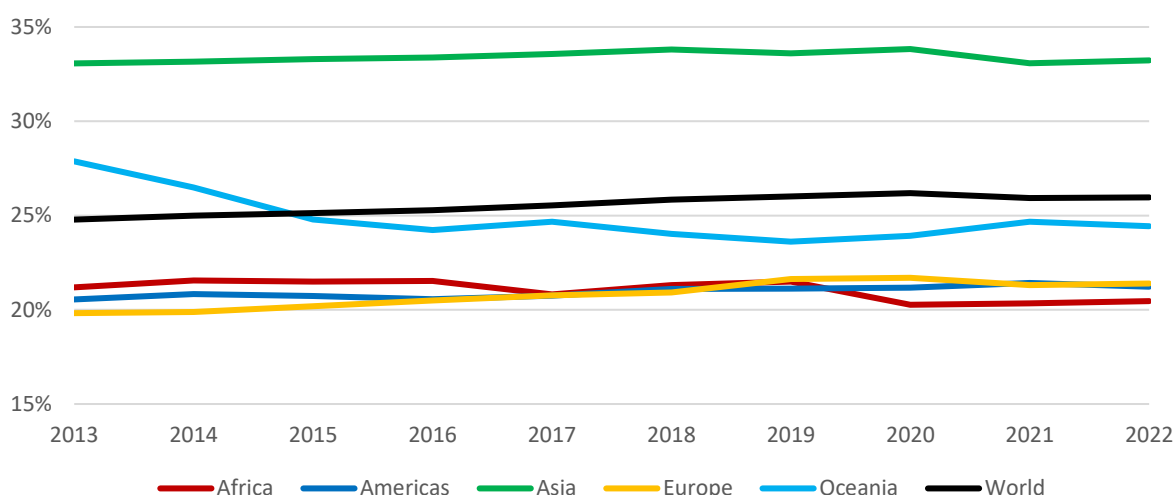
Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

The global investment ratio, defined as the gross fixed capital formation share of GDP, grew steadily during the last decade from 24.8 percent in 2013 to 26.0 percent in 2022 (Figure 7). The average investment ratio between 2013 and 2022 was the lowest in Europe (20.8 percent), followed by the

Americas (20.9 percent), Africa (21.0 percent) and Oceania (24.9 percent), while Asia showed the highest investment ratio (33.4 percent). Overall, Asia enjoyed the highest growth rate of GFCF (5.4 percent on average between 1973 and 2022) and Europe had the lowest (1.6 percent). Africa, Asia and Oceania experienced a large decrease during the 2013–2022 decade compared to 2003–2012 (Table 3).

Figure 7: Investment ratio (GFCF share of GDP)



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Table 3: Average annual growth rate of GFCF (percent)

	1973–1982	1983–1992	1993–2002	2003–2012	2013–2022	1973–2022
Africa	5.9	-2.2	3.1	6.5	2.5	3.2
Americas	2.9	3.0	4.6	2.8	2.3	3.1
Asia	4.8	6.1	3.6	7.9	4.5	5.4
Europe	1.4	1.4	1.6	1.4	2.2	1.6
Oceania	2.9	3.1	6.3	5.5	0.9	3.7
World	2.7	3.0	3.2	4.5	3.3	3.3

Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

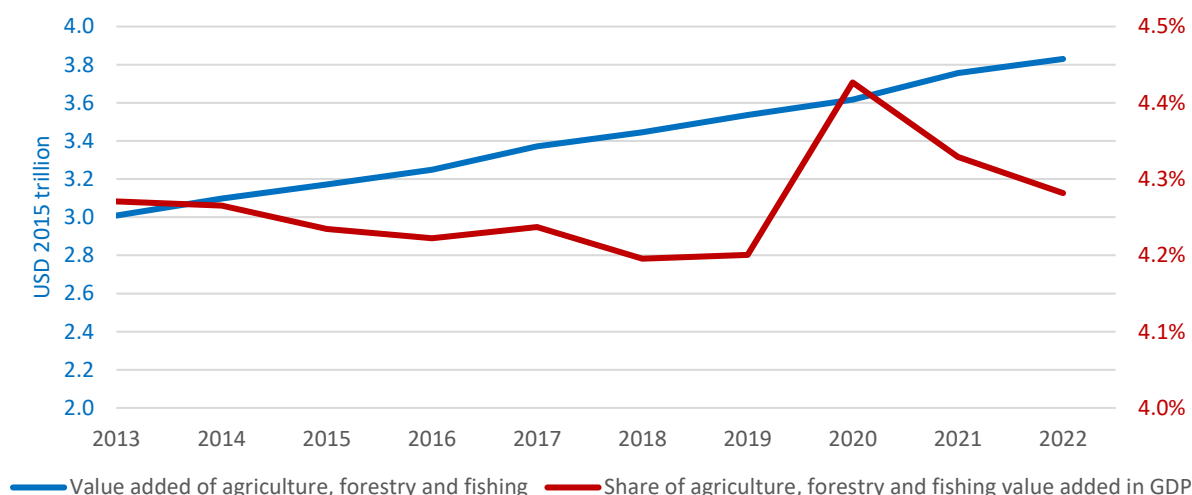
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

SHARE OF AGRICULTURE VALUE ADDED IN GDP

The global agriculture value added increased steadily by 2.9 percent each year on average from USD 3.0 trillion in 2013 to USD 3.8 trillion in 2022; it kept increasing despite the COVID-19 pandemic in 2020. The fluctuations of the sector's contribution to global GDP are largely dependent on the performance of non-agricultural activities while agriculture was relatively more stable in most cases. The relative decline until 2019 was due to a faster growth of non-agricultural activities than the agriculture sector, while the spike in 2020, due to the COVID-19 pandemic, occurred as the value added of the industry and services sector fell as that of agriculture kept increasing. The share of agricultural value

added in GDP resumed its declining trend after 2020, to 4.3 percent in 2022 – still above the pre-pandemic level (Figure 8).

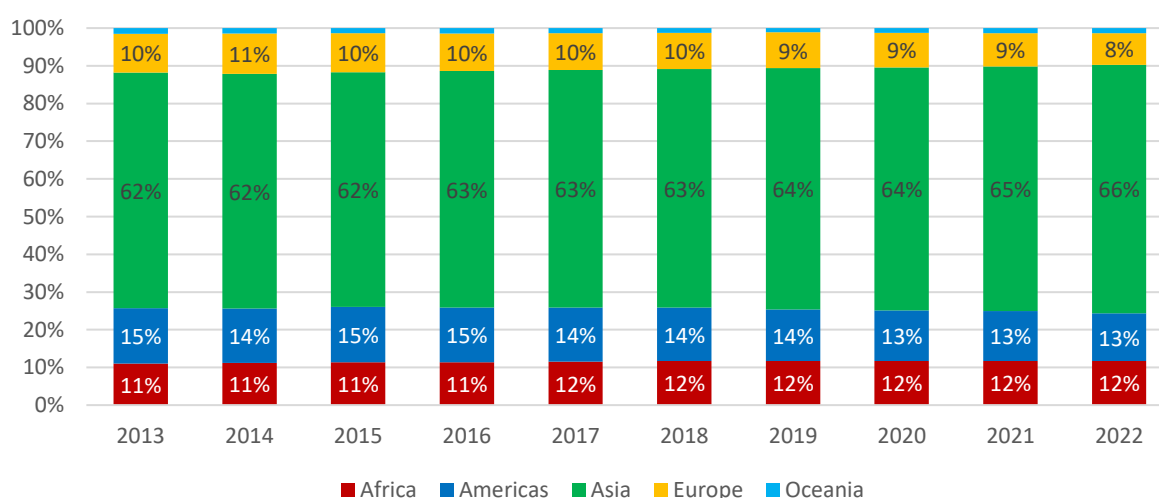
Figure 8: Global agriculture value added and share of GDP



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

During the last decade, Asia was the main contributor to the global value added of agriculture, largely because of its geographical size. It accounted for 62 percent of the global value added of agriculture in 2013 and 66 percent in 2022, driven by the contribution of Eastern Asia (35 percent in 2022) and Southern Asia (17 percent in 2022). In contrast, the share of the Americas and Europe declined from 15 percent to 13 percent and from 10 percent to 8 percent, respectively, between 2013 and 2022. Changes in the contributions of other regions during the same period were more limited: from 11 percent to 12 percent for Africa and from 1.5 percent to 1.4 percent for Oceania (Figure 9).

Figure 9: Global agriculture value added by region

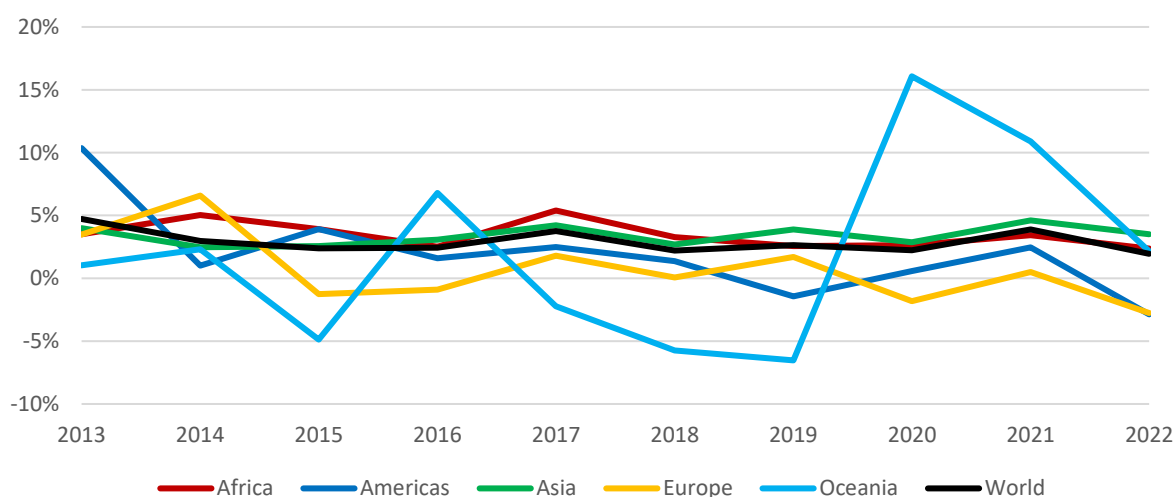


Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

The global agriculture value added grew on average by 2.9 percent between 2013 and 2022. It grew the fastest in Africa and Asia (3.5 percent and 3.4 percent respectively) and the slowest in Europe (0.7 percent). The annual growth rates of Americas and Oceania were in the middle: 1.9 percent and 2.0 percent, respectively. Overall, Asia and Africa enjoyed the highest growth rate of 3.3 percent on average between 1973 and 2022, followed by Oceania (2.6 percent), the Americas (2.3 percent) and Europe (0.9 percent).

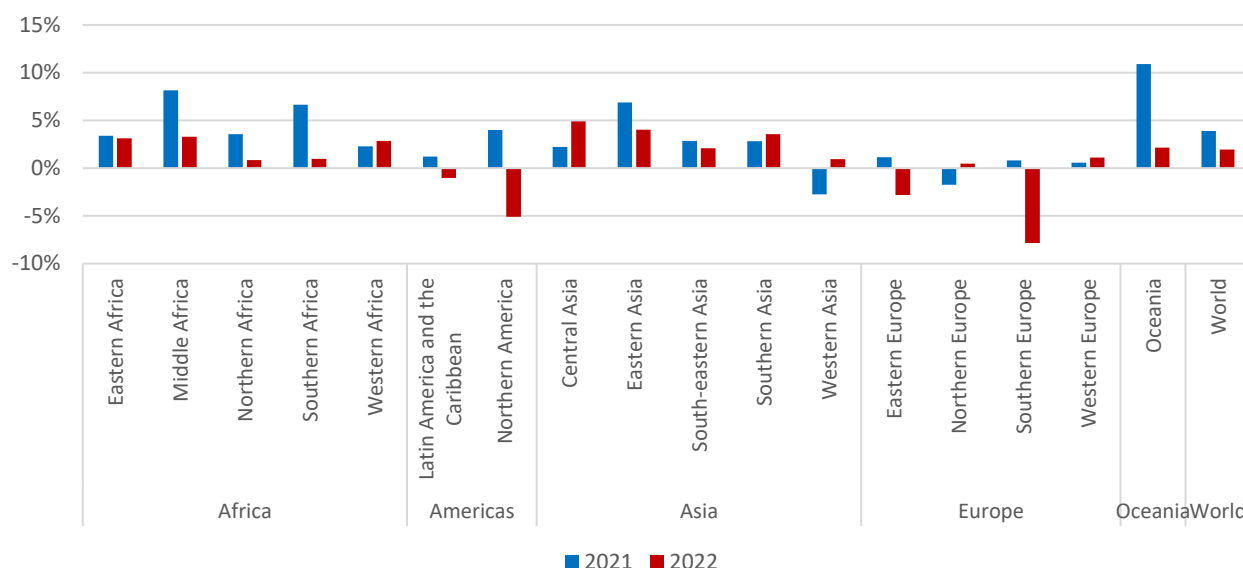
While Africa and Asia enjoyed comparatively stable growth rates over the 2013–2022 decade, the Americas, Europe and Oceania had large interannual variations. In the Americas, the growth rate decreased from 10.4 percent in 2013 to –2.9 percent in 2022, reaching an average of 1.9 percent over the decade. Europe followed the same overall decreasing trend, from 3.5 percent in 2013 to –2.8 percent in 2022, with an average growth rate of 0.7 percent during the decade. In Oceania, the growth rate of agricultural value added seesawed over the decade, ranging between –6.5 percent in 2019 and 16.1 percent in 2020, reaching an average of 2.0 percent. The decrease in agricultural value added in the Americas in 2022 is mostly due to the decrease in the United States of America (–7.4 percent). Two main factors drove the decline of agricultural value added in Europe in 2022: the war in Ukraine, which affected countries in Eastern Europe (–2.8 percent), and the severe drought that hit Spain (–19.8 percent), reducing its production and, therefore, agricultural value added. Oceania's extreme fluctuations are mostly due to the situation in Australia (which accounts for around two-thirds of the region's agricultural value added): extreme weather conditions such as floods and droughts have become more frequent in the past decade and significantly affected harvests in the country (Figures 10 and 11, and Table 4).

Figure 10: Agriculture value added growth rate by region



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Figure 11: Regional growth rate of agriculture value added



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Table 4: Average annual growth rate of agriculture value added

	1973–1982	1983–1992	1993–2002	2003–2012	2013–2022	1973–2022
Africa	0.9	2.8	4.4	4.8	3.5	3.3
Americas	2.5	2.4	2.5	1.9	1.9	2.3
Asia	2.8	3.8	2.6	3.7	3.4	3.3
Europe	2.9	0.4	0.1	0.4	0.7	0.9
Oceania	1.2	4.0	2.4	3.7	2.0	2.6
World	2.6	2.8	2.3	3.1	2.9	2.7

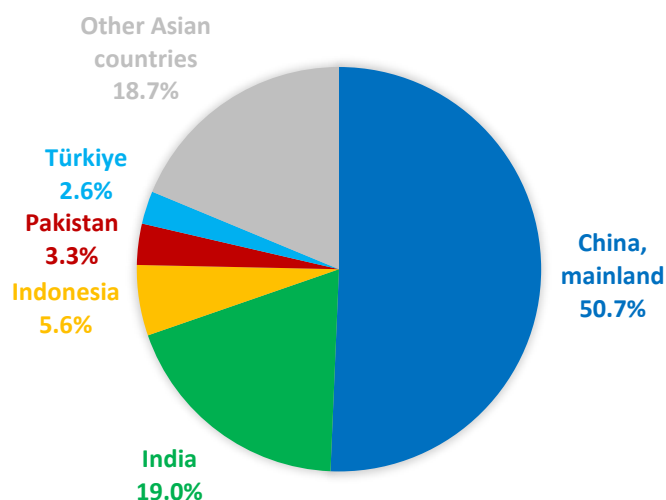
Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].

<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

A CLOSER LOOK AT AGRICULTURAL VALUE ADDED IN ASIA

China, mainland was by far the largest agricultural economy of Asia in 2022 accounting for more than half of the region's agriculture value added followed by India (19.0 percent), Indonesia (5.6 percent), Pakistan (3.3 percent) and Türkiye (2.6 percent). The rest of Asian countries account for the remaining 18.7 percent (Figure 12).

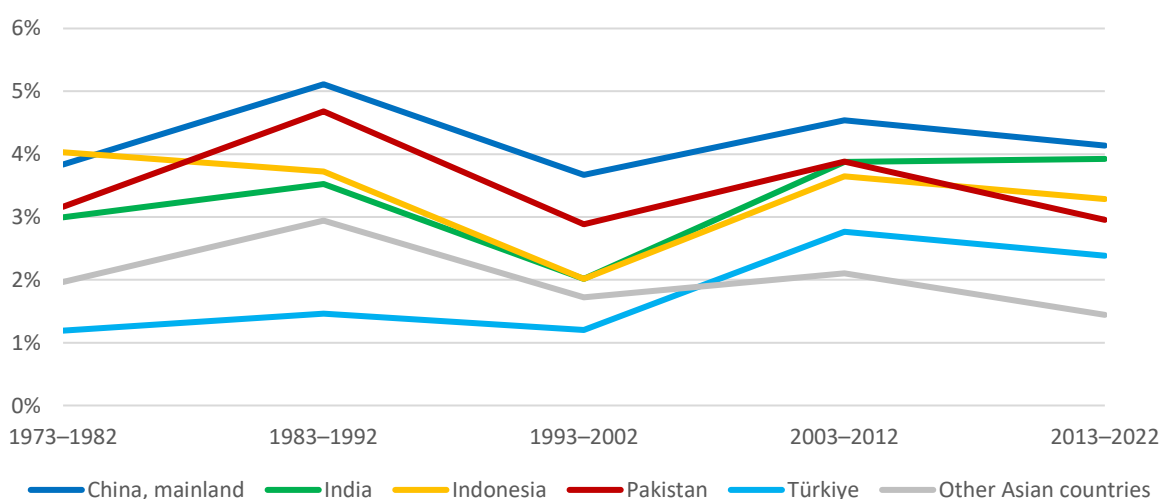
Figure 12: Share of agriculture value added in Asia by country, 2022



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

Figure 13 shows the growth rates of agriculture value added for the Asian countries mentioned above broken down by decade. During the most recent decade (2013–2022), China, mainland had the highest annual average growth rate of agriculture value added (4.1 percent) followed by India (3.9 percent) Indonesia (3.3 percent), Pakistan (3.0 percent) and Türkiye (2.4 percent); the other Asian countries had the lowest average growth rate (1.4 percent). China, mainland has the fastest growth of agriculture value added for most of the period with a notable acceleration during the 1983–1992 decade with an average of 5.1 percent (Figure 13).

Figure 13: Average annual growth rate of agriculture value added in Asia by country



Source: FAO. 2024. FAOSTAT: Macro Indicators. [Accessed June 2024].
<http://www.fao.org/faostat/en/#data/MK>. Licence: CC-BY-4.0.

EXPLANATORY NOTES

- > Gross domestic product (GDP) is the most frequently quoted indicator of economic performance, is a comprehensive measure of economic growth, as it measures the total value added generated within an economy over a specific time period. Value added is calculated as output less intermediate consumption. In this brief, the agriculture sector includes agriculture, forestry and fishing.
- > To adjust for inflation, this brief analyses macro indicators at constant prices of 2015 in US dollars. Deflation is based on the GDP deflator, the GFCF deflator, the value added deflator of Agriculture, forestry and fishing and the value-added deflator of Manufacturing derived from the United Nations Statistics Division (UNSD) National Accounts Analysis of Main Aggregates database (UNSD AMA). Deflators are obtained by dividing the time series in current prices by the series in constant 2015 prices (base year) and multiplying by 100. These deflators are reported in FAOSTAT.
- > Gross domestic product per capita in US dollars is an important economic indicator that enables cross-country comparisons, particularly in the context of economic development, as it takes into account differences in population size and growth, and can signal the extent to which economic growth reflects productivity increases.
- > Investment in physical capital is measured by the gross fixed capital formation, which captures the net additions (acquisitions less disposals) to the stock of fixed capital assets such as machinery, transport equipment, infrastructure and buildings within an economy. It is a useful indicator to identify and monitor developments in investment trends over time, particularly as capital accumulation increases the overall productive capacity of an economy, making large-scale production possible and promoting a greater degree of specialization.
- > The FAOSTAT Macro Indicators database provides macroeconomic indicators at the country and regional levels relating to total economy; agriculture, forestry and fishing; manufacturing; agriculture sub-industry (agriculture) and manufacturing sub-industry (food and beverages products; tobacco products; food, beverages and tobacco products). It releases time series for a selection of national accounts variables, including gross domestic product, gross fixed capital formation, value added of agriculture forestry and fishing and of manufacturing, gross national income, value added and gross output of agriculture sub-industry. The database also proposes additional indicators such as gross domestic product per capita, gross national income per capita, and year-on-year growth rates and shares of industries' contribution to gross domestic product.
- > Data are available in both national currency and in US dollars, in current prices and in constant 2015 prices. The breakdown of economic activities follows the International Standard Industrial Classification of All Economic Activities (ISIC).
- > The territorial coverage consists of 218 countries and territories, including former countries. The Food and Agriculture Organization of the United Nations (FAO) compiles aggregate values at the regional and global levels. The time coverage is annual from 1970 to 2022.
- > All data relating to total economy, agriculture, forestry and fishing, and total manufacturing originates from the UNSD-AMA database, which consists of a complete and consistent set of time series of the main national accounts aggregates of all United Nations member states and other territories in the world for which national accounts information is available. Series relating to the

agriculture sub-industry are obtained from the national accounts official country data in UNdata, while series on the manufacturing sub-industry (food and beverages; tobacco products; food, beverages and tobacco products) originate from the United Nations Industrial Development Organization (UNIDO) INDSTAT2 databases.

- > The regional aggregates are calculated by the Social and Economic Statistics Team in the FAO Statistics Division.

Data are released at the end of the first quarter of each year.

This analytical brief was prepared by Eun Jeong Lee and Naglaa Elsodany under the supervision of Veronica Boero, leader of the Social and Economic Statistics Team, FAO Statistics Division.

Required citation: FAO. 2024. *Gross domestic product and agriculture value added 2013–2022 – Global and regional trends*. FAOSTAT Analytical Briefs, No. 85. Rome. <https://doi.org/10.4060/cd0763en>

Cover photo: © FAO/Anatolii Stepanov

CONTACTS

Statistics – Economic and Social Development

FAO-Statistics@fao.org

<https://www.fao.org/about/who-we-are/departments/statistics-division>

Food and Agriculture Organization of the United Nations

Rome, Italy

© FAO, 2024



Some rights reserved. This work is available under a CC BY-NC-SA 3.0 IGO licence