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Government expenditures in agriculture 2001–2021

Global and regional trends

HIGHLIGHTS

- Over the last two decades, the global share of agriculture in government expenditure fluctuated between 1.4 and 2.2 percent with a noticeable shift in trend during the 2007–2008 food price crisis and the COVID-19 pandemic.
- In line with the overall trend of increasing total government expenditure, the magnitude of agriculture spending increased over time, yet its overall share in the total declined significantly in 2020 and 2021.
- Asia recorded the highest percentage of government expenditure allocated to agriculture (5.4 percent in 2021 compared with 3.3 percent in 2001), with Eastern Asia and South-eastern Asia driving the increase.
- During the COVID-19 pandemic years of 2020 and 2021, the countries with the highest share of agriculture in government expenditure were Mali (13.8 percent), Bhutan (12.3 percent) and Zimbabwe (12.2 percent).
- The global agriculture orientation index (AOI) showed an increasing trend from 0.52 in 2001 reaching its peak to 0.54 in 2019. In 2020 and 2021, the AOI pulled back to 0.44.

* The term “agriculture” includes forestry and fishing.

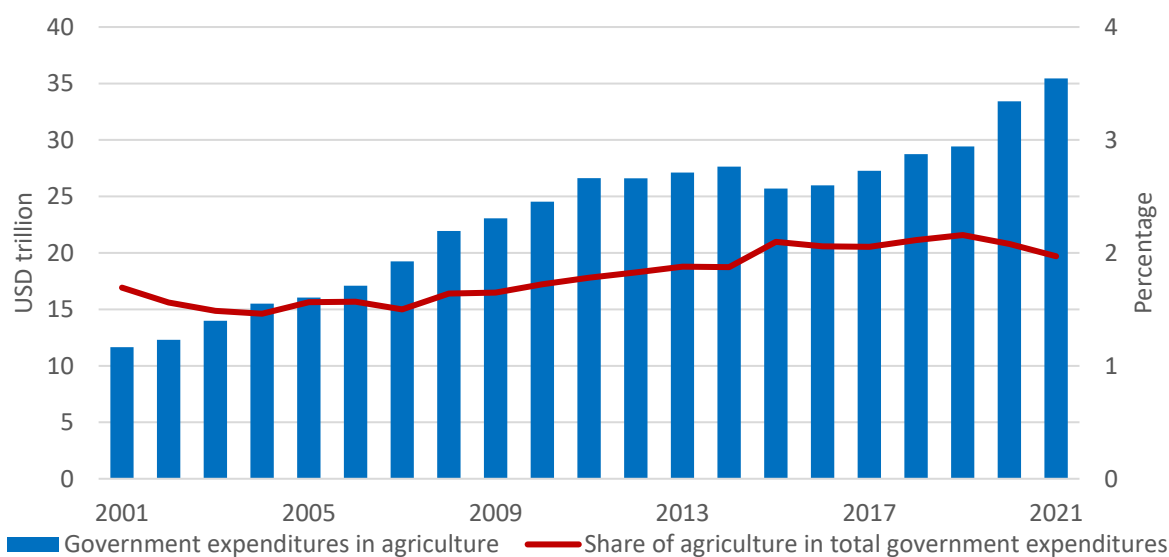
** The term “government” mentions the highest level of government for which data are available: if general government expenditure figures are available for a given country, these would be used in the calculation, whereas countries that only report on central government expenditures will continue to use central government figures only.

FAOSTAT GOVERNMENT EXPENDITURE IN AGRICULTURE

GLOBAL

Between 2001 and 2021, total government expenditures showed an increasing trend, from USD 11 trillion in 2001 to an all-time high of USD 35 trillion in 2021 (Figure 1), driven mostly by the COVID-19 pandemic response and the unprecedented scale of fiscal stimulus packages implemented by countries. Throughout the period, government expenditures represented between 35 and 40 percent of the global gross domestic product (GDP). While governments employed a mixture of policy and fiscal measures to cushion the impacts of the pandemic (IMF, 2021), the overall share of agriculture spending fell in most countries, with other sectors getting a higher share of expenditures compared to agriculture.

Figure 1: Total government expenditures and share of agriculture



Note: The number of countries with data available may vary over time. Global estimates include imputed data.

Source: FAO. 2022. FAOSTAT: Government Expenditure. In: FAO. Rome. Cited December 2022. <http://www.fao.org/faostat/en/#data/IG>

The agriculture sector is only one of the expenditure categories among the various functions of government. Between 2001 and 2021, governments spent 1.5–2.2 percent of their total expenditures on agriculture while the sector contributed 3.1–4.5 percent of the global GDP during the same period. The share of agriculture in government expenditures reached its peak in 2019 at 2.16 percent and eventually dropped to 2.08 percent in 2020 and 1.97 percent in 2021 (see Figure 1). Two major events that shifted the trends of agriculture sector spending are the 2007–2008 food price crisis and the COVID-19 pandemic. Between 2005 and 2007, the share of agriculture spending declined to 1.5 percent; it improved during the food price crisis from 1.64 percent in 2008 to as high as 2.10 percent in 2015. The high food prices observed during the period encouraged countries to spend more on agriculture aimed at supporting small producers to increase agricultural production (FAO, 2009). From 2015 onwards, government spending on agriculture remained above 2 percent of the total until the COVID-19 pandemic hit, resulting in agriculture spending pulled back to 1.97 percent of the total in 2021. In absolute terms, government expenditures in agriculture increased by more than 250 percent from USD 197 billion in 2001 to almost USD 700 billion in 2021. Measured in terms of the contribution of agriculture to GDP, the 2001 and 2021 spending is roughly equivalent to 18 percent and 19 percent of the agriculture value added, respectively.

REGIONAL

Asia is the main driver of the global public expenditures in agriculture. Between 2011 and 2021, Asia accounted for 73 percent of the global agricultural expenditure while its share to the global total expenditure was only 27 percent. Europe and the Americas contributed 35 percent and 34 percent, respectively, to the global total expenditure, compared to around 12 percent each to the global agricultural expenditure. Africa, and Oceania contributed 2.1 percent and 0.8 percent, respectively, to the global agricultural spending.

In 2021, Asia allocated 5.35 percent of its government expenditure to agriculture, driven primarily by China, while this allocation was 2.3 percent for Africa, 0.62 percent for the Americas, 0.64 percent for Europe, and 0.65 percent for Oceania (Table 1).

Among subregions, Eastern Asia, Southern Asia, Central, South-eastern Asia, Southern Europe, Eastern Europe and Western Europe continue to register increasing spending on the agriculture in absolute and relative terms, but the rate of increase was marginal – especially during the COVID-19 pandemic years. Other subregions show a declining trend in agriculture spending in absolute terms. Other factors that led to a declining agriculture spending in dollars terms include exchange rate conversion where local currencies are weaker relative to the US dollars, hence spending measured in dollars terms went down.

Table 1: Share of agriculture in government expenditures by region (percent)

<i>Region</i>	<i>2001</i>	<i>2011</i>	<i>2021</i>
World	1.69	1.78	1.97
Africa	3.07	2.69	2.27
Eastern Africa	4.51	6.78	2.76
Northern Africa	3.54	2.82	2.41
Middle Africa	1.80	1.50	1.35
Southern Africa	1.96	1.80	1.51
Western Africa	3.63	2.90	3.03
Americas	1.20	0.74	0.62
Caribbean	3.91	2.18	3.96
Central America	3.36	3.27	1.10
Northern America	1.03	0.50	0.54
South America	2.22	1.42	0.98
Asia	3.27	4.66	5.35
Central Asia	4.71	4.49	3.81
Eastern Asia	3.10	4.99	6.13
Southern Asia	6.42	6.90	5.95
South-eastern Asia	3.11	2.62	3.34
Western Asia	1.77	1.65	1.10
Europe	1.05	0.83	0.64
Eastern Europe	2.12	1.75	1.36
Northern Europe	1.04	0.63	0.54
Southern Europe	1.31	0.83	0.63
Western Europe	0.80	0.65	0.49
Oceania	1.50	1.05	0.65
Australia and New Zealand	1.49	1.04	0.63
Oceania excluding Australia and New Zealand	2.45	1.71	1.28

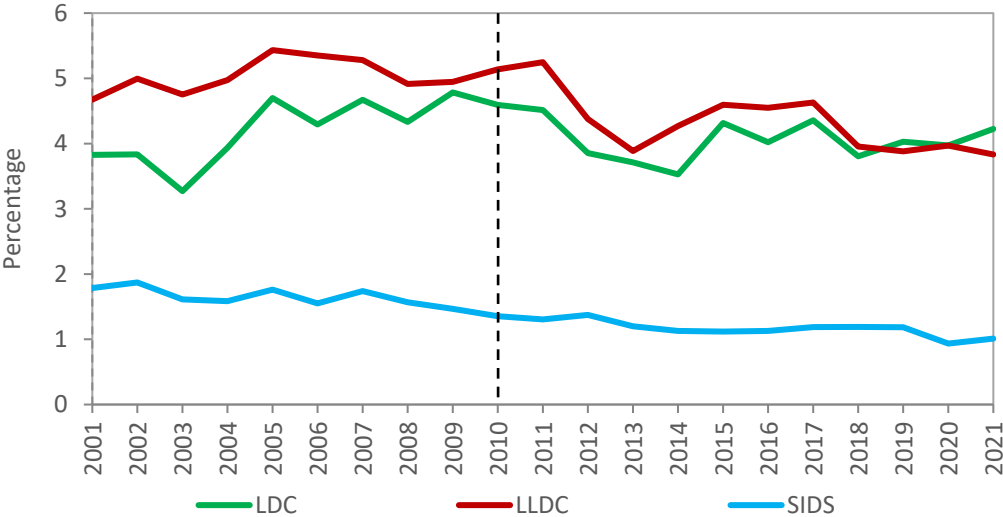
Note: The number of countries with data available may vary over time. Global and regional estimates include imputed data.

Source: FAO. 2022. FAOSTAT: Government Expenditure. In: FAO. Rome. Cited December 2022. <http://www.fao.org/faostat/en/#data/IG>

In least developed countries (LDCs) and landlocked developing countries (LLDCs), the average of the share of agriculture in government expenditures was 4.1 percent and 4.6 percent, respectively, much higher than the world average of 1.8 percent. Countries in these regions are among those with the highest share of agriculture spending. For Small Island Developing States (SIDS), the average of the share of agriculture in government expenditures during the same period was 1.8 percent, comparable to the global average (Figure 2).

Countries in the LDCs, LLDCs and SIDS groups face structural impediments to sustainable development, and face a host of challenges, making them specifically vulnerable to crisis (United Nations, 2022). For instance, the 2019–2022 locust infestations in the Horn of Africa and the COVID-19 pandemic threatened the food security in vulnerable countries by disrupting food supply and agriculture production. Between 2010 and 2021, the share of agriculture spending in LLDCs declined from 5.1 percent to 3.8 percent. A similar trend is observed in LDCs, where agriculture spending declined from its 4.8 percent peak in 2009 to 3.5 percent in 2014 and eventually improved to 4.2 percent in 2021. The share of agricultural spending in the SIDS region continued to fall 1.35 percent in 2010 to 1.0 percent in 2021.

Figure 2: Share of agriculture in government expenditure in selected regions



Note: The number of countries with data available may vary over time. Data for Cuba (available from 2015 onwards) were not included in the SIDS aggregate. Regional estimates include imputed data.

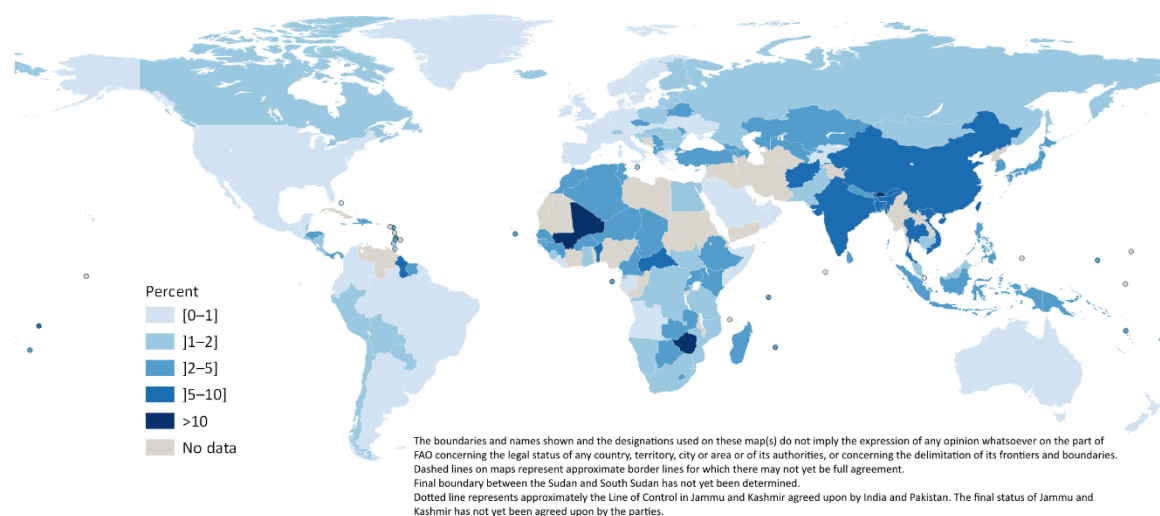
Source: FAO. 2022. FAOSTAT: Government Expenditure. In: FAO. Rome. Cited December 2022. <http://www.fao.org/faostat/en/#data/IG>

COUNTRY

At the country level, several factors (such as government priority, the size and contribution of agriculture to the economy, external support to agriculture, and commitments to promote agriculture) influence the allocation to the agriculture sector. In 2003, African states endorsed the Maputo Declaration on Agriculture and Food Security, under which they committed to allocate 10 percent of their expenditures to agriculture and rural development. Almost 20 years after, most African countries are yet to achieve their commitment, though some countries have already met this objective (ReSAKSS, 2021). As shown in Table 1, the regional allocation to agriculture in Africa is still well below the 10 percent target.

Figure 3 shows that, among countries with the highest share of agriculture in government expenditure in 2020–2021, many belong to the least developed countries (LDCs) and landlocked developing countries (LLDCs) categories. The top countries are Mali (13.8 percent), Bhutan (12.3 percent), Zimbabwe (12.2 percent), Afghanistan (10 percent), Benin (9.5 percent), China (9.4 percent), India (7.2 percent), Guyana (7 percent), Bangladesh (6.4 percent) and Samoa (6.3 percent). Six out of the top 10 countries are LDCs, four of which are from Africa and two from Asia. The remaining countries are from Asia (3), Africa (1), and South America (1). As countries were affected by the COVID-19 pandemic, the share of agriculture in government expenditure declined between 2020 and 2021.

Figure 3: Share of agriculture in government expenditure, 2020–2021 average



Note: The number of countries with data available may vary over time. May include imputed data.

Source: FAO. 2022. FAOSTAT: Government Expenditure. In: FAO. Rome. Cited December 2022. <http://www.fao.org/faostat/en/#data/IG> based on UN Geospatial. 2020. Map geodata [shapefiles]. New York, USA, UN.

THE AGRICULTURE ORIENTATION INDEX FOR GOVERNMENT EXPENDITURES

The agriculture orientation index (AOI) is one of the measures of the extent to which government expenditures in agriculture reflect (or not) the importance of agriculture in the overall mix of government outlays. The AOI, which is used to track Sustainable Development Goal (SDG) indicator 2.a.1, measures the government contribution to the agriculture sector compared to the sector’s contribution to GDP.

Table 2 shows that there was no improvement in the AOI in most of the SDG regions and subregions between 2011 and 2021. Over the period, the global AOI showed a declining trend from 0.52 in 2001 to 0.44 in 2011 then started to pick up again from 2015 (0.50) onward and reached its peak in 2019 at 0.54. From 2020 onward, the global AOI receded to 0.44 in 2021, partly due to the COVID-19 pandemic response as governments allocated more resource and higher expenditures to non-agricultural activities such as social spending (health, education and social protection).

Among SDG regions, the AOI decreased in sub-Saharan Africa, Northern Africa and Western Asia, Central and Southern Asia, Latin America and the Caribbean, while it remained stable at around 0.46 in

Europe and Northern America. The only region that increased the AOI between 2011 and 2021 is Eastern and South-Eastern Asia (from 0.76 to 0.89), driven primarily by China.

Among SDG subregions, the Caribbean (from 0.38 to 0.70), South-Eastern Asia (0.21 to 0.32), Eastern Asia (from 0.92 to 1.01), and Northern America (from 0.41 to 0.62) all reported an increasing AOI. Northern America reported an improvement in the AOI in 2020 and 2021 due to a spike in government expenditures in the United States of America. SDG subregions with a declining AOI include Northern Africa, Central Asia, Southern Asia, Central America, and South America. Major economies in Latin America such as Argentina, Brazil and Mexico all reported declining agricultural spending, hence the decrease in AOI for those countries.

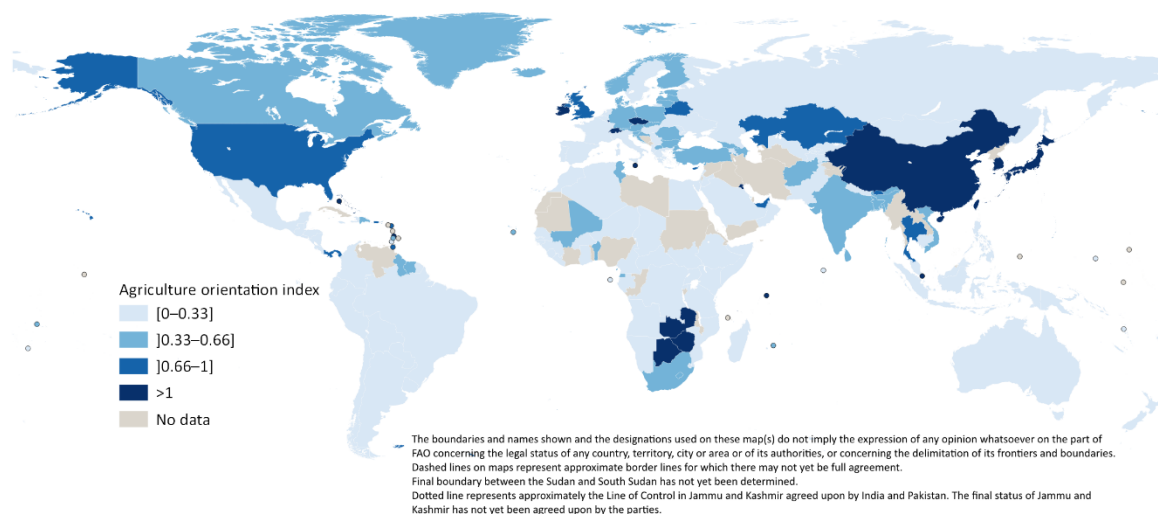
Table 2: Agriculture orientation index by SDG region

<i>Region</i>	<i>2001</i>	<i>2011</i>	<i>2021</i>
World	0.52	0.44	0.44
Sub-Saharan Africa	0.17	0.18	0.12
Northern Africa and Western Asia	0.32	0.32	0.25
Northern Africa	0.31	0.25	0.19
Western Asia	0.32	0.36	0.33
Central and Southern Asia	0.32	0.46	0.36
Central Asia	0.21	0.39	0.32
Southern Asia	0.33	0.46	0.36
Eastern and South-Eastern Asia	0.65	0.76	0.89
Eastern Asia	0.74	0.92	1.01
South-Eastern Asia	0.28	0.21	0.32
Latin America and the Caribbean	0.53	0.35	0.21
Caribbean	0.63	0.38	0.70
Central America	0.84	0.87	0.24
South America	0.42	0.27	0.15
Oceania	0.32	0.36	0.22
Australia and New Zealand	0.33	0.39	0.23
Oceania (exc. Australia and New Zealand)	0.13	0.13	0.09
Europe and Northern America	0.69	0.46	0.46
Europe	0.49	0.47	0.37
Northern America	1.09	0.41	0.62
Landlocked developing countries	0.19	0.34	0.21
Least developed countries	0.14	0.22	0.20
Small Island Developing States	0.45	0.41	0.68

Note: The number of countries with data available may vary over time. Global and regional aggregates may include imputed data.

Source: FAO. 2022. FAOSTAT: Government Expenditure. In: FAO. Rome. Cited December 2022. <http://www.fao.org/faostat/en/#data/IG>

Figure 4: Agriculture orientation index, 2020–2021 average



Source: FAO. 2022. FAOSTAT: Government Expenditure. In: FAO. Rome. Cited December 2022. <http://www.fao.org/faostat/en/#data/IG> based on UN Geospatial. 2020. Map geodata [shapefiles]. New York, USA, UN.

EXPLANATORY NOTES

Since 2012 the Food and Agriculture Organization of the United Nations (FAO) collects government expenditure on agriculture (GEA) data through a questionnaire sent annually in May to more than 190 countries. The questionnaire was jointly developed with the International Monetary Fund (IMF), using the Classification of the Functions of Government (COFOG) as outlined in the 2014 Government Finance Statistics Manual. For some countries that do not report the GEA Questionnaire to FAO, data are sourced directly from the IMF Government Finance Statistics database or from official country websites and publications.

Government expenditure in this note refers to expenditure by the highest level of government for which data are available, in other words, if consolidated general government expenditure figures are available for a given country, these would be used in the calculation, whereas for countries that only report central government expenditures the AOI is calculated using central government figures only. Further information will be referred to the technical note on the methodological changes of government expenditure (<http://www.fao.org/faostat/en/#data/IG>). FAO also cautions that the level or definition of government to which expenditures pertain can differ, thus affecting the cross-country comparability of the AOI. Moreover, not all countries report GEA data according to the COFOG. Also, as not all countries report timely data for the most recent years, regional aggregates for the latest years are computed using projected data. These are estimated starting from GDP data – which are more frequently updated, and time series models; particularly the Holt-Winters approach, applied to the share of agricultural expenditure in total expenditure.

“Agriculture” refers to COFOG Group 042, which includes agriculture, forestry, and fishing subsectors, and aligns to Section A and B of the International Standard Industrial Classification (ISIC) Revision 4.

The regional aggregates have been compiled using a combination of the official data sourced from countries and the imputed data for missing values, and following the classifications prescribed for SDG reporting.

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