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Government expenditures in agriculture 2001–2020

Global and regional trends

HIGHLIGHTS

- **The total government expenditures recorded an all-time high in 2020, driven primarily by the COVID-19 pandemic response.**
- **The global share of agriculture in government expenditure has increased to 2.2 percent over the last decade.**
- **Asia recorded the highest percentage of government expenditure allocated to agriculture, with Eastern Asia and Central Asia driving the increase. Africa has shown an increasing trend in agriculture spending in more recent years.**
- **Between 2015 and 2020, the countries with the highest share of agriculture in government expenditure were Malawi (14 percent), Mali (12 percent) and Bhutan (11.6 percent).**
- **The global agriculture orientation index (AOI), or Sustainable Development Goals indicator 2.a.1, showed an increasing trend from 0.46 in 2010 to 0.54 in 2019. In 2020, the AOI pulled back to 0.51 as higher expenditures went to non-agriculture activities, particularly those related to COVID-19 response.**

* The term “agriculture” includes forestry and fishing.

** The term “government” mentions the highest level of government for which data is 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

Total government expenditures recorded an all-time high in 2020, driven by the COVID-19 pandemic response. While governments employed a mixture of policy and fiscal measures to cushion the impacts of the pandemic (IMF, 2021), with considerable variations in the agriculture sector, the overall share of agriculture spending continued to fall in most countries.

Between 2010 and 2020, the global share of agriculture in government expenditure reported by countries showed a steady increase, from 1.73 percent in 2010 to 2.18 percent in 2020. The increase took place in the first half of the decade, while the share remained stable, just above 2 percent, in the past five years. National shares vary widely, ranging between 0.02 percent and 25 percent of total outlays. In absolute terms, this translates to an estimated government spending of USD 423 billion in 2010, increasing to USD 682 billion in 2020. This is roughly equivalent to 17 percent and 19 percent of the global agriculture value added in 2010 and 2020, respectively.

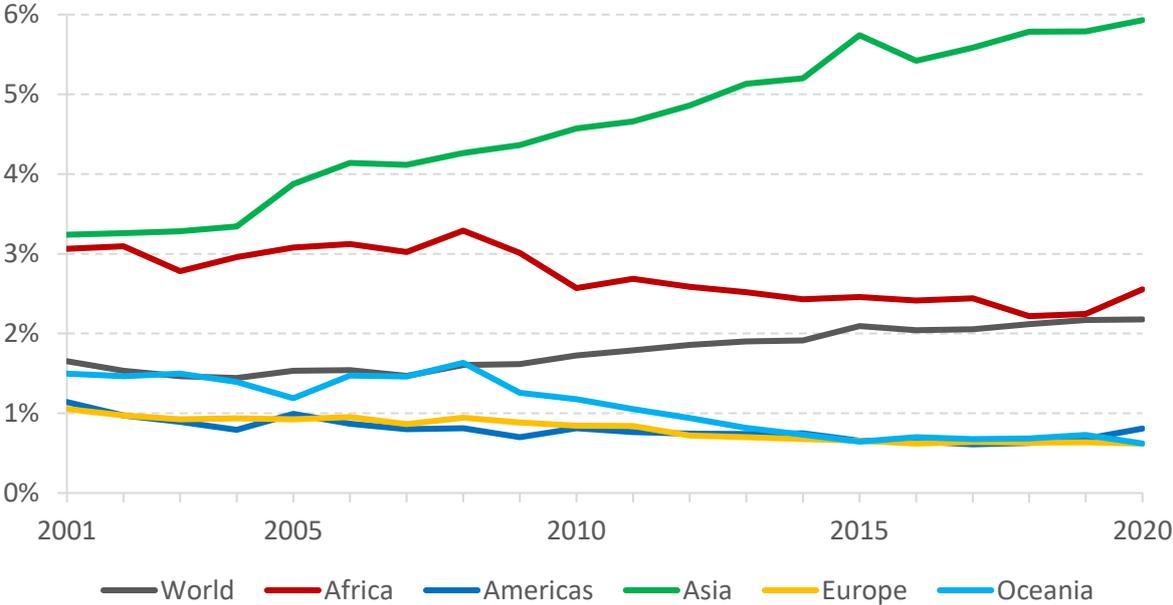
REGION

The observed increases in global expenditures in agriculture between 2010 and 2020 are primarily driven by Asia, while the share of agriculture in total government expenditures has decreased in the other regions (Figure 1). Asia also stands out as the region with the highest share of agriculture in government expenditure throughout the last decade, starting at 3.24 percent in 2001 and ending at 5.93 percent in 2020. The average annual growth rate of the budgetary allocation to the agriculture sector during the last decade reached 7 percent in the region.

Most African countries are signatories of the African Union’s Maputo Declaration of 2003, under which they committed to allocate 10 percent of their expenditures to agriculture and rural development, and the subsequent Malabo Declaration of 2014. Even though some countries have already met this objective (ReSAKSS, 2021), the region as a whole is still well below the 10 percent level. Between 2001 and 2020, the share of agriculture in government expenditures in Africa declined slightly, from 3.06 percent to 2.55 percent, though a noticeable increase was observed from 2018 onward. In absolute terms however, Africa spent USD 4.2 billion on agriculture in 2001 and USD 14 billion in 2020, a threefold increase within the reported period. While the absolute expenditures in agriculture have consistently increased over time, its allocated share is declining relative to government spending in other sectors.

The Americas, Europe and Oceania each allocated 1 to 1.5 percent of their government spending to agriculture in 2001. By 2020, this share dropped to 0.81 (Americas) and 0.62 percent (Europe and Oceania). Most of the decrease occurred between 2001 and 2015, while the subsequent period presented relative stability. While government spending on agriculture is increasing in absolute terms in the Americas, it is declining in Europe and Oceania.

Figure 1: Share of agriculture in government expenditure, by region (percent)



Source: FAO, 2021b.

Among subregions, the share of agriculture in government expenditure went up between 2001 and 2020 in Central Asia, Eastern Asia and South-eastern Asia. Most subregions in Asia are also increasing their

government spending in agriculture in absolute terms. In particular, Eastern Asia and Central Asia propelled the growth in Asia, primarily driven by increasing agricultural expenditures in China and Kazakhstan, respectively (FAO, 2021b).

In many subregions (e.g. Northern Africa, the Caribbean and Western Europe), the absolute amounts of budgetary allocation to agriculture went up, but the share of agriculture declined, as higher government spending was allocated to other sectors. This became evident during the COVID-19 pandemic, as most of the increase in government spending was allocated to sectors such as healthcare or manufacturing. Even though the majority of the subregions showed a declining share of agriculture spending, it does not necessarily mean that the overall support to agriculture went down. The percentage increase in agriculture spending is lower than the percentage increase in total spending, hence driving the declining trend (Table 1).

Table 1: Share of agriculture in government expenditures by region, 2001–2020 (percent)

| <i>Region</i> | <i>2001</i> | <i>2005</i> | <i>2010</i> | <i>2015</i> | <i>2020</i> |
|---|-------------|-------------|-------------|-------------|-------------|
| World | 1.65 | 1.53 | 1.73 | 2.09 | 2.18 |
| Africa | 3.06 | 3.08 | 2.57 | 2.46 | 2.55 |
| Eastern Africa | 4.56 | 6.33 | 6.98 | 4.25 | 3.47 |
| Northern Africa | 3.52 | 3.48 | 2.39 | 2.69 | 2.94 |
| Middle Africa | 1.79 | 1.97 | 1.27 | 0.96 | 0.82 |
| Southern Africa | 1.93 | 1.91 | 1.86 | 1.58 | 1.46 |
| Western Africa | 3.65 | 4.20 | 3.02 | 2.52 | 3.06 |
| Americas | 1.14 | 0.99 | 0.81 | 0.66 | 0.81 |
| Caribbean | 4.01 | 3.07 | 2.05 | 3.60 | 3.83 |
| Central America | 3.36 | 3.32 | 3.42 | 2.40 | 1.05 |
| Northern America | 1.04 | 0.87 | 0.56 | 0.44 | 0.77 |
| South America | 1.45 | 1.54 | 1.64 | 1.33 | 1.11 |
| Asia | 3.24 | 3.88 | 4.57 | 5.74 | 5.93 |
| Central Asia | 2.85 | 3.63 | 3.78 | 4.31 | 3.94 |
| Eastern Asia | 3.07 | 3.84 | 4.77 | 6.73 | 6.95 |
| Southern Asia | 6.42 | 5.92 | 7.15 | 5.92 | 5.99 |
| South-eastern Asia | 3.11 | 3.20 | 2.82 | 3.95 | 3.57 |
| Western Asia | 1.78 | 2.02 | 1.68 | 1.38 | 1.24 |
| Europe | 1.05 | 0.92 | 0.85 | 0.66 | 0.62 |
| Eastern Europe | 2.12 | 2.20 | 1.85 | 1.46 | 1.25 |
| Northern Europe | 1.04 | 0.79 | 0.62 | 0.50 | 0.51 |
| Southern Europe | 1.32 | 1.05 | 0.87 | 0.64 | 0.60 |
| Western Europe | 0.80 | 0.70 | 0.66 | 0.53 | 0.49 |
| Oceania | 1.50 | 1.19 | 1.18 | 0.64 | 0.62 |
| Australia and New Zealand | 1.49 | 1.18 | 1.16 | 0.63 | 0.61 |
| Oceania excluding Australia and New Zealand | 2.56 | 1.67 | 2.63 | 1.97 | 2.01 |

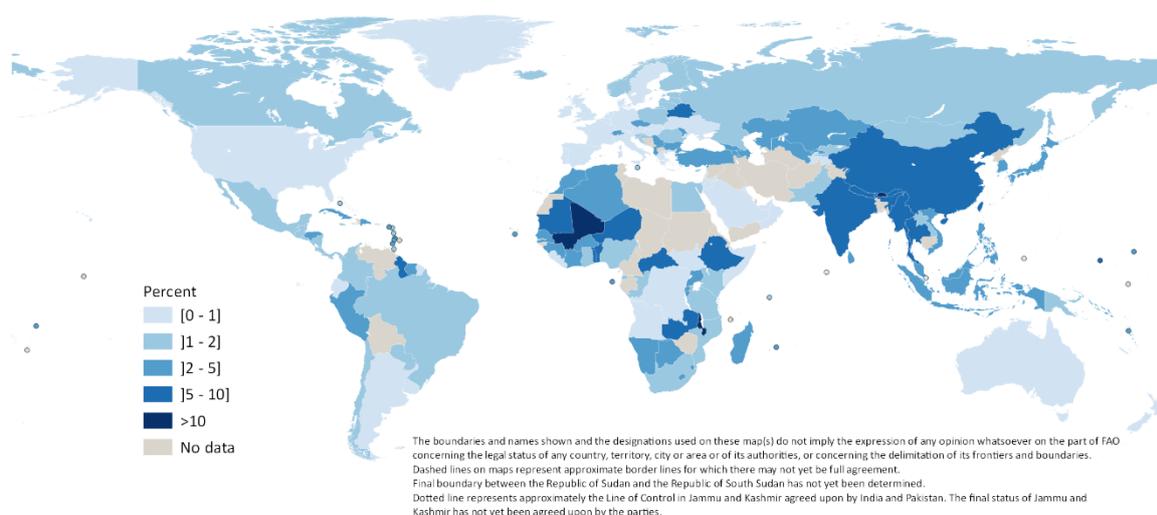
Source: FAO, 2021b.

COUNTRY

Figure 2 shows that, among countries with the highest share of agriculture in government expenditure in 2016–2020, many belong to the least developed countries (LDCs) and landlocked developing countries (LLDCs) categories. The top countries are led by Malawi (11.8 percent), Bhutan (11.7 percent), Mali (11.6 percent), China (9.6 percent), Guyana (8.7 percent), India (7.6 percent), Nepal (7.1 percent), Togo (6.6 percent), the Central African Republic (6.6 percent) and Thailand (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) and South America (1). In many of these countries, the share of agriculture in government expenditure actually declined between 2015 and 2020, which can be due to a lower rate of increase in agricultural spending than that of other sectors of the economy.

Depending on the data provided by countries, government expenditures in agriculture can be further analysed according to recurrent and capital expenditures. Countries that provided the detailed breakdown of their agriculture expenditures showed that they allocate more to current expenditures (such as salaries and wages, operational costs and overhead costs) than to capital expenditures (for example assets such as land, machinery and equipment). Capital expenditures are considered long-term investments; however, a detailed breakdown of agriculture spending is only available for a few countries (e.g. Argentina, Angola, Australia).

Figure 2: Share of agriculture in government expenditure, 2016–2020 average



Source: FAO, 2021b based on UN Geospatial, 2020.

THE AGRICULTURE ORIENTATION INDEX FOR GOVERNMENT EXPENDITURES

Government spending is one of the main sources of investment in agriculture. The *State of Food and Agriculture 2012* report has recognized that “investing in agriculture is one of the most effective strategies for reducing poverty and hunger and promoting sustainability” (FAO, 2012). However, despite the growing evidence that agricultural investment is essential to promoting agricultural growth and reducing poverty and hunger, the share of agriculture in government expenditure is declining in many countries.

One of the measures to show the extent to which government expenditures on agriculture reflect (or not) the importance of agriculture in the economy is the agriculture orientation index (AOI) (UNCTAD, 2016). 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 the gross domestic product (GDP).

Table 2 presents the trend in the AOI for the last two decades by SDG region. Between 2001 and 2020, the global AOI showed a declining trend from 0.52 in 2001 to 0.46 in 2010. It then started to pick up again, from 2015 (0.50) onward. It reached 0.51 in 2020, a comparable level to that reported in 2001. The COVID-19 pandemic fiscal response impacted the global AOI in 2020.

Between 2001 and 2020, the AOI decreased among SDG regions in Oceania, and Europe and Northern America, while it remained stable around 0.30 in Northern Africa and Western Asia. Among SDG subregions, the Caribbean (from 0.81 to 0.87), Central Asia (0.27 to 0.35), and Eastern Asia (from 0.72 to 1.25) all reported notable increases in their AOI while both South and Central America showed a decreasing trend, with Mexico responsible for most of the decrease for that subregion. Northern America reported an improvement in the AOI in 2020 due to a spike in government expenditures in the United States of America.

Table 2: Agriculture orientation index (AOI) by SDG region, 2001–2020

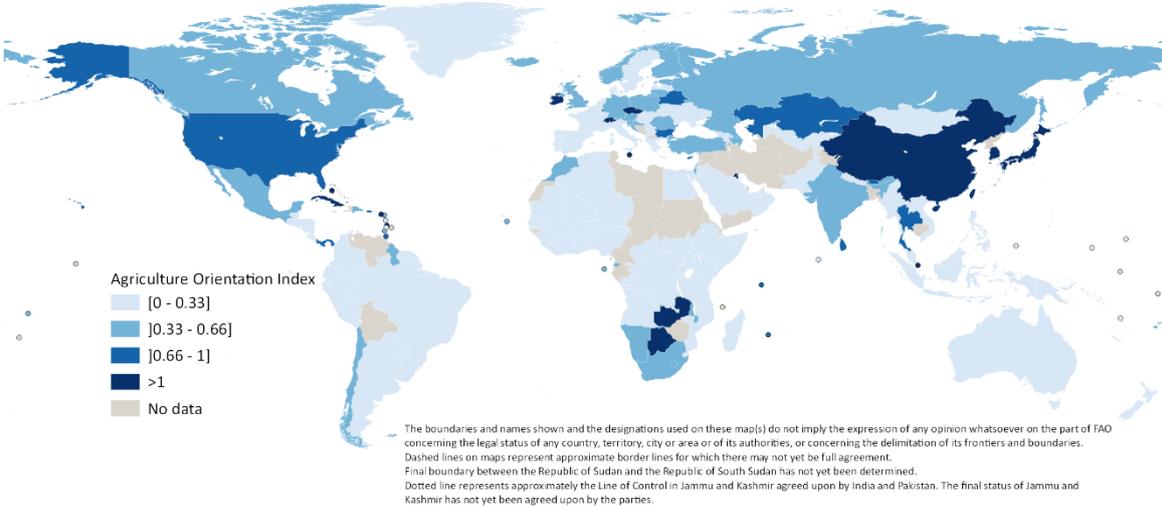
| <i>Region</i> | <i>2001</i> | <i>2005</i> | <i>2010</i> | <i>2015</i> | <i>2020</i> |
|--|-------------|-------------|-------------|-------------|-------------|
| World | 0.52 | 0.49 | 0.46 | 0.50 | 0.51 |
| Sub-Saharan Africa | 0.16 | 0.19 | 0.17 | 0.14 | 0.12 |
| Northern Africa and Western Asia | 0.32 | 0.33 | 0.28 | 0.31 | 0.32 |
| Northern Africa | 0.31 | 0.33 | 0.21 | 0.23 | 0.24 |
| Western Asia | 0.33 | 0.33 | 0.32 | 0.37 | 0.39 |
| Central and Southern Asia | 0.33 | 0.37 | 0.47 | 0.37 | 0.34 |
| Central Asia | 0.27 | 0.50 | 0.77 | 0.33 | 0.35 |
| Southern Asia | 0.33 | 0.37 | 0.46 | 0.37 | 0.34 |
| Eastern and South-Eastern Asia | 0.64 | 0.77 | 0.77 | 0.98 | 1.08 |
| Eastern Asia | 0.72 | 0.89 | 0.93 | 1.11 | 1.25 |
| South-Eastern Asia | 0.28 | 0.31 | 0.24 | 0.37 | 0.34 |
| Latin America and the Caribbean | 0.47 | 0.43 | 0.40 | 0.35 | 0.22 |
| Caribbean | 0.81 | 0.69 | 0.49 | 0.89 | 0.87 |
| Central America | 0.84 | 0.89 | 0.89 | 0.62 | 0.23 |
| South America | 0.29 | 0.28 | 0.32 | 0.26 | 0.17 |
| Oceania | 0.32 | 0.37 | 0.40 | 0.22 | 0.22 |
| Australia and New Zealand | 0.33 | 0.40 | 0.43 | 0.23 | 0.25 |
| Oceania (exc. Australia and New Zealand) | 0.13 | 0.09 | 0.15 | 0.12 | 0.11 |
| Europe and Northern America | 0.68 | 0.64 | 0.52 | 0.40 | 0.51 |
| Europe | 0.49 | 0.53 | 0.50 | 0.39 | 0.36 |
| Northern America | 1.02 | 0.82 | 0.55 | 0.41 | 0.77 |
| Landlocked developing countries | 0.20 | 0.32 | 0.37 | 0.30 | 0.24 |
| Least developed countries | 0.15 | 0.22 | 0.22 | 0.22 | 0.20 |
| Small Island Developing States | 0.52 | 0.52 | 0.48 | 0.81 | 0.68 |

Source: FAO, 2021b.

In the developing regions, the LLDCs and LDCs showed a modest increase in their AOI, from 0.20 to 0.24, and from 0.15 to 0.20, respectively, between 2001 to 2020, while the growth in Small Island Developing States was much stronger, from 0.52 to 0.68.

The AOI of low-income countries between 2016 and 2020 ranges from 0.02 to 2.52, whereas in high-income countries, it can go up to 8.25. While the AOI in high-income countries appears to be more oriented towards agriculture, governments in low-income countries, LDCs and LLDCs in particular devote a much higher share of total expenditure on agriculture in comparison to governments in high-income countries (see also Table 1). This pattern is driven by the share of agriculture value added in GDP, which is higher in low-income countries than in high-income countries.

Figure 3: Agriculture orientation index, 2016–2020 average



Source: FAO, 2021b based on UN Geospatial, 2020.

EXPLANATORY NOTES

Since 2012 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). For some countries, data are sourced directly from 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, in other words, 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 calculate AOI 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 comparability of the AOI, which uses data of the highest level of government. Moreover, not all countries report Government Expenditure on Agriculture

data according to the COFOG. 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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