Ceres2030
Sustainable Solutions to End Hunger

COMMENTARY

Ending Hunger Sustainably: Trends in official development assistance (ODA) spending for agriculture

Mali Eber-Rose, David Laborde, Sophia Murphy

Ceres2030 brings together the International Institute for Sustainable Development (IISD), Cornell University, and the International Food Policy Research Institute (IFPRI) to answer two linked questions: (i) What will it cost governments to end hunger as defined by Sustainable Development Goal (SDG) 2? And, (ii), What are the most effective public investments to end hunger sustainably based on the available evidence? Ceres2030 is a three-year project that will conclude early in 2021. SDG 2 is the second of 17 Sustainable Development Goals that together comprise the UN's 2030 Agenda for Sustainable Development (UN General Assembly, 2015). SDG 2 is a commitment to end hunger sustainably, with sub-goals focused on ending hunger, improving nutrition, increasing small-scale producers' income, and reducing the environmental footprint of agriculture.

The project combines a state-of-the-art economic model to cost the interventions needed to end hunger with a machine-learning enhanced approach to systematic evidence reviews that assess the effectiveness of agricultural policy interventions. The evidence syntheses are designed to support decision-makers in making better use of the available evidence when they choose the interventions to invest in to advance sustainable food systems and end hunger. The project is focused on SDG 2.1, the commitment to end hunger, SDG 2.3 on doubling the productivity and income of small-scale food producers, and SDG 2.4 on ensuring agricultural sustainability and resilience.

This briefing note offers an overview of the trends in official financial disbursements to agriculture for the period 2002–2018.[1] It offers an illustrative analysis of the types of exploration into public funding for development that can be conducted using a database maintained by the Organisation for Economic Co-operation and Development

[1] All records of ODA extracted from the OECD CRS database (OECD, n.d.a). This analysis begins in 2002 because data relating to CRS disbursements prior to 2002 is not included in the database results table as the annual coverage is below 60% (OECD, n.d.e).

(OECD) Development Assistance Committee (DAC). Official development assistance (ODA) refers to resource flows, mostly monetary, that governments make available to other governments, generally coming from industrialized countries and given to developing countries. An understanding of recent trends in ODA spending, including the amounts involved, the recipients, and focus of the projects financed, puts into perspective the recommendations from the Ceres2030 project on how much—and how—to spend public funding for agriculture.

SUMMARY OF FINDINGS

- Total ODA disbursements for agriculture have risen over 156% since 2002, standing at USD 10.2 billion in 2018.[2] Total disbursements in the period 2002–2018 peaked in 2017 at USD 11.2 billion.
- The share of agriculture in the total ODA envelope has been declining since 2014. In 2018, the agricultural share of the total ODA envelope was 5.2%, the lowest share since 2008. Despite this, the actual value of agricultural disbursements increased between 2014–2017.
- There was a sharp decline from 2017 to 2018 of USD 1 billion in disbursements for agriculture. It is too soon to tell whether this downward trend will continue.
- G7 donors have each disbursed between 3%–7% of their total ODA budget on agriculture since 2014. This relatively similar share equates to significantly different amounts of money depending on the size of each donor's total ODA spending.
- As a collective, the G7 share of total ODA allocated to agriculture has been declining since 2015. In 2018, the relative share of ODA allocated to agriculture by the G7 was 4.3%, the lowest share since 2006. In comparison, allocations to health and humanitarian aid in 2018 were 13.3% and 13.9% of total ODA disbursements, respectively.
- The United States has been the biggest donor of agricultural ODA since 2009. The value of the U.S. disbursements for agriculture has decreased significantly, from nearly USD 1.5 billion in 2016 to just over USD 1 billion in 2018. However, the overall ODA budget of over USD 30 billion has remained steady, making this a significant decline in their spending on agriculture.
- The grants of private philanthropic organizations such as the Bill & Melinda Gates Foundation (BMGF) are not classified as ODA. Nonetheless, BMGF is an important funder for agricultural development. It is helpful to compare that spending with ODA. Disbursements from the BMGF have been relatively stable since 2009, averaging USD 393 million per year. Although the relative share of agriculture in the foundation's total grants has been declining as overall spending increases, the share of agriculture in the foundation's total spending remains considerably higher than any ODA donor, at 11.2% in 2018.

[2] All values refer to disbursements and are stated in constant 2018 dollars. Values for agricultural ODA refer to agriculture, forestry and fishing total (sector code 310) and rural development (purpose code 43040) (OECD, n.d.b). Percentages are calculated relative to total ODA, all sectors. Values for health refer to health (sector code 120) and population policies/programs and reproductive health (sector code 130). Values for humanitarian aid refer to emergency response (sector code 720), reconstruction relief and rehabilitation (sector code 730), and disaster prevention and preparedness (sector code 740). Values relating to the Bill & Melinda Gates Foundation (BMGF) refer to public development investment.

- Recipients of both agricultural and total ODA are primarily in Africa and Asia. In 2018, Africa received USD 618 billion, and Asia received USD 661 billion in total ODA. Since 2011, Africa has been the main recipient of agricultural ODA, receiving 55% more agricultural ODA than Asia in 2018. Both regions experienced drops in agricultural ODA from 2017 to 2018: Africa by 7.9% and Asia by 11.5%. However, while total ODA for Africa also dropped (by 2.4%), the total ODA received by Asia increased by 2.4%.
- The COVID-19 pandemic has created a significant threat to the sources of ODA and the progress toward sustainable development targets. Just as the resources available to donor governments for ODA are decreasing as economies everywhere shrink, the worldwide economic decline requires an increase in ODA spending to make up for the decreased domestic expenditure that developing countries can afford.

WHAT DID CERES2030 MEASURE IN ITS MODEL?

The Ceres2030 project team was asked to answer how much it would cost governments to end hunger, double the incomes of small-scale producers, and protect the climate by 2030. To answer the question, the modellers adopted a broader view of ODA than is used in the rest of this report, which is focused on ODA for agriculture more specifically. The broader measure was meant to better capture public spending on food security and nutrition, beyond agriculture alone.

To quantify the additional contribution needed by donors to end hunger and double the income of small-scale producers by 2030, the team modelled a portfolio of interventions using 14 policy instruments (Laborde et al., 2020). In keeping with the rest of Ceres2030 findings, the modellers grouped the allocation of donor spending on food security and nutrition into three categories: (1) empowering the excluded, (2) on the farm, and (3) food on the move. Table 1 outlines which interventions were included in each of the three categories and maps them to the donor classification system used in the OECD DAC Creditor Reporting System (CRS) database and to the associated level of public donor spending. The table uses 2016–2018 averages.

The results show that donors spend USD 12 billion per year on ODA for food security and nutrition. That sum divides across the three categories of interventions as follows: USD 4.6 billion on empowering the excluded, USD 5 billion on the farm, and USD 2.8 billion on food on the move.

TABLE 1. INTERVENTIONS LISTED ACCORDING TO DONOR CLASSIFICATION SYSTEMS

BUCKETS	INTERVENTIONS	ASSOCIATED OECD DAC CRS CODE	PUBLIC ODA (2016–2018 AVERAGE, USD)***	CUMULATED PUBLIC ODA (USD)***
A. Empower the Excluded	A1. Food programs	52010 + 43072	1.70 billion	1.70 billion
	A2. Vocational Training*	11330 + 31181	0.86 billion	2.56 billion
	A3. Social Protection	16010	1.27 billion	3.83 billion
	A4. Women's rights**	15170 + 15180	0.70 billion	4.53 billion
	A5. Agricultural Cooperatives	31194	0.09 billion	4.62 billion
B. On the Farm	B1. Agricultural Research	31182	0.50 billion	5.12 billion
	B2. Extension & Agricultural Services	31166 + 31191	0.16 billion	5.28 billion
	B3. Production subsidies (crops)	31161 + 31162	0.29 billion	5.57 billion
	B4. Livestock	31163 + 31195	0.14 billion	5.70 billion
	B5. Input subsidies	31150 + 32165 + 32267	0.05 billion	5.75 billion
	B6. Land Management	31130 + 31164	0.21 billion	5.97 billion
	B7. Irrigation	31140	0.22 billion	6.19 billion
	B8. Agricultural Finance	31193	0.11 billion	6.29 billion
	B9. Agricultural Development, n.e.s.	31110 + 31120 + 31165	3.28 billion	9.57 billion
C. Food on the Move	C1. Rural Development	43040 + 43050	1.05 billion	10.62 billion
	C2. Agro-industries	32161	0.06 billion	10.69 billion
	C4. Storage	21061	0.06 billion	10.75 billion
	C5. PHL & Pest Control	31192	0.03 billion	10.78 billion
	C6. Roads**	21020	1.54 billion	12.33 billion
Not mapped to Ceres2030 buckets	Other food security measures	43071	0.01 billion	12.33 billion
Not mapped to Ceres2030 buckets	Other Nutrition	12240	0.78 billion	13.12 billion
Not mapped to Ceres2030 buckets	Other projects related to Agriculture	Description includes tag "Agriculture"	0.46 billion	13.57 billion
Not mapped to Ceres2030 buckets	Other recorded as SDG2 projects	Description includes tag "SDG2"	0.36 billion	13.94 billion

** Only partially about agriculture*

*** Very partially related to agriculture*

**** in 2018 constant USD*

TECHNICAL BACKGROUND

ODA is a term introduced by the OECD's DAC and refers to resource flows to the countries and territories specified on the DAC's List of ODA Recipients and to multilateral development institutions (DAC, 2016; OECD, n.d.c). Inclusion on the List of Recipients is based on a country's gross national income (GNI) per capita, as published by the World Bank. All low- and middle-income countries are eligible to receive ODA. Additionally, all of the Least Developed Countries, a category defined by the United Nations, are eligible and included on the list. The only exceptions are G8 members, EU members, and countries that will accede to the EU and that have a specified EU entry date (OECD, n.d.c).

To qualify as ODA, the resources must be provided by the official sector (state or local governments and their executive agencies) and mainly targeted toward the welfare and economic development of developing countries. They must also be concessional, meaning they are provided either as grants or at lower than commercial interest rates (DAC, 2016).

This analysis is drawn from the OECD DAC database. The database is a repository used by all OECD members to self-report their ODA spending, following commonly agreed protocols (DAC, 2016). This background note uses the CRS, which is an aggregation of individual project-level reports. Each record of ODA is classified by broad sector and specific purpose code, which is determined by the donor according to the specific area of development the ODA resources are intended for. For example, the sector code relating to agriculture is 310, which is the total for agriculture, forestry, and fishing. This can be broken down further into agriculture (311), forestry (312) and fishing (313), which can be further subdivided into purpose codes such as agricultural development (31120) or agricultural land resources (31130) (OECD, n.d.b). The binary nature of this classification (only one category permitted at each level of detail) is necessary to avoid double-counting ODA in the database.

This analysis focuses on annual disbursements, which are a measure of how much money is actually spent, as opposed to commitments, which measure donors' declared intentions of how much they intend to spend for a stipulated purpose. Commitments are often multi-year, but the whole value of the project contribution is recorded in the database for the year they are signed. In contrast, disbursement statistics are only recorded as the resources are placed at the recipient's disposal; therefore, the disbursements to meet a commitment may be spread over several years (OECD, n.d.e).

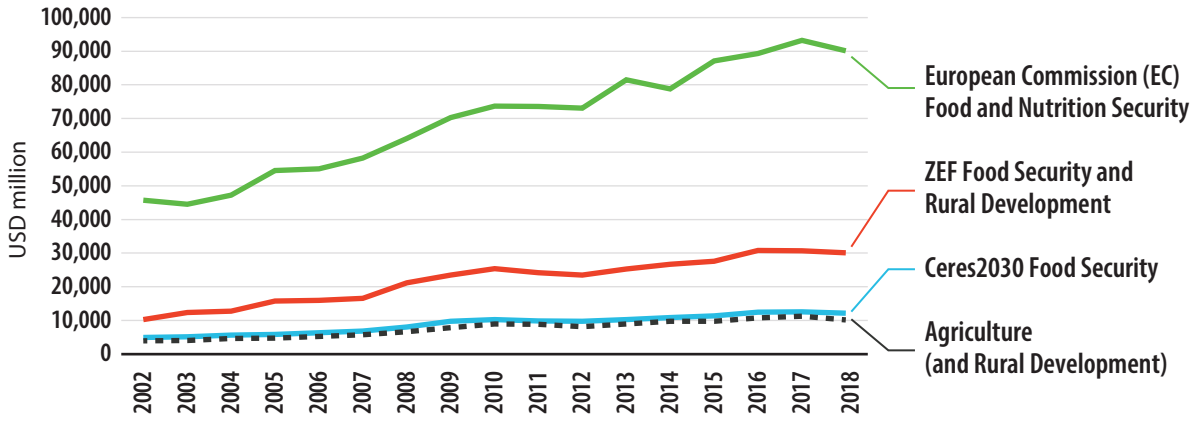
DEFINITION OF ODA FOR AGRICULTURE, FOOD SECURITY, AND NUTRITION

There are a variety of different ways to define ODA spending on agriculture, food security, and nutrition. Each definition entails different sets of CRS codes. This has consequences for the scale of the data extracted and the subsequent analysis of trends. Figure 1 (below) demonstrates the varying values of total ODA depending on the definition adopted and the corresponding CRS codes used.

This report focuses solely on ODA for agriculture (see dotted line in Figure 1) defined by the broad sector code 310, which corresponds to the combined spending on agriculture, forestry, and fishing total, and the purpose code 43040, which relates to rural development. Ceres2030 adopts a broader, more holistic definition of ODA,

focusing on public spending allocated to food security and nutrition (see Box 1). Broader definitions which account for food security and nutrition often incorporate a wider range of CRS codes. Consequently, the total amount of ODA increases too. The European Commission (EC) adopts the broadest definition of food and nutrition security, including CRS codes relating to higher education (11420) and human rights (15160) (see Appendix 1 for all CRS codes included in the EC definition). The broader definition adopted by the EC results in a much larger value for the total ODA allocated to food and nutrition security.

FIGURE 1. TOTAL ODA ALLOCATIONS DEPENDING ON THE ADOPTED DEFINITION OF ODA FOR AGRICULTURE, FOOD SECURITY AND NUTRITION



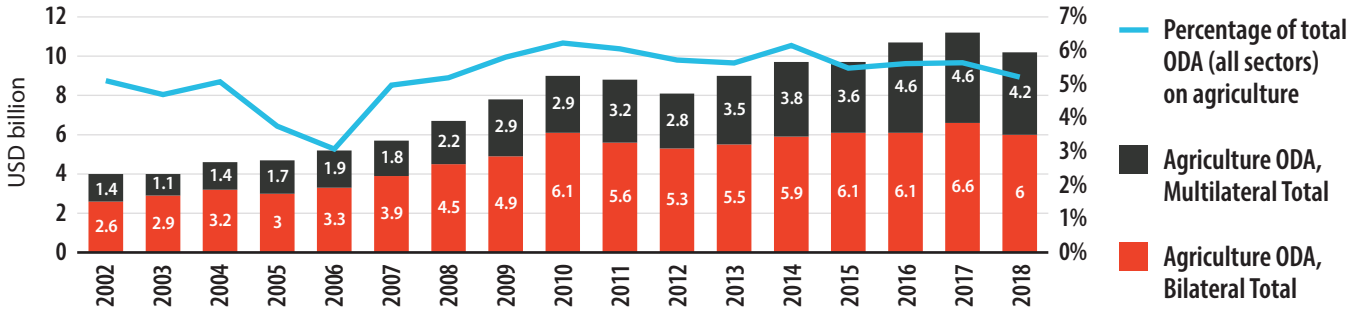
Sources: Commission to the European Parliament and the Council, 2016; OECD, n.d.a; Zentrum für Entwicklungsforschung (ZEF) & Food and Agriculture Organization of the United Nations (FAO), 2019.

OVERVIEW OF ODA FOR AGRICULTURE

Measured in constant 2018 dollars, agricultural ODA has increased significantly over the past two decades, rising 156% between 2002 and 2018 (see Figure 2). In 2002, total agricultural disbursements were valued at USD 3.9 billion; by 2018 they had reached USD 10.2 billion. Multilateral aid accounted for USD 4.2 billion, or 41% of this total. The remaining USD 6 billion was funded in bilateral payments from donors.

The increase in agricultural ODA has not been linear, and there was a decrease of 9.2% in the value of disbursements from 2017 to 2018. It is too soon to know if this drop will continue as the data for 2019 has not yet been released. The numbers do show a decrease in the share of total ODA directed to agriculture since 2014 (see the dotted line in Figure 2). The general increase in the value of agricultural disbursements, combined with a decreasing agricultural share of total ODA, suggests that the growth in agricultural ODA occurred in the context of an even larger increase in total ODA spending.

FIGURE 2. TOTAL ODA FOR AGRICULTURE BY ALL OFFICIAL DONORS, 2002-2018



Source: OECD, n.d.a.

Quantitative data tells only part of the ODA story. To understand what drives agricultural ODA spending and how much it is allocated, analysts need qualitative data, too. An important point of context for agricultural ODA spending in this period is the year 2009. That is the year the G8 met in L'Aquila, Italy and signed a declaration committing, jointly with other donors, to mobilize more than USD 20 billion for sustainable agricultural development over three years (G8, 2009). It is therefore notable that although the share of agriculture in the total ODA envelope remained between 5% and 6% from 2008 to 2018, in 2018 it dropped to 5.2%, which is the lowest share since 2008 and the L'Aquila Initiative. This suggests that although the total amount spent on agricultural ODA is increasing, agriculture has not become a higher priority within ODA budgets. Instead, both total ODA and agricultural disbursements generally increased in the period 2008–2018, although spending on both agriculture and total ODA fell from 2017 to 2018.

ODA FOR AGRICULTURE BY DONOR

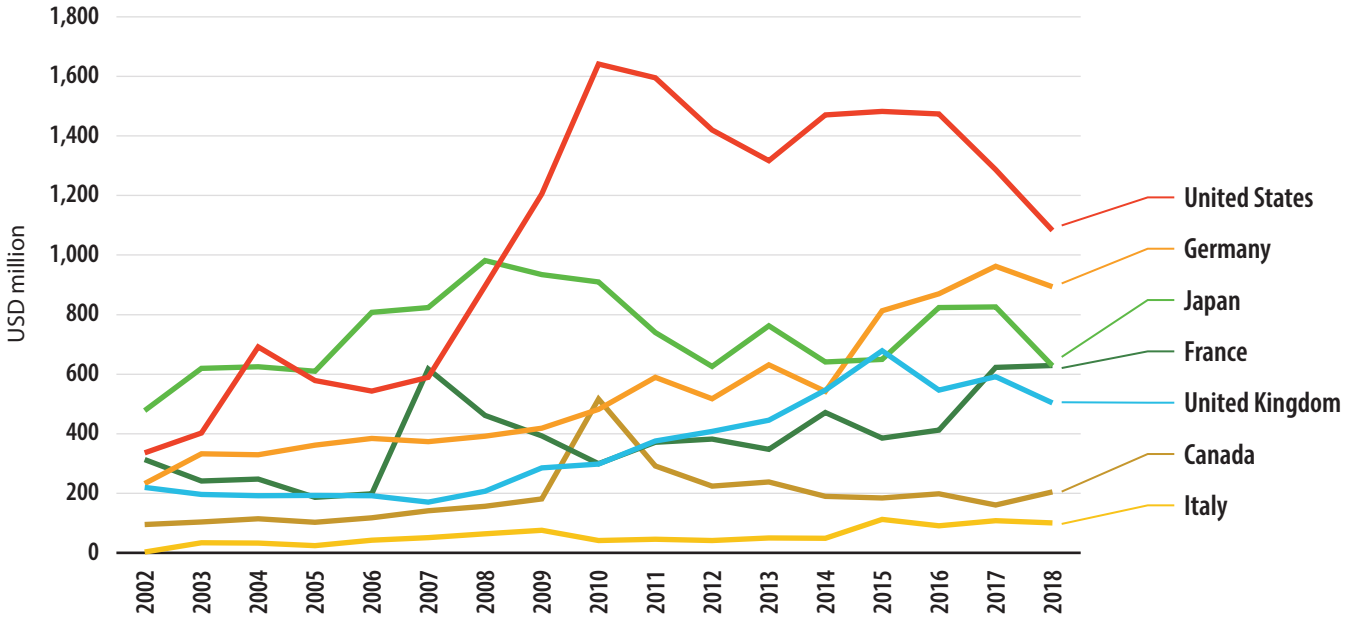
This report focuses on bilateral assistance, which is the assistance provided directly from a donor to a recipient country. Donors may choose to channel this funding through a multilateral institution (known as multi-bi aid), by contracting them to deliver a specific project. Because the disbursed resources are earmarked by the donor for a specific project, they are included in the donor's bilateral contributions. This analysis does not include the agricultural disbursements made by multilateral institutions nor the core contributions from donors to multilateral institutions.

Figure 3 shows annual disbursements in the agriculture sector from each of the G7 countries from 2002 to 2018. In Figure 4, the ODA for agriculture is shown as a percentage of total ODA for each G7[3] donor (See Appendices 2 and 3 for the actual values for each G7 donor). The figures show a general increase in agricultural ODA from all G7 donors from 2009, in line with the L'Aquila Initiative. Japan is the only G7 donor whose agricultural disbursements were lower in value in 2018 than in 2008. However, agriculture is not a large share of the total ODA budget. Despite increases in the total value of disbursements, the trend line shows a relatively stable share of ODA spent on agriculture by G7 countries as a group, ranging between 2.6% in 2005 to 5.6% in 2010. In particular, since 2014, the relative share spent on agriculture has been fairly stable amongst G7 donors—a low of 3.2% by Italy in 2017 and a high of 6.8% by France in 2018.

[3] The G8 became the G7 after Russia's departure in 2014.

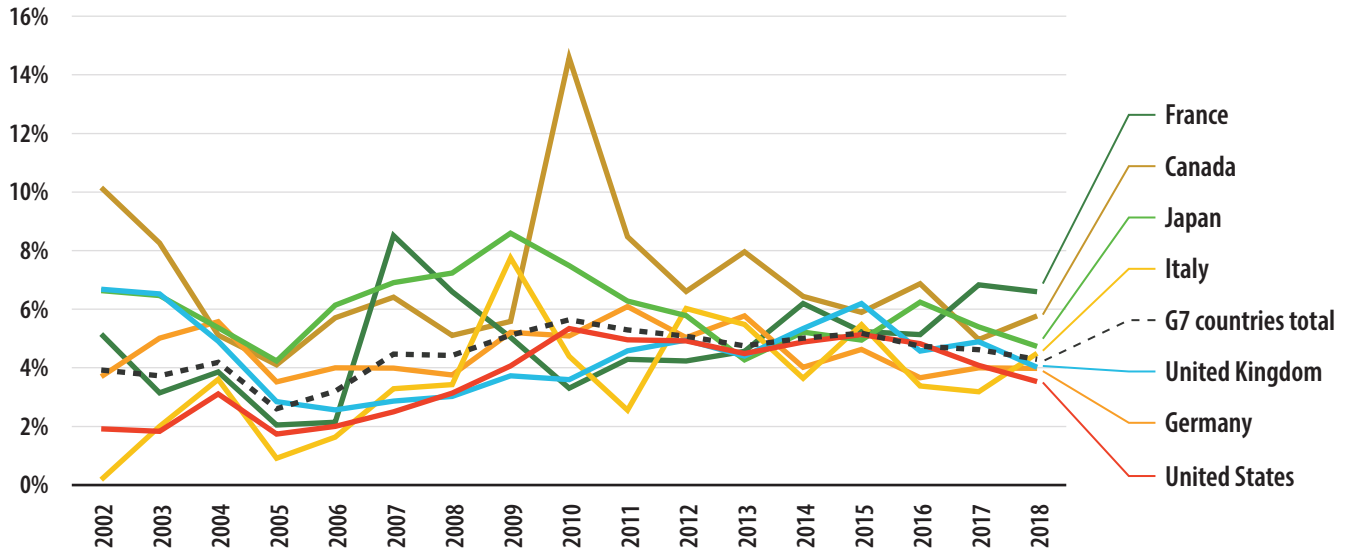
In general, these figures of agricultural ODA spending by donor mirror the stable increase in agricultural ODA from 2002 to 2018 shown in Figure 2. However, the additional detail shows some of the more specific variations among donors. There are clear spikes and dips in spending, including the significant increase in U.S. ODA for agriculture between 2007 and 2010 to unprecedented levels and the subsequent decrease from 2016, and a marked spike in the relative share allocated to agriculture by Canada in 2010.

FIGURE 3. G7 ODA DISBURSEMENTS FOR AGRICULTURE, 2002-2018



Source: OECD, n.d.a.

FIGURE 4. G7 ODA DISBURSEMENTS FOR AGRICULTURE AS A PERCENTAGE OF TOTAL ODA DISTRIBUTIONS, 2002-2018



Source: OECD, n.d.a.

By considering the value of agricultural disbursements alongside the relative share of agriculture in total ODA, inferences about the donor's total ODA disbursements can be drawn. The dramatic increase in U.S. disbursements for agriculture since 2007, making it the biggest bilateral donor in the sector, as shown in Figure 3, is not mirrored in Figure 4. This suggests that the increase came in the context of a wider increase in the ODA budget rather than a particular focus on agriculture. In comparison, the increase in Canadian ODA for agriculture in 2010 in response to the L'Aquila Initiative is fairly small in Figure 3 and yet is a big spike in Figure 4. This is because Canadian ODA is drawn from the International Assistance Envelope, which is an amount fixed in the government's annual budget. The Envelope also includes other expenditures, such as international security spending, that do not count as ODA. The specific amount for ODA is not fixed in the envelope's allocation, but a large increase in spending on one sector reduces the money available to spend elsewhere. The effect of increasing disbursements to agriculture to meet the L'Aquila Initiative was to raise the relative importance of agriculture compared to other sectors. Canada was the first G7 donor to meet its USD 1.18 billion L'Aquila commitment (Global Affairs Canada, 2018).

To understand ODA numbers correctly, it is essential to know the different ways of measuring ODA and what they mean. The value of disbursements shows which are the largest donors in terms of total funding. This is of particular interest to recipients. It is also useful to know which donors are especially interested in agriculture, which can be assessed using the percentage of total ODA allocated to agriculture. For example, the agricultural share of the ODA budget of Italy in 2018 was 4.5% compared to 3.5% for the U.S. However, the U.S. disbursements were over 10 times greater in dollar value.

THE ROLE OF PRIVATE PHILANTHROPY: EXAMPLE OF THE BILL & MELINDA GATES FOUNDATION

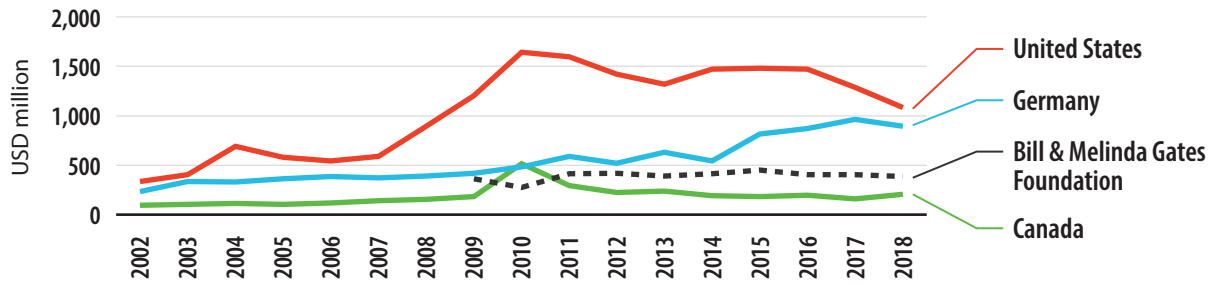
ODA is not the whole of agricultural development funding. A significant change in the landscape of foreign assistance directed to agriculture in the past 20 years has been the emergence of the BMGF as one of the largest donors—private or public—in agricultural research and development. Although the contributions of private donors are not classified as ODA, they are significant as a share of total agricultural development funding.[4] In 2018, private donors gave USD 0.87 billion toward agricultural development. Together with ODA, this meant a total for agricultural development assistance in 2018 was USD 11.1 billion. Private donors contributed 7.7% of this total. The BMGF contributed USD 0.39 billion (or 45%) of the total from private donors.

Agriculture has been an important focus of BMGF spending since it created the Alliance for a Green Revolution in Africa (AGRA) in 2006, together with the Rockefeller Foundation (BMGF, n.d.). The value of BMGF agricultural disbursements has remained relatively consistent since 2009, varying between USD 364 million in 2009 and USD 452 million in 2015 (with a dip to USD 277 million in 2010) (see Figure 5). In 2018, disbursements stood at USD 387 million, only USD 23 million more than the value of disbursements nine years before. Over the same period, the percentage spent on agriculture as a share of all the foundation's grants has decreased considerably, from 16% at its peak in 2012 to 11.2% in 2018 (see Figure 6). Although other issues have emerged to claim the foundation's

[4] In making comparisons between private donors, such as the BMGF, and other country donors, it is important to note that data in the OECD CRS database on the commitments and disbursements made by the BMGF is only available from 2009 (as demonstrated by Figures 4 and 5).

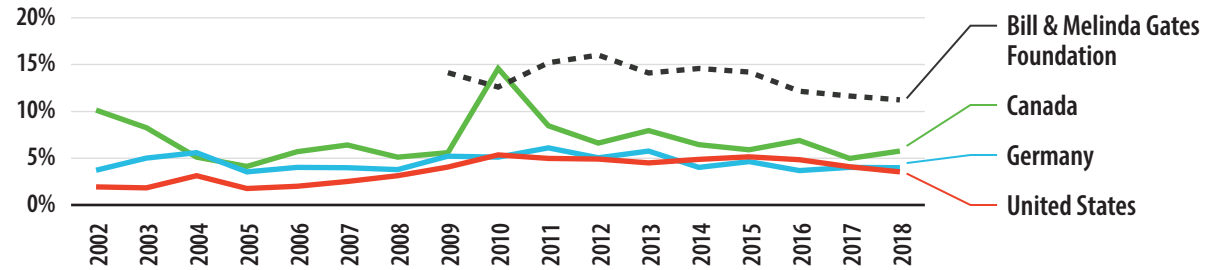
attention, it is notable that the percentage share of total funding allocated to agriculture in 2018 was still almost two times greater than that of any of the G7 countries.

FIGURE 5. COMPARISON OF AGRICULTURE DISBURSEMENTS OF BILL & MELINDA GATES FOUNDATION TO OTHER DONORS, 2002-2018



Source: OECD, n.d.a.

FIGURE 6. COMPARISON OF PERCENTAGE OF AGRICULTURE DISBURSEMENTS RELATIVE TO TOTAL DISBURSEMENTS OF BILL & MELINA GATES FOUNDATION TO OTHER DONORS, 2002-2018



Source: OECD, n.d.a.

OVERVIEW OF ODA FOR AGRICULTURE BY RECIPIENT

To answer the questions asked of the Ceres2030 project, it is important to understand ODA trends and impact. ODA is a critical source of finance for developing countries. It is especially important to African countries south of the Sahara. Analysis of the sources of foreign finance for developing countries shows that for Africa, south of the Sahara, ODA has been the largest single source of foreign finance since 2002, consistently providing over 30% of the total. In 2017, ODA represented 36% of the foreign finance received by African countries south of the Sahara compared to 31% from overseas personal remittances and 23% from foreign direct investment (OECD, n.d.e). In other regions, ODA is less dominant. The main source of foreign finance in South Asia, for example, is personal remittances, comprising 55% of foreign finance; in South America, it is foreign direct investment, at 68% of the total[5] (OECD, n.d.c). Despite these differences, and especially in Africa and Asia, ODA is a crucial resource for economic development.

The geographical distribution of all ODA and agricultural ODA is demonstrated by Figures 6 and 7, respectively (below), which show disbursements from all official donors. The two figures clearly show a regional focus in

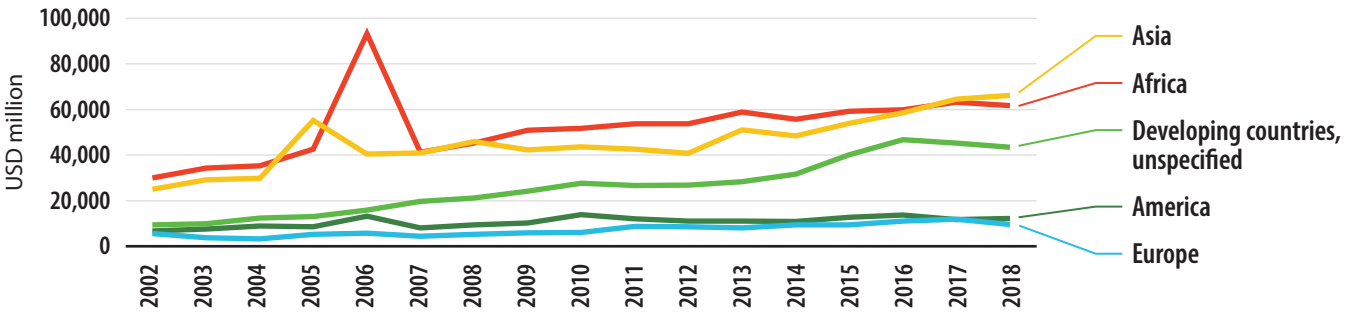
[5] Statistics of foreign financial resources refer to values according to 2016 constant prices.

ODA allocations, both generally and for agriculture, on Africa and Asia. The somewhat erratic and inconsistent disbursements revealed by the values of G7 ODA spending on agriculture (see Figure 2) do not seem to correlate to the recipient's location. The figures show similar trends in the geographical distribution of total and agricultural ODA. There is a fairly consistent and stable relationship between donors and recipients, even as overall spending has increased (Figure 7). There is slightly more variation in the regional distribution for total ODA (in particular with spikes in 2005 for Asia and 2006 for Africa) which is not reflected in the agricultural share. This suggests the additional spending was not allocated to agriculture.

Agricultural ODA is concentrated on Africa and Asia. The total disbursements received by the two regions were almost equal until 2011, when Africa seems to emerge as the main geographical focus for agricultural ODA (as shown by Figure 8).[6] In 2018, Asia received approximately two thirds of the agricultural ODA received by Africa. However, agricultural ODA comprises a greater proportion of the total ODA received by Africa compared to that of Asia: comprising 7.3% and 4.4% of the relative share in 2018, respectively.

All regions experienced a notable decline in agricultural ODA from 2017 to 2018 (Figure 8). Specifically, Africa experienced a drop in agricultural ODA of 7.9% and Asia of 11.5%. However, while agricultural ODA fell significantly, the total ODA received by Asia actually increased between 2017 and 2018 by nearly USD 1.6 billion or 2.4%. The total ODA received by Africa fell by 2.4%.

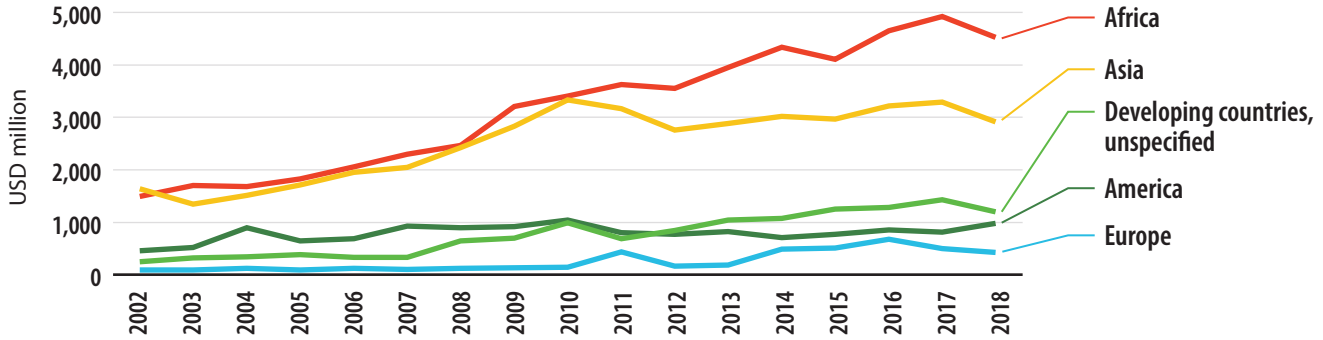
FIGURE 7. REGIONAL BREAKDOWN OF TOTAL ODA BY ALL OFFICIAL DONORS, 2002-2018



Source: OECD, n.d.a.

[6] Geopolitical factors are important in the consideration of regional trends. For example, one of the key recipients of ODA in Asia is Afghanistan, and therefore an important factor in the diverging regional focus in this period between Africa and Asia is the withdrawal of donor countries from the war in Afghanistan. Total ODA to Afghanistan from all donors peaked in 2011 at USD 5.9 billion, from which it has decreased significantly, along a fairly linear trend: to USD 4.2 billion in 2013 and USD 2.7 billion in 2018. Further contextual research is needed to fully understand this geopolitical trend.

FIGURE 8. REGIONAL BREAKDOWN OF ODA FOR AGRICULTURE BY ALL OFFICIAL DONORS, 2002-2018



Source: OECD, n.d.a.

LIMITATIONS OF THE DATABASE

For a project such as Ceres2030, committed to increasing the amount and quality of public investment in agriculture, it is important to understand the trends in ODA spending. The DAC database offers a vast array of quantitative information relating to ODA and wider foreign development assistance. There are, however, important limitations with the data. One of the challenges arises from the binary classification system, which, although necessary to avoid double-counting, oversimplifies the overlapping and widespread effects of ODA. Project spending is rarely confined to one sector, and understanding the dynamic and interactive effects of public investment is also crucial to identifying where best to direct spending.

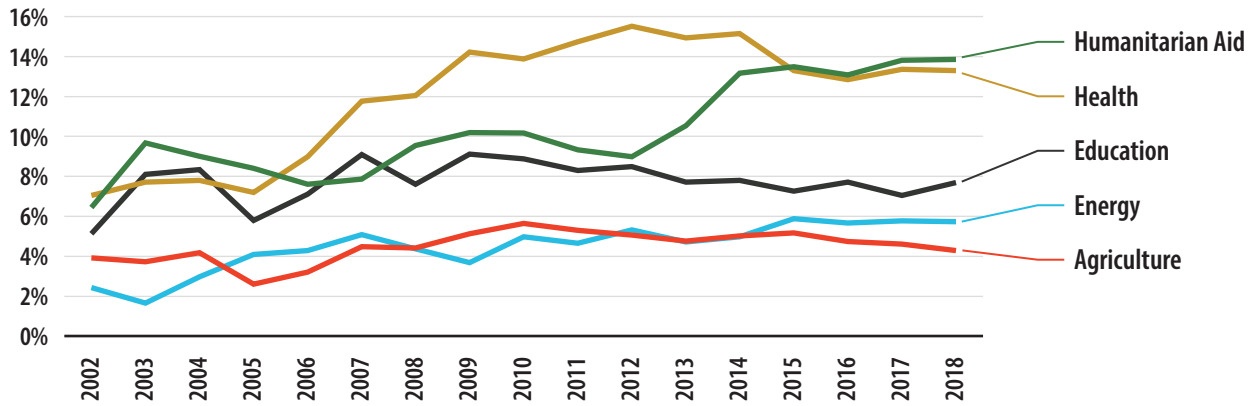
Take a complex, multi-sector area such as social protection. The spending might be classified under a multi-sector code or the code which the donor thinks corresponds to the largest component of aid activity. This decision rests with the funder. As a result, social protection funding is recorded under a variety of different sector and purpose codes. This can be exemplified by attempts to trace funding for the Protective Safety Net Programme (PSNP) in Ethiopia. Using a keyword search for "PSNP" in the project descriptions with Ethiopia as the recipient, the OECD DAC database shows over USD 1.2 billion was disbursed by all donors under the code for social protection (16010) between 2008 and 2018. However, 63% of the disbursements whose project descriptions contained the word "PSNP" were classified under other purpose codes, including approximately USD 0.6 billion under food assistance (code 52010) and a further USD 0.2 billion under 22 other purpose codes ranging from multi-hazard response preparedness (code 74020) to urban development and management (code 43030). As the PSNP program is the second largest social protection program in Africa (and a flagship program for the future of multisectoral, institutionalized social protection programs) the difficulty in tracking its total funding highlights a significant and growing issue in ODA analysis. The problem represents the tensions between the needs of qualitative and quantitative analysis.

IMPLICATIONS FOR CERES2030

Development is not only about agriculture; ODA is needed for many sectors. The goal of ending hunger requires progress in a variety of sectors, including health, education, and humanitarian assistance. ODA recorded in one sector will have knock-on benefits for others. For example, electrification in developing countries has demonstrably had positive effects on agricultural development (Cook, 2011). It is important to have a context in which to understand ODA for agriculture.

Agriculture is not a top priority for ODA spending. Figure 9 illustrates the relative sectoral allocations within the total collective G7 ODA disbursements. Since 2015, out of the five sectors shown, agricultural ODA has consistently comprised the smallest share of total ODA. In 2018, the relative share of ODA allocated to agriculture was 4.3%, the lowest share since 2006. Disbursements for humanitarian aid and health each amounted to more than three times the disbursements for agriculture in 2018, representing 13.9% and 13.3% of total ODA disbursements, respectively.

FIGURE 9. SECTORAL BREAKDOWN AS A SHARE OF TOTAL ODA DISBURSEMENTS FOR G7, 2002-2018

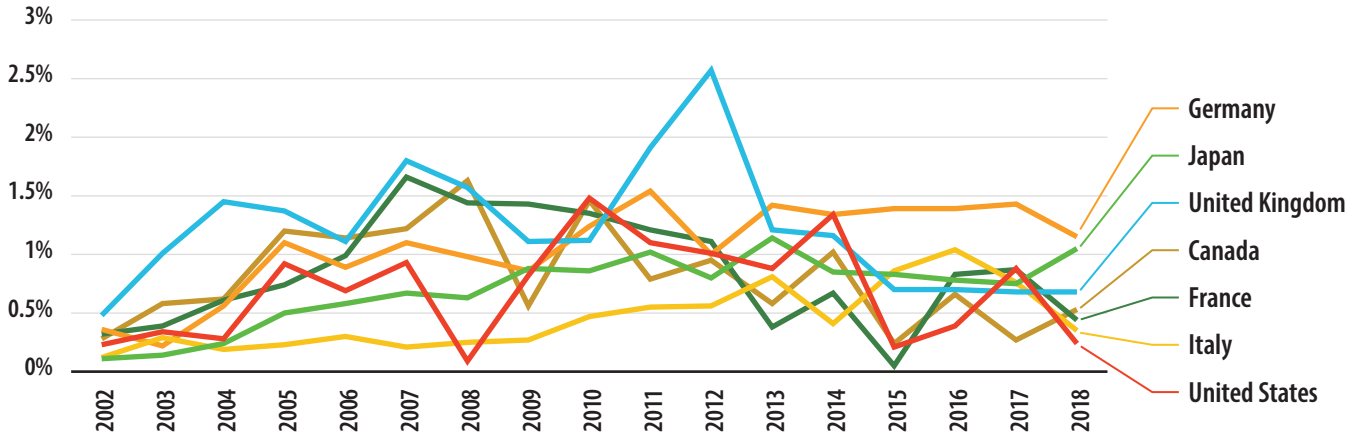


Source: OECD, n.d.a.

The Ceres2030 economic cost model will estimate the total public spending required to end hunger sustainably by 2030. The share of ODA allocations in donor governments' spending is an important context for the request made of donor governments to increase ODA spending. Figure 10 shows total ODA as a percentage of G7 donors' GNI.[7] In 2018, G7 ODA disbursements amounted to USD 94.2 billion, or 0.51% of the G7's joint GNI.

[7] Figure 10, and all data relating to GNI, refers to values in current dollars. This is the amount converted into US dollars each year reported by the donor, using the exchange rate for that year. The data for the percentage ODA/GNI is extracted from DAC1, and therefore the data is an annual aggregate of reported donor spending, or total flows; it is not recorded on a project level.

FIGURE 10. TOTAL ODA FLOWS AS A PERCENTAGE OF GROSS NATIONAL INCOME (GNI) FOR G7 DONORS, 2002-2018



Source: OECD, n.d.a.

FUTURE OF ODA

ODA flows are predicted to decrease due to the global economic slowdown associated with the COVID-19 pandemic. The International Monetary Fund (IMF) has predicted a global growth decline of 5% which will reduce fiscal space in donor countries, which is likely to reduce ODA flows (IMF, 2020). Economic modelling conducted by IFPRI linking the share of ODA in GDP to the share of the deficit in GDP and the GDP per capita, shows that when donor countries experience a deficit, it reduces the share of ODA allocated as a share of total GDP. The decrease in ODA flows is predicted to be up to 6% in the coming two years (Laborde et al., forthcoming). The specific impact on ODA for agriculture is not yet clear. Past experience with both cholera and Ebola, however, suggests there may be negative effects on the share of ODA allocated to agriculture within total ODA flows (Laborde et al., forthcoming).

This outcome is exactly the opposite of what is needed. The economic downturn and decrease in the GDP per capita of recipient countries should instead trigger a larger allocation of ODA from donors. Public finance for development is a mix of funds coming from donors and domestic budgets. Econometric analysis conducted by Ceres2030 shows that an increased GDP per capita of the recipient country is associated with a higher level of domestic expenditure, and the share of foreign aid and donor contributions in the total decreases. There is a reversed-U shape relation between ODA per capita and GDP per capita. As the GDP per capita of recipient countries declines, as it is widely predicted to do in the wake of the COVID-19 pandemic, ODA allocations by donors should be increasing.

ODA is critical to achieving sustainable development targets such as SDG 2, yet the pandemic has created a significant threat to this source of funding. Just as the resources available to donor governments for ODA are decreasing as economies everywhere shrink, the worldwide economic decline is necessitating an increase in ODA spending to make up for the decreased domestic expenditure that developing countries can afford. The Ceres2030 model estimates balance this tension by applying the co-funding rule, which is a ratio of domestic expenditure and foreign ODA based on the GDP per capita level of the recipient country, in order to determine the total additional expenditure required for each country annually and the split between the country share and the donor share.

CONCLUSION

To realize the ambition of the UN 2030 agenda, an increase in public investment is needed, both from donor governments and developing countries. The cost model developed by Ceres2030 quantifies this increase. The project also provides qualitative evidence in the form of eight articles published in *Nature Research* journals of how that spending can be directed. This briefing note explains how ODA is measured and what the recent trends in spending have been, in particular in the agriculture sector. A quantitative understanding of the existing trends in ODA spending provides important context. Combined with contextual, qualitative analysis, the OECD DAC database offers a rich and comprehensive view of the public and private donor resources available to agriculture and to development more broadly.

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APPENDICES

APPENDIX 1. CRS CODES CORRESPONDING TO THE EUROPEAN COMMISSION'S DEFINITION OF FOOD AND NUTRITION SECURITY (COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL, 2016, PP. 22–23)

11330 – Vocational training	15160 – Human rights	33110 – Trade policy and administrative management
11420 – Higher education	15170 – Women's equality organisations and institutions	33120 – Trade facilitation
12110 – Health policy and administrative management	16010 – Social/ welfare services	33150 – Trade-related adjustment
12220 – Basic health care	16050 – Multi-sector aid for basic social services	41010 – Environmental policy and administrative management
12240 – Basic nutrition	16062 – Statistical capacity building	41030 – Biodiversity
13020 – Reproductive healthcare	21020 – Road transport	41081 – Environmental education/ training
14010 – Water sector policy and administrative management	24030 – Formal sector financial intermediaries	41082 – Environmental research
14015 – Water resources conservation (including data collection)	24040 – Informal/semi-formal financial intermediaries	43010 – Multi-sector aid
14020 – Water supply and sanitation — large systems	25010 – Business support services and institutions	43040 – Rural development
14021 – Water supply — large systems	31210 – Forestry policy and administrative management	43050 – Non-agricultural alternative development
14022 – Sanitation — large systems	31220 – Forestry development	43081 – Multi-sector education/training
14030 – Basic drinking water supply and basic sanitation	31282 – Forestry research	43082 – Research/scientific institutions
14031 – Basic drinking water supply	31291 – Forestry services	51010 – General budget support
14032 – Basic sanitation	313 – Fishing	52010 – Food aid/Food security programmes
14040 – River basins' development	32110 – Industrial policy and administrative management	91010 – Administrative costs
15110 – Public sector policy and administrative management	32130 – Small and medium-sized enterprises (SME) development	99810 – Sectors not specified
15112 – Decentralisation and support to subnational government	32161 – Agro-industries	
15150 – Democratic participation and Civil society	32182 – Technological research and development	

APPENDIX 2. G7 ODA DISBURSEMENTS FOR AGRICULTURE, 2002–2018 (USD MILLION)

AGRICULTURE, TOTAL	CANADA	FRANCE	GERMANY	ITALY	JAPAN	UNITED KINGDOM	UNITED STATES	G7 COUNTRIES, TOTAL
2002	95.4	313.4	232.9	2.5	477.7	219.5	335.9	1,677.3
2003	103.5	241.8	332.7	33.9	619.3	196.2	402.5	1,929.9
2004	114.6	248.1	329.2	33.1	624.7	191.8	691.6	2,233.0
2005	102.9	186.7	362.0	24.6	609.7	192.7	578.7	2,057.3
2006	117.9	198.8	384.7	42.3	807.7	191.7	543.5	2,286.6
2007	141.5	617.0	373.8	50.9	823.5	170.9	589.4	2,767.0
2008	156.8	461.8	391.4	64.5	981.7	206.7	895.3	3,158.2
2009	181.5	392.6	418.1	75.8	934.1	285.9	1,205.0	3,493.1
2010	516.6	299.7	481.5	41.8	910.0	298.6	1,641.9	4,190.0
2011	291.4	371.5	589.5	46.3	739.5	376.1	1,595.6	4,010.1
2012	224.6	381.8	517.7	42.0	625.8	407.5	1,419.8	3,619.1
2013	238.6	348.0	631.7	50.1	762.2	445.6	1,317.2	3,793.4
2014	190.0	471.0	542.2	49.0	641.6	546.5	1,470.7	3,911.0
2015	184.0	385.2	813.2	112.5	650.0	679.1	1,482.9	4,306.9
2016	198.2	412.1	869.8	91.2	823.5	547.0	1,473.8	4,415.7
2017	160.7	622.9	962.1	108.0	825.6	591.3	1,286.4	4,556.9
2018	204.4	629.7	893.2	101.1	628.5	503.7	1,082.4	4,043.1

Source: OECD, n.d.a.

APPENDIX 3. G7 ODA DISBURSEMENTS FOR AGRICULTURE AS A PERCENTAGE OF TOTAL ODA DISBURSEMENTS, 2002–2018 USD MILLION (CONSTANT 2018 DOLLARS)

AGRICULTURE AS A PERCENTAGE OF TOTAL ODA	CANADA	FRANCE	GERMANY	ITALY	JAPAN	UNITED KINGDOM	UNITED STATES	G7 COUNTRIES, TOTAL
2002	10.15	5.16	3.70	0.18	6.64	6.68	1.91	3.92
2003	8.26	3.15	5.01	2.00	6.47	6.53	1.83	3.72
2004	5.11	3.86	5.58	3.61	5.37	4.91	3.10	4.19
2005	4.11	2.05	3.52	0.91	4.23	2.85	1.74	2.60
2006	5.71	2.14	3.99	1.64	6.14	2.56	2.01	3.21
2007	6.41	8.51	3.99	3.29	6.90	2.86	2.50	4.47
2008	5.11	6.60	3.76	3.43	7.24	3.02	3.13	4.43
2009	5.58	5.04	5.21	7.75	8.60	3.72	4.06	5.12
2010	14.58	3.30	5.09	4.40	7.48	3.60	5.34	5.64
2011	8.47	4.29	6.09	2.56	6.27	4.58	4.96	5.29
2012	6.61	4.24	5.03	6.03	5.78	4.94	4.92	5.07
2013	7.96	4.56	5.77	5.48	4.27	4.40	4.49	4.75
2014	6.44	6.19	4.02	3.64	5.22	5.34	4.88	5.01
2015	5.89	5.23	4.62	5.47	4.95	6.19	5.13	5.18
2016	6.87	5.14	3.66	3.38	6.24	4.57	4.83	4.74
2017	4.97	6.83	4.00	3.19	5.39	4.89	4.09	4.62
2018	5.77	6.60	3.98	4.50	4.73	4.02	3.53	4.29

Source: OECD, n.d.a.

Ceres2030
Sustainable Solutions to End Hunger

ABOUT CERES2030

Ceres2030 brings together three institutions who share a common vision: a world without hunger, where small-scale producers enjoy greater agricultural incomes and productivity, in a way that supports sustainable food systems. Our mission is to provide the donor community with a menu of policy options for directing their investments, backed by the best available evidence and economic models.

The partnership brings together Cornell University, the International Food Policy Research Institute (IFPRI) and the International Institute for Sustainable Development (IISD). Funding support comes from Germany's Federal Ministry of Economic Cooperation and Development (BMZ) and the Bill & Melinda Gates Foundation (BMGF).

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IFPRI INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

IISD International Institute for Sustainable Development