Food and Agriculture Organization of the United Nations

FINANCING FOOD FOR A BETTER FUTURE

Financing agrifood systems transformation to increase resilience, and prevent and mitigate food crises

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Abbreviations

ADB	African Development Bank
AFS	agrifood systems
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CO_2	carbon dioxide
DFA	development flows to agriculture
DFI	development finance institution
FAO	Food and Agriculture Organization of the United Nations
FI	financial institution
FIRA	Fideicomisos Instituidos en Relación con la Agricultura
FSW	Food Shock Window
GAFSP	Global Agriculture and Food Security Programme
GDP	gross domestic product
GHG	greenhouse gas
GNAFC	Global Network Against Food Crises
GSSS	green, social, sustainability and sustainability-linked [bonds]
HIC	high-income country
IADB	Inter-American Development Bank
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICMA	International Capital Markets Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IMF	International Monetary Fund
IDA	International Development Association
IPC/CH	Integrated Food Security Phase Classification/Cadre Harmonisé
KPI	key performance indicator
LDC	least developed country
LIC	low-income country
LMIC	lower-middle-income country
MFI	microfinance institution

ODA	official development assistance
OECD	Organization for Economic Co-operation and Development
OOF	other official flows
PCGS	partial credit guarantee scheme
PPP	purchasing power parity (dollars)
PRONAF	National Programme for the Strengthening of Family Farming
SDG	Sustainable Development Goal
SLB	sustainability-linked bond
SME	small- and medium-scale enterprise
SSA	sub-Saharan Africa
TAF	Technical Assistance Facility
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNCHOA	United Nations Office for the Coordination of Humanitarian Affairs
UMIC	upper-middle-income country
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
WFP	World Food Programme

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Executive summary

Hunger has increased substantially since the Third Financing for Development Conference held in Addis Ababa in July 2015, reaching 733 million people in 2023, and food crises are an important part of the current polycrisis. As of 2023, an estimated 28.9 percent of the global population (2.33 billion people) were facing moderate or severe food insecurity, and more than one-third were unable to afford a healthy diet. Additionally, almost 282 million people experienced high levels of acute food insecurity in crisis settings in 2023.

Financing for agrifood systems, which was already insufficient, has not increased substantially since then. Total flows of agrifood financing remain inadequate and they are also fragmented in their targeting of the countries and individuals most at risk of food crises. Increased public debt burdens and declines in fiscal space in low-income countries (LICs) and lower-middle-income countries (LMICs) are also notable and complicate public investment.

It is crucial for the Fourth Financing for Development Conference due to take place in July 2025 to prioritize increased investment in the transformation of agrifood systems (AFS). Agrifood systems are a vital pillar of the global economy, generating significant economic value and providing employment for more than 1 billion people – making them the world's largest source of jobs and livelihoods. Investments in agrifood systems transformation could generate global economic benefits of at least USD 5 trillion per year (FAO, 2023a; FSEC, 2024), while also providing critical resources for the prevention and mitigation of food crises. Moreover, in 2020 alone, agrifood systems generated between 10 and 12 trillion purchasing power parity (PPP) dollars of environmental, health and social hidden costs (FAO, 2023a). Thus, promoting a more sustainable, efficient and inclusive process of agrifood systems transformation is critical for achieving the Sustainable Development Goals (SDGs), including reducing poverty and inequality, promoting good health and adapting to and mitigating climate change.

Although estimating the financing gap for agrifood systems transformation is challenging, given the wide variety of interventions needed to address critical drivers, it is estimated to be around USD 680 billion a year. A projection by Laborde and Torero (2023) hypothesizes that a combined package of interventions aimed at enabling a more sustainable and inclusive

agrifood systems transformation could cost a total of USD 4 trillion between 2024 and 2030 in low- and middle-income countries, or USD 680 billion per year. This comprises a mix of investments (USD 426 billion) and the cost of establishing and reinforcing social safety nets (USD 255 billion). While the amount to be spent on social safety nets will largely decline with broader investments in agrifood systems, providing enough income to extend access to healthy diets by 2030 will still require major redistribution efforts.

At present, neither the quantity nor quality of available financing for agrifood systems transformation meets the demand from countries that are most in need. Low- and lower-middle-income countries face the most acute challenges in terms of food insecurity, undernourishment and malnutrition, and suffer from protracted food crises. Their economies are highly dependent on agrifood systems and are vulnerable to the increased frequency and intensity of climate shocks and conflict. These countries also face the greatest restrictions when it comes to accessing quality financing, given their high levels of debt, fiscal constraints and underdeveloped agribusiness sector. Public expenditure on agrifood systems in high-income and upper-middle-income countries is significantly higher and this makes them less vulnerable.

The targeting of financing for agrifood systems transformation within countries must improve. Within countries, the poorest and most vulnerable individuals end up benefiting from only a very small proportion of financing. Smallholder farmers, women, youth and other marginalized people in rural areas are more dependent on agrifood systems for their livelihoods, and most likely to be affected by food insecurity and malnutrition, but are often beyond the reach of financial flows for the sector.

A greater percentage of climate financing should be oriented towards agrifood systems. Climate-related finance to agrifood systems has increased over the past two decades, but the total value (USD 19 billion) remains small compared with the need to finance more resilient agrifood systems, which are currently estimated to generate one-third of global greenhouse gas emissions. Additionally, climate finance for agrifood systems still come predominately from donors – with only 5 percent coming from the private sector.

Reforms in agrifood systems financing are needed to address these shortcomings. Domestic funding for agrifood systems requires repurposing and reprioritization, both within and among countries; increased domestic resources are also needed. Additional flows of climate finance are required to support agrifood systems transformation, and greater efforts should be made to ensure social inclusion in agrifood systems investment, through for example, greater focus on investments that increase gender equality and women's empowerment. Greater macroeconomic stability for countries that are highly dependent on agrifood systems would also support enhanced financial flows.

Financial innovations are required at scale to transform agrifood systems. The agrifood system has not benefited from financial innovations present in other sectors. Nonetheless,

grants and concessional loans coupled with technical assistance, blended finance, debt swaps, green, social, sustainability and sustainability-linked bonds and derisking instruments such as insurance and guarantees all have promise for addressing the quantity and quality of financing for agrifood systems.

Increased investment in agrifood systems will play a crucial role in preventing and mitigating food crises. Thirty six out of 59 countries facing food crises (high acute food insecurity – Integrated Food Security Phase Classification/Cadre Harmonisé [IPC/CH] Phase 3 or above) are in protracted crises, having been characterized as in a crisis state for eight or more years. On average, only 3 percent of global development assistance has been allocated to food sectors in these countries, while 33 percent of global humanitarian flows were allocated to them. This suggests that the majority of financing is directed towards tackling the symptoms of food crises, rather than their causes, despite the heavy reliance of food-insecure populations on agriculture for their livelihoods.

The Fourth International Conference on Financing for Development provides an opportunity to address the unique role that agrifood systems investment can play in generating economic growth and decreasing inequality, as well as in preventing and mitigating food crises. A larger, more efficient, equitable and innovative financing landscape for agrifood systems transformation would be an important way to address the most pressing challenges faced by heavily agrifood systems-dependent low- and lower-middle-income countries, reduce poverty, ensure the right to food and reduce hunger and malnutrition, address gender and other forms of inequalities, support climate change adaptation and mitigation, and prevent and mitigate food crises.

Developing and agreeing on a common definition of food security and nutrition financing is crucial. The lack of clarity in this sense complicates efforts to achieve SDG 2.1 and SDG 2.2, creates accountability challenges, and underscores the complexity and fragmentation within the current financial landscape. The Food and Agriculture Organization of the United Nations (FAO) publication *The State of Food Security and Nutrition in the World 2024* proposes a new definition that captures the holistic nature of food security and nutrition (FAO *et al*., 2024). It considers public and private financing coming from domestic or foreign sources and integrates actions that address the main determinants, as well as the major and structural drivers of hunger and all forms of malnutrition. While food security and nutrition and agrifood systems transformation are not the same, this new definition recognizes that key investments in food security and nutrition, especially those oriented towards creating resilience against the major drivers, are part of the overall effort of transforming agrifood systems.

The current data infrastructure does not facilitate a systematic assessment of existing funding, but it does highlight key characteristics of regular financial flows that could inform future actions. However, implementing the new definition in a consistent manner presents significant data challenges, depending on the source of financing being considered.

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1 Introduction: Financing agrifood systems transformation to address crises and achieve the SDGs

1.1 Food crises, the polycrisis and agrifood systems transformation

The world is severely off track to achieve the Sustainable Development Goals. Of the 135 SDG targets that can be assessed using global data, only 17 percent are on track (UNDESA, 2024). Global levels of undernourishment have persisted at around the same levels for three consecutive years, after having grown significantly in the aftermath of the COVID-19 pandemic, with an estimated 713 to 757 million people being undernourished as of 2023. More than 582 million people are projected to be chronically undernourished by the end of this decade, of whom more than half live in Africa. By 2023, approximately 28.9 percent of the global population – around 2.33 billion people – were facing moderate to severe food insecurity, while as of 2022, over one-third of the world's population (2.8 billion people) could not afford a healthy diet. While there have been some improvements in addressing malnutrition, such as reductions in stunting and wasting among children under-five, in the current scenario none of the seven global nutrition targets are on track to be achieved by 2030 (FAO *et al.*, 2024). Furthermore, nearly 282 million people across 59 countries experienced severe acute food insecurity in 2023, with conditions deteriorating in 12 countries between 2022 and 2023 (FSIN and GNAFC, 2024).

Global food crises are an important factor in the polycrisis that is putting the 2030 Agenda for Sustainable Development (Agenda 2030) in peril.[1] After a period of rapid economic expansion in the early 2000s, the world faced successive shocks and multiple crises, such as the 2007–2008 food price crisis, the 2008 world financial crisis, the COVID-19 pandemic and escalating geopolitical tensions and conflict, while being increasingly affected by climate challenges (DESA FSDO, 2024). During the 2007–2008 global food price crisis, the price of maize and wheat doubled and that of rice tripled. During the COVID-19 pandemic, transport, processing and marketing in agrifood supply chains were disrupted. Commodity prices increased again from 2020 and were aggravated by the disruption in fertilizers, fuel and food supply caused by war in Ukraine in 2022 (FAO, forthcoming). Each of these crises has had severe impacts on vulnerable populations and countries' ability to achieve SDG 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture). They have also had significant economic repercussions, such as the impact of high food prices on the balance of payments of net food importing countries (FAO, 2022a). The most effective and sustainable responses to the food crises at national level in the past two decades have been investments in boosting agricultural production and expanding social protection. Such investments can also have an anticipatory effect, increasing countries' resilience to future shocks (FAO, forthcoming). Increased investment in agrifood systems is a crucial part of preventing and mitigating food crises and their contribution to the polycrisis.[2]

Agrifood systems transformation is a key enabler for the achievement of the SDGs and Agenda 2030, and an important channel through which to address the polycrisis. The 2024 edition of FAO's annual report, *The State of Food and Agriculture*, defines agrifood systems transformation as "the process by which the functioning of agrifood systems is changed to make them more efficient, inclusive, resilient and sustainable" (FAO, 2024a). Achieving this transformation is critical for SDG indicators linked to poverty reduction (such as SDG targets 1.1 and 1.2) and zero hunger (such as SDG targets 2.1, 2.2 and 2.4), but inadequate attention is often paid to how critical it is for achieving a variety of other SDGs. For example, it is hard to imagine achieving SDG 5 – gender equality – and particularly SDG 5.a.1 and 5.a.2 on women's access to land rights, without addressing the sector that employs 66 percent of women in sub-Saharan Africa (SSA) and 71 percent of women in southern Asia (FAO, 2023b). Certainly, achieving indicator SDG 8.7 (eliminating child labour) would be impossible without addressing the inequities that drive more than 70 percent of child labour globally to occur in agriculture. Furthermore, SDG 10 (reducing inequality) – and indeed the entire agenda that revolves around the objective of 'leaving no one behind' – is particularly aimed at reaching the most marginalized individuals, who are often found in rural areas and who depend disproportionally on agriculture and agrifood systems for

[1] A food crisis, as defined by the 2024 *Global report on food crises*, is "a situation where acute food insecurity requires urgent action to protect and save lives and livelihoods at local or national levels and exceeds the local resources and capacities to respond" (FSIN and GNAFC, 2024).

[2] A polycrisis is defined by the World Bank (2024a) as "an environment where multiple and interconnected challenges are affecting the world simultaneously".

their livelihoods (FAO, forthcoming). Promoting the transformation of agrifood systems is a critical step towards addressing the structural disparities that contribute to the current stalled progress in the promotion of food security and nutrition, as well as towards fostering the resilience of such systems against the major drivers responsible for national and regional food crises.

However, agrifood systems are underperforming across all regions, registering strong negative environmental impacts (such as greenhouse gas emissions, soil degradation and biodiversity loss), health-related impacts (such as obesity and non-communicable diseases) and social impacts (high levels of poverty and inequality). These hidden costs are estimated to have been between 10 and 12 trillion PPP dollars in 2020. FAO (2024a) estimates that the hidden costs of agrifood systems amount to 47 percent of gross domestic product (GDP) for countries in the protracted crisis category and 22 percent in countries in the traditional category. That indicates a strong overlap between countries with traditional agrifood systems and those that continue to suffer from crises related to food insecurity and nutrition. Transforming agrifood systems in these countries, as well as in those that are more transformed and industrialized, could generate global economic benefits equivalent to at least USD 5 trillion a year, or USD 104 trillion cumulatively between 2020 and 2050, by reducing the hidden costs of unhealthy diets, social inequalities and negative environmental impacts associated with the current systems (FAO, 2023a and FSEC 2024). This gross benefit indicates the importance of agrifood systems transformation for economic growth, employment and overall resilience.

Addressing such impacts and preventing food crises requires the transformation of agrifood systems everywhere, but the current funding directed towards agrifood systems is insufficient, inadequate and is concentrated in a few richer countries. Additionally, debt, fiscal and trade constraints for the countries that are most dependent on agriculture and agrifood systems for their macroeconomic stability have increased, making it more difficult for them to access domestic, international public or private sector financing. Finally, agrifood systems lag behind in terms of innovation in types of financing, and there are inequities in the distribution of that financing, as these flows often fail to reach smallholder farmers, women, youth and disadvantaged or marginalized people in rural areas who are most dependent on agrifood systems for their livelihoods and are most likely to be affected by food security and nutrition crises.

This report was prepared to present **data and evidence, as well as recommendations,** on how development finance flows could be bolstered and channelled more effectively to contribute to a sustainable transformation of agrifood systems, as well as to improving countries' capacity to prevent food crises and mitigate their effects, building on all action areas originally proposed in the 2015 Addis Ababa Action Agenda. The report aims to showcase and discuss how the core trends of development finance flows directed at agrifood systems have changed since the 2015 Third International Conference on Financing for Development,

of which the Addis Ababa Action Agenda was the main outcome. Furthermore, it seeks to present FAO's recent analytical work on a range of aspects linked to financing for agrifood systems transformation and food crisis prevention/mitigation. It also gives a clear overview of the current opportunities and challenges associated with fostering flows of public and private financing directed towards agrifood systems, while providing an in-depth analysis of a variety of innovative instruments and solutions that can be used to channel and amplify these flows.

The remainder of Chapter 1 analyses how different flows of development finance directed at agrifood systems, as well as other relevant trends associated with food security and nutrition, have changed and evolved over the past ten years – since the Addis Ababa Conference of 2015. This analysis is key to taking stock of the present-day scenario regarding agrifood systems financing, together with the opportunities and challenges it holds for donors and other stakeholders. The report analyses data, whenever possible, on agrifood systems financing; however, since there is no agreed definition of agrifood systems financing in the Organization for Economic Co-operation and Development (OECD)'s Development Assistance Committee data, nor in national systems, this report occasionally refers to available data on agriculture, agriculture and rural development, climate financing for agriculture, or funding for food security and nutrition. In the case of low-income and lower-middle-income countries, the overlap between financing for these concepts is considerable.

Chapter 2 presents a framework for understanding the changes that would be required to promote a more strategic and efficient use of financing flows directed at agrifood systems transformation. Firstly, it identifies the countries most in need of financing for agrifood systems, by presenting a country-level classification based on their macroeconomic dependence on agrifood systems. Secondly, it presents a conceptual framework focused on ensuring that the right sources of money reach the neediest actors in the most efficient and synergistic fashion possible.

Chapter 3 identifies a series of broader reforms and approaches to financing for agrifood systems, providing a number of considerations on possible shifts in the current financing architecture that can help to advance a more inclusive, sustainable and resilient process of agrifood systems transformation.

Chapter 4 offers a more in-depth analysis of a range of specific instruments and tools that have proved their potential in mobilizing additional investment capital for agrifood systems transformation. As is discussed later in the chapter, the capacity of developing and emerging countries to make use of such instruments will be limited by their internal risk environments and overall structural constraints, which points to the need for selecting the most appropriate tool to foster financing on the basis of the context at hand.

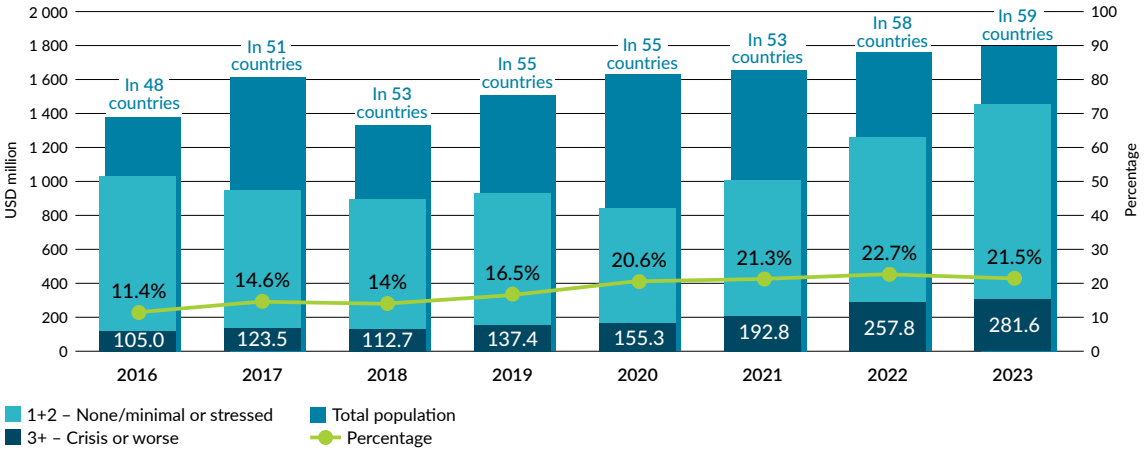
1.2 Taking stock of financing for agrifood systems transformation since Addis Ababa

The international financial architecture and availability of financing for agrifood systems transformation has failed to keep pace with the demonstrated need. The Third Conference on Financing for Development took place in 2015, and it is important to take stock of how food security and nutrition and food crises have evolved over the past ten years, as well as how financial flows to the sector have changed (domestic support, official development assistance (ODA) to agriculture and debt trends).

Between 2015 and 2023 there was a sharp increase in chronic hunger. The prevalence of undernourishment at global level rose from 7.7 percent in 2015 to 9.1 percent in 2023 (18.4 percent to 23.2 percent in sub-Saharan Africa). The global number of undernourished people increased from 570.2 million in 2015 to 733.4 million in 2023 (of whom 179.4 to 277.7 million were in SSA). In 2023, an estimated 28.9 percent of the global population – equivalent to 2.33 billion people – experienced moderate to severe food insecurity, indicating inconsistent access to sufficient food. Among them, approximately 10.7 percent – or 864 million people – faced severe food insecurity, putting their health and overall well-being at significant risk. These figures represent a sharp increase compared with 2015, when 14 percent of the global population was moderately food insecure (1.04 billion people in absolute terms) and 7.5 percent was severely food insecure (550 million), amounting to a total of 1.54 billion people (FAO *et al.*, 2024).

Acute food insecurity also increased. As can be seen from Figure 1, the prevalence of severe acute food insecurity (IPC/CH Phase 3 or higher) nearly doubled between 2016 and 2023, rising from 11 percent in 48 countries or territories in 2016 to 21.5 percent across 59 countries or territories by 2023. The most significant surge occurred between 2019 and 2020, when the share of people facing critical food shortages climbed from 17 percent to 21 percent, driven

Figure 1. Number of people facing high levels of acute food insecurity 2016–2023



Source: FSIN and GNAFC (Food Security Information Network and Global Network Against Food Crises). 2024. *2024 Global Report on Food Crises*. Rome. www.fsinplatform.org/grfc2024

by prolonged conflicts, the economic impacts of COVID-19 and extreme weather events that worsened existing vulnerabilities. A notable rise was also observed between 2018 and 2019, particularly in conflict-affected regions such as the central Sahel, the Democratic Republic of the Congo and South Sudan. Additionally, escalating weather-related disasters and economic instability contributed to worsening food insecurity in countries such as Guatemala, Haiti, Pakistan and Zimbabwe.

Countries experiencing food crises at national level are increasingly facing protracted crises.[3] Some 36 countries or territories are classified as being in protracted food crises in the *2024 Global Report on Food Crises*, and these countries have been in crisis every year for the report's past eight editions. Between 2016 and 2022, the number of people experiencing severe acute food insecurity in these 36 countries or territories surged from 93.4 million (13 percent of the analysed population) to 203.3 million (22 percent). Among them, 19 countries are classified as in both 'protracted' and 'major' food crises, accounting for 65 to 80 percent of those facing severe food insecurity across food-crisis countries each year. Furthermore, in 2023, the number of people projected to be in 'Catastrophe' (IPC/CH Phase 5) in five countries or territories was more than four times higher than in 2016, marking the highest level recorded in eight years of GRFC reporting.

While the level of hunger**, prevalence of chronic** and **acute** food insecurity **and countries facing food crises all rose substantially** between 2015 and 2023, **public spending on agriculture in low-income countries (LICs) and lower-middle-income countries (LMICs) remains very low and has not increased adequately.** Official development assistance channelled towards food security and nutrition has hovered around the same levels over the past ten years, while only 34 percent of these flows seek to address the major drivers of food insecurity (FAO *et al.*, 2024).[4] Those countries that are most dependent on their agrifood systems and that register a higher prevalence of food insecurity are also the ones that are facing the biggest challenges in relation to levels of national debt. To realize the objective of achieving zero hunger, there is a need for urgent and deep change across most areas of financing for development.

[3] According to the *Global Report on Food Crises (GRFC)*: "A food crisis is defined as 'major' if more than 1 million people or more than 20 percent of the total country population is estimated to be facing IPC/CH Phase 3 or above or equivalent, or if at least one area is classified in Emergency (IPC/CH Phase 4) or above, or if the country is included in the IASC humanitarian system-wide emergency response level 3." Additionally: "A food crisis is defined as 'protracted' if included as such in all eight editions of the GRFC. If the food crisis met the criteria to be defined as a 'major' food crisis in all editions, then it is defined as a 'protracted major' food crisis." (FSIN and GNAFC, 2025).

[4] Since 2017, the different editions of *The State of Food Security and Nutrition in the World* have analysed the major drivers (conflict, climate variability and extremes and economic slowdowns and downturns) and the underlying structural factors (lack of access to and unaffordability of nutritious foods and unhealthy food environments, and high and persistent inequality) behind the recent trends of food insecurity and malnutrition. For more details about how this analytical framework has been applied to map the food security and nutrition financing flows, see FAO, IFAD, UNICEF, WFP and WHO, 2024.

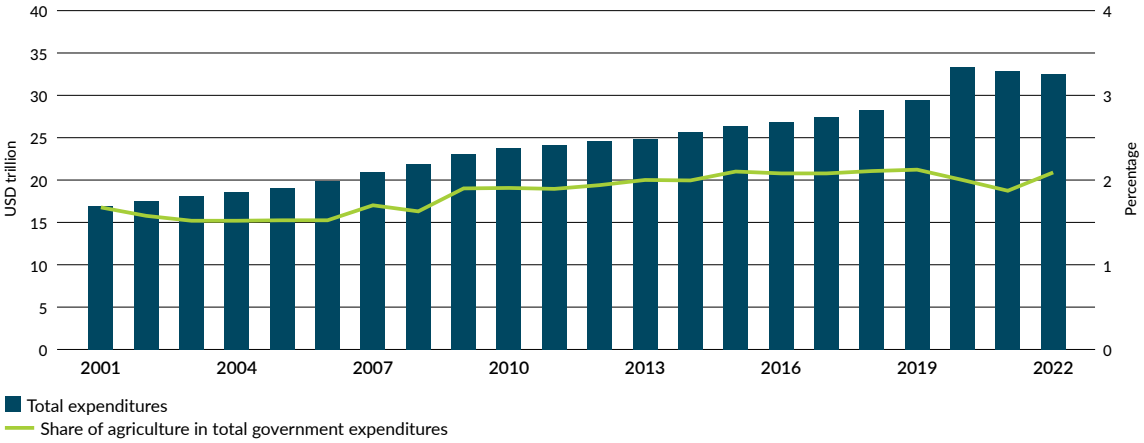
The following subsections examine how the core trends related to the financing flows directed towards agrifood systems have changed since the Addis Ababa Conference of 2015, analysing, in turn, different segments of this type of financing: a) domestic public support; b) development financing flows; and c) domestic debt.

a) Flows of domestic support directed at agriculture

The share of agricultural expenditure in GDP has remained mostly unchanged since 2015. Government expenditures reflect countries' priorities in terms of programmes and sectors and can be used as a direct response to cushion the impacts of economic and social challenges such as the COVID-19 pandemic, natural disasters and increasing inflation. Globally, agricultural expenditure accounted for 2.1 percent of total government expenditure in 2022, a percentage that has barely changed since the Addis Ababa Conference of 2015. The share of agricultural spending relative to the total peaked in 2019 at 2.13 percent and declined to 1.88 percent in 2021, before rebounding to 2.1 percent in 2022.

Nevertheless, total domestic expenditure on agriculture has reached an all-time high, having increased in real terms since 2015. It remains unevenly distributed among countries and concentrated in high- and upper-middle-income countries. In 2022, global public expenditure reached USD 36 trillion in nominal value, representing 36.7 percent of global GDP, according to FAOSTAT data. Government spending on agriculture amounted to USD 749 billion in nominal value, which represented an all-time high. In real terms, the total value of agricultural spending (in 2015 prices) was USD 683 billion in 2022.

Figure 2. Total government expenditure and share of agriculture (USD 2015 prices)



Source: FAO. 2024. *Government expenditure*. FAOSTAT. [Accessed on 20 November 2024]. http://www.fao.org/faostat/en/#data/IG. Licence: CC-BY-4.0.

Global agricultural spending in real terms increased by 2.95 percent on average each year between 2015 and 2022 (see Table 1). All regions recorded increases, with the highest average annual growth rate recorded in Asia (3.26 percent) and the lowest in Oceania (0.83 percent).

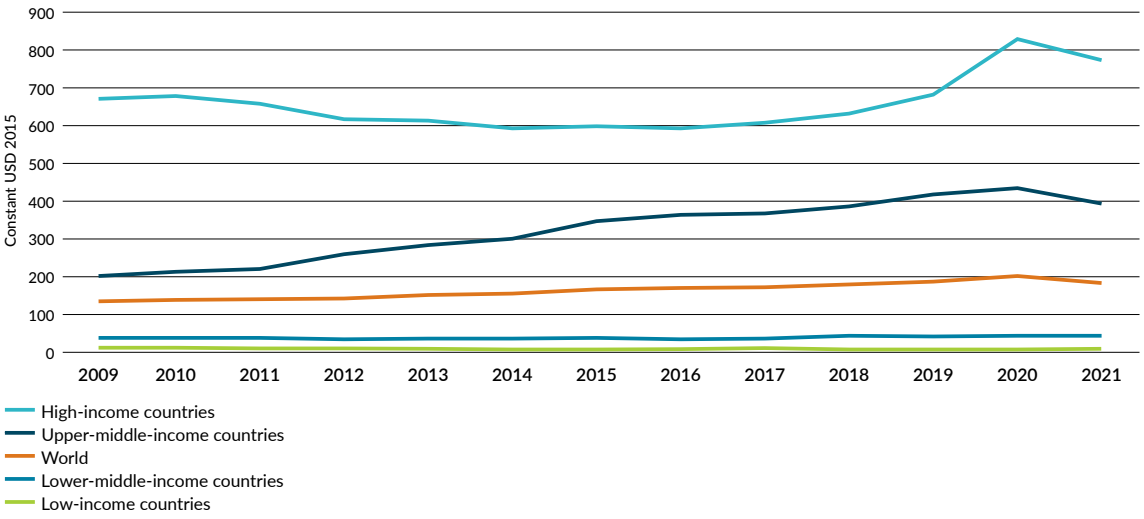
Table 1. Increases in agricultural spending 2015–2022, by region

Region	USD 2015 prices (million)		Average annual change (percent)
	2015	2022	2015–2022
World	**557 350**	**682 994**	**2.95**
Africa	**13 641**	**15 099**	**1.46**
Eastern Africa	2 543	2 576	0.19
Northern Africa	5 838	6 153	0.75
Middle Africa	796	906	1.86
Southern Africa	1 991	1 830	-1.20
Western Africa	2 474	3 634	5.65
Americas	**55 236**	**59 775**	**1.13**
Caribbean	3 429	3 869	1.74
Central America	6 912	3 693	-8.57
Northern America	31 322	38 399	2.95
South America	13 573	13 814	0.25
Asia	**427 230**	**534 659**	**3.26**
Central Asia	2 843	4 883	8.03
Eastern Asia	347 943	435 337	3.25
Southern Asia	43 783	63 446	5.44
Southeast Asia	19 153	16 494	-2.11
Western Asia	13 508	14 498	1.02
Europe	**57 869**	**69 887**	**2.73**
Eastern Europe	15 528	16 236	0.64
Northern Europe	10 391	13 530	3.84
Southern Europe	11 254	13 331	2.45
Western Europe	20 696	26 790	3.76
Oceania	**3 374**	**3 574**	**0.83**
Australia and New Zealand	3 199	3 312	0.49
Oceania excluding Australia and New Zealand	174	262	6.01

Source: FAO. 2024. *Government expenditure*. FAOSTAT. [Accessed on 20 November 2024]. http://www.fao.org/faostat/en/#data/IG. Licence: CC-BY-4.0.

However, this all-time high does not imply that such expenditures are directed where they are most needed, nor that they are financing sustainable and inclusive agrifood systems transformation. As can be seen in Figure 3, public spending on agriculture per rural inhabitant has persisted at very low levels for years among low- and lower-middle-income countries, which is where the highest levels of food insecurity and undernutrition

Figure 3. Domestic government expenditure on agriculture per rural inhabitant, 2009–2021

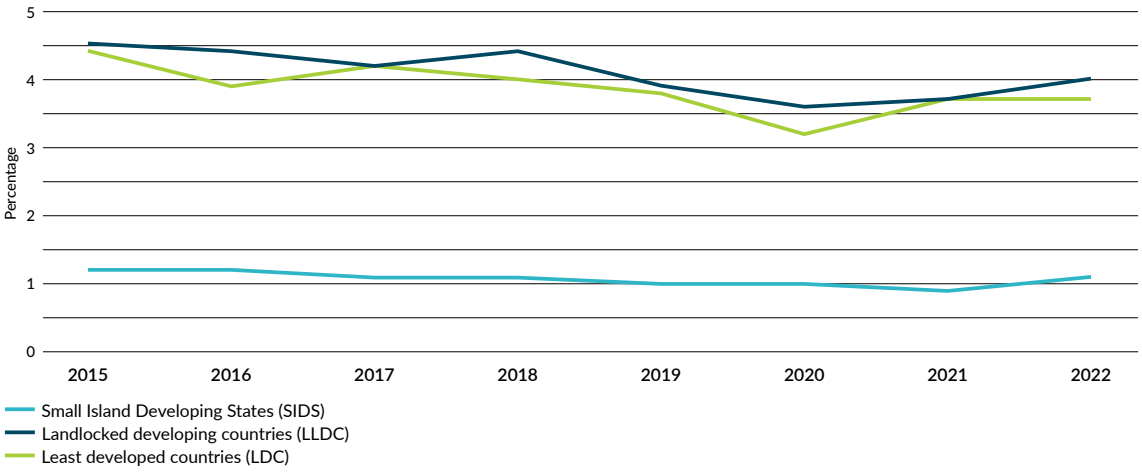


Source: FAO *et al.* 2024. *The State of Food Security and Nutrition in the World 2024 – Financing to end hunger, food insecurity and malnutrition in all its forms.* Rome. https://doi.org/10.4060/cd1254en

are concentrated. An analysis by FAO *et al*. (2024) shows that there is a strong correlation at country level between low levels of public spending on agriculture and various indicators of food insecurity and malnutrition, such as a high prevalence of undernourishment, prevalence of moderate and severe food insecurity, and percentage of stunted children under five years of age.[5]

Between 2015 and 2022, the share of agriculture in government expenditures in least developed countries (LDCs) declined from 4.5 percent to 3.7 percent (see Figure 4), and a slight decrease (4.5 to 4.1 percent) was registered among landlocked developing countries. In Small Island Developing States, the share of government expenditures channelled into agriculture has historically been very low, and it remained mostly unchanged between 2015 and 2022 (1.1 percent).[6]

Figure 4. Share of agriculture in government expenditure in selected types of countries (USD 2015 prices)



Source: FAO. 2024. *Government expenditure*. FAOSTAT. [Accessed on 20 November 2024]. http://www.fao.org/faostat/en/#data/IG. Licence: CC-BY-4.0.

[5] One way to tackle this scenario is to redirect existing public domestic resources for agriculture towards strategic programmes and investments that can promote a more sustainable and inclusive transformation of agrifood systems This is further discussed in section 3.1 of this report.

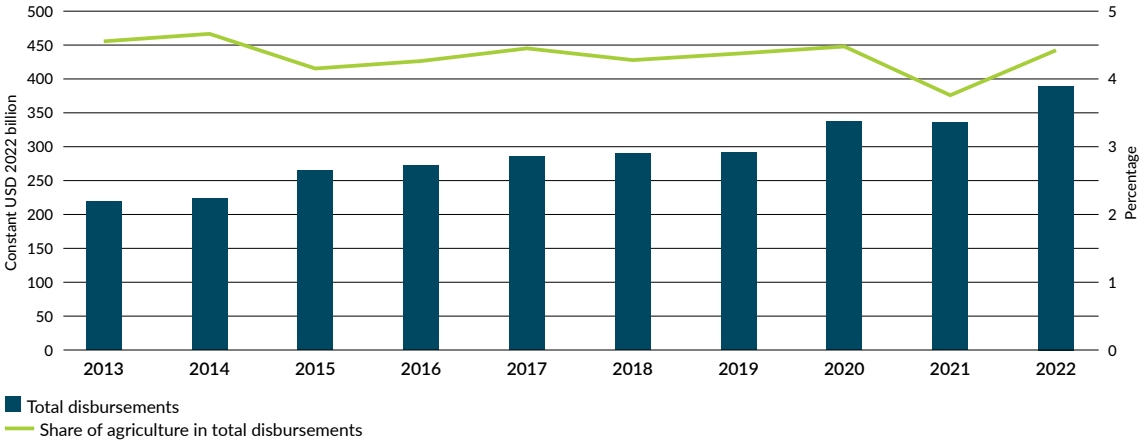
[6] This paragraph refers to groupings of countries as defined by the United Nations (UN). For example, the UN defines LDCs as: "low-income countries confronting severe structural impediments to sustainable development." As such, the groups are not mutually exclusive of the World Bank income groups used elsewhere in the report, e.g. low- income, lower-middle income countries.

b) Development finance flows directed towards agriculture

The relative share of development flows to agriculture (DFA) barely increased between 2015 and 2022, from 4.2 percent to 4.4 percent, due to the fact that both the total volume of development finance and the volume of flows contributing specifically to agriculture both rose in parallel. Development flows are a combination of official development assistance, other official flows (OOF) and private grants. According to the latest OECD data extracted from the FAOSTAT database, in 2022 total development flows from donors amounted to USD 390.6 billion, which represented a 77 percent increase from USD 265 billion in 2015 and a 16 percent increase from USD 336.8 billion in 2021 (see Figure 5). Contributions to agriculture also increased by 57 percent between 2015 and 2022, from USD 11 billion to USD 17.3 billion. Overall, however, the share of development flows directed specifically towards agriculture has seesawed over the past decade, without showing a definite upward or downward trend.

A lower share of external flows addresses the major drivers of food security and nutrition. External (or foreign) flows comprise official development assistance and other official flows, both of which are trackable for most of the world's major donors. According to an analysis by FAO *et al*. (2024), in 2021 approximately 77 billion in ODA and OOF was channelled into food security and nutrition, of which 45 percent (USD 35 billion) was channelled towards food consumption (food availability, access, utilization and stability). A significantly lower share (25 percent) of such flows was allocated to address the major drivers of food insecurity and malnutrition (USD 27 billion).[7]

Figure 5. Total development flows and share channelled towards agriculture

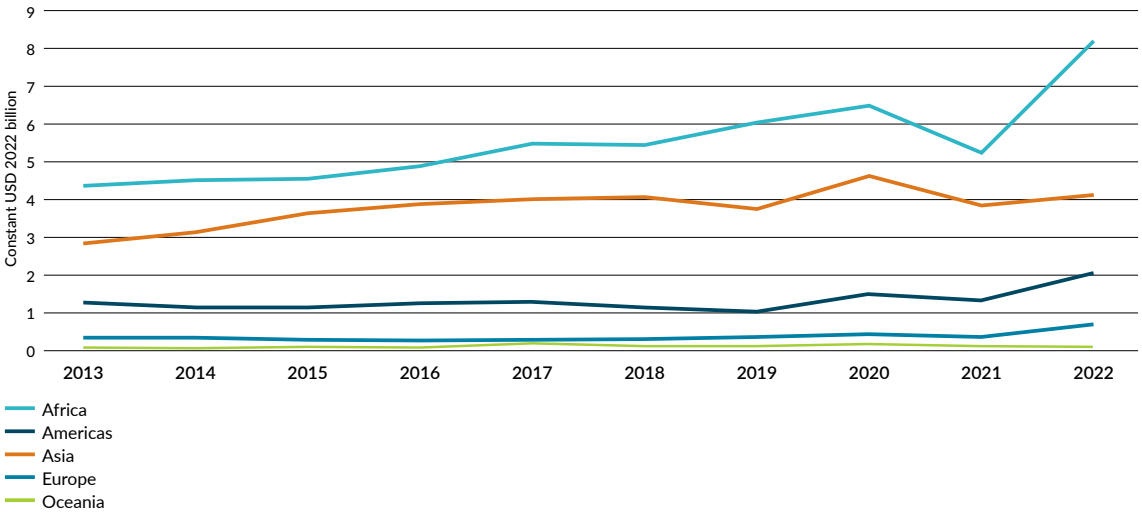


Source: FAO. 2024. *Development flows to agriculture*. FAOSTAT. [Accessed on 20 November 2024]. https://www.fao.org/faostat/en/#data/EA. Licence: CC-BY-4.0.

[7] It is important to highlight that development finance flows directed towards food security and nutrition span sectors and interventions that go beyond agriculture, in recognition of the multiple, intersectoral factors that contribute to hunger and food crises.

Between 2017 and 2021, flows channelled towards agricultural projects grew significantly in dollar value in Africa compared with other regions. As can be seen from Figure 6, Africa was the region that received the largest amounts of development flows to agriculture throughout the period. It received USD 8.2 billion in 2022, up 56 percent compared with 2021, and up 82 percent compared with 2015. Various factors are responsible for the high growth registered between 2021 and 2022, including the post-COVID-19 pandemic recovery effort and increased donor support in response to the global food crisis, linked to the war in Ukraine. On the other hand, Asia received USD 4.1 billion in DFA flows in 2022, an increase of 7 percent compared with 2021, and of 14 percent compared with 2015. The Americas was the third largest region in terms of disbursements to agriculture during the period: it received USD 2 billion in 2022, an increase of 52 percent compared with 2021 and of 66 percent compared with 2015. While small in comparison with the other regions, development flows to agriculture in Europe (USD 700 million in 2022) showed the largest increase between 2021 and 2022 (92 percent), as well as between 2015 and 2022 (133 percent). Disbursements in Oceania were the smallest among all regions (USD 110 million in 2022) and declined by 18 percent between 2021 and 2022. Among national income groups, lower-middle-income countries saw the highest increase in such flows (FAO, forthcoming).

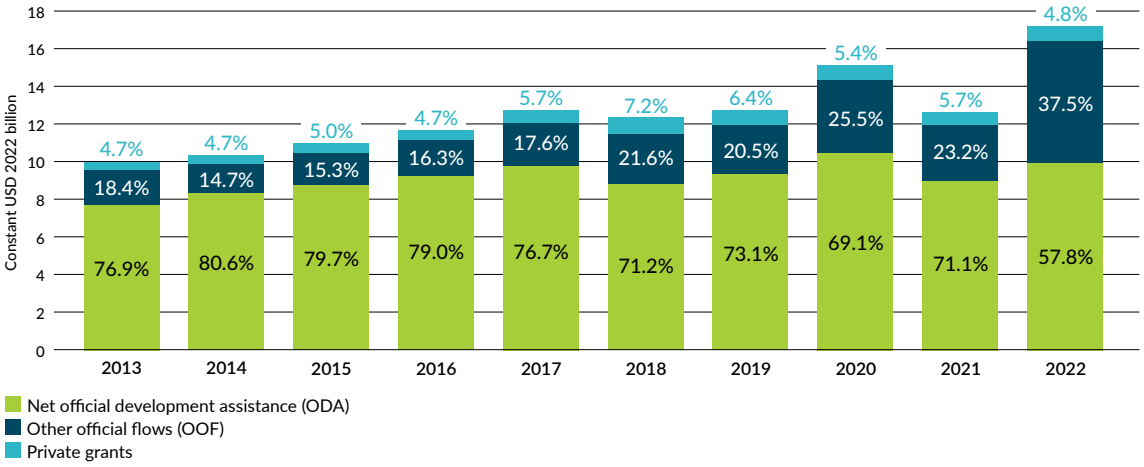
Figure 6. Development flows disbursed to agriculture by region (in USD 2022 prices)



Source: FAO. 2024. *Development flows to agriculture*. FAOSTAT. [Accessed on 20 November 2024]. https://www.fao.org/faostat/en/#data/EA. Licence: CC-BY-4.0.

The mix of official finance to agriculture is changing. The share of net ODA in development flows to agriculture dropped from 80 percent in 2015 to 58 percent in 2022, while that of OOF rose from 15 percent to 37 percent. Most of the increase in OOF occurred between 2021 and 2022, as these flows more than doubled from USD 2.9 billion to USD 6.5 billion.[8] Net official development assistance saw the slowest growth (16 percent) between 2015 and 2022, but nevertheless remained the larger resource flow throughout the period. Private grants remained the smaller resource flow between 2014 and 2022, although they increased by 75 percent, from USD 469 million in 2015 to USD 822 million in 2022. The share of private grants in DFA decreased marginally from 5 percent to 4.8 percent between 2021 and 2022, although it peaked at 7.2 percent in 2018.

Figure 7. Development finance (grants + loans) disbursed to agriculture, by source, 2013–2022



Note: Percentages indicate the shares in the total; they may not tally due to rounding.
Source: FAO. 2024. *Development flows to agriculture*. FAOSTAT. [Accessed on 20 November 2024]. https://www.fao.org/faostat/en/#data/EA. Licence: CC-BY-4.0.

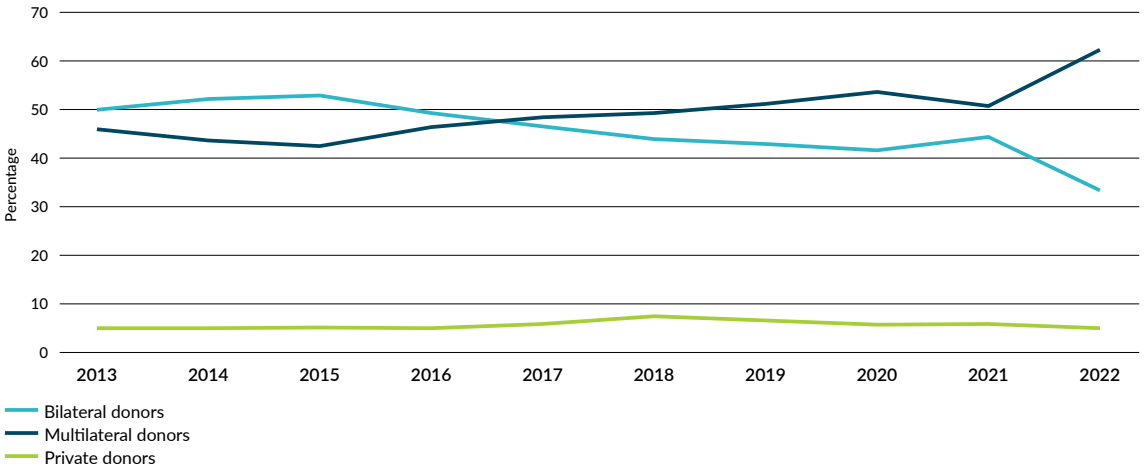
[8] While there are various factors that can partially explain the change in the composition of DFA, the following should be highlighted: 1) a gradual but increasing shift towards financing at market or quasi-market rates and a higher involvement of the private sector, such as through blended finance arrangements; and 2) the budgetary constraints faced by donor countries due to the COVID-19 pandemic, which prompted a reduction of grant-based aid and a shift towards less concessional resources (such as OOF) to fill the gap.

Multilateral donors have increasingly overtaken bilateral donors as the most important public financing source for the agriculture sector since 2017. Regarding the type of donors responsible for DFA contributions, Figure 8 shows comparative data over the past decade. Multilateral donors accounted for a record high 62 percent of total DFA disbursements in 2022 due to the significant contribution of the Islamic Development Bank. Bilateral donors accounted for 33 percent and the private sector for 5 percent. In 2015, bilateral contributions played a more important role than multilateral ones, but that changed in 2017, when multilateral donors became the main source of DFA disbursements.

c) High domestic debt as a constraint to agrifood systems financing

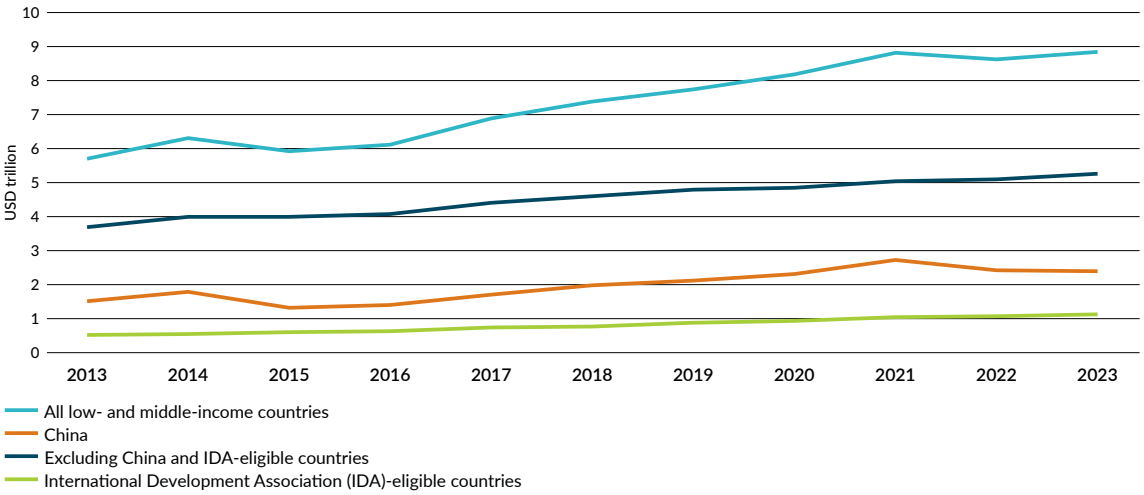
Debt burdens increased substantially between 2015 and 2022. As shown by the World Bank (2024a), the total external debt stock of LMICs increased 49 percent between 2015 and 2022, from USD 5.5 trillion to 8.8 trillion (see Figure 9). This has been a rising trend, only interrupted by slight decreases in the years 2015 and 2022. Debt service levels can represent a huge burden for LICs and LMICs, significantly restricting the options for spending when it comes to developing their agrifood systems through public investments.

Figure 8. Development finance flows to agriculture, by type of donor, 2013–2022



Source: FAO. 2024. *Development flows to agriculture*. FAOSTAT. [Accessed on 20 November 2024]. https://www.fao.org/faostat/en/#data/EA. Licence: CC-BY-4.0.

Figure 9. External debt stock of low- and middle-income countries, 2013–2023



Note: 'IDA-eligible countries' refers to the 78 countries that can currently receive financing from the International Development Association (IDA), the lending arm of the World Bank that focuses on assisting low-income countries. Eligibility for IDA support depends first and foremost on a country's relative wealth, defined as gross national income per capita below an established threshold and updated annually (USD 1 335 in the fiscal year 2025). IDA's resources are delivered through a combination of grants, which do not need to be repaid, and highly concessional loans with interest rates well below market value and generous grace and repayment periods.
Source: World Bank. 2024a. *International Debt Report 2024*. Washington, DC. http://hdl.handle.net/10986/42444

High levels of national debt constrain LICs' and LMICs' capacity to channel resources into the financing of agrifood systems transformation. Countries that register extremely high levels of debt find it far more challenging to attract financing from external sources – not just in terms of private capital, but also of non-concessional capital provided by development finance institutions (DFIs). Although not all countries that are at risk of debt distress also face a high prevalence of malnutrition and food insecurity, high levels of debt can certainly lead to such indicators worsening: for example, a debt default at national level can lead to economic downturns and spiking food prices, which in turn can increase levels of food insecurity and malnutrition (FAO *et al.*, 2024). In this sense, it is critical to highlight that, as will be further analysed in section 3.2, debt-for-development swaps can represent an important tool for freeing up much needed fiscal space for LICs and LMICs, allowing them to redirect resources towards strategic investments that hold significant potential to create more inclusive and resilient agrifood systems.

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2 Conceptualizing the financing need for agrifood systems transformation

Financing for agrifood systems transformations is crucial to promote economic growth, decent employment, environmental sustainability and overall resilience. As the following sections explain, low- and lower-middle-income countries are highly dependent on agriculture or broader agrifood systems, which generate significant GDP and employment. For example, Davis *et al.* (2023) estimate that more than 1 billion people are employed in agrifood systems globally, and that 3.8 billion people worldwide live in agrifood system-dependent households. Greater financing for agrifood systems transformation would have a significant impact on both the economic growth and employment levels of LIC and LMICs. Furthermore, addressing the hidden costs of agrifood systems in terms of health, environment and poverty can have a tremendous gross economic benefit. As noted in the introduction, FSEC (2024) estimates that agrifood systems transformation "provides cumulative gross benefits from avoided hidden costs of 104 trillion USD PPP between 2020 and 2050, equivalent to 5 trillion USD a year (annuitized)". These economic, environmental and social impacts of greater investments in agrifood systems will increase the overall resilience of LICs and LIMCs to diverse shocks and crises.

This chapter provides a framework for understanding the transformation of finance needed in the agrifood systems, and the finance required to address the ongoing food crises. The chapter first identifies those countries most in need of financing for agrifood systems, by presenting a typology based on macroeconomic dependence on agrifood systems. It goes on to present a conceptual framework focused on ensuring that the right sources of money reach the neediest actors in the most efficient and synergistic way possible.

2.1 Macroeconomic dependence on agrifood systems in LICs and LMICs

As previously demonstrated, despite an increase in food crises and hunger since Addis Ababa, flows of financing have not kept pace with need. This is especially problematic in the case of LICs and LMICs, which not only face the most acute challenges in terms of food insecurity and undernourishment, but also have economies that are highly dependent on agrifood systems. Rojas-Suarez *et al.* (2025) developed a classification of countries of all income levels, based on the importance that agrifood systems play in their GDP and employment rates. A similar classification was made for a larger sample of countries considering the importance of agriculture for GDP and employment, which showed that all LICs and LMICs in the sample were highly dependent on agriculture. Figure 10 presents this classification.

The most agriculture-dependent countries (in which agricultural participation in GDP exceeds 20 percent and employment in agriculture is above 50 percent) **are low-income countries from sub-Saharan Africa**, in addition to Nepal and Vanuatu. The large majority of low-income countries and many lower-middle income countries are also substantially dependent on agriculture (with agricultural participation in GDP above 10 percent and employment in agriculture above 20 percent).

Figure 10. Classification of countries based on the importance of agriculture for gross domestic product (GDP) and employment

Agriculture employment and output (2022)		Employment in agriculture as % of total employment			
		LOW (0%–10%%)	**MEDIUM LOW (10%–20%)**	**MEDIUM HIGH (20%–50%)**	**HIGH (>50%)**
Agriculture Value Added as % of GDP	**LOW (0%–10%)**	Bulgaria, Chile, Czechia, Djibouti, Hungary, Iraq, Jordan, Lebanon, Libya, Maldives, Mauritius, Poland, Trinidad and Tobago, Saint Vincent and the Grenadines	Bosnia and Herzegovina, Botswana, Cabo Verde, Costa Rica, El Salvador, Mexico, Panama, Saint Lucia, South Africa, Ukraine, Venezuela (Bolivarian Republic of)	Azerbaijan	Equatorial Guinea, South Sudan, Zambia
	MEDIUM LOW (10%–20%)	Argentina, Brazil, Dominican Republic, Malaysia, Montenegro, North Macedonia, Suriname, Uruguay	Belarus, Belize, Colombia, Eswatini, Jamaica, Kazakhstan, Serbia, Türkiye	China, Congo, Ecuador, Gabon, Georgia, Guatemala, Lesotho, Namibia, Peru, Philippines, Samoa, Sri Lanka, Sudan, Thailand	Republic of Moldova, Zimbabwe
	MEDIUM HIGH (20%–50%)	Algeria	Egypt, Guyana, Iran (Islamic Republic of), Papua New Guinea, Paraguay, Sao Tome and Principe, Tunisia	Albania, Bangladesh, Bolivia, Cameroon, Côte d'Ivoire, Fiji, Ghana, Honduras, India, Indonesia, Kyrgyzstan, Mongolia, Morocco, Nicaragua, Senegal, Timor-Leste, Togo, Tonga, Turkmenistan, Viet Nam	Angola, Armenia, Burkina Faso, Bhutan, Democratic Republic of the Congo, Eritrea, Lao People's Democratic Republic
	HIGH (>50%)	Micronesia (Federated States of)	Syrian Arab Republic	Afghanistan, Benin, Cambodia, Comoros, Gambia, Haiti, Kenya, Liberia, Mauritania, Myanmar, Nigeria, Pakistan, Sierra Leone, Somalia, Tajikistan, Uzbekistan, Yemen	Burundi, Chad, Central African Republic, Ethiopia, Guinea, Guinea-Bissau, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, United Republic of Tanzania, Uganda, Vanuatu

Source: Rojas-Suarez, L., Fiorito, A. & Vila, D. (forthcoming). *Agrifood systems and macroeconomic policies.* Rome, FAO.

There is a strong linkage between agricultural dependence and limited ability to access external financing. It should be noted that the countries classified in Figure 10 as highly dependent on agriculture are also those that, as will be discussed in more detail in Chapter 3, register a **limited ability to attract external financing**, which could be used – among other

things – to fund interventions aimed at addressing food insecurity and nutrition. In order to recognize which countries belong to this latter category, the *FAO State of Food and Nutrition Report 2024* developed a methodology to assess countries' abilities to access financing, on the basis of a range of variables such as debt sustainability, levels of short-term debt, country national income and various others (FAO *et al.*, 2024). Figure 11 assesses countries' ability to access financing, given their food insecurity and malnutrition drivers, and food security and nutrition indicators.

Figure 11. Low- and middle-income countries' degree of ability to access financing, considering food security and nutrition indicators and the major drivers

Countries' ability to access financing	Total	Climate extremes	Economic downturns	Conflict	Climate extremes – economic downturns	Conflict – economic downturns	Conflict- climate extremes	Climate extremes – economic downturns – conflict	Not affected by major drivers	Prevalence of undernourishment in total population	Prevalence of stunting in children (<5 years)	Prevalence of overweight in children (<5 years)
	2013-2022									2023	2022	2022
	(NUMBER OF COUNTRIES)									(% AVERAGE)		
LIMITED ABILITY: HIGH FINANCIAL RISK	**44**	12	4	3	3	2	9	4	7	23.1	23.9	4.9
MODERATE ABILITY: MEDIUM FINANCIAL RISK	**31**	9	3	2	3	0	4	0	10	10.4	20.9	6.4
HIGH ABILITY: LOW FINANCIAL RISK	**44**	11	3	2	5	1	6	2	14	6.9	13.3	7.7
TOTAL	**119**	**32**	**10**	**7**	**11**	**3**	**19**	**6**	**31**	-	-	-

Notes: Prevalence of undernourishment, childhood stunting and childhood overweight averages are unweighted. See Supplementary material to Chapter 3 for the list of countries analysed and the methodology on defining countries affected by major drivers of food insecurity and malnutrition. See Supplementary material to Chapter 5 for the details about the criteria for assessing countries' ability to access financing.
Source: FAO *et al.* 2024. *The State of Food Security and Nutrition in the World 2024 – Financing to end hunger, food insecurity and malnutrition in all its forms.* Rome. https://doi.org/10.4060/cd1254en

Agricultural dependence correlates with agrifood systems typologies. In this regard, it should also be noted that the *FAO State of Food and Agriculture 2024* report developed a typology that categorizes agrifood systems according to six possible typologies, based on how four proxy variables interact together to capture relevant components of food supply chains, diets and external drivers of food systems (Arslan *et al.*, 2024). Of the 16 countries that were highly dependent on agriculture, 9 were classified as traditional, 6 as in protracted crisis and 1 as having an expanding agrifood system.

The LICs and LMICs most dependent on agriculture are also those that are more prone to food crises. These estimates are made by triangulating employment in agriculture and value added of agriculture in GDP, and the list of countries that have faced 'protracted food crises'. Almost 70 percent (11 out of 16) of the countries with agricultural participation in GDP of over 20 percent and employment in agriculture of more than 50 percent were countries that have experienced food crises over the past 9 years.[9] In addition, of the 45 LICs and LMICs with agricultural participation in GDP of above 10 percent and employment in agriculture of more than 20 percent, one-third were registered as having experienced food crises over the past 9 years (FSIN and GNAFC, 2025).[10]

Financing for development has an important role to play in increasing funding for agrifood systems transformation, particularly in countries where agriculture is most important to the economy and where governments allocate fewer public resources to this sector. This is the case of LICs and LMICs, where government expenditure on agriculture per rural inhabitant is extremely low (FAO, 2024a). Crucial changes in terms of domestic support, ODA and debt management are essential to address this challenge, as will be discussed in section 3.

Currently, the countries that need the most financing have the lowest capacity to deliver public expenditure to transform agrifood systems and to achieve food security and nutrition. As shown in Figure 12, those countries that register the highest dependency on agrifood systems (the highest agriculture share of GDP) also record the worst values on the Agriculture Orientation Index.[11] This implies that these countries do not have sufficient levels of government expenditure on agriculture, despite its importance for their economies.

Domestic support to the agrifood sector is concentrated in high-income countries (HICs) and upper-middle-income countries (UMICs), which accounted for the majority of support provided between 2013 and 2018, averaging USD 313 billion and USD 311 billion, respectively, in contrast to USD 11 billion allocated to lower-middle-income countries and USD 6 billion

[9] Namely Burundi, Chad, the Central African Republic, Ethiopia, Guinea, Madagascar, Malawi, Mali, Mozambique, Niger and Uganda.

[10] Namely Afghanistan, Bangladesh, Burkina Faso, Cameroon, the Democratic Republic of the Congo, Haiti, Honduras, Kenya, Liberia, Mauritania, Nigeria, Senegal, Sierra Leone, Somalia and Yemen.

[11] The Agriculture Orientation Index for Government Expenditures is defined as the Agriculture Share of Government Expenditures, divided by the Agriculture Share of GDP, where Agriculture refers to the agriculture, forestry, fishing and hunting sector. The measure is a currency-free index, calculated as the ratio of these two shares. This indicator measures progress towards SDG Target 2.a.

to low-income countries (FAO, 2023). In LMICs and LICs, fiscal space to provide subsidies – directly to individual producers or via general services support – is more limited, and the impact of many of the trade policies used was to provide greater support to consumers rather than producers, as evidenced by negative market price support (Rojas-Suarez *et al.*, 2025).

Figure 12. Classification of countries by importance of agriculture in gross domestic product (GDP) and Agricultural Orientation Index 2022

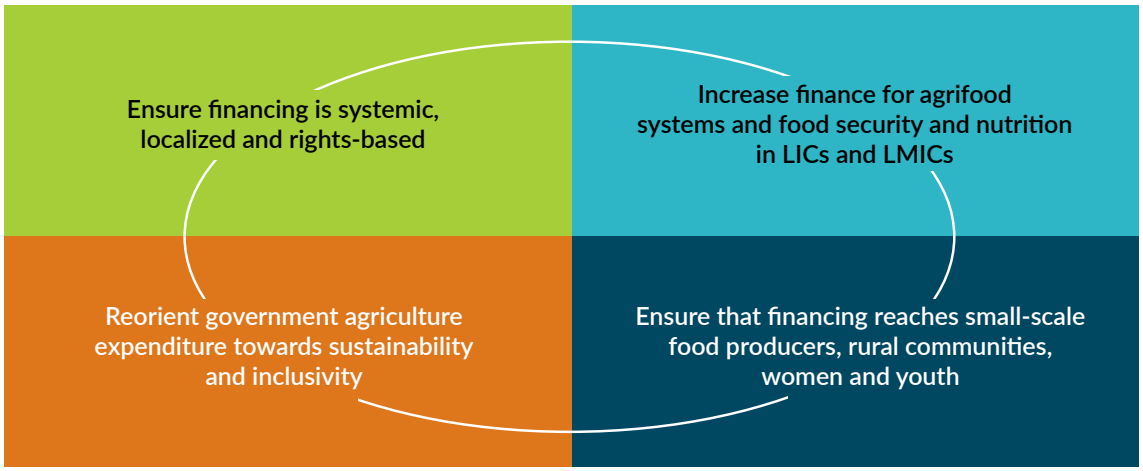
		Agricultural Orientation Index				
		BY PERFORMANCE				
		BEST	ABOVE MEDIAN	MEDIAN	BELOW MEDIAN	WORST
Agricultural Share GDP Value Added	LOW (0%–10%)	Botswana, Cabo Verde, Czechia, Panama, Saint Lucia, Trinidad and Tobago, Zambia	Bosnia and Herzegovina, Bulgaria, Chile, Croatia, Equatorial Guinea, South Africa	Azerbaijan, El Salvador, Grenada, Hungary, Mexico, Russian Federation, Saint Vincent and the Grenadines	Costa Rica, Jordan	Iraq, Lebanon, Maldives
	MEDIUM LOW (10%–20%)	Belarus, China, Dominican Republic, Georgia, Kazakhstan	Lesotho, North Macedonia, Sri Lanka, Thailand, Tunisia, Türkiye	Eswatini, Jamaica, Republic of Moldova, Montenegro, Namibia, Peru, Philippines, Samoa, Serbia	Argentina, Belize, Brazil, Congo, Gabon, Latvia, Malaysia, Suriname, Uruguay	Colombia, Ecuador, Guatemala, Ukraine
	MEDIUM HIGH (20%–50%)	N/A	Bangladesh, Bhutan, Fiji, Guyana, India, Morocco, Viet Nam	Algeria, Armenia, Cameroon, Lao People's Democratic Republic, Sao Tome and Principe, Senegal, Togo	Albania, Bolivia, Democratic Republic of the Congo, Côte d'Ivoire, Dominica, Egypt, Honduras, Indonesia, Paraguay, Turkmenistan	Angola, Burkina Faso, Ghana, Iran, Kyrgyzstan, Mongolia, Nicaragua, Papua New Guinea, Timor-Leste
	HIGH (>50%)	N/A	Malawi, South Sudan	Central African Republic, Mali, Nepal, Tonga, Tuvalu, Uzbekistan	Benin, Chad, Guinea, Madagascar, Marshall Islands, Mauritania, Micronesia (Federated States of), Myanmar, Niger, Nigeria, Pakistan, Palau, Rwanda, Solomon Islands, United Republic of Tanzania, Turkmenistan, Uganda, Vanuatu	Afghanistan, Burundi, Cambodia, Comoros, Ethiopia, Gambia, Guinea-Bissau, Haiti, Kenya, Kiribati, Liberia, Mozambique, Sierra Leone, Somalia, Syrian Arab Republic, Tajikistan

Source: FAO. (forthcoming). *Innovative finance for agrifood systems transformation.* Rome.

2.2 Increasing financing for food security and nutrition and agrifood systems transformation for the countries and people that need it most

Addressing the need to transform agrifood systems and prevent food crises requires substantial changes. Financing for development should contribute to ensuring that financing reaches the countries that are most in need – like those identified in Figure 12 in the macroeconomic analysis.[12] Addressing this requires adequate flows of financing, taking into account their fiscal space constraints and their ability to attract private capital. Financing should also reach those population segments that are most vulnerable, including small-scale producers, rural communities, women, youth and Indigenous Peoples. Financing should enable the necessary sustainability-related and inclusion-related changes in agrifood systems. It should also have a systemic approach, including an emphasis on strengthening financial capacities at local level and identifying synergies between types of financing. The elements of this approach are shown in Figure 13 and described thereafter.

Figure 13. Critical steps to enhance the role of financing for development to achieve zero hunger



Notes: LICs- Low-income countries, LMICs- Lower-middle-income countries
Source: Authors' own elaboration

[12] A study by Ceres2030 has proposed a categorization of countries according to their need for donor investment to achieve the zero hunger target, based on their dependency on external resources until 2030. According to this methodology, countries were classified as: 'high priority' when they are dependent on donors for more than 50 percent of their budgets; 'medium priority' for countries that depend on donors for between 30 percent and 50 percent of their budgets; 'low priority' for countries that depend on donors for less than 30 percent of their budgets; and 'on target' for countries that will need to retain existing levels of donor support, but will not need any extra donor support from now until 2030 (Laborde, Parent and Smaller, 2020).

a) Ensuring that the right types of financing reach the countries that need them the most

Most agrifood-dependent countries have limited access to private financing. Therefore, increasing these countries' ability to finance agrifood systems transformation and food security and nutrition will initially require increased levels of grant financing and low- or no-interest loans. Additionally, considering these countries' levels of debt and the high burden of debt servicing, measures to relieve debt stress through debt swaps and other measures are essential.

ODA is critical in these cases. Considering the high level of domestic support to agriculture provided by HICs and UMICs and the need to reorient such support towards sustainability and inclusion, it will be crucial that part of the reorientation process takes the approach of increasing ODA flows to lower-middle-income and low-income countries, where little money is available to meet fundamental food security and nutrition investment needs.

b) Reaching the right people: Financing small-scale producers and enterprises

Approximately 70 percent of smallholder farmers' demand for financing remains unmet, while only 0.8 percent of climate finance goes to smallholder farmers (CPI, 2023). As reported in the World Bank's 2017 Global Findex database, around 1.7 billion adults worldwide remain 'unbanked', meaning that they do not have an account with a financial institution (FI) or mobile money provider. Of this population, approximately 980 million are women, accounting for 56 percent of unbanked adults globally. This gap is narrowing over time, especially due to the growth of mobile money accounts, but remains higher, on average, in rural areas (FAO, 2023b).

Reaching out to small-scale food producers, rural women and youth and other vulnerable groups requires targeted, integrated public policies. For instance, the access of smallholder family farmers to finance in Brazil increased following the creation of a specific programme (the National Programme for the Strengthening of Family Farming (PRONAF), with dedicated subsidized credit lines for this group (see Box 1). This programme was complemented by several policies and programmes such as family farming registries, public procurement policies and various others. (FAO, 2015).

BOX 1.

The Programa Nacional de Fortalecimento da Agricultura Familiar (PRONAF)

The Programa Nacional de Fortalecimento da Agricultura Familiar [National Programme for Strengthening Family Farming] is a key initiative run by the Brazilian Government aimed at supporting family farmers and fostering rural development. Launched in 1995, the programme provides grants, credit and technical assistance to small-scale farmers to enhance their productivity, income and sustainability. It has played a crucial role in addressing food security, rural poverty and inequality by empowering farmers to modernize their production techniques and diversify their activities.

PRONAF offers low-interest credit lines tailored to different farming needs, including crop production, livestock, agro-industrial activities and environmentally sustainable practices. Eligible participants include small-scale farmers who meet specific criteria, such as earning most of their income from agricultural activities and primarily using family labour.

In addition to credit, PRONAF promotes capacity building by providing technical support to farmers, helping them to adopt innovative technologies and practices. The programme is segmented into various lines of credit, including PRONAF Mulher, focused on supporting women farmers, and PRONAF Jovem, aimed at encouraging youth involvement in agriculture.

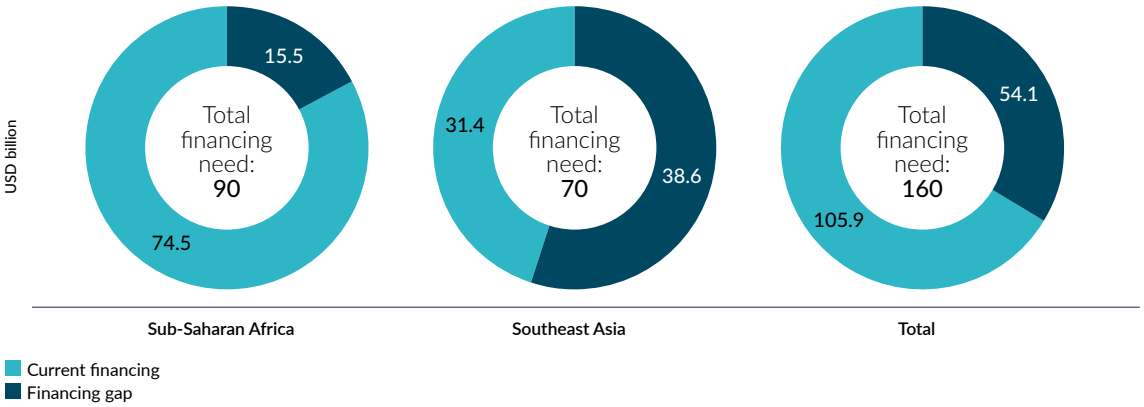
PRONAF has had a profound impact on rural development in Brazil by strengthening family farming, which plays a critical role in food production and job creation. One of its key achievements has been increasing productivity and income for small-scale farmers, enabling them to invest in modern agricultural practices and diversify their crops. It has also promoted social inclusion and environmental sustainability, encouraging the integration of sustainable production practices in small-scale farming through specialized credit lines, such as PRONAF Agroecologia.

Source: FAO. 2015. *An in-depth review of the evolution of integrated public policies to strengthen family farms in Brazil.* ESA Working Paper No. 15-01. Rome. https://openknowledge.fao.org/items/d45d73f1-f1e2-4db3-ab7c-94259f434bf5

Promoting a sustainable transformation of agrifood systems will require channelling significant amounts of additional capital on the part of private FIs towards small- and medium-sized enterprises (SMEs) active in the agrifood value chains of LICs and MICs, given the critical role that these play in every aspect of such systems. These enterprises tend to face a wide range of constraints that negatively affect their credit risk profiles, increase the cost of financing to unaffordable levels, and leave them for the most part unattended by the private financial sector – resulting in a significant gap in agri-SME financing, across all regions.[13]

There is currently an estimated annual gap of USD 106 billion of unmet demand for agri-SME financing in sub-Saharan Africa and Southeast Asia. Only 34 percent (USD 54 billion) of the total actual demand (USD 160 billion) is met by the formal financial sector at present (see Figure 14, ISF Advisors (2022)). By far the largest share of the funding provided (USD 40 billion) comes from the commercial banking sector and is channelled towards more mature agri-SMEs with correspondingly lower levels of risk, due to a range of factors such as available collateral, an established credit history and good business experience. Another tranche of USD 6 billion in funding is provided by non-bank financial institutions, such as leasing companies or factoring service providers. This financing usually takes the form of loans collateralized against specific assets. Smaller amounts of credit are provided by state-run development banks (USD 4 billion), social impact lenders and impact-oriented funds (USD 3 billion), as well as private equity funds (USD 1 billion).

Figure 14. Agrifood SME financing gap across sub-Saharan Africa and Southeast Asia



Source: Shamba Centre for Food and Climate. 2024. *Unleashing the catalytic power of donor financing to achieve Sustainable Development Goal 2*. Geneva, Switzerland. Based on data from ISF Advisors. 2022. *The state of the agri-SME sector – Bridging the finance gap*. ISF. Washington, DC. https://isfadvisors.org/wp-content/uploads/2022/04/ISF_AgriSME-Finance-state-of-the-sector-report.pdf

[13] Examples of such constraints include low available collateral, a weak credit history, low access to established market channels and lack of financial education.

Only a relatively small portion of the formal credit provided to agri-SMEs is offered on fully commercial terms, without any form of financial and non-financial support. This kind of fully commercial credit tends only to be accessible to – and affordable for – a relatively small subsegment composed of the most profitable and commercially attractive agribusinesses, which are usually export-oriented. Most of the credit directed at agri-SMEs tends to be offered on subcommercial terms, relying on some sort of subsidies or partial guarantees provided by public or multilateral actors (coupled with technical assistance, capacity building, linkages to markets and other complementary services) to hedge risk and offset costs, incentivizing the participation of private capital when lending to these actors. Finally, there is a vast, financially unserved market segment of agri-SMEs that do not have access to formal loans, as they are not viewed as creditworthy clients by financial providers, even on subcommercial terms. These are the majority of agri-SMEs supplying domestic markets and working in local currencies. A relatively small share of these firms may rely on informal sources of financing to access credit (such as family and friends, informal moneylenders), but the financing provided through these channels will most often be quite expensive, scarcely flexible and insufficient.

c) Reorienting agricultural support to promote agrifood systems transformation

It is crucial to repurpose and reallocate existing domestic flows of funding directed at agriculture, ensuring that they are better able to promote agrifood systems transformation. Repurposing existing public support to agriculture carries significant potential to shift agrifood systems onto more sustainable and inclusive pathways, so that they can actively contribute to meeting the SDGs. An analysis by FAO (2024b) estimates that an important first step in this sense would be to ensure that the current USD 630 billion in direct government expenditure for agriculture is spent in a more efficient, sustainable and targeted way, better capable of promoting agrifood systems transformation. Section 3.1 of this study will focus in greater depth on analysing the pathways (and the challenges) associated with repurposing agricultural support.

d) Ensuring financing is systemic, localized and rights-based

Adopting a systemic approach to financing is essential for achieving transformative and lasting impact in agrifood systems (Waddell, 2022). The current short-term, project-by-project investment model is inadequate for addressing the structural drivers of food insecurity, undernourishment and climate vulnerability, at the scale and pace required (EIT Climate-KIC, 2023).

Systemic investment tries to identify the types of capital needed across a country, region or sector in order to match need with investment (Mitchell, 2020). By identifying connections between the local agrifood systems, from farms and land tenure to processing and infrastructure to culture and social dynamics, investments can go beyond isolated interventions and shift towards synergies that enable systemic change (Ricigliano and Muoio,

2024). Investments must be coherent and synergistic to allow transformation (Korijn and Fort, 2024)) This can be seen in sustainability transitions: for example, when seeking to shift livestock systems towards more regenerative approaches, interventions must not only focus on how livestock impacts climate, but also on how consumers understand these impacts, thereby empowering them to make adequate decisions. Finance must ensure that producers can adopt more sustainable practices, and that the infrastructure exists to enable access to regenerative options. Investments that adopt these systemic perspectives come together as integrated portfolios (Belle, 2020).

Systemic investment also requires local ownership and enhanced local capacity, responding to actual financing needs and matching interventions. Given that most SDG targets and climate solutions are dependent on local and regional governments, enhancing their fiscal capacity and institutional strength is essential for advancing Agenda 2030. As such, local and regional governments must be equipped with the financial tools, governance mechanisms and inclusive investment models that can enable them to build resilient and regenerative agrifood economies.

For agrifood systems transformation to be sustainable and just, it must be participatory, ensuring that farmers, food producers, Indigenous communities, women-led agribusinesses and marginalized groups play a direct role in shaping public investment strategies, policy frameworks and governance mechanisms. By ensuring that capital flows align with locally defined priorities and participatory decision-making, agrifood investment strategies can become more responsive to the needs and priorities of vulnerable and marginalized groups. Participation empowers these groups and expands social capital, while making the outcomes of decision-making processes more equitable and efficient. As noted by Osmani (2008), empowerment and social capital *"can enable people to express their preference better and to make them count, thereby enhancing allocative efficiency; to improve the accountability of those who are responsible for implementing decisions, thereby improving technical efficiency; and to ensure that the interests of those suffering from marginalisation and social exclusion are not ignored or trampled over, thereby promoting the cause of equity"*. The author also highlights that such positive outcomes require addressing capacity, incentives and power gaps.

Finally, in alignment with the Finance for Development commitments to human rights expressed in the Addis Ababa Action Agenda, it is crucial to ensure that development finance actively supports the realization of the right to adequate food, as outlined in Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR).[14] Fulfilling the right to food requires the implementation of effective economic, environmental and social policies at both national and international levels. States must take whatever steps necessary to eradicate hunger and promote enjoyment of the right to adequate food, by adopting national human rights-based food nutrition security strategies that include identifying the resources available to meet its objectives. States must also acknowledge the crucial role of international cooperation and uphold their commitment to taking action to ensure realization of the right to adequate food. Finally, international financial institutions should have stronger consideration of right to food protection in its lending, credit and measures to deal with debt crises (ICESCR).[15] Effective financing mechanisms should integrate human rights obligations into national and international strategies, ensuring that investments in food systems are inclusive and gender-sensitive, as emphasized in Article 12 of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).[16, 17]

[14] ICESCR, Article 11 (1966) – Recognizes the right to an adequate standard of living, including adequate food.

[15] General Comment No. 12 (1999) by the Committee on Economic, Social and Cultural Rights – clarifies state obligations to respect, protect and fulfil the right to food.

[16] CEDAW, Article 12 (1979) – mandates ensuring adequate nutrition for women during pregnancy and lactation.

[17] UN Special Rapporteur on the Right to Food – Reports (A/HRC/25/57, 2014) warn of the dangers of unregulated speculation in agricultural markets contributing to food price volatility.

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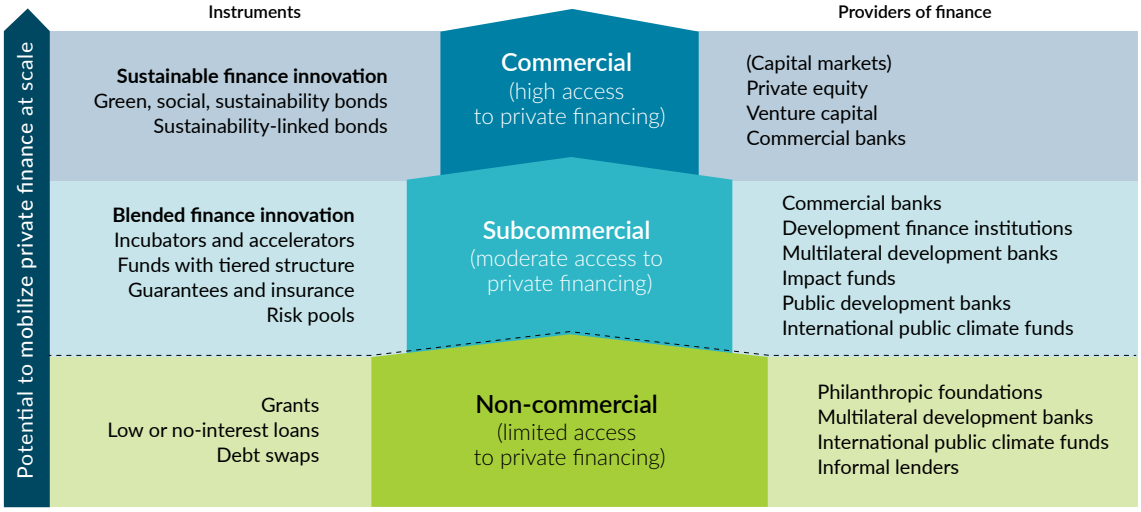
3 Reforms and approaches to bolster flows of finance towards agrifood systems

To address the financing gap in food security and nutrition and agrifood systems transformation in agrifood system-dependent countries, the appropriate streams of finance must be leveraged. Financing directed towards agrifood systems can be broken down according to three key tiers (see Figure 15): i) a small market for commercial capital (with high access to private financing); ii) a sizeable subcommercial market (with moderate access to private financing); and iii) a large non-commercial tier (with very limited access to private financing), primarily served through concessional and informal finance (FAO, 2025a).

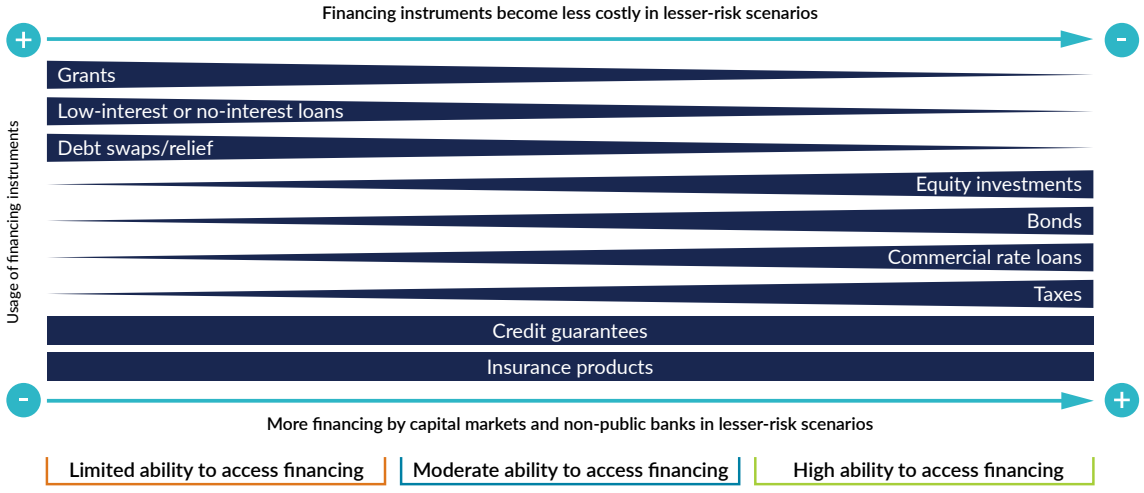
Figure 15. Market tiers for agrifood systems financing



Source: FAO. 2025a. *Innovative finance for agrifood systems transformation.* Rome. https://openknowledge.fao.org/items/87ad91de-eda8-4010-b33d-60e642616bf0

As discussed in the Introduction, **low- and middle-income countries that register the highest rates of food insecurity and malnutrition are also those that face the greatest structural constraints to accessing financing that could be channelled into addressing these issues**. Figure 16 provides recommendations for the most suitable financial instruments of which countries can make use, depending on their ability to access financing. LICs and MICs with a limited ability to access financing tend to rely mainly on grants and concessional loans provided by bilateral and multilateral donors, which represent basic but essential sources of finance channelled towards developing their agrifood systems. Debt swaps are also important tools for these countries to gain much needed fiscal space and liberate resources that can be channelled into agrifood-related projects. As these countries' risk environment improves, a wider range of financial instruments becomes more affordable and available, such as equity and debt investments (at rates increasingly closer to commercial ones), blended finance arrangements and sustainable bonds. These instruments tend to follow a strategic approach, by which public concessional finance is leveraged to incentivize the flow of private capital towards agrifood systems, by derisking and enhancing investments that hold the greatest transformative potential for such systems – and which would not be considered by commercial investors in the absence of public support.

Figure 16. Recommended financial instruments based on a country's ability to access financing



Source: FAO *et al.* 2024. *The State of Food Security and Nutrition in the World 2024 – Financing to end hunger, food insecurity and malnutrition in all its forms.* Rome. https://openknowledge.fao.org/handle/20.500.14283/cd1254en

When using public resources to make agrifood systems investments more appealing to private investors, care should be taken to ensure that these investments are effectively able to reach and benefit small-scale, rural beneficiaries and generate positive socioeconomic and environmental impacts for the most marginalized segments of rural populations. As noted by FAO (2024b): *"if public resources are channelled toward commerce-oriented financing solutions, instead of the bottom non-commercial tier, their impact thesis and capacity to reach end-beneficiaries while mobilizing new actors must be well substantiated to justify this trade-off"*. Finally, all countries, regardless of their ability to access financing, should leverage partial credit guarantees and insurance to derisk investments in agrifood systems and scale up the financial engagement of private commercial actors in these systems. As will be discussed in section 3.1, countries with a limited ability to access financing might be constrained from making use of such instruments on account of their high-risk environments and the scarce domestic resources available to fund them.

3.1 Increasing and redirecting public domestic funding

An important component of funding for agrifood systems transformation is public domestic expenditure directed at the agriculture sector. These flows of domestic capital can help to improve agricultural production, foster the productivity of other sectors of the economy, lower food prices and contribute to the empowerment of marginalized categories of rural dwellers – if adequately channelled and directed (Kamenya *et al.*, 2022). Channelling public domestic capital in this manner can also play a pivotal role in creating the enabling conditions for rural financial markets to prosper, amplifying and bolstering the flows of private investment. Establishing public derisking facilities to improve the risk/return trade-off for private investors looking to deploy their capital in the national agriculture sector is an example of such use of domestic resources, as will be further explored in section 4.5 (Szebeni *at al.*, 2021). That being said, and as already discussed in section 2.1, flows of domestic government expenditure towards agriculture tend to be quite weak in LICs and LMICs, where they are in fact most needed to address the high levels of food insecurity and malnutrition (FAO *et al.*, 2024).

Policies aimed at supporting agricultural production and safety nets are effective responses to food crises. A review by Wiggins *et al.* (2010) analysed policies across 98 countries of the Global South. Of these, 63 countries undertook combinations of measures to bring down food prices on domestic markets, to stimulate domestic food production and alleviate the hardships of vulnerable people through social protection. It was found that more than 50 percent of countries had reduced tariffs on imported food, and more than 40 percent had deterred food exports, set specific price controls or subsidized food prices. Almost 60 percent had stimulated the domestic production of staple crops, most commonly by providing subsidized farm inputs. More than half had distributed food to people in need, often through food-for-work schemes.

Domestic capital can be a key enabling factor when it comes to promoting a more sustainable and inclusive transformation of agrifood systems. The following paragraphs explore two pathways that pursue this objective: strengthening countries' commitments to increasing the levels of domestic funding for food and agriculture; and redirecting existing domestic spending towards more strategic, cross-sectoral interventions that can foster a truly sustainable and inclusive transformation of agrifood systems.

It is important to strengthen countries' commitment to raising domestic funding for agriculture. As shown in section 1.2a, levels of public domestic spending in agriculture have been historically low in LICs and LMICs, with very little change registered over the past two decades. Among relevant public initiatives that have sought to encourage sovereign nations to raise these levels are the Maputo Declaration (2003) and the Malabo Declaration (2014), through which Member States of the African Union pledged to spend at least 10 percent of their annual budget on food and agriculture. This commitment is still far from having been realized. Between 1980 and 2020 – both before and after the Maputo pledge – only five countries (Burkina Faso, Ethiopia, Malawi, Mali and Niger) had consistently met the target. Meanwhile, Benin, Mozambique, Senegal and Sierra Leone had achieved it in certain years

following the pledge. However, despite this commitment, the share of agriculture in total government spending across the African continent has steadily declined, falling from an average of about 7 percent per year in the 1980s to less than 3 percent per year over the past decade. The rate of decline for the share of expenditure has slowed down substantially over the past decade, due in part to the influence of the pledge (Benin, 2022; Kamenya, 2022). Overall, the experience of the Maputo and Malabo Declarations points to the notion that the setting of a specific target to raise domestic funding for agriculture should be **evidence-based and dependent on the specific situation faced at national level,** rather than a fixed percentage that applies to all countries – as a share of public expenditure.

There is substantial cross-country variation in government agricultural expenditure on the continent, as most African countries spend a much smaller proportion of their annual budget on agriculture than the sector's share in the economy (Benin, 2022). Overall, this points to the need to couple expenditure commitments with strengthening the flow of domestic resources directed towards agrifood systems transformation, through a range of strategies and instruments. The repurposing of public domestic financing, described in the next paragraph, is one such instrument, while other relevant tools, such as debt-for-development swaps, are discussed in section 4.2.

It will be essential to repurpose public domestic financing for agriculture. As noted in a recent analysis by FAO (2024b), global domestic public support for agriculture was approximately USD 851 billion per year between 2020 and 2022, of which USD 452 billion was directed towards supporting producers, mainly in the form of market price distortions (USD 154 billion) and different types of fiscal subsidies (USD 297 billion).[18] At present, domestic financial support to producers, whether in the form of market price support or subsidies, tends to disproportionately benefit larger-sized, higher-income farmers, with a weak associated impact on essential goals such as reducing inequality and improving incomes among marginalized households. Furthermore, as shown in section 1.3, domestic per capita expenditure on agriculture has persistently remained at very low levels since 2010 in both LICs and LMICs. This points to the need for these countries to make targeted and strategic decisions on how to reallocate the scarce domestic resources available (and use them more efficiently) when pursuing the development of more inclusive and sustainable agrifood systems.[19]

[18] As shown in FAO (2023a), the majority of public support to food and agriculture is provided by high-income countries (USD 313 billion, or 31 percent of production value) and upper-middle-income countries (USD 311 billion, or 19 percent of production value), which tends to take the form of price incentives and subsidies to producers. Far lower amounts are provided by lower-middle-income countries (USD 11 billion, or 2 percent) and low-income countries (USD 6 billion, or 6 percent). Support policies in these latter countries tend to protect consumers rather than producers, with farmers actually facing disincentives that keep domestic prices low and explain the negative support values registered in low-income countries.

[19] To this end, FAO has developed the *Monitoring and Analysing Food and Agricultural Policies* (MAFAP) tool, which aims to support governments' decision-making in allocating public resources for policies that can best achieve an inclusive agrifood systems transformation, by identifying strategic areas where repurposing current expenditure could help to achieve goals such as poverty reduction or climate change adaptation and mitigation (FAO, 2024b).

There is significant potential linked to reallocating public flows of domestic financing towards cross-sectoral initiatives that have a far deeper transformative effect on agrifood systems, such as those aimed at reducing greenhouse gas emissions in agricultural production, improving socioeconomic equity in rural areas, enhancing climate resilience among smallholders and promoting access to healthy diets. This repurposing of public domestic finance, together with a more cost-effective overall use of the resources channelled into agriculture, holds the potential to generate substantial benefits across a variety of development indicators: for example, a simulation carried out in *The State of Food Security and Nutrition in the World 2024* across six countries showed that a strategic reallocation of public spending towards support measures in the agriculture sector could result in the creation of 1 million new, off-farm jobs in rural areas, with 2.8 million people being lifted out of poverty and an additional 16 million people able to afford a healthy diet (FAO *et al.*, 2024b).[20] An enabling political/institutional environment is critical for an effective reallocation of domestic resources: targeted government expenditures that are able to strategically develop agrifood systems require *"strong institutions characterized by high levels of competence and effectiveness and low levels of political interference. In countries with low institutional quality, the development of agrifood systems is likely to be more sensitive to fiscal adjustments, as the allocation of scarce resources may become even more distorted"* (Rojas-Suarez *et al.*, 2025).

There are notable trade-offs between socioeconomic, environmental and health-related goals associated with repurposing public domestic expenditure, which governments need to learn to identify and navigate, so as to achieve a balance between different objectives (FAO *et al.*, 2024). For example, simply removing market price support would affect farmers' livelihoods and possibly result in negative environmental repercussions. A more strategic approach would be to redirect public support towards funding research in technologies and practices that raise productivity, while simultaneously reducing greenhouse gas (GHG) emissions and supporting rural infrastructure. Furthermore, reforming existing subsidy structures to benefit more low-income, small-scale farmers (for example by removing barriers to subsidy access and rebalancing skewed subsidies that disproportionately favour larger producers) can be critical to raising incomes and promoting food security among the poorest and most marginalized. On the other hand, this approach could also lead to increased consumption of high-emissions intensity products among low-income producers, implying a need to balance such measures with others aimed at reducing GHG emissions (FAO, 2024b).

[20] Burkina Faso, Ethiopia, Ghana, Mozambique, Nigeria and Uganda.

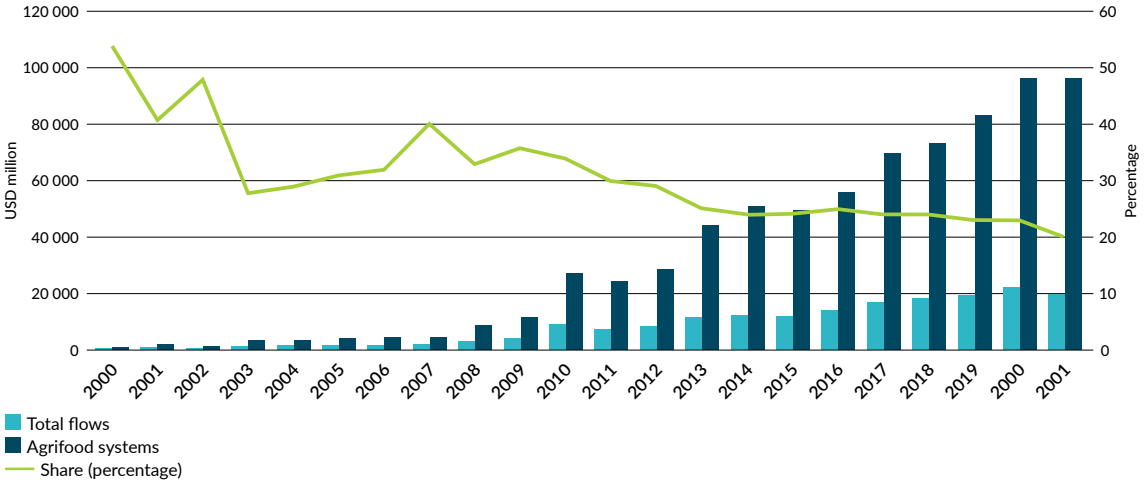
Prior to the COVID-19 pandemic, global support to food and agriculture averaged USD 630 billion per year between 2013 and 2018 (FAO *et al.*, 2022). **This amount could potentially be reallocated** for a more inclusive and sustainable agrifood systems transformation. **According to FAO (2024b),** not all this funding can easily be redirected, and the existence of various trade-offs, as mentioned above, implies that policymakers will have to make compromises between different objectives and priorities when deciding how to channel these resources more strategically. Furthermore, even if such resources were to be effectively reallocated, they would still be insufficient to fully cover the costs of agrifood systems transformation. This points to the need to raise additional financing, especially from the private commercial sector (as will be more amply discussed in section 4.3), as well as to foster the flows of public development finance, from both bilateral donors and multilateral banks, channelled towards this goal.

3.2 Scaling up the flows of climate finance towards agrifood systems transformation

There is a critical need to scale up the flows of climate finance directed at agrifood systems, given the important role that such flows play in enabling a more sustainable transformation process, as well as in preventing food crises. As shown by Galbiati *et al.* (2023), in 2021 almost 60 percent of the total flows of climate-related finance directed towards agrifood systems came from bilateral donors, 35 percent from multilateral donors, and only 5 percent from the private sector.[21] While the total amount of climate-related finance to agrifood systems has increased over the past two decades, as of 2021 it amounted to USD 19 billion, which is a small amount compared with estimates of the capital required to finance agrifood systems transformation. Following OECD terminology, 'agriculture' was the primary destination sector for the funding provided to agrifood systems (39 percent of total flows), with multilateral donors channelling most of their resources to this area, while 'biodiversity and environment' attracted 28 percent of total contributions, with increasing engagement in this regard from bilateral donors (Galbiati *et al.*, 2023).

[21] It should be noted that this percentage is derived from OECD data and does not necessarily capture the full picture of private commercial actors' actual involvement in climate-related finance.

Figure 17. Climate-related development finance to agrifood systems and its share of global flows



Source: Galbiati, G.M., Yoshida, M., Benni, N. & Bernoux, M. 2023. *Climate-related development finance to agrifood systems – Global and regional trends between 2000 and 2021*. Rome, FAO. https://doi.org/10.4060/cc9010en, based on OECD data.

Moreover, the share of total climate-related development finance flows to agrifood systems has decreased considerably, as can be seen in Figure 17, while the total amount of climate-related development finance channelled towards agrifood systems has increased. The growth of total climate-related development finance has by far outpaced that of agrifood-focused finance. Additionally, two-thirds of all bilateral climate finance contributions to agrifood systems came from just four development partners (European Union institutions, France, Germany and Japan) which indicates an opportunity to mobilize additional financing from other public stakeholders.

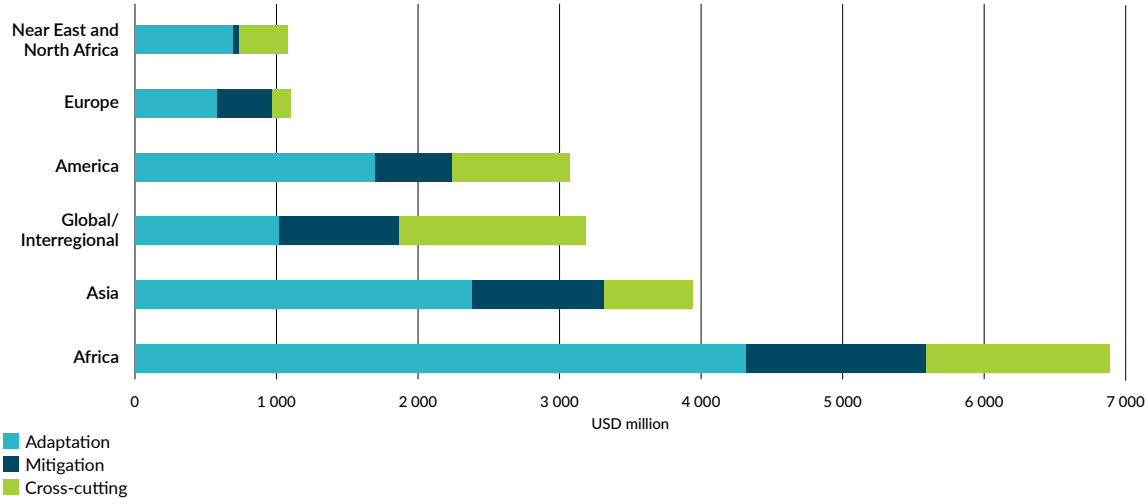
Only a small percentage of climate finance flows is channelled towards investments that benefit small-scale agricultural actors in developing countries, despite their extreme levels of vulnerability to climate change impacts. As already mentioned in section 1.2, just 0.8 percent of total climate finance tracked is channelled towards investments targeting small-scale agricultural actors, across a range of areas such as sustainable agriculture, renewable energy generation, water management and various others. The largest share of climate finance flows is directed towards investments in *"general land use, forestry, and natural resource management projects without a specific focus on small-scale actors"* (CPI, 2023). As the authors note,

> *"In 2019/20, climate finance for small-scale agrifood systems was strikingly low, at USD 5.53 billion. This represents just 0.8% of total climate finance tracked across all sectors and 19% of the total for agrifood systems in the same period… Given their essential contributions to food security, nutrition, and livelihoods, and in light of their vulnerability to adverse climate impacts, there is a pressing need for increased and equitable climate investment in small-scale agrifood systems"* (CPI, 2023).

The traditional challenges that prevent small-scale actors from accessing financial capital also prevent them from accessing climate-specific flows. They include low access to collateral; poor contract enforcement; lack of information on available investment opportunities in small-scale agriculture; high transaction costs associated with financing these remote and fragmented actors; the scarcity of risk mitigation mechanisms and facilities to incentivize investments that would benefit these actors; and lack of coherent national climate policies, budgets and regulatory frameworks. Given the essential role that small-scale actors play in agrifood systems – and in enabling a more inclusive and sustainable transformation of such systems – there is a critical need to improve both the quantity and the quality of climate-related financing directed specifically at these players.

Sub-Saharan Africa attracted the majority of climate-related development finance directed at agrifood systems in 2021 (36 percent of the total), followed by Asia (20 percent) and Latin America (16 percent). This funding was primarily directed towards investments pursuing climate adaptation objectives (55 percent), followed by mitigation (21 percent) and cross-cutting goals (24 percent). This skewed proportion was mainly a consequence of multilateral donors' strong preference for funding agrifood-specific investments in adaptation, which represented 66 percent of their total funding. The vast majority of climate-linked donor support to agrifood systems was composed of grants (73 percent), which were more common among bilateral donors, followed by concessional credit (25 percent), which was the preferred instrument among multilateral institutions (Galbiati *et al.*, 2023).

Figure 18. Regional distribution of climate-related development finance allocated to agrifood systems, by climate objective



Source: Galbiati, G.M., Yoshida, M., Benni, N. & Bernoux, M. 2023. *Climate-related development finance to agrifood systems – Global and regional trends between 2000 and 2021*. Rome, FAO. https://doi.org/10.4060/cc9010en, based on OECD data.

There is significant untapped potential for private financing directed at agrifood systems. Currently, the private sector is providing low levels of climate financing directed at agrifood systems, and greater engagement is needed. Blended finance plays a key role in fostering the flow of private capital towards disruptive and game-changing business models that can enable a more sustainable and climate-smart transformation of agrifood systems (FAO, 2025a). Without substantial public support, both financial and non-financial private commercial stakeholders will lack adequate incentives to mobilize their capital towards more ambitious, riskier investments that hold strong transformative potential for agrifood systems, and which can build proof-of-concept for climate-smart technologies and practices. A blended finance approach can provide risk-return enhancements to investments that can enable innovative business models, new technologies, small ticket sizes and non-cash generating conservation activities, all of which are key for the transformation process (FAO, 2025b).

3.3 Increasing social inclusion through investment in agrifood systems

Achieving a truly inclusive transformation of agrifood systems implies removing the barriers and discrimination that prevent marginalized and underserved groups of rural actors from accessing finance. From the viewpoint of financing, this implies directing flows of investment capital towards projects and initiatives that are sensitive to the needs of underserved minorities; that do not contribute to widening existing inequalities; and that, whenever possible, actively seek to mitigate some of the many socioeconomic, cultural and regulatory barriers to inclusion that affect these minorities. This section specifically discusses the implications of promoting a more gender-focused approach to financing women who are active in agrifood systems, given the importance of these actors in promoting a more sustainable transformation of such systems.

Women play a crucial role across all segments of agrifood systems. As shown by FAO (2023b), approximately 36 percent of working women are engaged in agrifood systems worldwide, in a wide variety of roles such as farmers, traders, retailers and hired labourers. Despite their essential role, women experience the impacts of multidimensional poverty significantly more than men, with gender disparities driven by a complex interplay of structural inequalities and discriminatory social norms. Women tend to have less access to resources, services and technologies and lower levels of education and training than men in agrifood systems. Their working conditions tend to be poorer and less stable, often involving irregular, informal, low-wage and labour-intensive jobs. Furthermore, the impacts of climate change on women's incomes and work burdens are greater than those of men, resulting in poorer outcomes in key areas such as food security, nutrition, health and socioeconomic resilience. These

interconnected challenges hinder women's production capabilities, limit their entrepreneurial capacity and restrict their overall ability to enhance their livelihoods.[22]

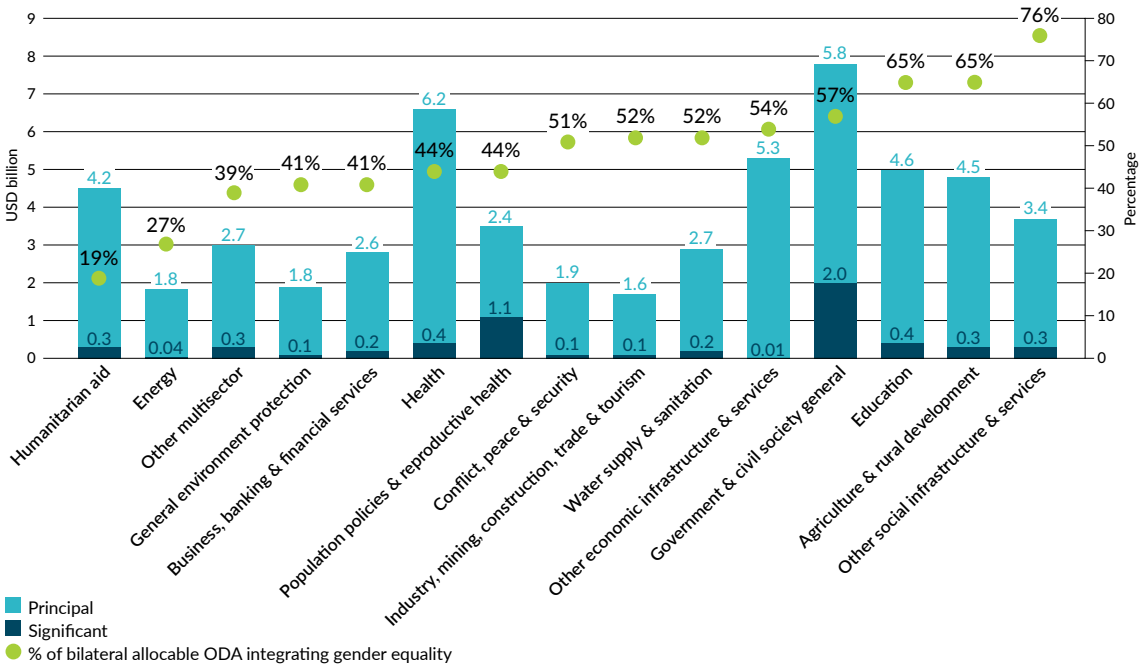
There is currently a stark gap in the amount and quality of development finance (from bilateral, multilateral and philanthropic sources) **channelled towards projects and investments that seek to actively promote gender equality and women's empowerment** in the agrifood systems of developing countries. This financing gap hinders the capacity of countries to address the inequalities affecting rural women, preventing them from fulfilling their socioeconomic potential as key drivers of transformation for such systems. Even when financing is provided, the pursuit of gender-related objectives is often a secondary preoccupation for such projects, making them incapable of generating truly transformative impacts on women workers' conditions in agrifood systems.

Without a structured approach, raising additional funding for gender-related investments will not by itself generate truly transformative change. Indeed, there is a clear Theory of Change that can guide interventions focused on promoting gender equality and women's empowerment in agrifood systems. As shown in FAO's *Status of women in agrifood systems*, there is a need to: a) address gender gaps in productivity and wages in agrifood systems; and b) support increased women's empowerment in agrifood systems by investing at scale in policies, programmes and approaches that deliberately seek to address these gaps (FAO, 2023b). Doing so carries the potential to increase GDP by nearly USD 1 trillion and reduce food insecurity for 45 million people. Additionally, it could raise the incomes and resilience of between 50 and 230 million households. There are numerous specific strategies that have proved successful, which include investing in women's access to and tenure of land, investing in social protection and other social policies such as care systems, and investing in approaches that address underlying discriminatory norms and unfavourable policies (or so-called gender-transformative approaches).

While a large portion of ODA for agriculture and rural development has some gender focus, there is room for more transformative approaches. An analysis of the flows of development finance that pursue gender equality objectives in agrifood systems should begin with what is arguably their most important source, namely bilateral ODA, using data and terminology provided by the OECD. As can be seen in Figure 19, 65 percent of bilateral aid channelled into the 'agriculture and rural development' sector in 2021 pursued gender equality-related objectives (a total of USD 4.8 billion disbursed), which places it among the sectors with the highest share of gender-linked ODA. However, the share of aid directed at projects in this sector with gender as a 'principal' primary objective was extremely low, estimated at approximately 3 percent (a volume of USD 300 million) (OECD, 2023). This terminology

[22] According to FAO (2023b), farms managed by women are, on average, 24 percent less productive than those of a similar size managed by men. Additionally, women working in wage employment in agriculture earn about 18.4 percent less than their male counterparts, which means they receive 82 cents for every dollar earned by men. Finally, FAO (2024c) reports that for each degree of global temperature increase, female-headed farming households experience 34 percent greater losses due to climate change, compared with male-headed households.

Figure 19. Share of sector-allocable ODA, with gender equality objectives, per sector (average, 2020–2021)



Source: OECD. 2023. *Official development assistance for gender equality and women's empowerment: A snapshot.* Paris. https://one.oecd.org/document/DCD(2023)12/en/pdf

refers to the marker that the OECD uses to categorize flows of development finance with a gender equality focus, and is described in more detail in Box 2. As observed in FAO (2025b), it is doubtful if the majority of ODA flows allocated to agriculture have a truly transformative impact on gender equality and rural women's livelihoods overall, as in most of such projects the promotion of gender tends to be a corollary effort, and often a 'box-ticking' exercise for project designers.

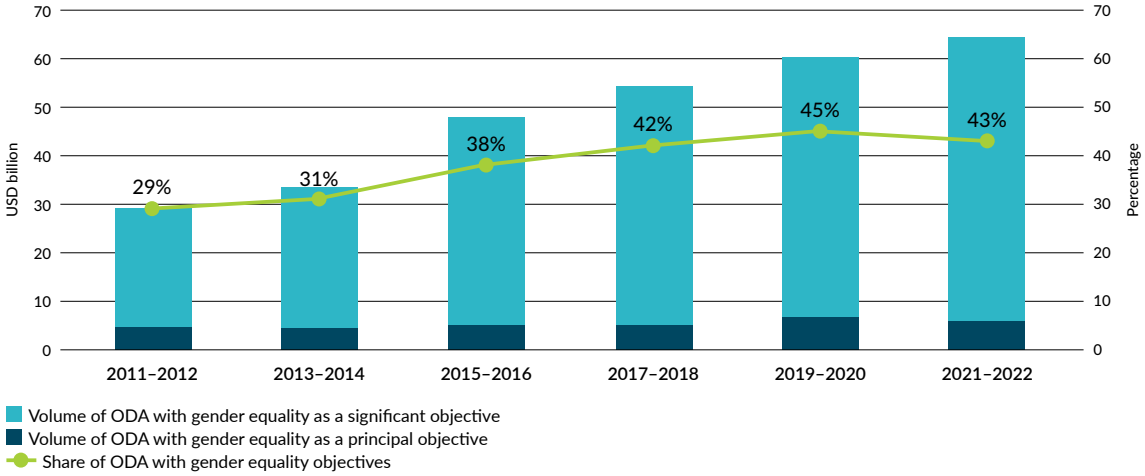
BOX 2.

Features of the Organization for Economic Co-operation and Development (OECD) marking system

The OECD employs its own three-point marking system to define which flows of development finance carry gender equality objectives. Funded programmes that score a zero on this system have been screened for gender, but do not actively target objectives related to this dimension. Programmes that score a 1 have gender equality as a 'significant' objective, while those that score a 2 have it as a 'principal' objective. Flows of finance directed at programmes scoring 1 and 2 are counted as being 'gender-focused'. As of 2022, approximately 39 percent of total ODA flows were channeled into projects with a gender score of 1 ('significant'), while only 4 percent went to those projects that had a score of 2 ('principal').

Source: FAO. 2025. *Development finance for gender equality and women's empowerment in agrifood systems.* Rome. https://openknowledge.fao.org/handle/20.500.14283/cd5017en

Figure 20. Share of ODA linked to gender objectives, per DAC member (average, 2021–2022)



Source: OECD. 2024. Development finance for gender equality and women's empowerment. Paris. [Accessed 20 November 2024] https://web-archive.oecd.org/temp/2024-03-07/73550-development-finance-for-gender-equality-and-women-s-empowerment.htm. Licence: CC-BY-4.0.

The relative share of ODA allocated to gender equality has plateaued since 2017. Beyond the agriculture sector, OECD data show that the overall flows of bilateral ODA with gender-equality objectives have grown over the past decade or so. As can be seen in Figure 20, in 2021–2022 43 percent of bilateral ODA came under this category (amounting to USD 64.1 billion in disbursements),[23] representing a 14 percentage-point increase compared with 2011–2012. Nonetheless, as public donors have begun to redirect their capital towards other macro-level objectives, such as the fight against climate change, the COVID-19 pandemic and emerging conflicts, the share for gender has plateaued. This points to the risk of an increasing deprioritization of gender equality and women's empowerment in public donors' agendas, which would further deprive lower-income countries of the vital financing capital needed to tackle the many gender-based disparities and structural inequalities affecting women in agrifood systems.

Transformative finance for gender equality remains low. The share of ODA with gender equality as a 'principal' objective has remained low and stagnant in recent years (at around 4 percent), despite the overall growth in gender-linked ODA flows. With multiple and sometimes competing objectives and priorities among donors, there is an increased risk of diluting gender-related objectives in development finance, as mainstreaming gender issues becomes little more than a box-ticking exercise, whereby lip service is given to these considerations, but little in terms of concrete action is actually planned or carried out to tackle the key challenges that women face at local level. Based on these insights, there is currently a strong need for placing gender equality and women's empowerment back at the top of donors' agendas, especially when it comes to deploying capital in agrifood systems and

[23] At regional level, Africa and Asia were the main recipients of these flows, together accounting for approximately 33 percent of all gender equality and women's empowerment-linked ODA (FAO, 2024c).

towards projects that explicitly seek to achieve transformative and profound effects on rural women's livelihoods, autonomy and equality (that is, those that pursue gender equality as a 'principal' objective, according to the OECD marking system) (FAO, 2025b).

Just 8 percent of funding from private philanthropic sources is channelled towards development goals linked to gender equality and women's empowerment, which is in marked contrast to overall ODA commitments. Surveying 103 philanthropic donors, OECD (2021) found that 40 percent of them did not view gender equality as either a primary or a secondary priority in their financing activities. Beyond philanthropic capital, accurately measuring and comparing the levels of gender-focused financing derived from other sources, such as development finance institutions, blended finance mechanisms and commercial investors, remains difficult due to the lack of a standardized system for marking and tracking (George and Gulrajani, 2023). For example, an OECD (2022) survey of over 700 blended finance facilities found that only 8 percent had a core institutional strategy dedicated to promoting gender equality. Notably, the largest share (25 percent) of these 'gender-sensitive' facilities directed their investments primarily towards the agriculture sector.

As will be illustrated in greater depth in the concluding section, these insights point to **the need to conduct a deeper reform of how the current development finance architecture** views and interprets the promotion of gender equality and women's empowerment – both in agrifood systems and the general economy – and channels its resources towards initiatives that have such objectives. There is a need to incentivize the flows of quality financing directed at development projects – with a longer-term horizon – that can generate profound positive effects on the entrepreneurship, empowerment, resilience and adaptation of women in agrifood systems, and which can help to address the many gender-based inequalities registered across development indicators, legal norms and social expectations. In this framework, development agencies can play an important role in promoting collaboration between different categories of donors to foster gender-equality financing in agrifood systems, both through liaison efforts and by showcasing, through solid research and data, the considerable returns on investment and multiplier effects that increased partnerships and funding for gender equality and women's empowerment could generate in areas such as food security and nutrition.[24] As noted by George and Gulrajani (2023):

> *"Collective engagement could help address gaps in finance in specific geographies and at the sub-sectoral level, while also pushing funders to provide more predictable finance both for local women's organizations and for a better functioning global architecture."*

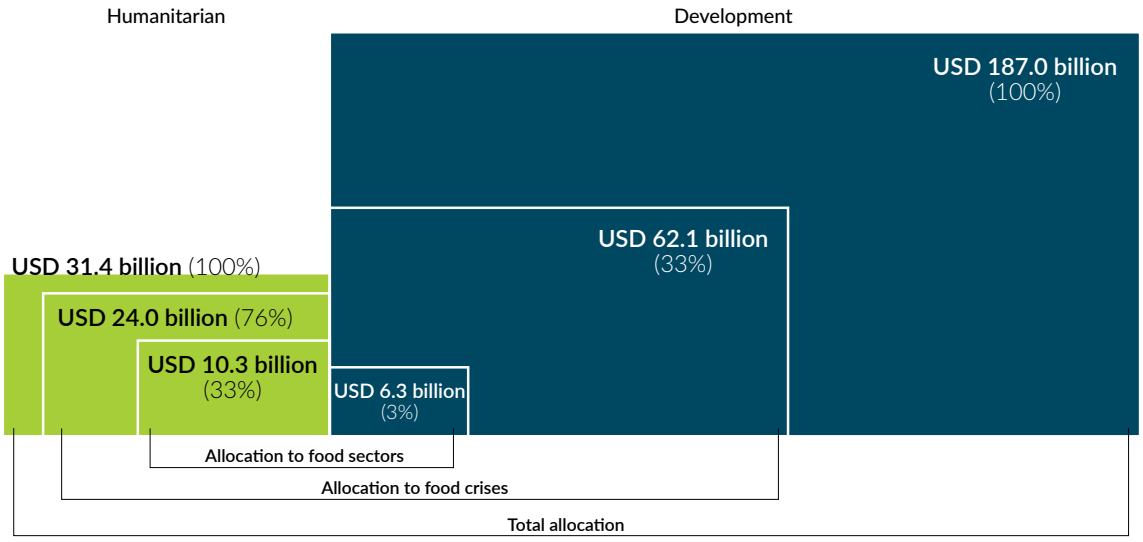
To conclude, it should also be noted that certain recent and innovative financial instruments, such as the 'social gender bonds' described in section 4.4, carry the potential to become valuable tools for raising substantial amounts of capital on international markets, which can be directed at quality investments promoting gender equality and women's empowerment in agrifood systems, and which can help to fill the current gap in gender financing. There is also considerable potential for **leveraging public capital to derisk and incentivize private investment** in gender-focused projects in agrifood systems, following the blended finance approach outlined in section 4.3. Such experiences would be pivotal in demonstrating to the broader private financial sector the significant business opportunities associated with financing gender equality and women's empowerment in agrifood systems, as well as in incentivizing private FIs to develop an offer of financial services that are more flexible and better tailored to the needs and strengths of women entrepreneurs active in such systems (FAO, 2025b).

[24] A clear example of such an approach is FAO's Commit to Grow Equality, a global initiative that aims to create partnerships among governments, philanthropies, private companies, multilateral agencies and other stakeholders with the goal of raising capital and catalysing investments for projects that pursue gender equality and women's empowerment objectives in agrifood systems (FAO, 2024c).

3.4 Rethinking financing towards food crisis prevention and mitigation

As described in section 1.2, 19 countries are currently facing protracted major food crises. Given this situation, it is essential to analyse how the global financing architecture has channelled its resources towards mitigating and preventing the effects of food crises, to highlight the most recent trends, and to identify critical areas for improvement. The 2024 edition of the *Financing and food crises report* finds that the financing of food sectors in countries affected by food crises has been a greater focus of global humanitarian assistance than of development assistance (GNAFC, 2025).[25] As can been seen in Figure 21, while on average only 3 percent of global development assistance was allocated to food sectors in food crisis countries between 2016 and 2023 (an annual average of USD 6.3 billion), 33 percent of global humanitarian flows (USD 10.3 billion) were allocated to these sectors. More broadly, 76 percent of all humanitarian assistance was allocated to those countries between 2016 and 2023 (USD 32 billion per year), compared with 33 percent of global development assistance (USD 62 billion per year). Therefore, while food crisis countries have received, in absolute terms, a larger amount of funding from development finance flows, they have attracted a larger relative share of total humanitarian finance flows (GNAFC, 2025).

Figure 21. Average humanitarian (2016–2023) and development (2016–2022) finance to food crisis countries, and to food sectors in such countries



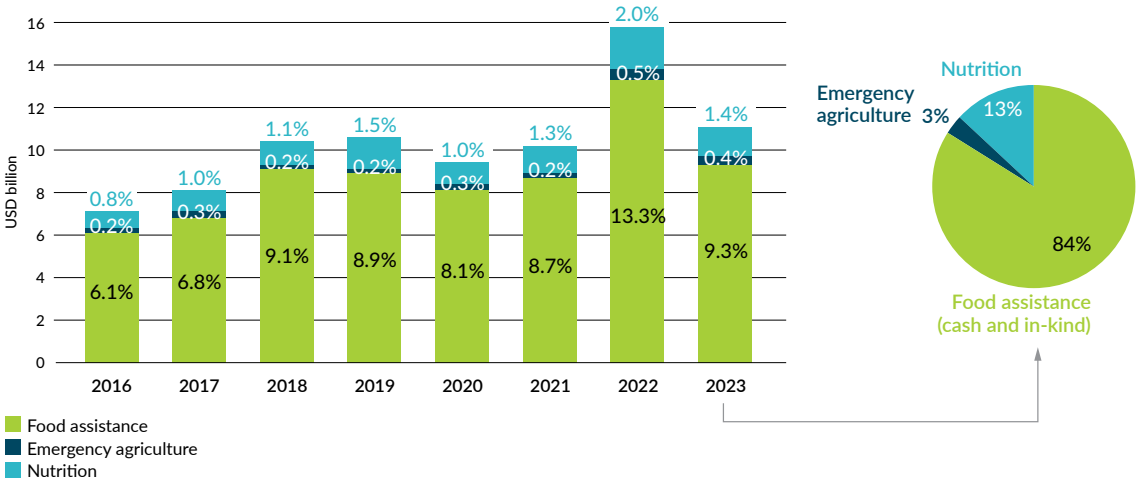
Source: GNAFC (Global Network Against Food Crises). 2025. *Financing flows and food crises report* – 2024. Rome https://www.fightfoodcrises.net/sites/default/files/resource/file/FFFC2024_FINAL.pdf

[25] Following the definition provided in the *Financing and food crises report*, humanitarian assistance refers to *"the sum of commitments and paid contributions for humanitarian action spent outside donor countries as reported to the OCHA Financial Tracking Service – including those from non-official resource partners (e.g. private donors)"* (GNAFC, 2024). Development assistance follows the OECD classification and refers to *"flows to countries and territories on the DAC list of official development assistance recipients [...] provided by official agencies and administered with the promotion of the economic development and welfare of developing countries as its main objective; and [that] are concessional in character"* (GNAFC, 2025).

The trend is towards declining humanitarian assistance. Global humanitarian assistance to food sectors in food crisis countries in 2023 amounted to USD 11 billion, which represented a decrease of 30 percent from the record highs of 2022 – greater than the 19 percent decline registered by humanitarian financing flows in general. Furthermore, this decrease contrasts with the rise in the number of people experiencing acute food insecurity between 2022 and 2023. Despite the recent decline, humanitarian allocations to food sectors still register a significantly positive trend over the 2016–2023 period, with an overall increase of 56 percent. Development assistance, on the other hand, reached record highs in 2023, with USD 8 billion allocated to food sectors in a food crisis context, registering a steady increase from 2022 (USD 7 billion) and 2021 (USD 5.9 billion) (GNAFC, 2025).

The greatest share of humanitarian assistance in 2023 was directed at East Africa (31 percent, or USD 3.4 billion), followed by the Near East and North Africa region (28 percent, or USD 3.1 billion) and the South Asia and Pacific Region (14 percent, or USD 1.5 billion). East Africa was home to the highest number of acutely food insecure people in 2023, with 64.2 million people in IPC Phase 3 or above across eight countries. All three major drivers of food insecurity – which included the 2020–2023 drought, El Niño-driven floods, heightened conflicts and increased macroeconomic instability – contributed to an additional 7 million people experiencing acute food insecurity between 2022 and 2023. The ten recipient food crisis countries that received the greatest share of humanitarian assistance to food sectors accounted for 70 percent of all these allocations. In terms of development assistance, the greatest share of funding to food sectors was directed towards West African countries (27 percent, or USD 2.2 billion), followed by East Africa (22 percent, or USD 1.8 billion). Overall, the analysis indicates that while at a broader level funds have increased in response to rising need, humanitarian financing has not been consistently channelled towards peaks in need stemming from specific food crises (GNAFC, 2025).

Figure 22. Financing flows of humanitarian assistance between 2016 and 2023, by destination



Source: GNAFC (Global Network Against Food Crises). 2025. *Financing flows and food crises report* – 2024. Rome https://www.fightfoodcrises.net/sites/default/files/resource/file/FFFC2024_FINAL.pdf

Most of the humanitarian assistance towards the food sectors of food crisis countries between 2022 and 2023 was allocated to food assistance (84 percent, or USD 9.3 billion), while 13 percent of flows were directed towards nutrition-related goals (USD 1.4 billion) and 3 percent towards emergency agriculture (USD 360 million), as shown in Figure 22. These shares have remained mostly unchanged over the past eight years. In terms of development assistance, 50 percent of these financing flows were directed towards agriculture (USD 4.2 billion), 14 percent towards development-oriented food assistance (USD 1.1 billion), and similar shares of approximately 10 percent were channelled respectively towards basic nutrition (USD 950 million) and rural development (USD 780 million) (GNAFC, 2025).

Such data point to the fact that most of the financing directed towards food crises is currently aimed at tackling the symptoms of such crises (that is, it is directed towards food assistance), rather than addressing the interconnected drivers and structural factors that contribute to these events. This can be partially explained by the fact that financing for food crises has so far primarily been a focus of humanitarian assistance (at least in terms of the total share of financing devoted to such goals), rather than of development finance, which tends to channel its resources towards more immediate relief interventions, such as food assistance.

Humanitarian assistance tends to focus on in-kind food provision, despite the fact that a large share of the acutely food-insecure population relies on some form of agriculture for their livelihoods and actually has the capacity – if not the means – to continue local food production during the crisis. Furthermore, donors tend to lack coordination in their approach to financing food crisis prevention and mitigation, as they follow their own institutional priorities and focus on specific areas of intervention, rather than broader, intersectoral strategies that seek to address the root causes of food crises.

Two actions are needed. First, it is critical to promote a more equitable and needs-based allocation of both humanitarian and development financing directed at agriculture, which is informed by the priorities of affected populations and enables longer-term projects and investments that can tackle the root causes of food crises, thereby strengthening the resilience of agrifood systems and preventing such crises before they become manifest. Second, objectives related to food crisis prevention and mitigation should be mainstreamed in the financing priorities of development, humanitarian and climate finance, across a wide range of sectors. Doing so would recognize the complex, interdependent factors that are responsible for the major drivers behind food crises, and which need to be addressed, in a coordinated manner, in order to foster agrifood systems' resilience against macro-level shocks.

Furthermore, redirecting domestic public resources towards a range of interventions linked to anticipatory action – before a food crisis becomes manifest – can be an effective way of reducing the vulnerability of agrifood systems to shock-induced harvest failures. From the perspective of governments, there is a need to gradually shift from a reactive to an anticipatory approach when dealing with food crises. Such measures can include boosting climate-resilient agricultural production practices, developing early warning systems and extending social safety nets to low-income, vulnerable individuals. Nevertheless, the narrow fiscal space and macroeconomic instability faced by most food crisis countries can severely limit the scope of such measures, unless significant grant support is provided by international donors.

For an adequate and effective financial response to food crises, prioritization, programming and funding allocations should be led by established evidence and local populations' own priorities, rather than by political dynamics, funding calendars and individual agency considerations. Moreover, further efforts need to be made not only to ensure that increased financing is provided to meet growing needs, **but that it is the right kind of financing, delivered in the right place, at the right time.** In food crisis contexts, evidence is needed to guide financing allocations and enable the relevant mix of financing tools to respond to and prevent food crises (GNAFC, 2025). At present, the documented rise in intensity and duration of acute food insecurity in these contexts is not being met with appropriately layered and targeted financing. This includes humanitarian financing that follows rote responses rather than aligning with people's specific needs and potential for impact, or with evidence of where needs are most extreme, and development financing that does not adjust to or increase in line with intensified needs that require significant investments to tackle the root causes of food crises.

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4 Tools and instruments to bolster the flows of financing towards agrifood systems transformation

This chapter illustrates how a range of specific financial instruments can be used to foster the flows of development finance directed towards the transformation of agrifood systems – in both LICs and MICs. Such financial instruments can play a crucial role in derisking and enhancing the terms of investments in agrifood systems. They tend to leverage public capital (both concessional and non-concessional) to incentivize the participation of private stakeholders in riskier, longer-term and more ambitious investments in agrifood systems, capable of generating deeper, more transformative impacts for local populations. Specific examples are provided throughout this chapter to showcase how such financial instruments have been applied in different contexts.

BOX 3.

FAO tools and instruments to increase financing for agrifood systems transformation

Recently, FAO has promoted several approaches, tools and instruments to increase financing volume and coherence for agrifood systems transformation:

a) Innovative dedicated financing facilities

While financial aid from bilateral and multilateral partners is crucial to help countries counter the immediate effects of global food price shocks and prevent food crises from developing, this type of assistance is rarely dependable or immediate (FAO, 2025a). Given this, **dedicated financing facilities** have been established to provide emergency support to countries severely affected by food price crises, usually for limited time frames. In 2022, FAO advanced a proposal for a **Food Import Financing Facility,** aimed at helping food-importing countries to shoulder the extra costs associated with the global spike in food prices stemming from the Russia-Ukraine conflict and the after-effects of the COVID-19 pandemic.

This proposal helped to influence the International Monetary Fund (IMF) in launching the establishment of a **Food Shock Window (FSW)** in September 2024, aimed at covering urgent balance of payment deficits and financing direct food support for countries facing acute food insecurity – due to both soaring food prices and domestic crisis factors. This support took various forms: in-kind food distribution; targeted cash transfers to cover basic needs; school feeding programmes; input and fuel subsidies; investments in agricultural machinery; and many other types of interventions. The IMF disbursed USD 1.8 billion to six countries (Burkina Faso, Guinea, Haiti, Malawi, South Sudan, Ukraine,) over approximately 18 months through the FSW, until this was discontinued in March 2024. Ukraine was by far the largest beneficiary of the funding provided through the FSW, with more than USD 1.3 billion disbursed (IMF, 2023). While data are not yet available for all countries that benefited from the FSW financing, an analysis by FAO (forthcoming) showed that the facility registered some positive impacts on improving food consumption scores and other food security indicators, although there were mixed results in terms of the FSW's capacity to bring down food prices in the target countries. It should also be noted that the 'emergency' financing provided by the FSW lacked promptness, as disbursements began in November 2022 – six months after the global price of cereals had already reached its peak.

While the experiences described here have been limited, both in time and in the number of countries targeted, they may serve to inspire the financing-for-development donor community to establish a **permanent facility, mandated with mobilizing dedicated funding for all countries facing acute food insecurity and domestic crisis factors**. Such a facility would provide cheaper and more flexible financing that can be used to mitigate both the immediate impact that soaring food price inflation can have on agrifood systems, as well as the longer-term negative effects on the stability, efficiency and resilience of such systems.

To this end, FAO has proposed the establishment of a **Financing for Shock-Driven Food Crises (FSFC) Facility**, to be led by FAO in close collaboration with the World Food Programme (WFP) and UN Office for the Coordination of Humanitarian Affairs (UN OCHA). The concept of the FSFC was launched in 2024 under the Italian Presidency of G7. The FSFC aims to address the growing gap between how humanitarian funding is directed at food crises and the concrete early actions required to address them – by focusing on anticipatory financing to intervene in a more rapid and cost-efficient manner, using pre-identified scientific triggers and associated response plans. The Facility aims to transform the prevailing, costly patterns linked to emergency funding, promoting a more cost-effective approach for donors and practitioners on the ground.

BOX 3. *(cont.)*

The FSFC would develop comprehensive early warning systems tailored to food security-related risks, which would integrate real-time data and advanced forecasting to ensure accurate triggers, allowing the timely disbursement of funds. The Facility would focus on 12 main categories of risk (such as climatic events, a pandemic, economic disruptions and conflict) mobilizing public and private blended resources that can fund cost-effective and well-positioned anticipatory action and rapid response programmes.

By addressing these risks, FSFC will ensure that resources are allocated efficiently, protecting vulnerable populations and reducing the impact of food crises. The FSFC will also seek to complement existing mechanisms, such as OCHA's Central Emergency Response Fund, filling gaps in hazard and geographical coverage to enhance the speed and efficiency of global food security efforts.

b) Derisking investment through better information and decision-making tools

There is also a strong need to build the evidence required to identify and design the most appropriate investments to accelerate agrifood systems transformation. In this regard, **FAO's Hand-in-Hand Initiative**, first launched in 2019, has sought to make use of advanced data tools and geospatial analysis to collect and analyse information that could be used to identify key areas of need at local level, and help countries to identify which investments could generate the greatest positive impacts on their agrifood systems. In particular, the open access Hand-in-Hand Geospatial Platform was created to assist public decision-makers in understanding where investments, technological innovation and policy change can be used in the most efficient manner to promote agrifood systems transformation and achieve SDGs 1 and 2.

By utilizing a multidimensional geographic information system data platform that integrates economic, statistical and geospatial analyses, it facilitates more targeted and effective programming for rural transformation. The geospatial representation of agricultural landscapes underscores critical relationships among various economic, social and environmental factors, guiding investment to help those involved in agriculture to achieve their full sustainable income potential.

c) Promoting policy coherence

There is a need to pursue diverse development objectives in a coherent fashion. A critical challenge is how to achieve zero hunger (SDG 2), while taking climate action to combat climate change and its impacts (SDG 13). FAO developed a **Global Roadmap** towards achieving SDG 2 without breaching the 1.5 °C threshold. It encompasses 10 domains of action and 120 actions (FAO, 2023). The roadmap involves exploring the financing options to the required actions.

As part of policy coherence, FAO promotes **repurposing domestic public support to agriculture,** as discussed in section 3.1.

Finally, FAO is part of the development of the **Global Alliance Against Hunger and Poverty** proposed by the Brazilian Presidency of the G20 in 2024. The Global Alliance will enable country-owned, evidence-based, large-scale policy instruments to eradicate hunger and poverty through the mobilization and alignment of knowledge and financial support. FAO will host the Global Alliance's support mechanism.

Sources: FAO. 2023. *Achieving SDG 2 without breaching the 1.5 °C threshold: A global roadmap, Part 1 – How agrifood systems transformation through accelerated climate actions will help achieving food security and nutrition, today and tomorrow, In brief.* Rome. https://doi.org/10.4060/cc9113en
FAO. 2025a. *Innovative finance for agrifood systems transformation.* Rome. https://openknowledge.fao.org/items/87ad91de-eda8-4010-b33d-60e642616bf0
FAO. (forthcoming). *Lessons from responses to food crises.* Rome.
IMF (International Monetary Fund). 2023. *Review of Experience with The Food Shock Window Under The Rapid Financing Instrument and The Rapid Credit Facility.* Washington, DC. https://www.imf.org/en/Publications/Policy-Papers/Issues/2023/06/30/Review-of-Experience-with-The-Food-Shock-Window-Under-The-Rapid-Financing-Instrument-and-535478

4.1 Grants and concessional loans

Grants and low-/no-interest loans tend to be the most common type of financing available to lower-income countries to develop their agrifood systems, channelled mainly through ODA flows, due to these countries' high financial risk profile and limited capacity to repay loans provided on commercial terms. In these countries, a combination of barriers such as the high cost of borrowing, scarce publicly available data on agricultural value chains, lack of operational readiness and capacity on the part of most investee agri-enterprises, and weak regulation increase the overall risk faced by private investors and discourage them from mobilizing their capital in agrifood-focused projects. As a result, international donors and DFIs play a key role in ensuring the continued flow of grants and concessional loans directed at projects that seek to generate a range of positive impacts across different dimensions of development.

Conditional grants and concessional funding can be tied to specific investments in a wide range of cross-cutting areas that hold relevance for the development of agrifood systems, such as fostering the use of climate-smart practices and technologies in agriculture, supporting smallholder farmers, strengthening women-led agribusinesses, or financing the shift to renewable energy technologies for production.

One of the most relevant examples of this approach can be seen in the work of the Global Agriculture and Food Security Programme (GAFSP), which is a multilateral financing platform launched by the G20 in 2010, in the wake of the 2007–2008 food price crisis. Hosted within the World Bank, the GAFSP has so far mobilized USD 2 billion in funds from a range of public and philanthropic donors, financing more than 300 projects that have directly supported more than 20 million people (World Bank, 2024b). The GAFSP primarily provides grant funding to LIC governments (average size USD 5 to USD 50 million) to support national agricultural and food security investment plans, tied to specific focus areas, in collaboration with different United Nations development agencies and DFIs as supervisory partners. The grants support innovative public and private sector activities targeting smallholders and can also provide smaller grants directly to farmer producer organizations, together with technical assistance, to strengthen their capacity in a range of areas, such as climate resilience. Furthermore, in the framework of its new Business Investment Financing Track window, the GAFSP focuses on leveraging concessional finance to mobilize additional flows of private capital towards the development of more sustainable and climate-resilient agrifood systems, as part of a blended finance approach that will be discussed in greater detail in section 4.3. The GAFPS uses concessional loans to mitigate the risk and improve the terms of more complex and ambitious investment structures, targeting agri-SMEs with high growth potential, incentivizing the participation of private and multilateral capital in rural development projects that can generate a variety of positive impacts on agrifood systems at national level (World Bank, 2024b).

Grant funding also plays a critical role in the establishment of Technical Assistance Facilities (TAFs), which are autonomous facilities that can provide investment funds with the technical support and capacity required to design, implement and evaluate complex investments that aim to generate positive socioenvironmental impacts across various dimensions of agrifood systems. TAFs can provide expertise in a wide range of technical areas that are usually outside a fund's remit, but which are key to designing and implementing transformative investments in agrifood systems, such as digital agriculture, renewable energy technology, biodiversity conservation and land restoration. One example of this is the dedicated TAF that supports the investments of the AGRI3 Fund (see section 5.2.5), which was funded by a USD 5 million grant from the Government of the Netherlands (Benni, 2024a).

4.2 Debt swaps

A debt swap (or more precisely, a debt-for-development swap) is a conditional financial agreement designed to alleviate the significant debt burdens faced by LICs and MICs. A debt swap typically involves an agreement whereby a portion of a country's debt is forgiven or reduced in exchange for commitments to invest in development projects focusing on specific areas, such as food security, nutrition, education and health. This involves a conditional restructuring of a part of the existing national debt, which foresees that the public funds liberated in this manner will be earmarked and channelled by the beneficiary country towards transformative interventions. The most common type of such debt swaps are bilateral ones, which are negotiated directly between a creditor and a debtor country.

The use of debt swaps has increased with the levels of global public debt. As shown by FAO *et al.* (2024), and as discussed in Chapter 1, global debt levels have increased fourfold since 2000, with the debt servicing obligations of 58 of the LICs and MICs most vulnerable to climate change being forecast to reach approximately USD 500 billion by 2026. In the three decades leading up to 2017, debt swaps removed governmental liabilities for a total amount of USD 2.6 billion, redirecting resources towards investments in different dimensions of development and climate action for a total amount of USD 1.2 billion – mainly through bilateral agreements between countries linked to individual transactions of relatively modest size. These bilateral debt swaps have all been transacted with creditor countries from the Paris Club, an informal group of 22 HICs whose goal is to find workable solutions to payment problems faced by debtor countries. To date, Paris Club members have drawn up 480 debt swap agreements with 102 debtor nations (Paris Club, 2024).

Debt swaps can be of critical assistance to LICs and MICs, helping them to increase the sustainable and inclusive transformation of agrifood systems. These countries tend to register both a limited capacity to access financing and high levels of sovereign debt, which implies that a considerable share of their public revenue must be used to service payments on interest and principal. Debt swaps therefore provide governments with much needed fiscal

space, allowing them to reallocate public resources towards crucial policies and programmes that can have more profound transformative effects on agrifood systems. As noted in section 2.2, these policies need to carefully balance the various trade-offs associated with redirecting domestic resources towards pursuing, in parallel, different goals related to the promotion of climate adaptation, social protection, rural health and various other areas.

More specifically, debt-for-food security swaps have been leveraged in recent years to free up resources that could be channelled into a wide range of relevant initiatives, such as home-grown school feeding programmes, programmes to strengthen climate-smart agriculture, and large-scale procurement of essential foodstuffs. While they are primarily bilateral agreements between countries, development agencies are usually engaged to ensure the correct design, implementation, monitoring and evaluation of the planned interventions enabled by the swap. WFP was engaged in 12 such agreements between 2007 and 2023, carrying out swaps in 6 countries: Egypt, Guinea-Bissau, Madagascar, Mauritania, Mozambique and Pakistan, for a total funding volume of USD 150 million. Initiatives funded through these agreements have included home-grown school feeding programmes, food assistance for pregnant and nursing mothers, and campaigns on healthy nutrition (FAO *et al.*, 2024; Watkins *et al.*, 2024).

Another more recent variant of debt swaps are debt-for-climate swaps, which seek to free up public resources that can be targeted towards investments that generate positive impacts on climate and the environment (see Box 4). These are agreements that involve a creditor country, a debtor country and a development partner acting as a financial intermediary. The latter provides loans to the debtor country for the repurchase of the debt, in exchange for specific commitments to invest in national projects that foster climate adaptation, mitigation and biodiversity protection. As noted by FAO *et al.* (2024): "Financing for these loans typically involves labelled bonds [...] bolstered by support from donors or guarantees from multilateral banks, enabling favourable credit terms including beyond market interest rates and maturities. This approach allows both bilateral swapping and swapping of privately held debt. It further broadens refinancing options and offers a lifeline to countries excluded from credit markets." Although still in its early stages, the potential market size for debt-for-climate swaps is estimated at USD 800 billion. Furthermore, and unlike other types of debt swaps, the first instances of such debt-for-climate agreements have been noteworthy for the sheer size of the individual transactions involved: between 2022 and 2023, for example, debt-for-climate swaps were agreed upon for USD 1.6 billion in Belize, USD 553 million in Ecuador and USD 500 million in Gabon (FAO *et al.*, 2024).

BOX 4

When would a debtor country prefer a debt-for-climate swap over a conditional grant?

There is an ongoing debate on the advantages and disadvantages of debt-for-climate swaps over conditional grants to foster the flow of investment capital towards climate-related goals. Conditional grants are grants to countries that are only paid out once a specific socioenvironmental goal has been achieved. Debt-for-climate swaps, for example, liberate fiscal space that can be used to mobilize capital towards different investments aimed at meeting specific climate-related key performance indicators (KPIs). There are instances in which debt-for-climate swaps can be viewed as a more effective means of facilitating public investment in recipient countries than conditional grants. First, climate-related spending tends to be less costly for the creditor, since the financial burden is typically shared among multiple creditors. Second, debt-for-climate swaps generally provide some level of debt relief, resulting in a higher net fiscal transfer that can be allocated to climate-related projects. Furthermore, swaps tend to generate debt relief that exceeds what is needed to finance climate-related projects, resulting in more public resources being unlocked compared with conditional grants that only cover the cost of the specific investment. However, for these arrangements to be more effective than grants, it is crucial to structure them so that swap-related commitments are made senior over the remaining debt service obligations. Without this arrangement, creditors aiming to support climate-related investments face increased risks with a debt-for-climate swap, such as sovereign risk, compared with a conditional grant arrangement (Chamon *et al.*, 2022).

Source: Chamon M., Klok E., Thakoor V. and Zettelmeyer J. 2022. *Debt-for-climate swaps: Analysis, design, and implementation.-IMF Working Papers*. International Monetary Fund, Washington, DC. https://www.imf.org/-/media/Files/Publications/WP/2022/English/wpiea2022162-print-pdf.ashx

4.3 Blended finance

A blended finance approach involves leveraging concessional funds from public and philanthropic sources to attract and mobilize substantial commercial capital for agricultural development projects that investors would typically avoid due to their high risk. By leveraging concessional funds, it is possible to mitigate the risk of specific investments and incentivize commercial investors to deploy their resources in climate-smart, resilience-enhancing projects characterized by a higher risk profile and longer time horizons, which carry greater transformative potential for agrifood systems. A blended finance approach can play a critical role in increasing the appeal of investments linked to agrifood systems transformation, by *"improving the bankability of projects and reducing transaction costs in the agricultural sector, defined by high transaction cost/ return ratios and information asymmetries, and loosely structured value chains in which most operators and transactions are small-scale"* (Convergence, 2022). Such an approach holds the potential to generate appealing financial returns for investors, as well as positive socioenvironmental impacts, in a wide range of dimensions such as GHG reductions, food security improvements, land rehabilitation and biodiversity protection (Galbiati *et al.*, 2023).

The strategic use of concessional financing to derisk investments is particularly important to incentivize the mobilization of private commercial capital towards the 'missing middle' – the vast, financially underserved segment of agricultural companies whose credit needs are too large to be met by microfinance institutions (MFIs) or financial cooperatives, and too small to be of interest to commercial banks and other sources of private commercial capital (Benni, 2024a).[26] While this large group of agribusinesses plays a potentially critical role in enabling a more sustainable and inclusive transformation of agrifood systems, they tend to be shunned by private commercial stakeholders in favour of larger investee firms with more appealing credit risk profiles, unless concessional capital is leveraged to enhance the risk/reward ratio of such investments (FAO, forthcoming).

Overall, a blended finance approach is critical to catalyse – and scale up – private financing flows directed at the development of agrifood systems, with public and philanthropic investors 'paving the way' for the greater engagement of private investors through a strategic use of both risk-tolerant capital and complementary non-financial support. Under this approach, public financing should be used in a time-bound, market-friendly manner to enable innovative investments to be made in agrifood systems. As pointed out in the *State of Food Security and Nutrition in the World 2024*:

> *"Especially when there is a substantial development benefit, actors such as governments and donors can use blended finance as a vehicle to channel the needed financing flows to achieve that outcome. The objective is that, over time, the risk perception will diminish due to the initial support of the more risk-tolerant capital, and that commercial finance can then replace the grants or concessional financing which played a crucial and catalytic role in the initial stage"* (FAO *et al.*, 2024).

Every USD 1 of concessional finance is used to mobilize USD 4 of commercial finance on average, a leverage ratio that has remained substantially the same over the past five years (Convergence, 2023). However, only USD 1.80 of these USD 4 is currently mobilized from private investors, with the remaining USD 2.30 being provided by DFIs themselves, pointing to a scenario where DFIs are the first to capitalize on concessional support provided by donor governments. As government donors assume first loss on blended finance investments, DFIs are well placed to offer commercial financing via their own funds, which implies competing with commercial lenders rather than incentivizing a wider engagement of private capital through concessional support.

However, there is a risk that DFIs' involvement through capital at commercial rates may crowd out private stakeholders' engagement, rather than, as intended, assist in fostering public-private markets for such investments. As highlighted by the Shamba Centre for Food

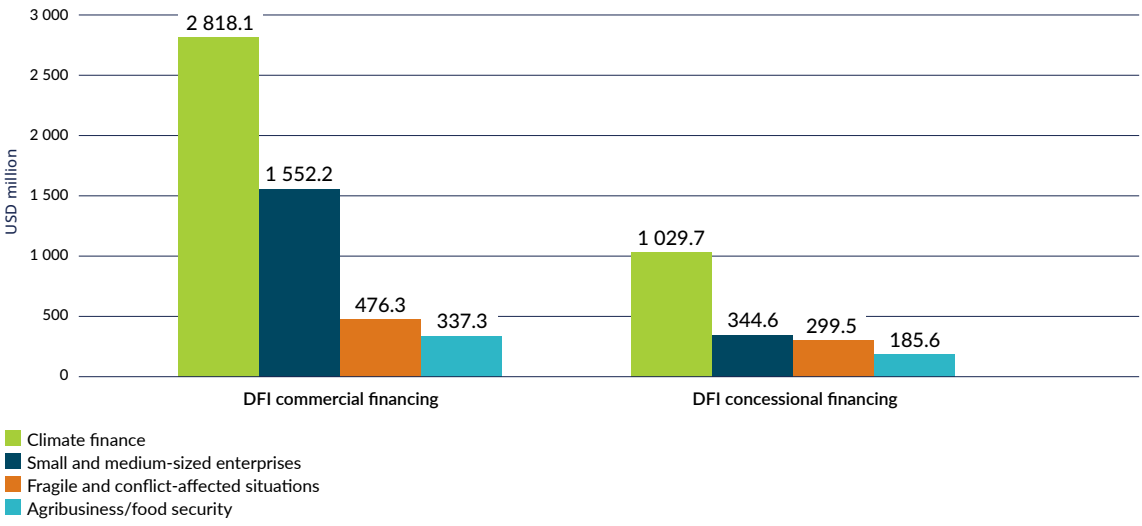
[26] Although there is no definitive agreement in the literature on the exact ranges, those agrifood-SMEs that require financing of between USD 50 000 and USD 2 million are usually considered to be part of the 'missing middle'.

and Climate (2024): *"This practice represents a missed opportunity for expanding the pool of finance provided by DFIs. DFIs should ideally be offering concessional financing to anchor, de-risk and bring private investors to the table."* When it comes to investing in agrifood systems, these numbers tend to be even worse than the average: In the agroprocessing subsector, for instance, every USD 1 of concessional financing generates USD 3.50 in commercial financing. Of this amount, USD 1.40 comes from private investors, while the remaining USD 2.10 is contributed by development finance institutions.

DFIs' levels of engagement in blended finance transactions targeting the agrifood sector tend to be very low. As can be seen in Figure 23, in 2021, only USD 337 million in commercial financing and USD 185.6 million in concessional financing were channelled by DFIs into blended finance projects linked to agribusiness and food security – even lower than the flows of blended finance directed towards fragile and conflict-affected areas. A range of overlapping constraints help to explain why DFIs tend to eschew the agrifood sector when it comes to blended finance transactions: the risk-averse institutional financing strategies usually adopted by these institutions, which are a reflection of donors' expectations; the pursuit of returns at close to commercial rates, which favours investments in larger-scale firms and strongly reduces the pool of potential transactions; and the high perceived risk environment and strong information asymmetries that characterize agrifood value chains (Shamba Centre for Food and Climate, 2024).

Blended finance holds particularly strong potential for bolstering the flows of climate finance directed at agrifood systems. As pointed out in a large-scale analysis carried out by Convergence (2022), climate change has historically been a strong thematic focus of blended finance transactions. Since 2011, on average, half of all blended finance transactions launched

Figure 23. Total volume of development finance institutions (DFI) blended finance projects (USD million, 2021)



Source: Shamba Centre for Food and Climate. 2024. *Unleashing the catalytic power of donor financing to achieve Sustainable Development Goal 2*. Geneva. https://www.donorplatform.org/post/unleashing-the-catalytic-power-of-donor-financing-to-achieve-sustainable-development-goal-2/

annually had this type of focus, attracting more than 65 percent of the aggregate annual flows of financing in the blended finance space (an average of USD 7 billion per year). Furthermore, the median size of these climate-focused transactions has been USD 80 million, which is considerably higher than the median size of transactions registered in the overall blended finance market (USD 55 million). From a regional perspective, climate blended finance has focused primarily on sub-Saharan Africa (41 percent of transactions in the 2019–2021 period), followed by Latin America and the Caribbean (28 percent). From a country perspective, Brazil, Colombia and Kenya have registered the highest number of blended finance deals with a climate focus (Galbiati *et al.*, 2023).

An increasing number of climate-oriented blended finance transactions in recent years have focused specifically on smallholder farmers and rural communities. Some 36 percent of climate deals between 2019 and 2021 targeted these actors, up from 26 percent registered in the 2016–2018 period.[27] This rising interest can be explained by the fact that, from the perspective of impact investors, agrifood-focused transactions are well placed to achieve both climate mitigation and climate adaptation results. In other words, they can both contribute to reducing the emission of carbon dioxide (CO_2) and other greenhouse gases, and help rural people to become more resilient to the effects of climate change, such as the increased frequency and magnitude of extreme natural events, erratic weather patterns and soil salinization. According to Convergence's analysis, over 60 percent of climate-related blended finance deals in agriculture (in the 2019–2021 period) were cross-cutting transactions, aimed at achieving both mitigation and adaptation effects, such as expanding renewable energy usage in agribusiness and promoting forest restoration (Convergence, 2022).

Increasing this investment requires highly specialized blended finance funds. Convincing investors to mobilize their capital in climate-focused development projects aimed at enhancing agrifood systems requires considerable technical expertise on the part of the entity structuring the investment, an established track record of supported transactions, and insightful, granular information on the specific context at hand (such as the agroecological features of the territory, value chain dynamics and specific farm-related aspects of climate vulnerability). In turn, this requires highly specialized blended finance funds that have been set up with the necessary capacity, expertise and resources to identify and foster the most impactful deals that can promote climate-smart agriculture. There have been some interesting examples in recent years of blended finance funds specifically established to incentivize investors' engagement in these types of projects, although they are relatively few in terms of the overall blended finance space. These funds focus on derisking investments in projects that aim to achieve various types of environmental and social impacts, through the promotion of sustainable agricultural practices, forest protection, degraded farmland and pastureland rehabilitation, and a host of other interventions (Galbiati *et al.*, 2023).

[27] As seen in section 3.1.2 on climate finance, currently an extremely small share of total climate finance flows are channelled towards investments that benefit small-scale agricultural actors in developing countries.

Blended finance presents significant potential to enhance the flow of climate finance directed towards agrifood systems. As highlighted in a comprehensive analysis by Convergence (2022), climate change has been a major focus of blended finance transactions. Since 2011, climate-related projects have accounted for, on average, half of all blended finance transactions launched annually, attracting over 65 percent of the total annual financing in this space (approximately USD 7 billion per year). Additionally, the median size of these climate-focused transactions has been USD 80 million, notably higher than the median of USD 55 million for all transactions in the blended finance market. Regionally, sub-Saharan Africa has been the primary focus of climate blended finance, accounting for 41 percent of transactions between 2019 and 2021, followed by Latin America and the Caribbean at 28 percent. On a country level, Brazil, Colombia and Kenya have seen the most blended finance deals with a climate focus (Galbiati *et al*., 2023).

In recent years, there has been a growing emphasis on smallholder farmers and rural communities within climate-oriented blended finance transactions. Between 2019 and 2021, 36 percent of climate deals targeted these groups, up from 26 percent in the 2016-2018 period. This shift has been driven by the recognition that agrifood-focused transactions are well-positioned to deliver both climate mitigation and adaptation outcomes. These projects not only contribute to reducing CO_2 emissions and other greenhouse gases but also help rural populations to build resilience to climate impacts, such as more frequent extreme weather events, erratic weather patterns and soil salinization. According to Convergence's analysis, over 60 percent of climate-related blended finance deals in agriculture between 2019 and 2021 were cross-cutting, aimed at achieving both mitigation and adaptation goals, such as expanding renewable energy use in agribusinesses and promoting forest restoration (Convergence, 2022).

Increasing investment in climate-focused agrifood systems requires highly specialized blended finance funds. Attracting investors to mobilize capital for development projects aimed at improving these systems demands significant technical expertise from the entity structuring the investment, a proven track record of successful transactions, and detailed, context-specific information on factors such as the agroecological characteristics of the area, value chain dynamics, and the particular climate vulnerabilities of farms. This calls for blended finance funds that are well-equipped with the necessary capacity, expertise and resources to identify and support impactful projects that promote climate-smart agriculture. While there have been some notable examples of blended finance funds created to encourage investor participation in such projects, they remain relatively few within the broader blended finance landscape. These funds primarily focus on derisking investments in initiatives that aim to achieve environmental and social impacts, such as promoting sustainable agricultural practices, protecting forests, rehabilitating degraded farmland and pastureland, and implementing a variety of other interventions (Galbiati *et al*., 2023).

A relevant example of a blended finance facility of this kind is the & Green Fund, which focuses on enhancing and derisking investments that seek to promote a shift away from traditional deforestation practices in key agricultural supply chains (such as palm oil, soy and beef) and financing the transition of these supply chains from extractive to truly sustainable blueprints. The Fund was launched in 2017, with an initial anchor investment from the Government of Norway, which subsequently attracted additional funding from a range of private and public investors, such as the Dutch Entrepreneurial Development Bank, the Ford Foundation, Unilever and the Global Environment Facility, reaching a total capitalization of USD 144 million (Galbiati *et al.*, 2023; Benni, 2023).

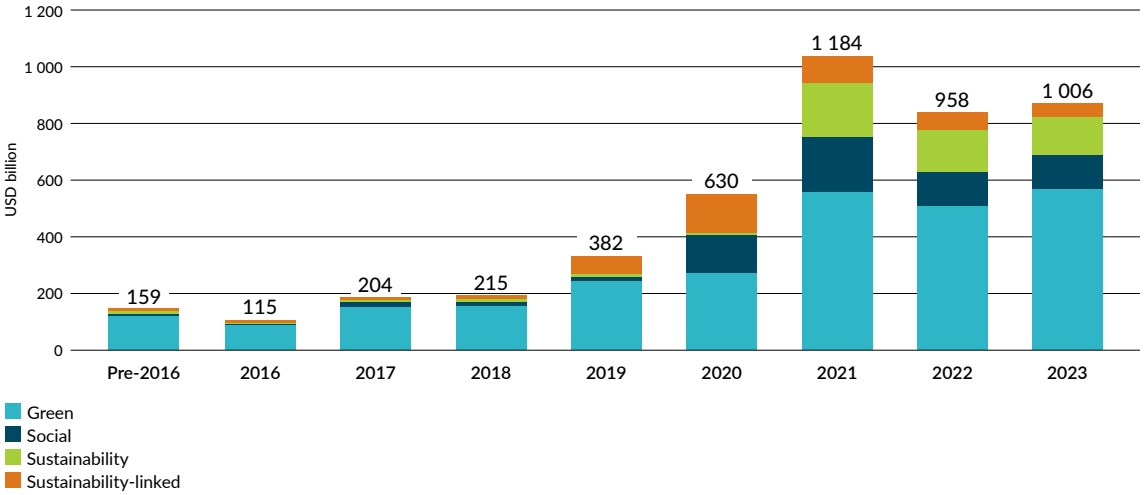
4.4 Sustainable bonds

Green, social, sustainability and sustainability-linked (GSSS) bonds are specific types of debt instruments that hold the potential to raise substantial amounts of capital directed at investments linked to a range of development goals, including the promotion of agrifood systems transformation. These bonds can be issued by a variety of public and private entities (such as governments, DFIs, multilateral development banks, commercial banks) and are designed to raise capital on international markets to finance projects that seek to generate

targeted socioeconomic and environmental impacts in a range of dimensions, together with acceptable financial returns. Countries with a high capacity to access financing can leverage the earmarked capital mobilized by these bonds' issuances to finance a wide range of interventions aimed at promoting agrifood systems development – through different pathways, depending on the specific type of bond.

GSSS bonds have grown substantially since 2016. As can be seen in Figure 24, the combined, annual amount of GSSS bonds issued in the market has grown exponentially over the years, from USD 115 billion in 2016 to more than 1 trillion in 2023. The cumulative amount of GSSS bonds issued in the market reached USD 4.9 trillion at the end of 2023 (World Bank, 2024b). Some 71 percent of the total value issued by GSSS bonds came from high-income countries, although a specific analysis on green bonds shows that China accounted for the majority of such issuances (FAO *et al.*, 2024). The growth of this segment of the bond market has been bolstered by the development of international principles and standards that have sought to establish a quality baseline for issuances, such as the guidelines developed by the International Capital Market Association (ICMA) for each GSSS bond asset class, as well as the United Nations Development Programme's guidelines on how bond issuers can apply the SDG Impact Standards. These efforts have been mirrored by sovereign nations establishing their own good practice guidelines and frameworks to inform the issuance of GSSS bonds, such as in the case of Colombia, Mexico and Thailand (GSG, 2023).

Figure 24. Global green, social, sustainability and sustainability-linked bond annual issuance (USD billion)



Source: World Bank. 2024b. Green, social, sustainability, and sustainability-linked (GSSS) bonds – Market update – January 2024. Washington, DC. https://thedocs.worldbank.org/en/doc/dacb969cc71f53abde2d2758f1cc13ed-0340012024/original/GSSS-Quarterly-Newsletter-Issue-No-8.pdf

Green bonds, which are issued to finance projects that pursue objectives related to climate adaptation, mitigation and environmental protection, **are the most widespread and popular among GSSS bonds**, accounting for 64 percent of all issuances in 2023 (and 74 percent of those issued by the private sector). Green bonds have been used to promote the development of agrifood systems in a wide range of ways, such as by channelling capital towards investments in solar-powered irrigation, drought-resistant seeds, land restoration, greenhouses and efficient water management. While green bonds tend to deliver higher returns compared with conventional emerging market bond indices, they also tend to command a higher premium compared with traditional bonds in both LICs and MICs, on account of the heightened (and costlier) technical requirements associated with designing, implementing, monitoring and evaluating climate-smart investment projects (FAO *et al.* 2024; World Bank, 2024b). For example, in March 2024, the African Development Bank issued a four-year, EUR 500 million green bond intended to raise funding among European lenders for a wide range of investments in African countries, such as those promoting the clean energy transition in agriculture, improved water management, rehabilitation of degraded farmland and facilitating access to organic inputs. (ADB, 2023).

Social bonds are debt instruments that seek to raise capital for projects that pursue a range of positive social outcomes (such as on health care, education, affordable housing), while **sustainability bonds** aim to generate a combination of positive green and social impacts. The public sector has been primarily involved in issuing both social bonds (29 percent of all GSSS bond issuances between 2021 and 2023) and sustainability bonds (26 percent), while private financial institutions have had scarce engagement with these securities (GSG, 2023). A relevant example of a sustainability bond linked to agrifood systems is the seven-year bond issued in 2024 by the International Fund for Agricultural Development (IFAD) for 1 billion Swedish krona (USD 93 million), backed by funding from the Swedish pension company Skandia and the insurance conglomerate Folksam. The aim of the bond is to support sustainable growth and inclusive development in rural areas of developing countries, with a view to promoting a more equitable transformation of agrifood systems (IFAD, 2024).

Sustainability-linked bonds (SLBs) are a newer addition to the sustainable debt asset class and are based on results-based finance principles. As illustrated by the GSG (2023): *"They are pay-for-success instruments: proceeds are not earmarked for specific projects or expenditures, but the issuer commits to meeting predefined key performance indicators within a timeline for defined sustainability policies and actions."* Therefore, unlike green, social or sustainability bonds, which are 'use-for-proceeds' products whose capital is meant to fund preplanned investments in specific areas of development, SLBs allow issuers to decide how borrowed funds are used, as long as they are channelled towards sustainability-linked key performance indicators, such as a drop in greenhouse gas emissions or an increase in renewable energy generation. Depending on their design, SLBs might foresee financial penalties for the issuer for failing to meet their KPI targets, and/or rewards for exceeding them. While they have so far represented a very minor share of GSSS bonds (5 percent of GSSS issuances in 2023),

SLBs have been the fastest-growing asset class of the environmental, social and governance debt market.

One of the first sovereign issuers was Uruguay, which launched an 11-year USD 1.5 billion SLB in 2022 to achieve two KPI targets: a quantified drop in GHG emissions and the retention of its native forest areas. The issuance attracted 188 investors from different regions and the total demand from investors was 2.6 times the actual amount issued. The bond structure included both a coupon 'step-down' that was payable to Uruguay if it exceeded its targets (to encourage outperformance), along with a more customary step-up to penalize underperformance (GSG, 2023). The case of Uruguay exemplifies one of the main criticisms directed at SLBs, namely that they do not necessarily guarantee the additionality of the interventions they finance. In other words, some of the pro-environment interventions funded by the SLB might have been carried out even in the absence of such an instrument. As the KPI targets used in Uruguay's SLB are taken directly from the nation's commitments under the UN Framework Convention on Climate Change, it could be argued that the bond does not extend the ambitions of the Government of Uruguay beyond what it had already committed to. On the other hand, issuing SLBs can raise additional financial resources that are tied to the achievement of such goals, and arguably further reward (and incentivize) nations for meeting their nationally determined contributions (LSE, 2023).

Finally, it is also important to mention a subcategory of GSSS bonds: social gender bonds. These have been issued to raise capital on international markets for investments that seek to foster gender equality and women's empowerment in agrifood systems or other sectors (ICMA, UN Women and IFC 2021; Luxembourg Stock Exchange and UN Women). The proceeds from the issuance of this kind of bond are used exclusively to finance programmes and initiatives that support gender equality and women's empowerment, such as capitalizing credit lines for women-owned small businesses in agricultural value chains or supporting companies whose services can have a transformative and positive impact on the life of rural women. A relevant example is the social gender bond developed by FIRA (*Fideicomisis Instituidos en Relaciòn con la Agricultura*) in Mexico,[28] in collaboration with the Inter-American Development Bank. A first issuance of the bond took place in 2020 for USD 150 million, and a second one in 2021 for USD 175 million. These two issuances raised funding for approximately 14 000 social investments in women-led enterprises across all subsectors of Mexican agriculture, providing both working capital and longer-term financing for a wide array of productive projects. In general, these types of bonds can contribute to filling the enormous financing gap that affects vast segments of small-scale, women-led agricultural enterprises in developing countries and foster agrifood systems transformation through the generation of positive impacts on women's entrepreneurship and gender equality across all segments of agricultural value chains (Benni, 2024; FAO, 2025b).

[28] FIRA is a development finance institution that channels its capital – through local financial institutions – into investments aimed at promoting the livelihoods and resilience of small-scale entrepreneurs in Mexico's agriculture sector.

4.5 Derisking through insurance and guarantees

Insurance and partial credit guarantees are useful but underutilized products that can help to mitigate the risk associated with investing in agrifood systems. They can mobilize significant commercial capital towards more ambitious and complex investments aimed at transforming agrifood systems. As mentioned at the start of Chapter 4, financial instruments of this kind can play an important role in derisking and enhancing the terms of investments in the agrifood systems of all LICs and MICs, regardless of their current capacity to access financing on commercial terms, although in the case of the most financially constrained countries – with higher-risk environments – the costs associated with implementing such mechanisms may often turn out to be prohibitive.

Agricultural insurance is a specialized type of insurance designed to protect farmers and other stakeholders in the agricultural value chain from the risks associated with their activities, while also helping to improve their productivity. This form of insurance extends beyond crop production and can cover livestock, forestry, aquaculture and other related sectors. While in its broader categorization the term 'agricultural insurance' can refer to any form of insurance coverage for agriculture-related activities (such as insuring farm equipment), the term often refers to providing insurance coverage against extreme climate- and environment-related events, such as droughts, floods, hurricanes, forest fires and other types of hazards. This is also the terminology that will be adopted in this report (Benni, 2021a).

This type of insurance coverage can represent a considerable risk mitigation factor for agribusinesses that seek to access credit from the formal financial system, as it reduces their chance of going bankrupt following an extreme natural event and improves their capacity to be solvent. When built up to scale, agricultural insurance coverage can represent a significant boost to financial access for SMEs in particular, mitigating their scarce availability of other common factors that enhance creditworthiness, such as conventional collateral (for example, land titles), an established credit history, or an external guarantor (Benni, 2021a).

However, agricultural insurance is a challenging financial product to commercialize successfully among small-scale farmers in developing countries, whether in terms of improving the affordability of such products, as well as familiarity with and demand for them, or extending coverage to a wide scale. A range of bottlenecks and challenges, such as the low levels of financial education among such actors, scarce technical expertise in agriculture on the part of local insurers and weak public infrastructure for meteorological data gathering contribute to keeping prices exceedingly high and demand low for such products among farmers, especially when the insurance provider seeks to sell them coverage directly, on an individual basis (a microinsurance approach) (Hess and Hazell, 2016).

Substantial financial and non-financial support is commonly provided by a range of donors (such as governments, development agencies, DFIs) to lower the risk faced by national insurance companies when covering small-scale agricultural actors, as well as to foster demand and increase affordability for such products among farmers. Targeted premium subsidies are one of the most popular tools used to pursue these goals. There is also substantial potential associated with growth of digital innovation in the field of agri-insurance, as a range of new technologies hold the promise of unlocking various benefits that can foster the affordability and efficiency of agri-insurance products, such as lower transaction costs, more precise risk modelling and damage evaluation, and more granular data on clients. However, these innovations are still scarcely diffused in developing countries, and few have achieved proof-of-concept.

This explains why there has been a surge in interest in meso- and macro-level agricultural insurance schemes, whereby the policyholder is either a meso-level institution (such as a commercial bank, MFI, development agency or large-scale value chain company) or a governmental entity, which are responsible for paying the insurance premium and receive the payout in the event that an insured peril manifests. The payout amount can then be distributed by the policyholder organization to the small-scale farmers in the peril-affected area, which implies that these farmers are the ultimate beneficiaries of the insurance coverage – and not

the direct policyholders. The advantage for a meso- or macro-level institution in covering the cost of the insurance is that it ensures a basic degree of protection for large populations of small-scale farmers in which it may have a strategic interest, either because they are active clients in its credit portfolio (for a bank or MFI), because they provide its main source of raw products (for a value chain company), or due to a public/mandated interest to ensure their protection (for a governmental institution or development agency). This approach mitigates the obstacle of low familiarity and trust among farmers towards agri-insurance as a financial product, given that they are the beneficiaries of the payouts and not direct buyers of the insurance contract (Benni, 2021a).

These programmes often provide insurance to farmers as one component of a broader, multicomponent suite of services, leveraging synergies generated by the simultaneous provision of different services. One example of this is WFP's Rural Resilience Initiative, which offers agri-insurance coverage to small-scale farmers in different sub-Saharan African countries, together with credit and savings services channelled via village associations and capacity building to enhance their resilience against natural disasters. Beneficiary farmers are asked to contribute to the cost of the agri-insurance premium in-kind, by taking part in resilience-building activities such as improving irrigation systems in their fields, employing drought-resistant seeds, or restoring degraded land (Benni, 2021a).

Finally, partial credit guarantees (PCGs) can be an effective instrument to derisk and enhance the terms of investments by channelling private commercial capital into agrifood systems, although there is mixed evidence on their capacity to support smaller and more marginalized agricultural firms in accessing private capital (Benni, 2021b). PCGs are intended to incentivize private financial institutions to expand their agricultural loan portfolios and redirect their financing capital towards agricultural firms with less available collateral and a higher credit risk profile, enabling more ambitious investments with a longer time horizon and greater potential to generate positive socioenvironmental impacts. Over time, PCGs can demonstrate to the entire private financial sector that there is a viable business opportunity associated with lending to smaller-scale agricultural firms, acting as a catalyst for a wider engagement of private financial stakeholders in financing this segment. However, concerns remain about the potential for moral hazard in the use of PCGs, as the existence of a guarantee system could reduce the financial institution's efforts to supervise and enforce loan repayments from its borrowers, leading to higher default rates and damaged credit histories among borrowing firms. Furthermore, the introduction of a PCG can generate unfair competitive advantages for some financial stakeholders and introduce distortions in the market for agricultural financing.[29]

[29] These are only a few of the advantages and disadvantages associated with using PCGs in agricultural financing. For a more detailed analysis, see Benni (2021b) and Zaunder *et al.* (2013).

There is mixed evidence in the literature of the effectiveness of PCGs in bolstering the flows of finance towards smaller-scale firms in agricultural value chains (financial additionality), as well as in terms of the actual improvements to socioeconomic and development indicators experienced by these firms due to the PCGs' intervention (development additionality). In this sense, portfolio guarantees, which partially cover the risk of default in a financial institution's loan portfolio, could prove to be a more effective solution to the challenge of enhancing access to finance among marginalized enterprises, rather than guaranteeing coverage of individual, larger investments directed at key value chain agents (such as processors or input suppliers) (Benni, 2021b).

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5 Recommendations

The why

To address overlapping crises, it is crucial to leverage the role of financing for development to transform agrifood systems, which can in turn reduce hunger, increase resilience, enable economic growth, promote sustainability and inclusivity and prevent and mitigate food crises. Food-related crises have significantly contributed to the polycrisis and mutually reinforcing shocks, and are preventing the achievement of Agenda 2030. The food price crisis of 2007–2008 and 2011 contributed to a noticeable slowdown in growth in the past 20 years. Disruptions caused by the COVID-19 pandemic increased food insecurity in many countries, and among many groups of people. In 2022, acute supply disruptions of food and fertilizers led to high food and agricultural import bills in 2022–2023, which particularly affected LDCs and net food importing countries. The new financing for development global framework should address the drivers of overlapping crises with explicit emphasis on transforming agrifood systems to be more inclusive and sustainable.

Increased financing for agrifood systems transformation is crucial to eradicate hunger, advance the realization of the right to food and promote economic growth and employment, while improving environmental sustainability and resilience. Most low- and lower-middle-income countries are highly dependent on agriculture or agrifood systems, in terms of contribution to GDP and participation in total employment. Addressing the hidden health, environmental and poverty costs of current agrifood systems generates substantial economic gross benefit to countries and increases their resilience to shocks and crises.

The situation today

Current financing for building sustainable and inclusive agrifood systems is insufficient. Against the backdrop of a sharp increase in hunger between 2015 and 2023, public spending per capita on agriculture has persisted at very low levels for years among low- and lower-middle-income countries, where the highest levels of food insecurity and undernutrition are experienced. Additionally, the relative share of development flows to agriculture barely increased between 2015 and 2022, while debt burdens in countries with high dependency on agrifood systems for jobs and GDP increased substantially.

Overcoming limitations of the current financing structure is essential, to bolster funding directed at agrifood systems transformation and the promotion of food security and nutrition. The existing framework for food security and nutrition is fragmented, lacks consensus on priorities, and is dominated by numerous (and often uncoordinated) actors delivering small, short-term projects, making it difficult to scale up and implement financing effectively. Greater alignment and synergy among the various financing sources would significantly enhance the impact and scalability of funding for food security and nutrition. A systemic approach to financing is required to address the structural drivers of food insecurity, undernourishment and climate vulnerability. Systemic investments identify the most adequate types of capital across countries and require local ownership.

The choice of financial instruments must be adapted to the specific needs of countries. Financing agrifood systems transformation in countries with limited ability to access financing, such as LICs and LMICs, will require greater emphasis on grants, low-interest and no-interest loans and debt swaps/relief. Countries with limited or moderate ability to access financing flows are also the most in need of increased financing flows, as they tend to have a higher prevalence of undernourishment and stunting. More coordinated, risk-tolerant, innovative and concessional/grant financing is needed to support them.

Many low- and lower-middle-income countries rely heavily on agrifood systems, which contribute up to 20 percent of their GDP and provide employment for over 50 percent of the population. As a result, there is a strong link between agrifood systems and macroeconomic stability in these nations. A combination of economic drivers (such as fiscal and exchange rate corrections, macroeconomic and financial crises), together with climate- and conflict-related ones, can adversely affect agrifood systems and exacerbate food insecurity. In these cases, countries should work to achieve the necessary fiscal space to invest in agrifood systems, while engaging with multilateral organizations and donors to provide bridge financing in the form of grants or highly concessional loans. Innovative financing is only likely to play a significant role in countries with higher levels of macroeconomic stability. Additionally, it is crucial to ensure subsidized credit lines for net food importers in low- and lower-middle-income countries at times of high food and agricultural import bills, along the lines of the Food Import Financing Facility proposed by FAO.

Financing to enhance agricultural production, along with strengthening social safety nets, is essential to prevent and mitigate food crises. Low- and lower-middle-income countries have little capacity or financing available to respond to food price shocks and crises, whereas middle-income countries often use a mix of policies, including trade measures, stock releases and production stimuli to limit the transmission of price shocks to the national economy. Donors looking to support low- and lower-middle-income countries in preventing food crises could invest in these policies, and countries should also use domestic public resources to finance anticipatory action focused on boosting agricultural production and social safety nets. It is also crucial to keep in mind that some LICs and LMICs have a low institutional capacity to absorb and use efficiently increasing amounts of concessional financing, which can limit efforts aimed at scaling up flows of finance directed at food crisis prevention and mitigation. This underlines the importance of funding interventions aimed at strengthening institutional capacity and know-how at state level, before attempting to foster financial flows (FAO *et al.*, 2024).

Existing financing for agrifood systems is inadequate. Only a small percentage of all domestic support to farmers is transformative. Enhancing infrastructure for markets and market access, improving land management or carbon sequestration and providing public support to agrifood systems can disproportionately benefit larger, richer farmers. There is considerable potential in reallocating public domestic spending on agriculture towards initiatives that can drive deeper, transformative change in agrifood systems. This would help to address structural inequalities and support the most vulnerable low-income farmers. Some of this reallocation should occur within countries, while additional funds could come from increasing official development assistance to lower-middle-income and low-income countries, where limited resources are available to meet essential food security and nutrition investment needs.

Meeting SDG targets 2.1 and 2.2 will require trillions of dollars, with even greater investment needed to transform agrifood systems and prevent and mitigate food crises. There is an urgent need to boost financing across several key development action areas, including domestic public resources, private sector engagement, international development cooperation and debt instruments. Climate finance, in particular, plays a critical role in supporting agrifood systems transformation and must be significantly scaled up. Investing in these areas not only enhances food security and nutrition, but also generates widespread social, economic and environmental benefits, such as reducing poverty, creating jobs, promoting climate resilience and supporting sustainable economic growth.

It is equally important to ensure that financing for agrifood systems transformation and food crisis prevention and mitigation reaches the people with the greatest needs. It is crucial that countries implement reforms and adopt tools focused on increasing the access to finance of vulnerable rural communities, small-scale food producers, women, youth and micro-, small and medium-sized enterprises.

Considering the critical role that women play in agrifood systems, there is a need to emphasize the significant return on investment and multiplier effects that increased partnerships and funding for gender equality and women's empowerment can generate. Actors in international development cooperation, blended finance and private finance should be made aware of the significant profit opportunities and corollary benefits associated with financing women in agrifood systems.

The how

Innovative financial instruments can be leveraged to mobilize capital and increase investments aimed at rural, financially underserved populations. These instruments can enable more ambitious, complex and long-term interventions, which hold greater transformative potential for agrifood systems. These can include blended finance transactions, green bonds, partial guarantees and debt swap agreements. The choice of the specific instrument to be employed will be limited by a country's capacity to access financing at commercial or subcommercial terms, with more instruments being unlocked as the country improves its internal risk environment – and its capacity to attract external investors. Concessional finance will be critical to derisk such investments and encourage private commercial capital to mobilize its

resources towards projects that can generate positive socioeconomic and environmental impacts for agrifood systems, with concrete associated benefits for low-income, marginalized individuals. Greater public-private collaboration to build catastrophic insurance solutions is crucial given the current overlapping crises and shocks.

Recipient governments have a critical role to play when it comes to establishing an enabling environment for more ambitious investments in their national agrifood systems. Good governance is essential to foster a country's ability to access financing, scale up the engagement of private investors in the development of its agrifood systems and use existing national resources more effectively in order to achieve food security and end all forms of malnutrition. On the side of recipient governments, improving data collection, transparency and knowledge in agrifood is critical to improve the risk perception of both domestic lenders (such as commercial banks) and foreign private investors that are considering whether to deploy their capital in the agrifood systems of developing countries.

There is a need for high-income countries and donors to better align their spending priorities with the national priorities of recipient governments. The priorities of governments for financing agrifood systems transformation tend to be overlooked amidst the different (and often diverging) institutional objectives of a high number of sovereign donors, DFIs, IFIs, philanthropic actors and other stakeholders. As discussed in *The State of Food Security and Nutrition in the World 2024*, there is a need to put national and regional actors back in the 'driver's seat', recognizing the critical importance of their institutional priorities and goals, and placing these at the top of the agenda when deciding where and how to channel available financial resources towards agrifood systems transformation.

Donors should also focus on derisking potential investments in agrifood systems to incentivize a higher engagement of private commercial actors, through a strategic use of concessional and patient capital, as well as non-financial interventions (such as technical support to investee firms, financial and business management education), which can help to alleviate the risk shouldered by private investors.

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