

The Sustainable Development Goals Extended Report 2024

Inputs and information provided as of 30 April 2024

2 ZERO HUNGER



Note: This unedited ‘Extended Report’ includes all indicator storyline contents as provided by the SDG indicator custodian agencies as of 30 April 2024. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information for further information. The ‘Extended Report’ aims to provide the public with additional information regarding the SDG indicators and is compiled by the Statistics Division (UNSD) of the United Nations Department of Economic and Social Affairs.

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Target 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Indicator 2.1.1 Prevalence of undernourishment

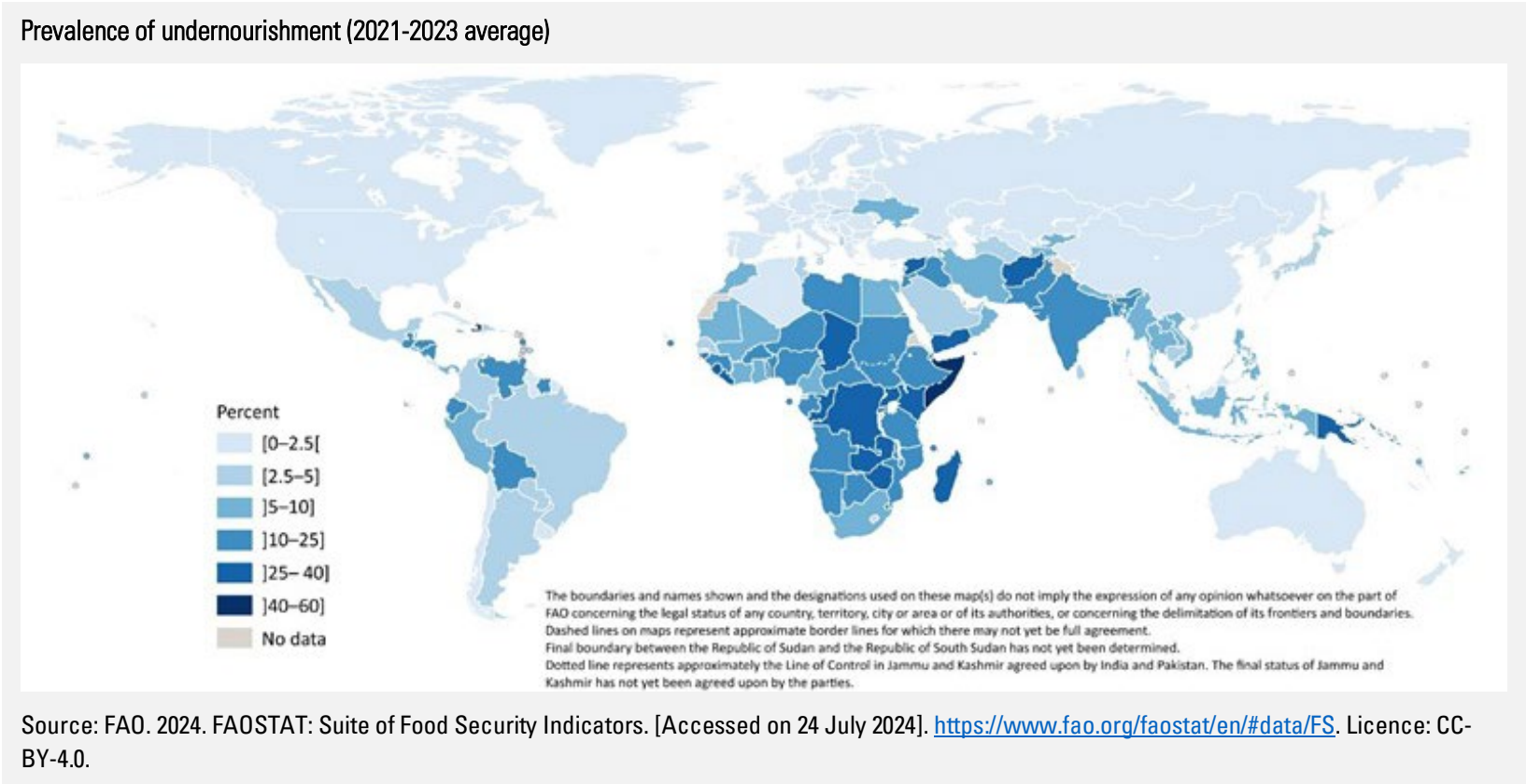
Indicator 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)

Global hunger and food insecurity have persisted at nearly the same levels for three consecutive years after rising sharply in the wake of the COVID-19 pandemic¹

The world is still far off track to achieve Sustainable Development Goal (SDG) 2, Zero Hunger, with the global prevalence of undernourishment persisting at nearly the same level for three consecutive years, still affecting about 9.1 percent of the population in 2023 compared with 7.5 percent in 2019. Between 713 and 757 million people may have faced hunger in 2023 – one out of 11 people in the world, and one out of every five in Africa. Hunger is still on the rise in Africa, but it has remained relatively unchanged in Asia, while notable progress has been made in the Latin America and the Caribbean region.

Progress towards the broader goal of ensuring regular access to adequate food for all has also stalled; the prevalence of moderate or severe food insecurity has remained unchanged for three consecutive years at the global level, although it is important to highlight progress in Latin America. In 2023, an estimated 28.9 percent of the global population – 2.33 billion people – were moderately or severely food insecure.

The lack of improvement casts a shadow over the possibility of achieving Zero Hunger in the world, six years away from the 2030 deadline. It is projected that 582 million people will be chronically undernourished at the end of the decade, more than half of them in Africa. There is the need to accelerate the transformation of our agrifood systems to strengthen their resilience to the major drivers and address inequalities to ensure that healthy diets are affordable for and available to all.



Custodian agency(ies): FAO

¹ Information for 2.1.1 and 2.1.2 provided 25 July 2024.

Target 2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

Indicator 2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age

Progress in stunting reduction has been achieved since 2012, but accelerated efforts to improve diets, health and hygiene to impact child growth are needed to reach the 2030 target

Chronic undernutrition, or stunting (being too short for their age) has severe consequences for children including delayed child development, lower school achievement, reduced earnings in adulthood and increased risk of chronic disease. Improved diets, nutrition, health and hygiene/sanitation services for women and children are needed globally to accelerate progress of stunting reduction.

Globally, stunting has declined steadily since 2012, with 148.1 million or 22.3% of children under age 5 suffering from stunting based on the latest estimates from 2022. This is a 17% reduction compared to the 177.9 million stunted children under age 5 in 2012. The number of countries with a very high stunting prevalence (greater than or equal to 30%) decreased from 46 countries in 2012 to 28 countries in 2022. Based on the current trends (2012-2022), 1 in 5 children under age 5 (19.5%) are projected to be stunted in 2030 indicating that greater investments are needed to achieve the 2030 target of a 50% reduction in the number of children with stunting.

Significant differences in the reduction of number of children with stunting are found across regions. Three quarters of all children with stunting in 2022 lived in Central & Southern Asia (36.7%) and Sub-Saharan Africa (38.3%). Since 2012, Central Asia and Southern Asia have shown the greatest progress in reducing the number of children with stunting by 25% with an average annual rate of reduction (AARR) of 2.9% per year. Sub-Saharan Africa made progress to reduce stunting with an AARR of 1.4% per year but the absolute numbers of children with stunting increased from 55.1 million in 2012 to 56.8 million in 2022 in part due to the nearly 20% increase in the population of children under 5 during this period.

The prevalence of stunting in the 45 Least Developed Countries (LDCs) decreased (from 38.7% in 2012 to 32.3% in 2022) with an AARR of 1.7% per year. As in Sub-Saharan Africa, due to the population growth in LDCs the absolute number of children with stunting declined by only 2% and more than a third of all stunted children (34.9%) in 2022 lived in LDC countries.

Greater attention is needed for the regions and sub-regions with unacceptably high prevalence of stunting. Evidence from studies on linear growth, developmental epigenetics and child development show that chronic undernutrition has profound and irreversible effects on both short term and long term development². Recent evidence shows that half of the burden of child stunting originates in the 500 days between conception and 6 months of age³. To protect the progress achieved in stunting reductions and face the threats arising from the destabilizing polycrisis, a redoubled commitment for the unfinished agenda of the first 1000 days including a focus on maternal nutrition is needed.

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Indicator 2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)

The global prevalence of wasting has remained largely unchanged over the past decade, but with each climate, conflict and economic crisis the lives of far too many young children are threatened; the trend towards increasing overweight in childhood must be reversed to prevent the heavy costs of obesity in adolescence and adulthood

Wasting is a life-threatening physiological condition provoked by poor nutrient intake, poor nutrition care, practices, and services and/or disease. Wasting in children is aggravated by climate, conflict and economic crises. Children who survive wasting are more at risk to have subsequent episodes of wasting and to become stunted⁴.

The global prevalence of wasting (low weight-for-height) has remained largely unchanged over the past decade with the point estimate of 45.0 million or 6.8% of children under age 5 suffering from wasting based on the latest estimates for 2022⁵. The percentage of children with wasting remains above the 3% global target for 2030. More than half of all children affected by wasting in 2022 lived in Central & Southern Asia (56.2%). Almost one quarter of children with wasting are living in Sub-Saharan Africa (22.9%). Latin America and the Caribbean is the only region where the prevalence of wasting (1.4%) is below the target of 3%. In 2022, 11 million or 7.0% of children with wasting lived in the 45 Least Developed Countries (LDCs) accounting for one quarter (24.8%) of all children with wasting.

Overweight (or high weight-for-height) in children is a rising issue provoked by changes in diets and lifestyle. The global prevalence of childhood overweight has not changed significantly since 2012. In 2022, there were 37.0 million (5.6%) overweight children under 5 years of age. Based on the current trends (2012-2022), 5.7% or 37.2 million children under age 5 are projected to be overweight in 2030. A reversal in trajectory is needed to achieve the 2030 target of a reducing childhood overweight to 3%.

In 2022, the greatest share of overweight children lived in Eastern Asia and South-eastern Asia (28.2%). Since 2012, Northern America and Europe have shown the greatest progress in reducing childhood overweight with an average annual rate of reduction of 1.8% per year. Based on latest available data, Central and Southern Asia is the only region where the prevalence of overweight (2.9%) is below the target threshold of 3%. Similar to the pattern observed globally, the prevalence of overweight in the 45 Least Developed Countries (LDCs) has not changed with 3.1% in 2012 and 3.2% in 2022 and 13.7% of all overweight children living in LDC countries.

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² Leroy JL, Frongillo EA, Dewan P, Black MM, Waterland RA. Can Children Catch up from the Consequences of Undernourishment? Evidence from Child Linear Growth, Developmental Epigenetics, and Brain and Neurocognitive Development. Adv Nutr. 2020 Jul 1;11(4):1032-1041. doi: 10.1093/advances/nmaa020. PMID: 32584399; PMCID: PMC7360439.
³ Benjamin-Chung, J., Mertens, A., Colford, J.M. et al. Early-childhood linear growth faltering in low- and middle-income countries. Nature 621, 550–557 (2023). <https://doi.org/10.1038/s41586-023-06418-5>
⁴ Mertens, A., Benjamin-Chung, J., Colford, J.M. et al. Child wasting and concurrent stunting in low- and middle-income countries. Nature 621, 558–567 (2023).
⁵ The point estimate number of children affected by wasting is considered an underestimate of the total burden over one year. The annual estimate of children affected by wasting must be calculated from both the prevalent cases (present at the moment of measurement) and the incident cases (new cases that develop over the course of the year).

Almost one third of women aged 15-49 years in the world has anaemia

Anaemia is a condition in which the concentraion of haemoglobin is lower than normal. This preventable and treatable condition is associated with the increased risk of mortality and morbidity in mothers and babies including miscarriages, stillbirths, prematurity and low birthweight.

Since 2000, the global prevalence of anaemia in women of reproductive age has stagnated from 31.2% (95% UI 28.7-34.1) in 2000 to 29.9% (95% UI 27.0-32.7) in 2019. Nevertheless, pregnant women have shown some progress from 2000 to 2019, lowering from 40.9% (95% UI 38.7-43.0) to 36.5% (95% UI 34.0- 39.0). Since 2000, Latin America and Caribbean has showed the greatest progress in decreasing the prevalence of anaemia with an average annual rate of reduction of 2.4% per year.

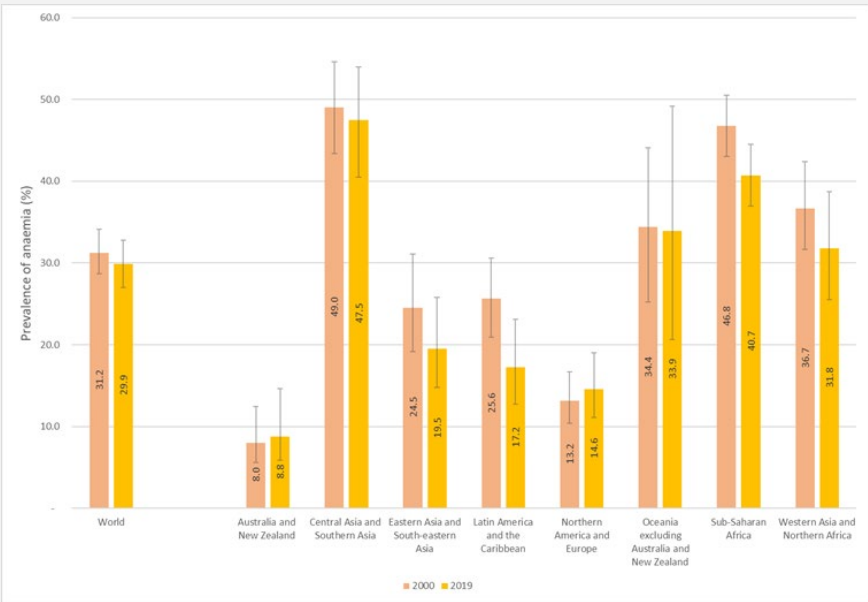
From 2000 to 2015, anaemia prevalence in women by all pregnancy status slightly decreased in most regions, however, since 2015, it has remained stagnant . For example, Latin-America and the Caribbean had a prevalence of 25.5% (95% UI 20.0-30.6) in 2000, slightly decreased in 2015 with 17.3% (95% UI 13.8-21.6) and remained similar in 2019 with a prevalence of 17.2% (95% UI 12.7-23.1)

Of the 570.8 million women living with anaemia in 2019, 43.2% of them resided in Central Asia and Southern Asia, followed by 19.3% in Eastern Asia and South Eastern Asia. Two regions, Central Asia and Southern Asia and Sub-Saharan Africa, had a prevalence higher than 40% which is considered as severe public health significance, most of the regions were located in moderate (20-39.9%) and mild public health significance (5-19.9%), and no region felt within the normal public health significance (<5% anaemia prevalence).

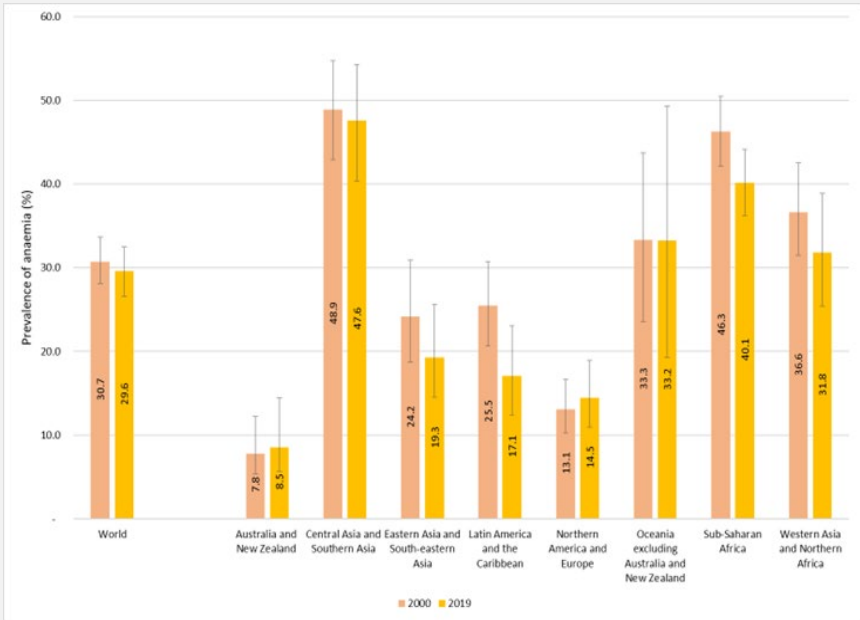
Based on current trends (data from 2000 to 2019), it is projected that in 2030, a similar pattern will continue- 1 in 3 women 15-49 years (32.3%) will have anaemia, resulting in women experiencing fatigue and impaired physical capacity in their daily life.

There is still much to be done to address the burden of anaemia. Multisectoral efforts should look at the different influencing factors and pathways to prevent, control and understand the burden in all settings. Anaemia in women does not only affect its gender, but also affects national productivity and economies and it may have an intergenerational effect.

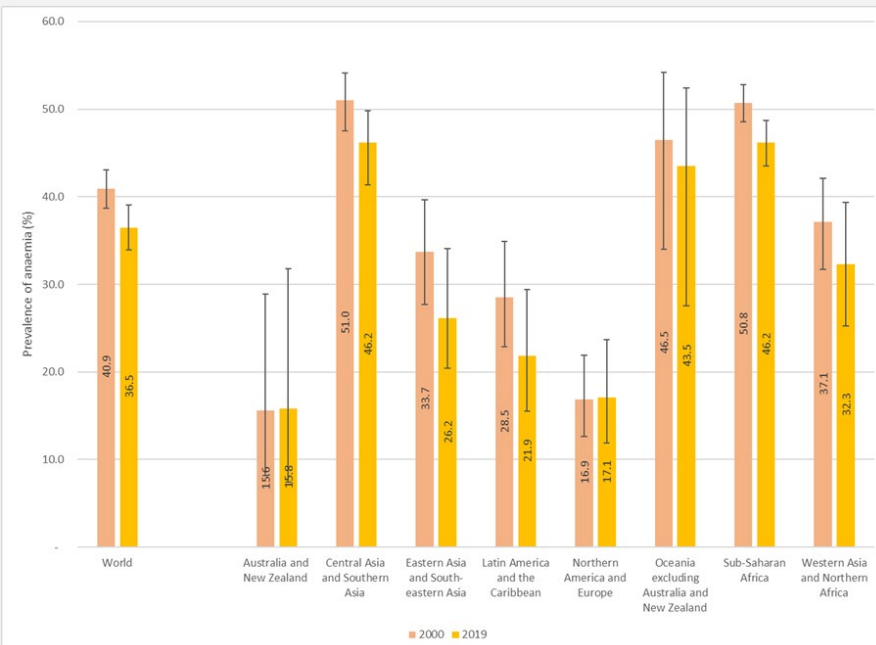
Prevalence of anaemia in women 15 to 49 years ,for the years 2000 and 2019



Prevalence of anaemia in non-pregnant women aged 15 to 49 years, for the years 2000 and 2019



Prevalence of anaemia in pregnant women aged 15 to 49 years, for the years 2000 and 2019



Additional resources, press releases, etc. with links:

- Wilson SE, Rogers LM, Garcia-Casal MN, Barreix M, Bosman A, Cunningham J, Goga A, Montresor A, Tunçalp Ö. Comprehensive framework for integrated action on the prevention, diagnosis, and management of anemia: An introduction. Ann N Y Acad Sci. 2023 Jun;1524(1):5-9. doi: 10.1111/nyas.14999. Epub 2023 Apr 17. PMID: 37067421.
- WHO Global Anaemia estimates, 2021 Edition. Global anaemia estimates in women of reproductive age, by pregnancy status, and in children aged 6-59 months. Geneva: World Health Organization; 2021 (Available at https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children)
- Stevens GA, Paciorek CJ, Flores-Urrutia MC, Borghi E, Namaste S, Wirth JP, Suchdev PS, Ezzatl M, Rohner F, Flaxman SR, Rogers LM. National, regional, and global estimates of anaemia by severity in women and children for 2000–19: a pooled analysis of population-representative data. Lancet Glob Health 2022 May;10(5):e627-e639. [https://doi.org/10.1016/S2214-109X\(22\)00084-5](https://doi.org/10.1016/S2214-109X(22)00084-5).
- WHO Micronutrients database. Vitamin and Mineral Nutrition Information System (VMNIS). Geneva: World Health Organization; 2021 (Available at <https://www.who.int/teams/nutrition-and-food-safety/databases/vitamin-and-mineral-nutrition-information-system>)
- Nutrition Data Portal <https://platform.who.int/nutrition/nutrition-portals>
- WHO. Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva, World Health Organization, 2011 (WHO/NMH/NHD/MNM/11.1) (Available at <http://www.who.int/vmnis/indicators/haemoglobin.pdf>)
- WHO. Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. Geneva: World Health Organization; 2014. (Available at https://apps.who.int/iris/bitstream/handle/10665/113048/WHO_NMH_NHD_14.1_eng.pdf)
- WHO. Global nutrition targets 2025: anaemia policy brief (WHO/NMH/NHD/14.4). Geneva: World Health (Available at <https://www.who.int/publications/i/item/WHO-NMH-NHD-14.4>) Organization; 2014.
- Global anaemia reduction efforts among women of reproductive age: impact, achievement of targets and the way forward for optimizing efforts. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO. (Available at <https://www.who.int/publications/i/item/9789240012202>)
- Nutritional anaemias: tools for effective prevention and control. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO (Available at <http://apps.who.int/iris/bitstream/handle/10665/259425/9789241513067-eng.pdf>)

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Custodian agency(ies): WHO

Target 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

Indicator 2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size

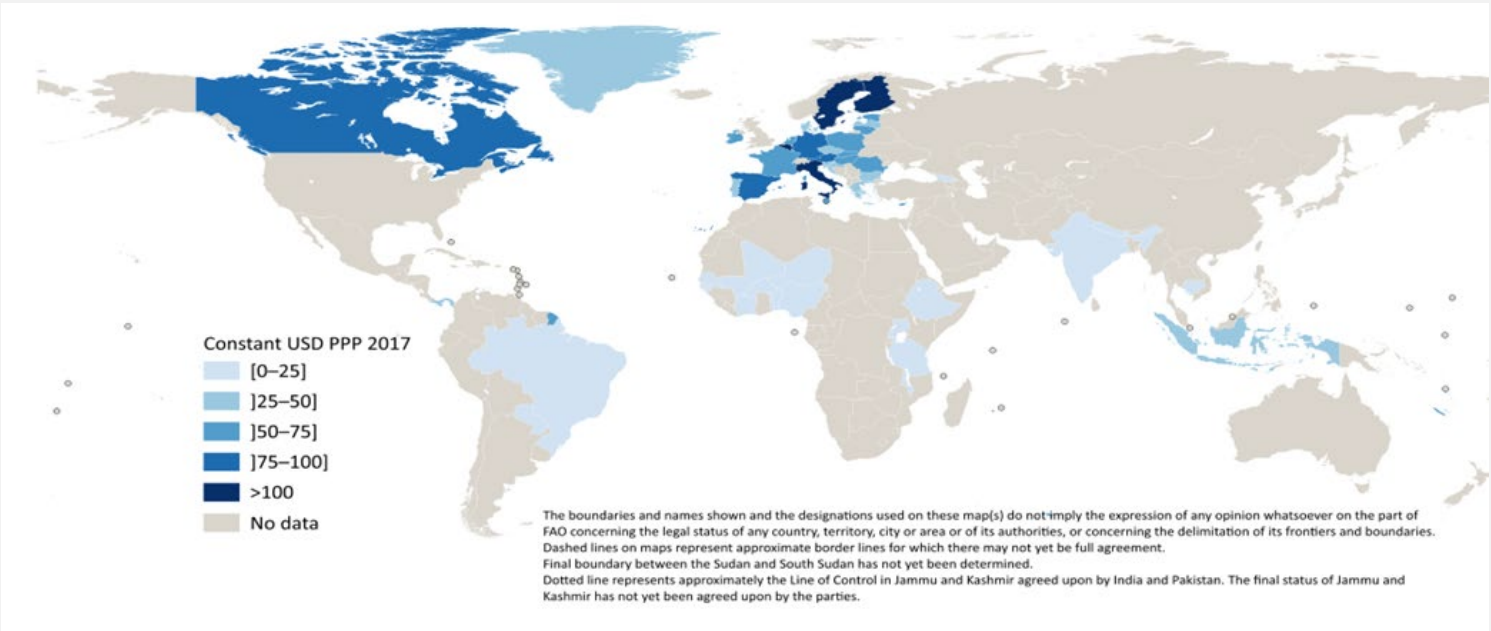
Labor productivity and gender disparities among food producers

Small-scale food producers are essential contributors to enhancing the resilience of agricultural and food production systems and have a key role in fighting against hunger. Despite their significant contributions to food production in many countries, they often are among the most vulnerable groups within rural areas and within the broader agri-food system.

According to the latest available data from various countries, the labor productivity of small-scale food producers stands at less than 20 USD (Constant PPP 2017) per day worked in 95 percent of low and middle-income countries reporting values for SDG 2.3.1 (refer to Map 1).

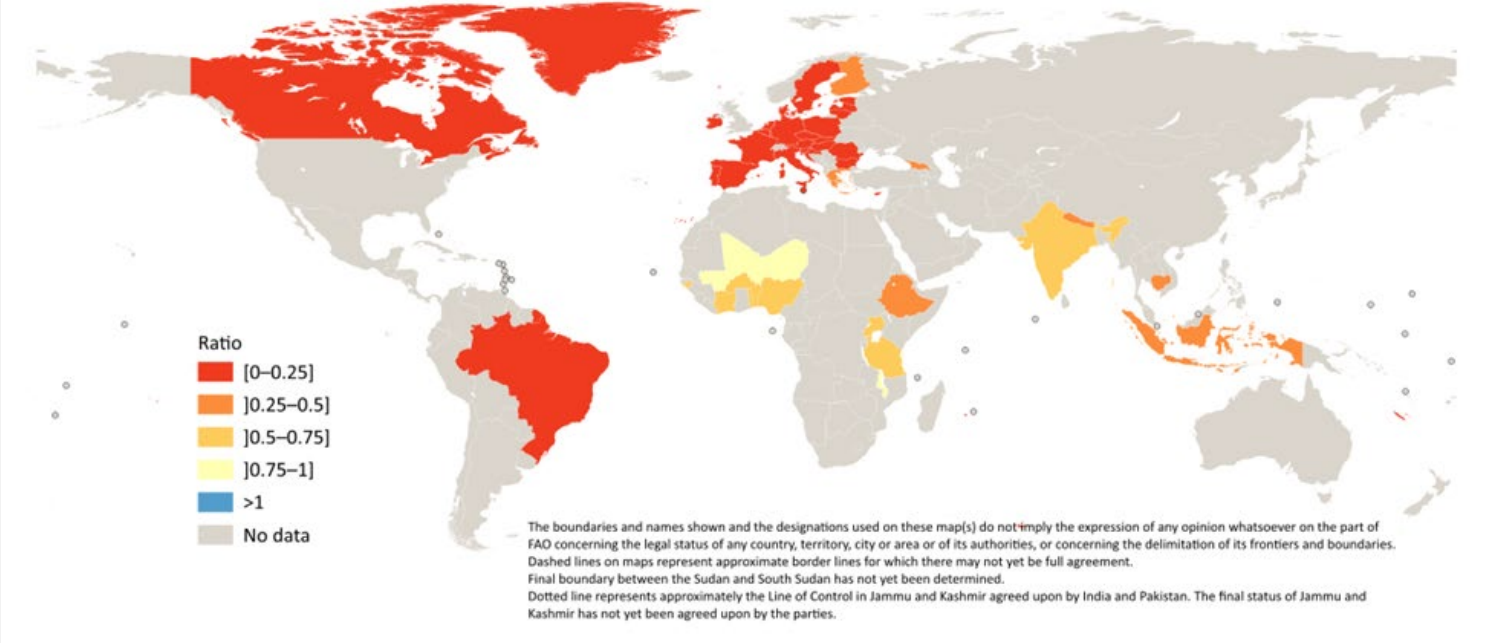
In addition, the labour productivity of small-scale food producers continues to lag behind those of non-small scale producers. This productivity gap varies across countries, yet the average ratio of small-scale to large-scale productivity is only 30 percent. More pronounced differences are observed in higher-income countries. In most European countries reported and Canada, the labour productivity of small-scale producers is less than 25 percent of non-small scale producers (Map 2).

Map 1: Small-scale food producers’ average labour productivity (2017 PPP). Countries' last year reported.

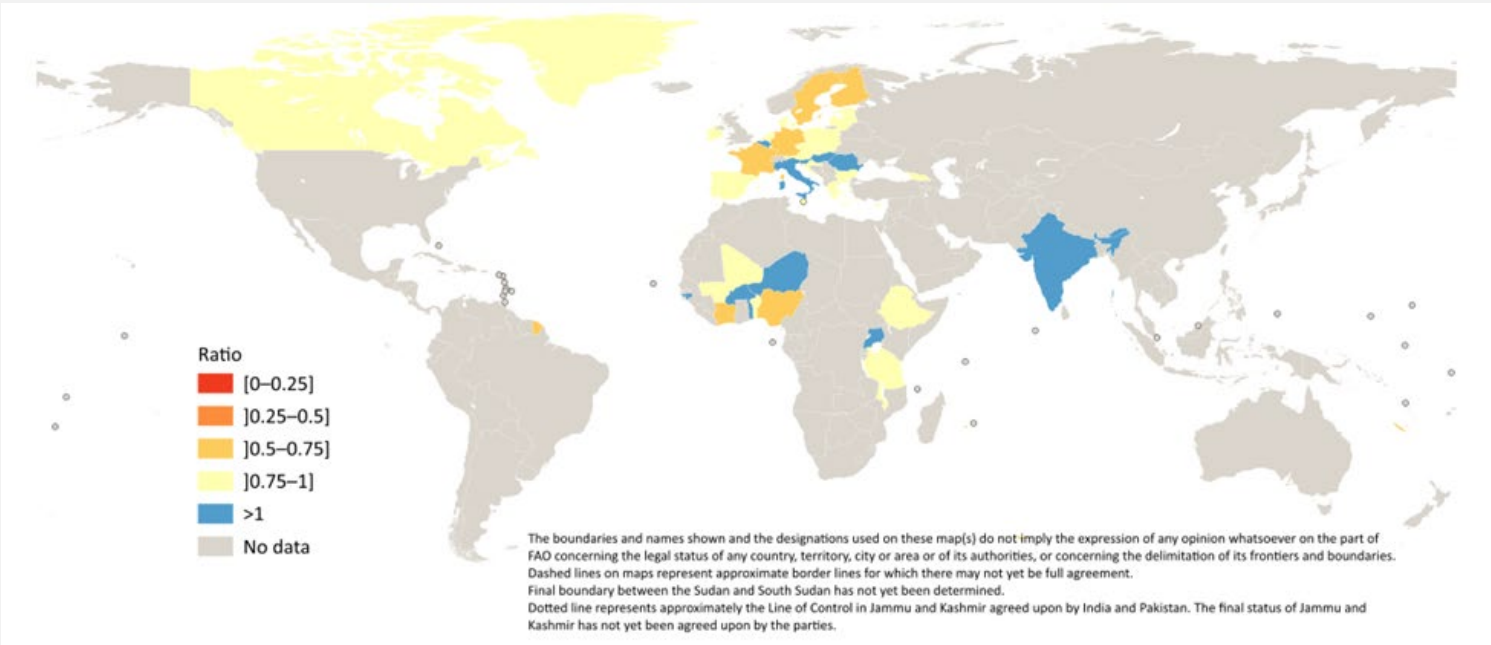


The differences in labor productivity between male and female headed small-scale and non-small scale food producers vary significantly across countries, ranging from a 70 percent lower labor productivity among women-headed small-scale producers to instances where labor productivity is higher among women-headed small-scale producers compared to those headed by men, particularly notable in India and some countries in West Africa and Europe.

Map 2: Ratio of small-scale over non-small-scale food producers of average labour productivity. Countries' last year reported



Map 3: Ratio of female-headed over male-headed holdings of average labour productivity. Countries' last year reported



Storyline authors(s)/contributor(s): Veronica Boero, FAO

Custodian agency(ies): FAO

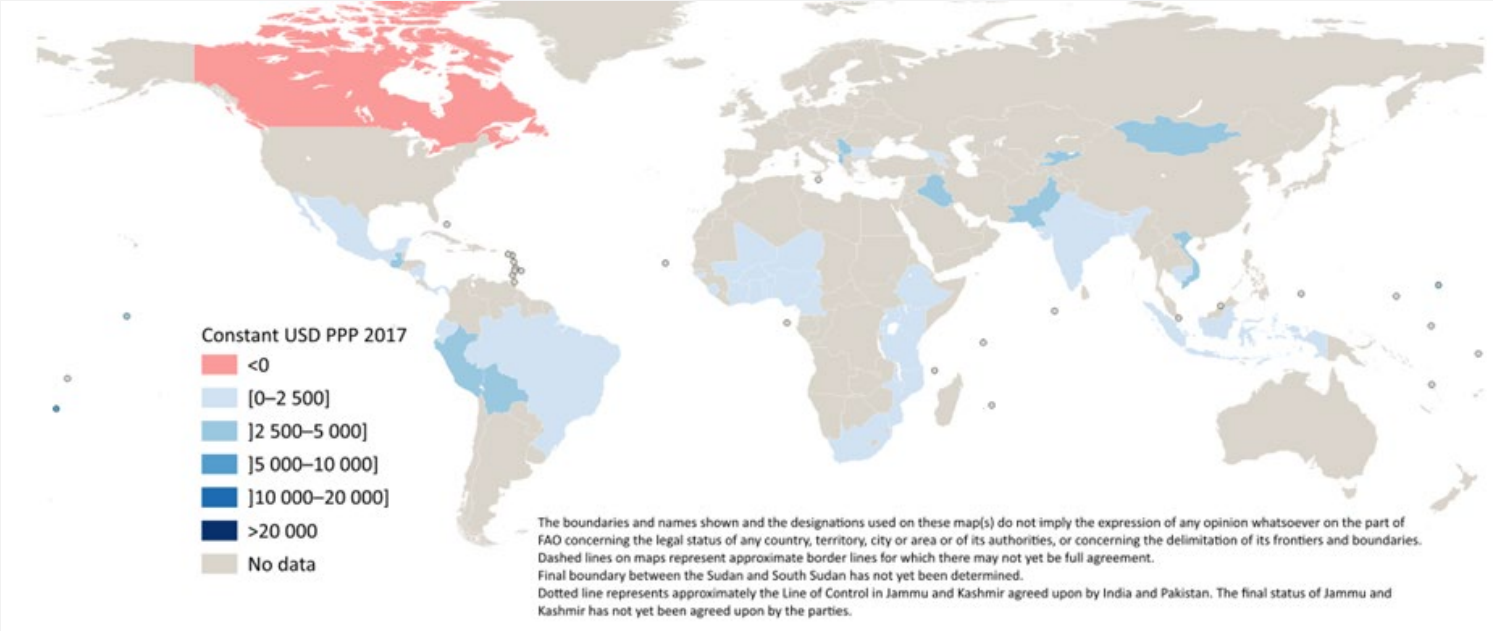
Indicator 2.3.2 Average income of small-scale food producers, by sex and indigenous status

Income gap among food producers

Small-scale food producers are essential contributors to enhancing the resilience of agricultural and food production systems and have a key role in fighting against hunger. Despite their significant contributions to food production in many countries, they often are among the most vulnerable groups in rural areas and within the broader agri-food system.

Recent country data indicates that the income of small-scale food producers continues to fall behind that of non-small scale producers. In the majority of reported countries, small-scale producers’ annual income from agriculture is less than 1500 USD, with a universal income ceiling of 6100 USD (constant PPP 2017) (Map 1).

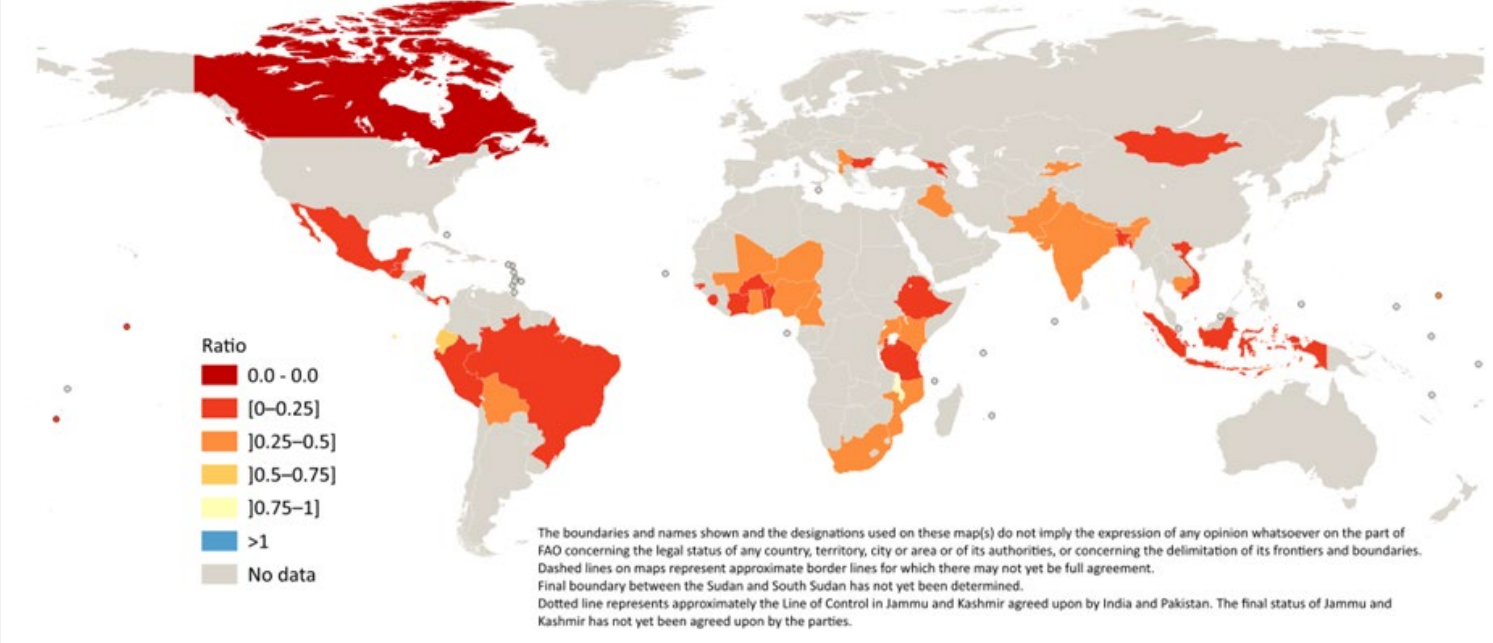
Map1: Average annual income from agriculture of small-scale food producers in constant PPP 2017 USD



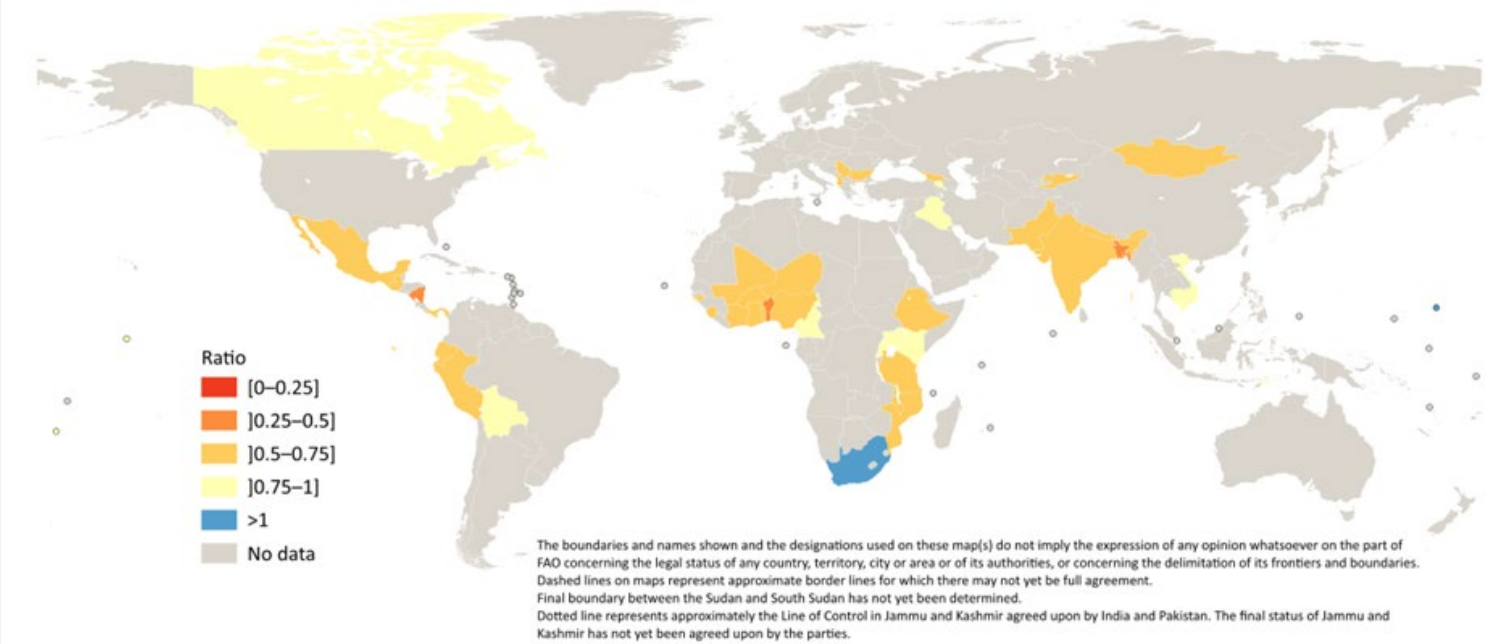
Moreover, in 95 percent of the countries with available data, small-scale food producers draw an average annual income of less than half that of non-small scale food producers (Map 2). This income disparity persists universally across countries, regardless of their income groups.

In nearly fifty percent of countries with available data, small-scale food production units headed by women generated incomes that were less than 70 percent of those headed by men (Map 3). The gender disparity in agricultural income remains prevalent in most countries, even among non-small scale food producers.

Map 2: Ratio of small-scale over non-small-scale food producers of annual income from agriculture. Countries' last year reported



Map 3: Ratio of small-scale female headed over small-scale men headed production units. Last reported country values



Storyline authors(s)/contributor(s): Veronica Boero, FAO

Custodian agency(ies): FAO

Target 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

Indicator 2.4.1 Proportion of agricultural area under productive and sustainable agriculture

The world is at a moderate distance to achieving productive and sustainable agriculture

New data derived from a combination of key economic, social and environmental indicators, that proxies the original indicator 2.4.1, suggests that the world is at a moderate distance to achieving productive and sustainable agriculture (score 3.4 out of 5), while also having registered slight improvement towards achieving productive and sustainable agriculture (score 3.9 out of 5) since 2015.

At the regional level, Northern America and Europe (4.1), Eastern Asia and South-Eastern Asia (3.8), Oceania (3.7), and Latin America and the Caribbean (3.6), are close to achieving productive and sustainable agriculture. Central Asia and Southern Asia (2.8), Western Asia and Northern Africa (2.8), and Sub-Saharan Africa (2.7), as well as LDCs (2.6) and LLDCs (2.6) are at a moderate distance to achieving productive and sustainable agriculture.

Over the period 2015-2021, most regions achieved a slight improvement towards productive and sustainable agriculture, with scores ranging from 3.5 to 4.4 out of 5. On the other hand, SIDS (3.3), and LLDCs (3.1) showed no improvement.

The overall picture is therefore one of slight improvement with respect to achieving the SDG Target 2.4 of ensuring sustainable and productive agriculture. However, most regions, and the world as a whole, remain at a moderate distance to the target. While more detailed analysis is required to investigate the root causes, the evidence suggests that all regions of the world urgently need sustained, concerted actions geared towards improving productive and sustainable agriculture by 2030, or otherwise risk missing the target by a wide margin.

Figure 1: SDG 2.4.1 Proxy - 2021 Current status score and assessment to achieve productive and sustainable agriculture

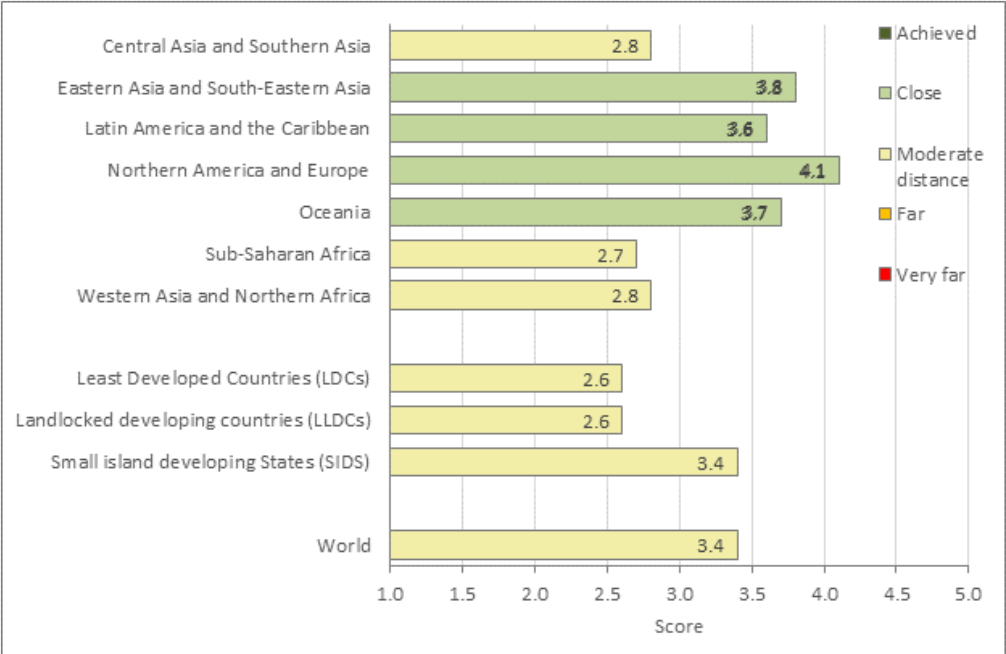
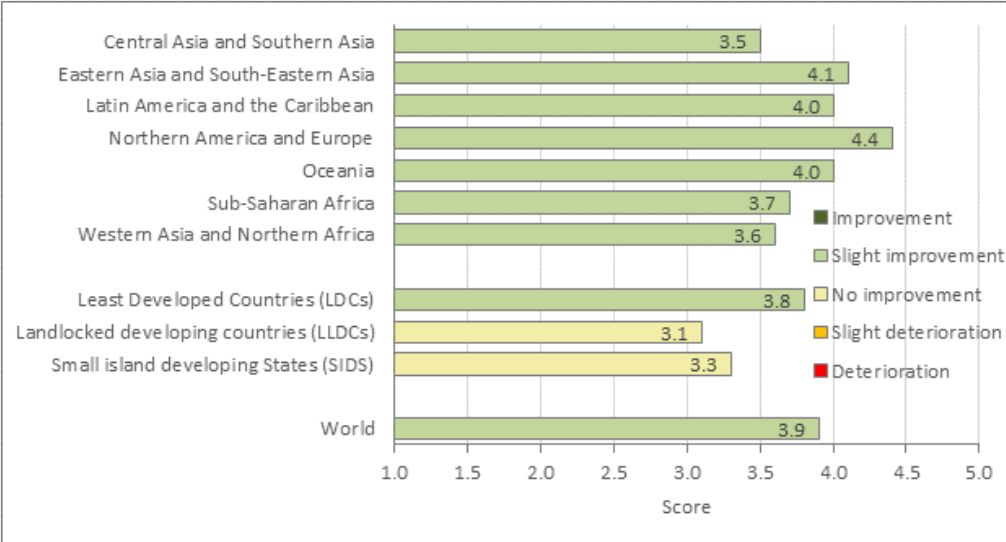


Figure 2: SDG 2.4.1 Proxy – 2015 to 2021 Trend score and assessment to achieve productive and sustainable agriculture.



Custodian agency(ies): FAO

Target 2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

Indicator 2.5.1 Number of (a) plant and (b) animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities

The global response to the growing threat of social and climate change needs to be strengthened to adequately preserve crop and crop-associated diversity

Plant genetic resources for food and agriculture constitute the foundation of productive and resilient agricultural systems and underpin the world’s food security and nutrition. At the end of 2022, about 5.94 million plant germplasm accessions were conserved under medium- or long-term conditions in 866 genebanks in 116 countries and 17 regional and international research centres. This estimate is based on updated reports from 36 countries and 14 research centres, representing 63 percent of total holdings, and on reports from recent years for the remaining countries and centres.

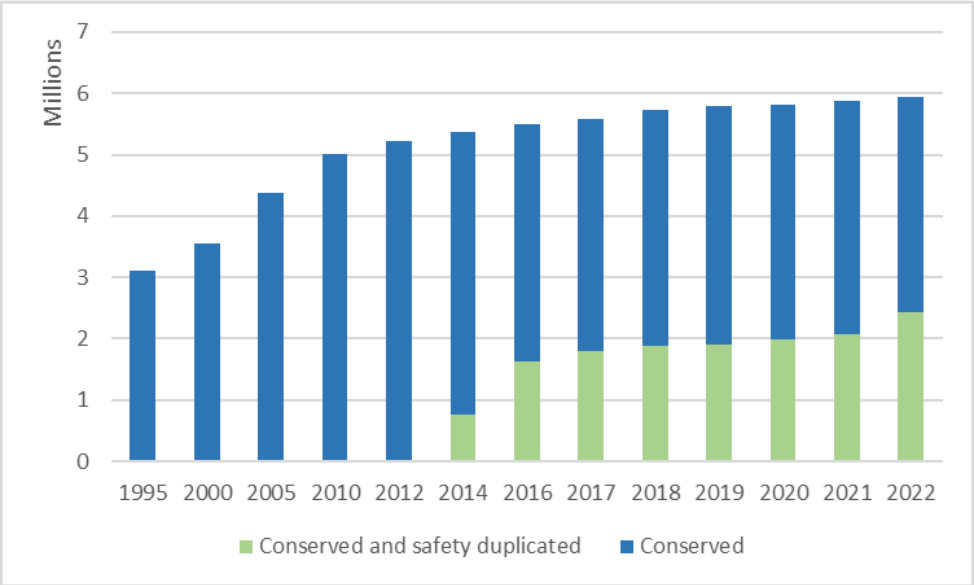
The highest net increases in genebank holdings were in Melanesia (14 percent); Central America and Oceania, excluding Australia and New Zealand (9 percent each); and Western Africa (6 percent). In the remaining regions and in the international centres, the increases averaged 0.5 percent. During 2022, the number of conserved germplasm accessions increased by more than 1 percent in 13 out of the 36 countries and four out of the 14 regional or international centres with updated reports.

Net decreases in genebank holdings of more than 1 percent occurred in two countries in Europe and in the roots and tubers collections of one international centre. Armed conflicts in Eastern Europe and Northern Africa affected the operations of two important national genebanks conserving 6 and 13 percent of the respective regional holdings. The urgent relocation of these genebank collections into secure conservation facilities far from the conflict zones has been required also in view of their low level of safety duplication.

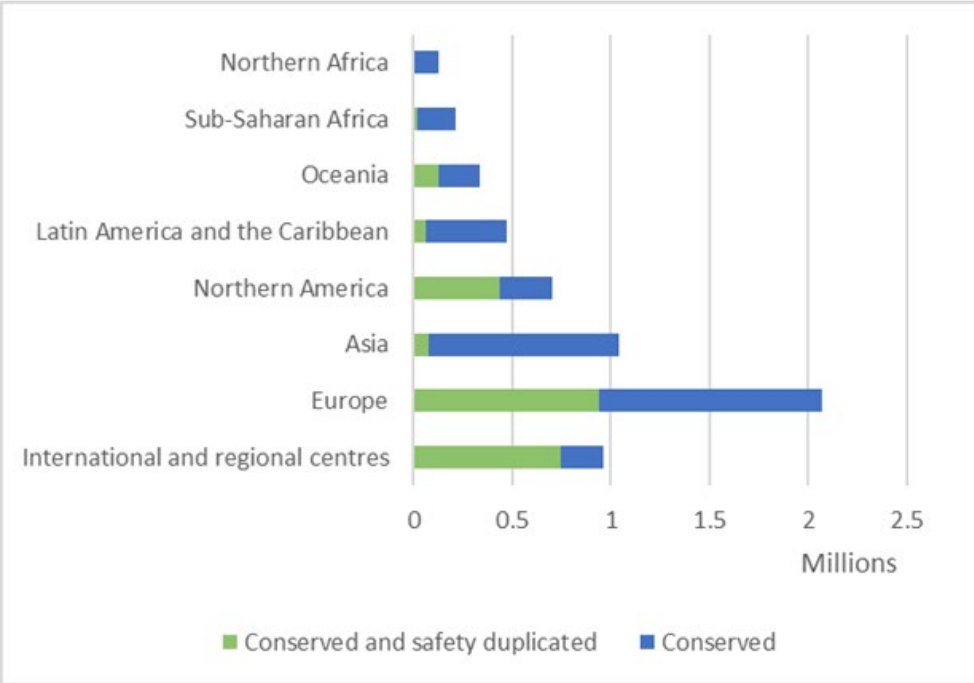
As of December 2022, almost 41 percent of all *ex situ* holdings or 2.4 million accessions held in 83 out of 116 countries and 15 out of 17 regional and international centres, were safety duplicated in other genebanks or at the Svalbard Global Seed Vault. This represents a significant increase relative to the situation in 2021 when 2.1 million accessions (35 percent of the total conserved) were safety duplicated and to early 2015, when 0.8 million accessions (11 percent) were safety duplicated. The percentage of safety duplication is relatively high among international centres (79 percent, as compared to 48 percent in 2015) and regional centres (60 percent), while it is rather low (34 percent) in national collections, despite having increased from 8 percent since 2015. Across regions, the level of safety duplication varied significantly: lowest in Northern Africa and Asia, and highest in Northern America and Europe.

Crop wild relatives, wild food plants and neglected and underutilized crop species are the plant genetic resources for food and agriculture most at risk of being eroded and lost forever. Socioeconomic drivers and climate change are increasingly threatening their survival in both wild and agricultural landscapes. Much greater, urgent and concerted efforts at local, regional and global levels are needed to secure their diversity in *ex situ* collections for future use.

Number of accessions of plant genetic resources conserved in medium- or long-term conservation facilities in the world (1995–2022) and safety duplicated in a geographically distant area under equivalent or better conditions than those in the original genebank (2014–2021)



Plant genetic resources conserved ex situ and safety duplicated (number of accessions) (2022)



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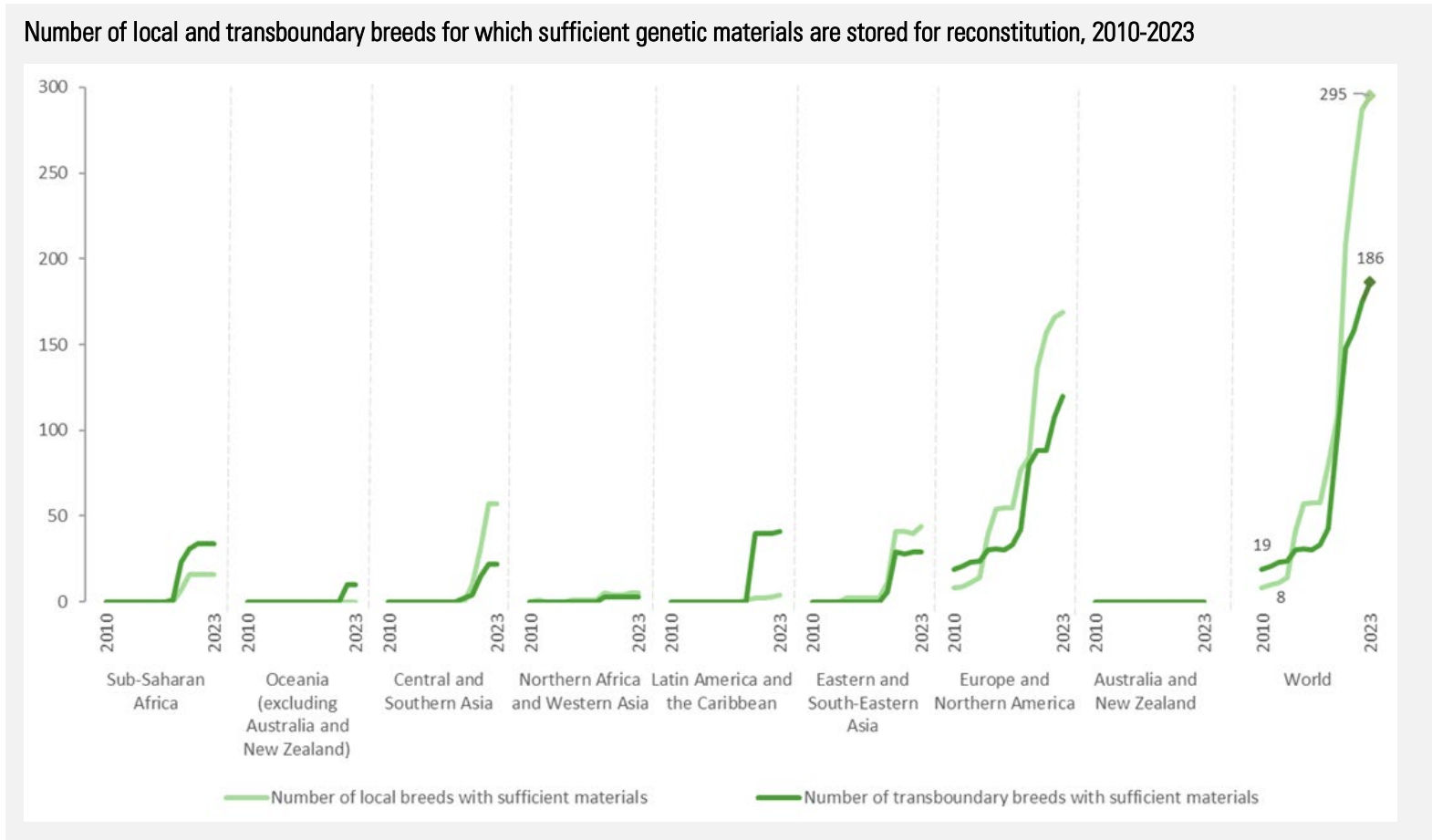
Indicator 2.5.2 Proportion of local breeds classified as being at risk of extinction

Increased efforts are needed to preserve the genetic diversity of farmed and domestic animals for future generations

The diversity of farmed and domesticated animals is mainly maintained in vivo in-situ, which refers to living animals kept and used in the respective livestock production system. If the number of living animals in a population falls below certain thresholds, it is considered to be at risk of extinction. Livestock keepers and governments must take action to maintain populations and to prevent breeds' extinction. Another way to preserve breed diversity for the future is to store cryopreserved genetic material in gene banks. This is called in vitro ex-situ conservation. These two approaches complement each other and the respective SDG indicators (2.5.2 and 2.5.1b) need to be interpreted simultaneously. For both indicators, the number of countries with updated data preclude the meaningful assessment of global results.

A stable or decreasing percentage of breeds at risk in combination with an increasing number of breeds with sufficient material cryoconserved can be interpreted as a positive trend regarding the achievement of the target. Unfortunately we are still far from maintaining the genetic diversity of farmed and domesticated animals. For in vitro ex-situ conservation, sufficient material is stored for only 295 out of 7667 local breeds, and 186 out of 1116 transboundary breeds in 2023. In-situ, the risk-status of 61% of local breeds remains unknown and 71 percent of local breeds with a known status are being at risk of extinction. In cases where the reporting status allows for presenting regional results, the proportion of endangered local breeds is alarmingly high: in 2023, it was 83% in North America and Europe. While the data

on extinction risk do not allow for a sound interpretation at regional and global level, the reporting for SDG indicator 2.5.1b is comparatively better. However, the number of local and transboundary breeds that have sufficient material is alarmingly low. In North America and Europe, sufficient material is reported for 169 local and 120 transboundary breeds, while this is the case for only 44 local and 29 transboundary breeds in East and Southeast Asia and for 16 local and 34 transboundary breeds in Sub-Saharan Africa.



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Target 2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries

Indicator 2.a.1 The agriculture orientation index for government expenditures

Government spending in agriculture is increasing and the global agriculture orientation index (APO) showed recovery post COVID-19 pandemic

Between 2015 and 2022, the global government spending in agriculture showed an increasing trend and recorded an all-time high of USD 749 billion in 2022, growing at an average annual rate of 2.95 percent. Throughout this period, agriculture received between 1.87 percent and 2.11 percent of global total spending. Government spending 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 or increasing inflation.

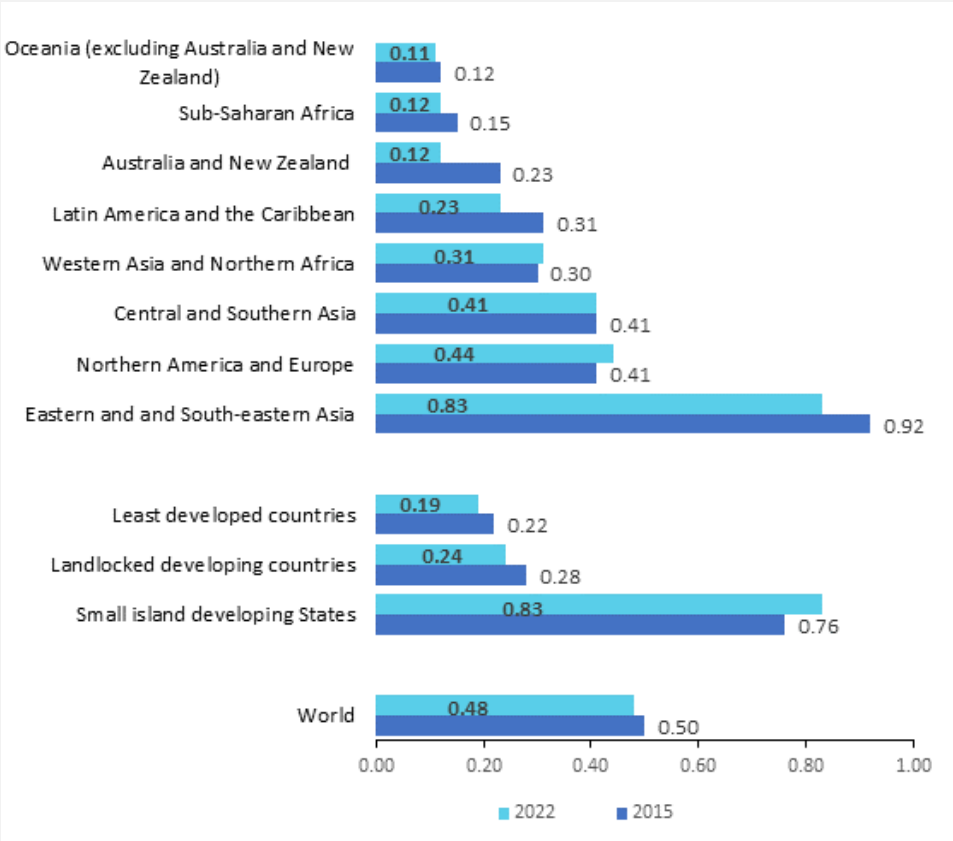
At the global level, the agriculture sector contributes between 3.96 percent to 4.35 percent of the GDP between 2015 and 2022. When government expenditure on agriculture is compared relative to the agriculture sector’s contribution to GDP, measured in terms of the agriculture oriental index (AOI), it recorded a declining trend during the same period (Figure 1).

In 2015, the global AOI was recorded at 0.50. In 2020, the global AOI went down to 0.45 and declined further to 0.43 in 2021. The COVID-19 pandemic contributed to the fall in the global AOI in 2020 and 2021 as government resources and priorities during this period were allocated to other sectors. In 2022, the global AOI showed a recovery at 0.48 but still below the level recorded in 2015.

The declining trend in AOI is also observed among all regions with the exception of Northern America and Europe in which it increased and Central and Southern Asia in which it remained at the same level. During this period, Northern America & Europe recorded an increase in AOI from 0.41 in 2015 to 0.44 in 2022, driven mostly by the COVID-19 pandemic response and the unprecedented scale of fiscal stimulus packages implemented by the United States and the European countries. Countries in the developing regions all recorded a decline in their regional AOIs with Latin America and the Caribbean with a decline in AOI from 0.31 in 2015 to 0.23 in 2022 - the highest among regions. The Sub-Saharan Africa and the Western Asia and Northern Africa regions also reported a decline in their AOIs.

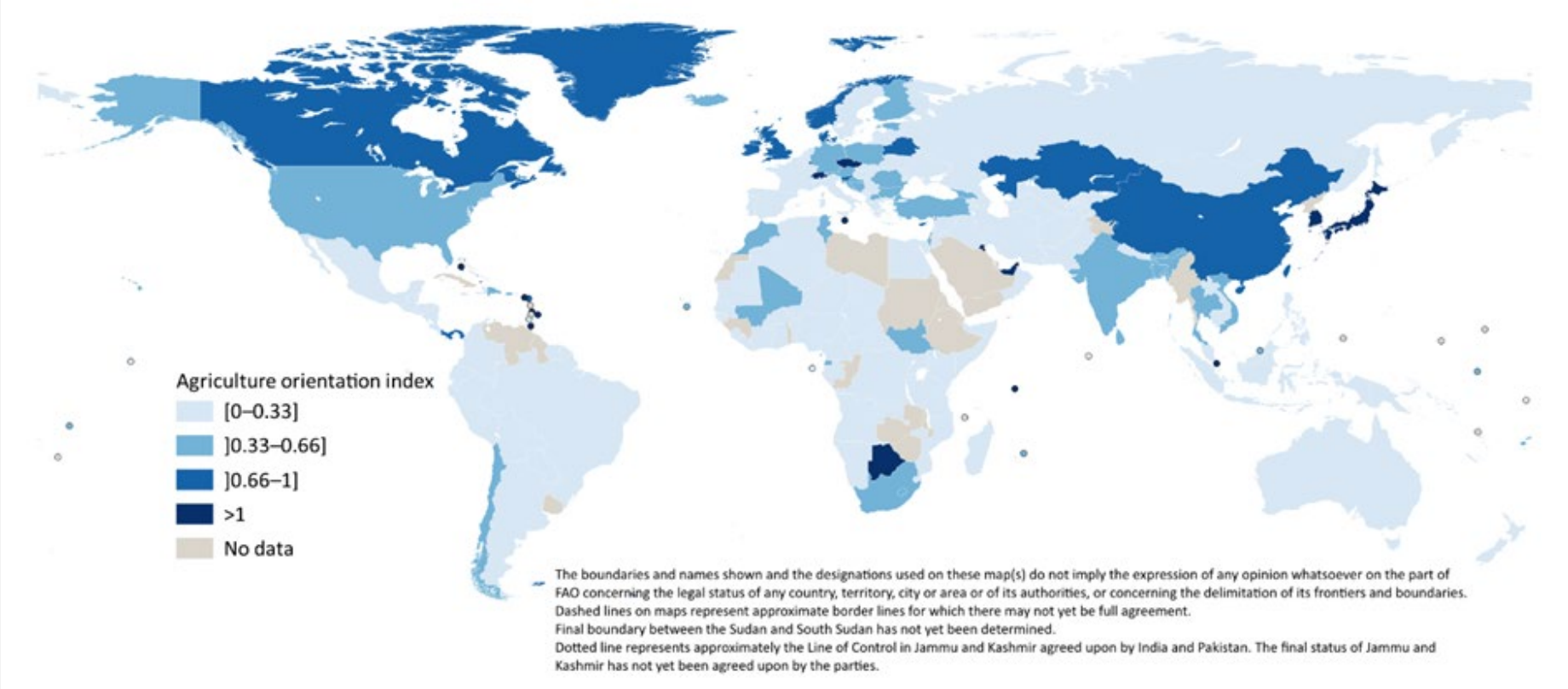
Countries that belong to the least developed countries (LDC) and landlocked and developing countries (LLDC) are among the highest spenders in agriculture in terms of share to total government expenditures. On average, the LDC and the LLDC regions allocated about 4 percent of their total expenditures to agriculture, yet the agriculture sector generates about 18 percent of their GDP. In terms of AOI, both regions reported a decline from 0.22 in 2015 to 0.19 in 2022, and 0.28 in 2015 and 0.24 in 2022, respectively. On the other hand, the Small Island developing states (SIDS), defied the trend and recorded an improvement in AOI from 0.76 in 2015 to 0.83 in 2022.

Figure 1: Agriculture orientation index, by SDG regionsm, 2015 and 2022



Note: The number of countries with data available may vary over time. Global and regional aggregates include imputed data. Source: FAO, 2024. FAOSTAT. Government Expenditures on Agriculture. <https://www.fao.org/faostat/en/#data/IG>

Figure 2. Agriculture orientation index, 2021–2022 average



Source: FAO. 2024. Government Expenditure. In: *FAOSTAT*. Rome. [Cited February 2024]. <http://www.fao.org/faostat/en/#data/IG> based on UN Geospatial. 2020. Map geodata [shapefiles]. New York, USA, UN.

Additional resources, press releases, etc. with links:

- <https://www.fao.org/3/cc9148en/cc9148en.pdf>

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Indicator 2.a.2 Total official flows (official development assistance plus other official flows) to the agriculture sector

Total aid to agriculture in developing countries on the rise

Total aid to agriculture in developing countries increased by 33% representing USD 18.1 billion in 2022, or 4.4% of total official flows. The increase was mainly due to agricultural development (integrated projects) and to agricultural policy and administrative management and financial services.

Africa accounted for 65% of the increase in 2022, mainly due to non-concessional loans for projects for agricultural development from the Islamic Development Bank in Egypt.

Europe was the region with the highest percentage increase (151%) due to a USD 402 million concessional loan from the European Investment Bank to Ukraine for the upgrading of cereals, oil seeds and aquaculture and fisheries value chains which represented more than 50% of the flows to Europe, followed by Africa (78%) and Latin America & the Caribbean (71%).

Egypt was the largest recipient of official financing for agriculture in 2022 (USD 2.1 billion), followed by Colombia (USD 721 million) and India (USD 707million).

However, an important part of the official financing (USD 3.2 billion) was not allocated by country aiming primarily to address food security concerns at a global level and dealing with the consequences of the Ukraine aggression by Russia.

Among the four sectors that are included in the indicator, agriculture represented 76%, forestry represented 11%, rural development 9% and fisheries only 3%.

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Target 2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

Indicator 2.b.1 Agricultural export subsidies

Continuing downward trend in agricultural export subsidies notified to the WTO

A continuous downward trend is observed in export subsidy outlays notified to the WTO. Total notified annual outlays fell from its peak of US\$ 6.7 billion in 1999 to US\$ 33 million in 2022 . As of 1st January 2024, only least developed countries and net food importing developing countries are allowed to use certain forms of export subsidies.

Custodian agency(ies): WTO

Target 2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

Indicator 2.c.1 Indicator of food price anomalies

The proportion of countries with moderately to abnormally high food prices rose sharply in 2022 and was nearly four times more than the 2015-19 average

Globally, the proportion of countries facing moderately to abnormally high food prices rose sharply in 2022, reaching a new record high of 58.1 percent. This represents a significant rebound from the 2021 value of 21.5 percent, which was a substantial improvement from the previous all-time high of 48 percent in 2020. The 2022 share at the global level increased by nearly four-fold compared to the 2015-19 average. This trend generally held true across most regional groupings except for Sub-Saharan Africa, Central and Southern Asia and Eastern and South-Eastern Asia.

Global food prices started to surge in February 2022, following the breakout of the war in Ukraine, which introduced significant volatility in global commodity markets. The war also exerted strong upward pressure on fertilizer prices, which reached all-time highs in the second quarter of 2022, adding uncertainty on farmer planting decisions. Food prices remained overall elevated in 2022, particularly for net food importing countries, despite some easing towards the latter half of the year.

In the regions of Central and Southern Asia as well as Eastern and South-Eastern Asia, the share of countries facing moderately to abnormally high food prices in 2022 was lower than the peak reached in 2020 but remained higher on a yearly basis and compared to the 2015-19 average. For both regions, abundant supplies from the above average 2022 cereal output likely played an important role in moderating the pace of food price growth relative to their 2020 levels.

By contrast, the share of countries facing moderately to abnormally high food prices steadily increased over the last several years in Sub-Saharan Africa (SSA) and Least Developed Countries (LDCs), where the SSA region accounts for over 70 percent of countries. As of 2022, the share represented a three-fold increase from the 2015-19 average. The

surge in prices of important food commodities, such as wheat, maize and oilseeds, contributed to a significant increase in food import bills, particularly for net importing countries. This represented an additional inflationary pressure especially for countries that were already experiencing currency weakness, partly due to the lingering effects of the COVID-19 pandemic.

In Europe and North America, the share of countries afflicted by moderately to abnormally high food prices soared from 55.6 percent in 2020 to 80 percent in 2022. In addition to the disruption to agrifood markets that followed the war in Ukraine, widespread drought conditions and high energy prices drove up food prices in Europe. Among staple food items, prices of cereals, eggs, milk, and potatoes showed the highest increases in 2022.

Proportion of countries by region affected by moderately to abnormally high food prices in 2015-2019 average, 2020, 2021 and 2022 (%)



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