Strengthening responsible investments and finance for food security and nutrition

Background note for the Committee on World Food Security's High-Level Forum in October 2025 in Rome, Italy

By the High Level Panel of Experts on Food Security and Nutrition (HLPE-FSN)

Web Annex

27 June 2025

Annex 1: Data notes on Table 1 Selected financial flows to food by region

Table 1 Data notes corresponding to Main Text Table 1

Financial flow	Source notes	Per capita source	% GDP per capita source	Regional notes (1)
ODA and OOFs to FSN *From* **SOFI 2024 (FAO et al., 2024)**	Table 13: Destination of Official Development Assistance and Other Official Flows for Food Security And Nutrition by Recipient Income Group and Region.	SOFI 2024 (FAO et al., 2024).	Calculated from GDP per capita in data source year (2021) from World Bank WDI (2).	Regions determined by source (3).
FDI to agriculture (FAOSTAT)	FDI to agriculture, forestry and fishing and to food, beverage and tobacco.	Authors' calculation using regional figure and population data from World Bank WDI, aligned to M49 regional categories.	Authors' calculation using per capita figure and GDP data from World Bank WDI, processed to align to M49 regional categories.	Regions consistent with M49 categorizations.
Remittances (World Development Indicators)	WDI "Personal remittances, received (current US$)". Not disaggregated by purpose.	Authors' calculation using regional figure and population data from World Bank WDI, aligned to M49 regional categories.	Authors' calculation using per capita figure and GDP data from World Bank WDI, processed to align to M49 regional categories.	Regions consistent with M49 categorizations.
Government expenditure (FAOSTAT)	FAOSTAT regional figures (includes imputed data), for USD value in 2022 of government expenditure on "Agriculture, forestry and fishing" (highest government level).	Authors' calculation using regional figure and population data from World Bank WDI, aligned to M49 regional categories.	Authors' calculation using per capita figure and GDP data from World Bank WDI, processed to align to M49 regional categories.	Regions consistent with M49 categorizations.
Climate finance (CLIC, 2025)	Data refers to regional destination of project-level climate finance for agrifood systems for 2021/22 (CLIC, 2025).	Authors' calculation using regional figure and population data from World Bank WDI, processed to align to regional categories as reported by original source.	Authors' calculation using per capita figure and GDP data from World Bank WDI, processed to align to regional categories as reported by original source.	Regions determined by source. (4)

(1) **Regional classifications.** Wherever possible source data was accessed disaggregated to country level and processed to apply UN M49 country and regional coding for consistency across sources. Where data was not available at country level the closest feasible approximation was used. These instances are noted in the table.

(2) **World Bank - World Development Indicators.** Additional data were used to express figures in per capita and percentage of per capita GDP terms. Population and GDP per capita data were accessed from the World Bank's World Development Indicators database, disaggregated to country level and processed to align with the source regional distribution.

    a. For per capita calculations, population data was taken from the year of the financial flow indicator.

    b. For GDP per capita calculations, US$ 2015 constant GDP per capita was used, for the year of the financial flow data.

    c. Data was accessed on 29 April 2025.

(3) **Regional disaggregation of the SOFI 2024**. The SOFI data is presented for Africa, Asia and Americas. Americas covers North America and LAC, but the report notes that "the population by region covers only LICs, LMICs and UMICs in the respective regions.". By default, therefore, the Americas region is understood to exclude North America and thus aligns with the M49 Latin America and the Caribbean region. For this reason, to ensure consistency, GDP and population data for per capita and % of GDP per capita calculations are taken for the LAC region.

(4) **Regional disaggregation of CPI climate finance data.** Regions here are a closest possible proxy as the indicator data is not available disaggregated by country. Regions are as reported in the original source therefore presented as: Africa - Middle East and North Africa and Sub-Saharan Africa; Asia – East Asia and the Pacific and South Asia; and Latin America and the Caribbean – Latin America and the Caribbean.

Annex 2 – Cost of Ending Hunger

Table 2 Estimates for the cost of ending hunger

Source	Annual cost (USD bn)	Time	FSN targets covered	Main activities	Funding sources
Shekar et al., 2017[1]	7[2]	10 years	Nutrition targets (stunting reduced by 40%, anaemia reduced by 50%, breastfeeding rate increased by 50% and wasting reduced to <5% prevalence).	Nutrition-specific and nutrition-sensitive interventions (including supplementation and nutrition in pregnancy and childhood, breastfeeding practices and policies, staple food fortification).	Not specified – global community.[1]
Shekar et al., 2024	13	2025-2034 (10 years)	Five SDG 2.2 targets to achieve a 90% threshold of the target.	Builds on Shekar et al. (2017) to prioritize interventions in low funding scenarios	Not specified – global community.
Rosegrant, Sulser and Wiebe, 2022	10.5[2]	2022-2030	End hunger by 2030, achieve SDG2, and align agriculture with 1.5℃ pathways.	$4bn agricultural R&D investments and $6.5bn invested in climate smart technology.	Unspecified combination of public and private domestic and international.
Global Nutrition Report, 2021[3]	10.8[2]	2022-2030	40% reduction in child stunting, 50% increase in breastfeeding rates, 50% reduction in anaemia in women, reduce child wasting to <5%.	Micronutrient supplementation, nutrition practice promotion, fortification of staple foods.	A combination of donor and domestic resources.
Laborde et al., 2016[1] **1 above**	11[2]	2016-2030	Targets 5% threshold for hunger prevalence.	Household interventions, social safety nets, rural development, farm support, enabling policies, nutrition.	$4bn donors, $7bn developing countries.
Sulser et al., 2021	25.47[2]	2015-2050	Offsetting the impact of climate change on hunger.	Agricultural R&D, water systems, infrastructure.	Public investments.

---

[1] Via Fan, S., Headey, D., Laborde, D., Mason-D'Croz, D., Rue, C., Sulser, T. B., & Wiebe, K. (2018). *Quantifying the Cost and Benefits of Ending Hunger and Undernutrition: Examining the Differences among Alternative Approaches*. International Food Policy Research Institute. http://www.jstor.org/stable/resrep46645

[2] Specified *additional* funding

[3] Via El Harty, K., and Smaller, C. Modelling the additional investment needed to end hunger: Why are the cost estimates so wildly different? https://www.shambacentre.org/modelling-the-additional-investment-needed-to-end-hunger

Laborde, Parent and Smaller, 2020[3]	33[2]	2020-2030	Focus on SDGs 2.1, 2.3 and 2.4. 3% chronic hunger prevalence, double incomes of small-scale agricultural producers, keep to Paris Agreement emissions targets.	14 policy interventions across on farm (farmer support and R&D), food on the move (post-harvest loss, storage, SMEs) and empowerment (social protection and vocational training).	$14bn from donors, $19bn from L&MICs through taxation, and expected to mobilize an additional $52 billion from private investment annually.
Chichaibelu et al., 2021	39 - 50	2021-2030	Lift 840-909 million out of hunger, including COVID-19 responses.	Invest in agricultural R&D, extensions services, agricultural ICT systems, small-scale irrigation expansion, and female literacy improvement.	Donors and domestic funds.
Mason-D'Croz et al., 2019[1]	52	2015-2030	Targets 5% hunger prevalence threshold including climate adaptation.	Agricultural R&D, irrigation expansion, water use efficiency, soil & water management, infrastructure	Not specified – global community.
von Braun et al., 2024[3]	93[2]	2025-2030	Lift 700 million out of hunger and malnutrition by 2030.	10 priority short-term cost effective investments including social protection, school feeding, women's literacy, nutrition, crop protection, removing trade barriers.	Focus on ODA flows, specifically G7 commitments, combined with other finance mobilized.
von Braun et al., 2024	21[2]	2025-2040	Lift 700 million people out of hunger and malnutrition through long term approaches to 2040.	Combined short-term and long-term approaches: least cost interventions including agricultural R&D, agricultural extension, irrigation expansion, literacy, information services, nutrition-specific interventions, and social protection; as well as humanitarian assistance and school feeding.	Focus on ODA flows, specifically G7 commitments, combined with other finance mobilized.
Ruggeri Laderchi et al., 2024	215	2024-2050	Transform food systems.	Achieve universal healthy diets, strong livelihoods, biosphere protection, and environmentally sustainable production.	Unspecified combination of sources.
FAO, IFAD and WFP, 2015[1]	265[2]	2016-2030	SDG2 Zero Hunger.	Pro-poor investment in rural development, agriculture, urban areas; social protection, especially nutrition and consumption oriented.	International community, international resource transfers to LICs.

Food and Land Use Coalition, 2019[3]	300-350	2019-2030	Food and land use transformation for healthy diets, nature-based solutions, diversified food choice and supply, and equal opportunity.	10 critical transitions: healthy diets, productive regenerative agriculture, nature restoration, healthy and productive oceans, diversified protein supply, reduced food loss and waste, local linkages, digital revolution, rural livelihoods, women's empowerment.	Combination of governments, business, farmers, financial institutions and investors, and MSPs.
UNCTAD, 2014	480	2015-2030	Achieving SDG2.	Investment in agricultural infrastructure, natural resource development, research, food safety nets.	Expected >75% private sector contribution.
Laborde and Torero, 2023 and costed by High Level Political Forum on Sustainable Development, 2023[3]	680	2023-2030	5% hunger prevalence coupled with agrifood systems transformation, covering SDG2 and beyond: reducing extreme poverty, universal access to nutritious foods, affordable healthy diets, limited emissions, reduced food loss and waste, sustainable use of biodiversity and ecosystems.	Social safety nets, school feeding programmes, irrigation and livestock innovation, reduction in food loss and waste, repurposed farm subsidies, consumer incentives.	Combination of international and national financing commitments.
CPI and FAO, 2024	1100	2024-2030	Transforming agrifood systems to align with 1.5 degree pathways.	National policy instruments and budget support; climate-sensitive crop and livestock systems; forestry; biodiversity, land and marine ecosystems; food and diets; and fisheries and aquaculture.	Combination of domestic and international funding, focus on climate finance.
Thornton et al., 2023	1300	2020-2030	Reconfigure food systems for sustainability and equity.	Halt conversion of forests and peatlands for agriculture, and reduce producer risk, lower emissions and strengthen the policy, finance and innovation enablers of change.	Not specified.

Sources: **Chichaibelu, B. B., Bekchanov, M., von Braun, J., and Torero, M**. 2021. The global cost of reaching a world without hunger: Investment costs and policy action opportunities, Food Policy, Volume 104, https://doi.org/10.1016/j.foodpol.2021.102151; **CPI & FAO**. 2024. The Triple Gap in Finance for Agrifood Systems. Available at: climatepolicyinitiative.org/publication/the-triple-gap-in-finance-for-agrifood-systems; **FAO, IFAD and WFP**. 2015. Achieving Zero Hunger: the critical role of investments in social protection and agriculture. Rome, FAO; **Food and Land Use Coalition (FOLU).** 2019. Growing Better: Ten Critical Transitions to Transform Food and Land Use, The Global Consultation Report of the Food and Land Use Coalition https://www.foodandlandusecoalition.org/wp-content/uploads/2019/09/FOLU-GrowingBetter-GlobalReport.pdf; **Global Alliance Against Hunger and Poverty**. 2025. Guidance Note on Nationally Determined Contributions (NDCs) for the Global Alliance Against Hunger and Poverty. https://globalallianceagainsthungerandpoverty.org/wp-content/uploads/2025/04/Global-Alliance-Guidance-Note-on-NDCs.pdf; **Global Nutrition Report.** 2021. 2021 Global Nutrition Report: The state of global nutrition. Bristol, UK: Development Initiatives. https://www.un.org/nutrition/sites/www.un.org.nutrition/files/global_nutrition_report_2021.pdf; **Laborde, D., Bizikova, L., Lallemant, T., & Smaller, C.** 2016. Ending Hunger: What would it cost?. International Institute for Sustainable Development. https://www.iisd.org/system/files/publications/ending-hunger-what-would-it-cost.pdf; **Laborde, D., Parent, M., & Smaller, C**. 2020. Ending Hunger, Increasing Incomes, and Protecting the Climate: What would it cost donors? Ceres2030. International Institute for Sustainable Development (IISD) and International Food Policy Research Institute (IFPRI**); Laborde, D., Torero, M**. 2023. Modeling Actions for Transforming Agrifood Systems. In: von Braun, J., Afsana, K., Fresco, L.O., Hassan, M.H.A. (eds) Science and Innovations for Food Systems Transformation. Springer, Cham. https://doi.org/10.1007/978-3-031-15703-5_7; **Mason-D'Croz, D., Sulser, T. B., Wiebe, K., Rosegrant, M., Lowder, S. K., Nin-Pratt, A., Willenbockel, D., Robinson, S., Zhu, T., Cenacchi, N., Dunston, S., Robertson, R. D.** 2019. Agricultural investments and hunger in Africa modeling potential contributions to SDG2 – Zero Hunger, World Development, Volume 116 (pp.38-53) https://doi.org/10.1016/j.worlddev.2018.12.006**.; Rosegrant MW, Sulser TB and Wiebe K**. 2022. Global investment gap in agricultural research and innovation to meet Sustainable Development Goals for hunger and Paris Agreement climate change mitigation. *Front. Sustain. Food Syst.* 6:965767. doi: 10.3389/fsufs.2022.965767; **Ruggeri Laderchi, C., Lotze-Campen, H., DeClerck, F., Bodirsky, B.L., Collignon, Q., Crawford, M.S., Dietz, S., Fesenfeld, L., Hunecke, C., Leip, D., Lord, S., Lowder, S., Nagenborg, S., Pilditch, T., Popp, A., Wedl, I., Branca, F., Fan, S., Fanzo, J., Ghosh, J., HarrissWhite, B., Ishii, N., Kyte, R., Mathai, W., Chomba, S., Nordhagen, S., Nugent, R., Swinnen, J., Torero, M., Laborde Debouquet, D., Karfakis, P., Voegele, J., Sethi, G., Winters, P., Edenhofer, O., Kanbur, R., & Songwe, V.** 2024. The Economics of the Food System Transformation. Food System Economics Commission (FSEC), Global Policy Report.; **Shekar, M., Kakietek, J., Dayton Eberwein, J. Walters, D.** 2017. An Investment Framework for Nutrition: Reaching the Global Targets for Stunting, Anemia, Breastfeeding, and Wasting. Directions in Development: World Bank Group. https://documents1.worldbank.org/curated/en/793271492686239274/pdf/114429-PUB-PUBLIC-PUBDATE-4-20-2017.pdf; **Shekar, M., Okamura, K. S., Vilar-Compte, M., & Dell'Aira, C.** 2024. Investment Framework for Nutrition 2024. Washington, DC: World Bank.; **Sulser, T. B., Wiebe, K., Dunston, S., Cenacchi, N., Nin-Pratt, A., Mason-D'Croz, D., Robertson, R., Willenbockel, D., & Rosegrant, M. W.** 2021. Estimating costs of adaptation in the agrifood system. International Food Policy Research Institute. https://doi.org/10.2499/9780896294165; **Thornton, P. Chang, Y., Loboguerrero, A. M., Campbell, B**. 2023. Perspective: What might it cost to reconfigure food systems?, Global Food Security, Volume 36, https://doi.org/10.1016/j.gfs.2022.100669.; **UNCTAD (United Nations Conference on Trade and Development)**. 2014. World Investment Report 2014. Investing in the SDGs: an action plan. Geneva, Switzerland. http://unctad.org/en/PublicationsLibrary/wir2014_en.pdf; **von Braun, J., Chichaibelu B.B., Laborde, D. and Torero Cullen, M**. 2024. Cost of Ending Hunger –Consequences of Complacency and Financial Needs for SDG2 Achievement, ZEF – Discussion Papers on Development Policy No. 347, Center for Development Research, Bonn, May 2024 pp. 103.

www.fao.org/cfs/cfs-hlpe