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FOODSYSTEMS 2030

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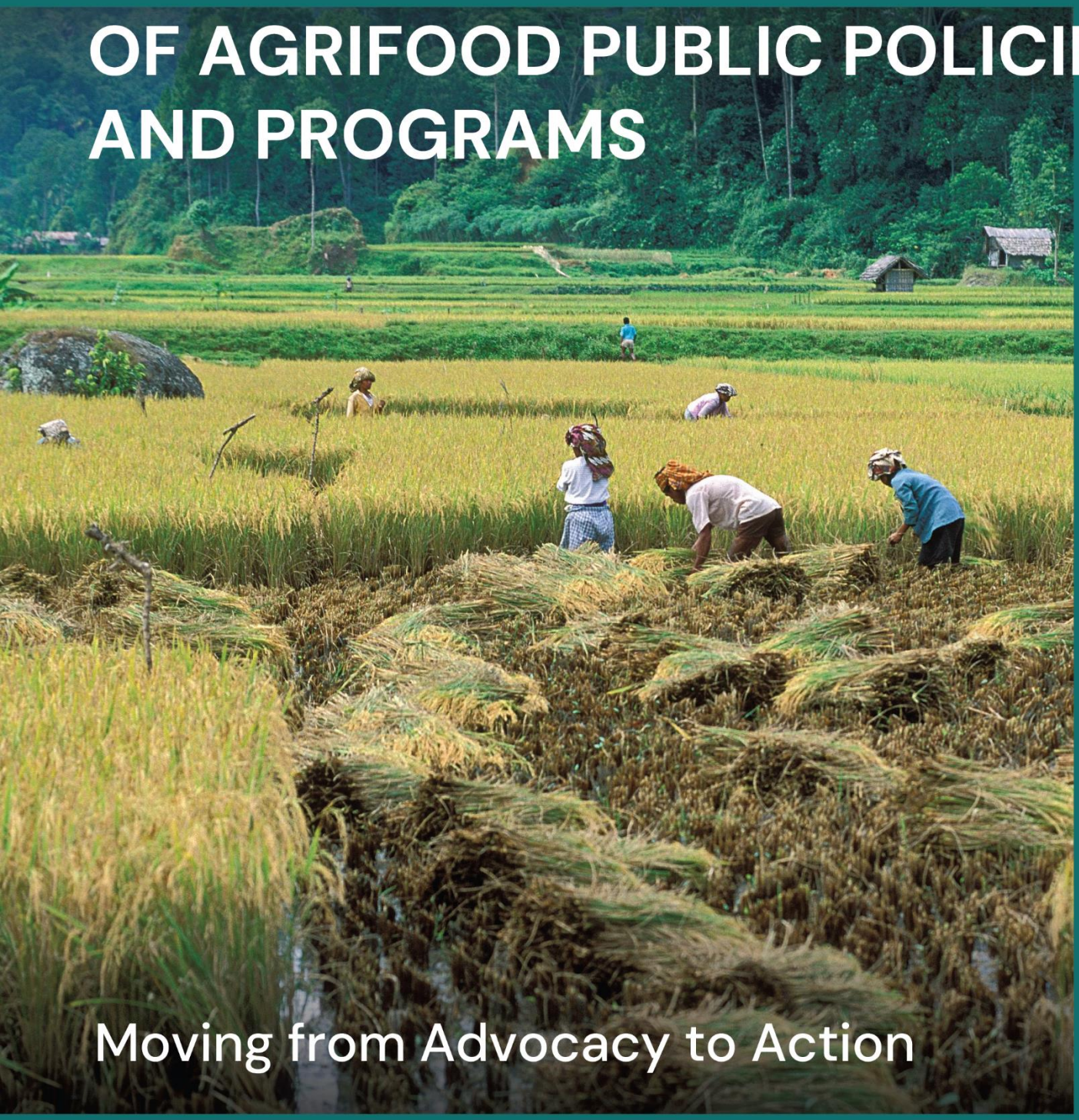
THE WORLD BANK'S SUPPORT FOR REPURPOSING OF AGRIFOOD PUBLIC POLICIES AND PROGRAMS



Moving from Advocacy to Action

Agriculture and Food Global Department

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CONTENTS

LIST OF BOXES

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS AND ACRONYMS

AgPER	Agricultural public expenditure reviews
AGRA	Alliance for a Green Revolution in Africa
APCoP	Agricultural Global Community of Practice
BMZ	German Federal Ministry for Economic Cooperation and Development
CGIAR	Consultative Group on International Agricultural Research
COP	Climate Change Conference of the Parties
CSA	Climate-smart agriculture
DPF	Development Policy Financing
DPO	Development Policy Operation
FAO	Food and Agriculture Organization of the United Nations
FCDO	Foreign, Commonwealth, and Development Office of the United Kingdom
FNS	Food and Nutrition Security
FSRP	Food System Resilience Program
FS2030	Food Systems 2030
GDP	Gross Domestic Product
GFFA	Global Forum for Food and Agriculture
GFNS	Global Food and Nutrition Security
GHG	Greenhouse gas
GSSE	General Services Support Estimate
HIC	High-income country
IDB	Inter-American Development Bank
IBRD	International Bank for Reconstruction and Development
IDA	International Development Assistance
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IO	International Organizations
IPF	Investment Project Financing
ISP	Input subsidy program
LIC	Low-income country
MAFAP	Monitoring and Analyzing Food and Agricultural Policies Program
MDTF	Multi-donor trust fund
MPA	Multiphase Programmatic Approach
MPS	Market price support
MIC	Middle-income country
NRA	Nominal Rate of Assistance
NRP	Nominal Rate of Protection
OECD	Organization for Economic Cooperation and Development
PA	Prior action
PforR	Program for Results
SGR	Strategic grain reserves
SSA	Sub-Saharan Africa
TA	Technical assistance
TFP	Total factor productivity
UAE	United Arab Emirates
UK	United Kingdom
USDA	United States Department of Agriculture
US$	United States Dollar
WBG	World Bank Group

ACKNOWLEDGEMENTS

This report was prepared by the World Bank's team led by Sergiy Zorya (Global Lead for Agricultural Public Policies and Expenditures) and included Joshua Gill (Senior Agricultural Economist), Mansur Ahmed (Senior Agricultural Economist), Francis Darko (Agricultural Economist), and Alexandra Christina Horst (Senior Economist) from the Global Department for Agriculture and Food, and Ghada Elabed (Senior Agricultural Economist, Africa Region). Overall guidance was provided by Shobha Shetty (Global Director of the Department for Agriculture and Food) and Marianne Grosclaude (Global Practice Manager of the Department for Agriculture and Food).

The report presents the recent work by the World Bank on Repurposing the Agricultural Support. It makes the case for urgent realignment of agricultural public policies and programs to sustainably transform the current agrifood system into one that better serves people, the planet, and economies. The report takes stock of the agricultural support globally and across country income groups. It describes the World Bank's recent initiatives that have moved the repurposing agenda from advocacy to action.

The World Bank wishes to recognize the invaluable support of the Food Systems 2030 Multi-Donor Trust Fund, which has played a crucial role in leveraging the World Bank's recent repurposing engagement.

EXECUTIVE SUMMARY

1. **This report is prepared for the Hamburg Sustainability Conference to present the recent work of the World Bank on the repurposing of agricultural support**. The report presents the case for using the existing public policies and programs for agrifood systems in a different way that helps accelerate a sustainable agrifood system transformation (i.e., the Repurposing agenda), takes stock of the volumes and composition of global agriculture support and across countries' income groups, and describes the World Bank's recent initiatives that have moved the repurposing agenda from advocacy to action. The Food Systems 2030 Multi-donor trust fund (FS2030 MDTF) has played a crucial role in leveraging the World Bank's recent repurposing engagement.[1] It will remain crucial for future scale up.

2. **Why is the repurposing agenda so urgent**? Over the past 60 years, significant strides have been made in reducing poverty and food insecurity, with global agrifood production increasing substantially. The proportion of people living in extreme poverty has reduced from one in every two people to one in every ten people, and those experiencing undernourishment have reduced from one in three to one in eight or nine. This progress has been driven by investments in agricultural research, innovation, technology, and market reforms, triggering improvements in agricultural productivity that is critical for agricultural output growth.

3. While progress is undeniable, food insecurity remains a massive problem and is rising again, particularly in areas that have been unable to improve agricultural productivity. As such, the repurposing agenda is urgent. Furthermore, the agrifood system has incurred hidden costs, contributing to climate change, resource degradation, ecosystem damage, and unhealthy diets. These costs, estimated at US$10-15 trillion annually, have eroded the past agricultural productivity gains and increased food production volatility. The challenge has shifted from a sole focus on *how much food we produce* to also encompass *how we produce our food*.

4. **How do countries respond?** Agricultural support worldwide, where the data is available, totaling over US$650 billion annually, often discourages sustainable practices and hinders productivity growth. Agricultural policies and incentives are crucial to agrifood production methods. Although most support is found in the countries that are members of the Organization for Economic Cooperation and Development (OECD), as well as China and India, many other countries also show significant agricultural support in relative terms as a share of their gross domestic product (GDP) despite low absolute levels. Much of this aid takes the form of market price support (MPS) and direct farm payments – instruments that frequently result in unsustainable resource use. Only a small fraction is spent on general support services and direct farm support for climate-smart agriculture (CSA) that enhance farm productivity while reducing environmental impact. This poor resource allocation might have contributed to a significant slowdown in global agricultural productivity growth in the last decade.

5. Repurposing agricultural support towards general support services and direct farm support to CSA can lead to a more sustainable and inclusive agrifood system. Modeling by the World Bank and the International Food and Policy Research Institute (IFPRI) suggests that redirecting just 10 percent of the most distortive public support to green innovations could yield US$2.4 trillion in gains by 2040, while

[1] Food Systems 2030 (FS2030) is an umbrella multi-donor trust fund hosted by the Global Department for Agriculture and Food at the World Bank. FS2030 MDTF is designed to address the hidden health, environmental, and economic costs arising from the current global agrifood system, thereby helping countries build sustainable agrifood systems. FS2030 MDTF is supported by 11 donors (listed in chronological order of contributions received): BMZ-Germany; Bill and Melinda Gates Foundation; European Commission; UK FCDO; Netherlands; Ireland; Israel; Denmark; Japan; Norway; and New Zealand.

reducing emissions by 40 percent and returning 105 million hectares of land to natural habitats.[2] However, repurposing involves complex trade-offs and policy reforms tailored to each country's context.

6. **How has the World Bank supported the Repurposing agenda?** In 2021, the World Bank launched the Global Technical Assistance (TA) on Repurposing. The global advocacy supported by this Global TA, which included knowledge generation, global agricultural policy dialogues, and strategic partnerships, has resulted in commitments for action. In 2023, issuing a Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action at the Climate Change Conferences of the Parties (COP28) in Dubai, 160 governments pledged to revisit or orient policies and public support related to agrifood systems to promote activities, which increase incomes, reduce greenhouse gas emissions, and bolster resilience, productivity, livelihoods, nutrition, water efficiency and human, animal and ecosystem health while reducing food loss and waste, and ecosystem loss and degradation.

7. The World Bank has launched a program to help countries implement these changes, emphasizing the need for tailored solutions and high-quality analytical work, already ongoing in close to 40 countries. This analytical work, i.e., estimating agricultural support policies and programs, underpins the financing for repurposing through projects, programs, and policy actions. Some of the public sector investments are financed by the FS2030 MDTF, to date in the amount of US$95 million for investment projects in seven countries: Bangladesh, Colombia, Ghana, Indonesia, Malawi, Mozambique, and Tanzania. The analytical work also underpins the repurposing investments being leveraged through the World Bank's Development Policy Operations (DPOs) and Programs for Results (PforRs).

8. **What are the initial achievements?** Recent repurposing achievements supported by the World Bank-backed reforms include rice import liberalization in the Philippines and farm price taxation's abolition in Uzbekistan. These reforms were supported by DPO series underpinned by the World Bank's analytical work on repurposing. Initial progress on repurposing has also been made in other countries. In Bangladesh, Tanzania, and Zambia, the recently launched PforRs seek to repurpose agricultural support by promoting trade, improving the design of fertilizer support programs, shifting more funds to the programs for the delivery of general support services and direct farm support to CSA. While the latest PforRs were approved only recently, the willingness of those countries to engage through these PforRs in agricultural reforms is, in itself, a significant achievement.

9. **What is the Forward Look?** As the global agenda for repurposing agricultural support gains momentum, the World Bank is committed to intensifying its efforts to support actions by countries. The Global TA on Repurposing supported by the FS2030 MDTF will build on existing initiatives to broaden and deepen their impact. It is critical to remember that reforms may take a long time. For instance, in the Philippines, it took over 20 years to implement rice tariffication and trade liberalization. In contrast, Uzbekistan experienced a shorter lag of about 5-6 years between analytical underpinning and reform actions. Irrespective of the time horizons, it is vital to remain engaged, generate evidence, and produce repurposing options that have clear implications to expand the repurposing agenda to more countries successfully. It is crucial to have these elements ready to seize windows of opportunity for reforms.

10. ***High-level global forums and policy dialogues***: The World Bank will continue to support the global momentum by providing platforms for experience sharing and peer support in agricultural policy through high-level policy dialogues. Contributions will be presented at key events such as the World Bank Group (WBG)-International Monetary Fund (IMF) Annual and Spring Meetings, G20, and COPs. Regional policy dialogues will focus on soil health and fertilizers in sub-Saharan Africa (SSA), low-methane emission agriculture in Asia, and sustainable livestock in Latin America.

[2] Gautam, M., D. Laborde, A. Mamun, W. Martin, and R. Vos. 2022. *Repurposing Agricultural Policies and Support: Options to Transform Agriculture and Food Systems to Better Serve the Health of People, Economies, and the Planet*. Washington, DC.: World Bank and IFPRI.

11. ***Deepening the global analytical agenda***: The World Bank will continue to produce global insights on policy instruments to advance the repurposing agenda. Key topics include the management of strategic grain reserves and improved use of fertilizers and soil health enhancement. These studies aim to develop global knowledge and policy recommendations to manage these areas more effectively.

12. ***Scaling up country deep dives***: The World Bank will increase the number of country-level AgPERs to identify repurposing options for financing. The goal is to prepare the repurposing options covering at least US$50 billion for annual agricultural support, which, among other things, will inform the design of DPOs and PforRs supporting the change.

13. ***Supporting implementation of the repurposing projects***: The World Bank will support the implementation of the repurposing pilot projects financed by the FS2030 MDTF. With projects in Bangladesh and Ghana already prepared and five other projects to be prepared soon, the focus will shift to implementation.

14. ***Enhancing cross-country learning***: An e-knowledge academy on repurposing agricultural support will be launched to provide comprehensive guidance to both internal and external audiences. The program will include modules on setting the context, identifying repurposing policy options, and pathways to repurposing. The Global Food and Nutrition Security (GFNS) Dashboard will be expanded to include a new module on agricultural support, compiling data from various organizations. This will provide information on key support parameters and examples of repurposing actions undertaken by countries worldwide.

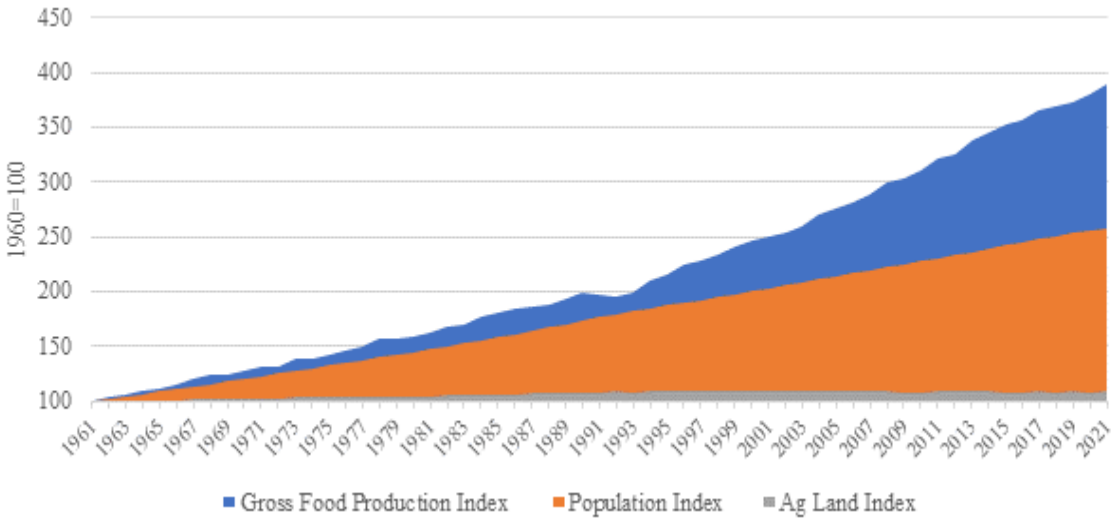
15. ***Strengthening partnerships***: The World Bank will enhance partnerships with development partners, countries, and other organizations. It will leverage data collection under the Agricultural Incentives Consortium and advance knowledge and collaboration with entities like the Consultative Group on International Agricultural Research (CGIAR) to model and design repurposing options.

16. Our forward-looking strategy aims to make agrifood systems more productive, resilient, and sustainable, aligning with the World Bank's commitment to global food and nutrition security (FNS).

1. WHY REPURPOSE?

1. **The agrifood system is crucial for people, the planet, and the economy**. It provides livelihoods to over a billion individuals—36 percent of the global workforce[3]—and contributes approximately US$10 trillion to the world economy, over 12 percent of the global GDP. In the last 60 years, agricultural production has almost quadrupled, a result of timely investments in technology and innovation, outpacing the population increase, which was two-and-a-half times higher (Figure 1). This expansion has yielded substantial benefits for people and economies alike. Since 1960, the incidence of extreme poverty—defined as living on less than US$1.90 per day in purchasing power parity—has declined from one in every two people to one in every ten. Similarly, the proportion of people living in hunger has decreased from one in every three to one in every eight or nine.

Figure 1: Global Food Production, Population, and Agricultural Land (1961-2021)



Source: World Bank based on FAOSTAT data.

2. **Gains in total factor productivity (TFP) have primarily driven the increase in food production**. Global agricultural output has expanded more rapidly than the use of inputs and factors of production such as land, irrigation, labor, and capital. Since the 1960s, TFP growth has averaged 1 percent annually, with a notable increase to almost 2 percent during 2001-2010 (Figure 2). Public support for agriculture has been instrumental in fostering this productivity-led growth. Government policies and support programs have encouraged investments in research and extension services, infrastructure, and other initiatives that stimulate growth, thereby creating a conducive environment that has enhanced TFP.[4]

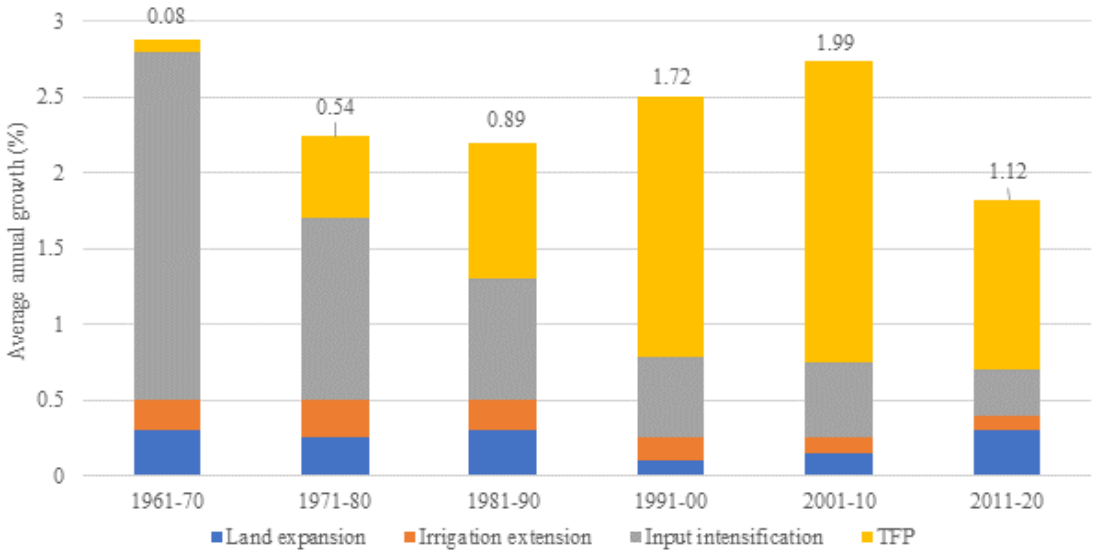
3. **However, the current methods and patterns of production are unsustainable, with substantial hidden costs**. Although public policies have succeeded in boosting agrifood production and productivity growth has mitigated agriculture's share of global greenhouse gas (GHG) emissions, the narrow focus on increasing the quantity and reducing the cost of food—rather than producing nutritious and affordable food within planetary limits—has led to significant hidden costs. These hidden

[3] Davis, B., E. Mane, L. Gurbuzer, G. Caivano, N. Piedrahita, K. Schneider, N. Azhar, M. Benali, N. Chaudhary, R. Rivera, R. Ambikapathi, and P. Winters. 2023. *Estimating Global and Country-Level Employment in Agrifood Systems.* FAO Statistics Working Paper Series, No. 23-34. Rome, FAO. https://doi.org/10.4060/cc4337en

[4] Fuglie, K., S. Morgan, and J. Jelliffe. 2024. *World Agricultural Production, Resource Use, and Productivity, 1961-2020*. Washington, DC.: The US Department of Agriculture, Economic Research Service, Economic Information Bulletin 268.

environmental, social, and health-related costs are estimated to add up to US$10 trillion annually.[5] Such costs are fueling a harmful cycle of unsustainable production methods and unhealthy dietary habits. Agriculture is the leading cause of biodiversity loss; in the last 60 years, the transformation of 309 million hectares into farmland has occurred mainly at the expense of natural habitats. Moreover, agriculture is a significant contributor to climate change, with agriculture and land use changes responsible for over a third of all human induced GHG emissions, largely due to current agricultural practices and production patterns.[6]

Figure 2: Sources of Global Agricultural Output Growth (1961-2020)



Source: US Department of Agriculture, Economic Research Service, 2024.

4. **Alongside high environmental costs, the current agrifood production patterns impose significant health costs as they prioritize calorie availability over nutritious diets**. Nutritious diets are essential for FNS since unhealthy eating habits contribute to various forms of malnutrition and obesity. In 2022, nearly 2.8 billion people, or about 36 percent of the world's population, could not afford healthy diets.[7] Among children under five, an estimated 149 million were stunted, and 45 million were wasted, while 39 million were overweight.[8]

5. **Consequently, the current agrifood policies and programs are compromising the progress made in reducing food insecurity and productivity growth**. Data from the Food and Agriculture Organization of the United Nations (FAO) indicates a troubling reversal in the global trend of undernourishment, disrupting the steady decline observed since the early 2000s (Figure 3). Additionally, there has been a downward trend in global per capita output growth and an increase in the volatility of

[5] FAO. 2023. *The State of Food and Agriculture 2023 – Revealing the true cost of food to transform agrifood systems*. Rome. https://doi.org/10.4060/cc7724en

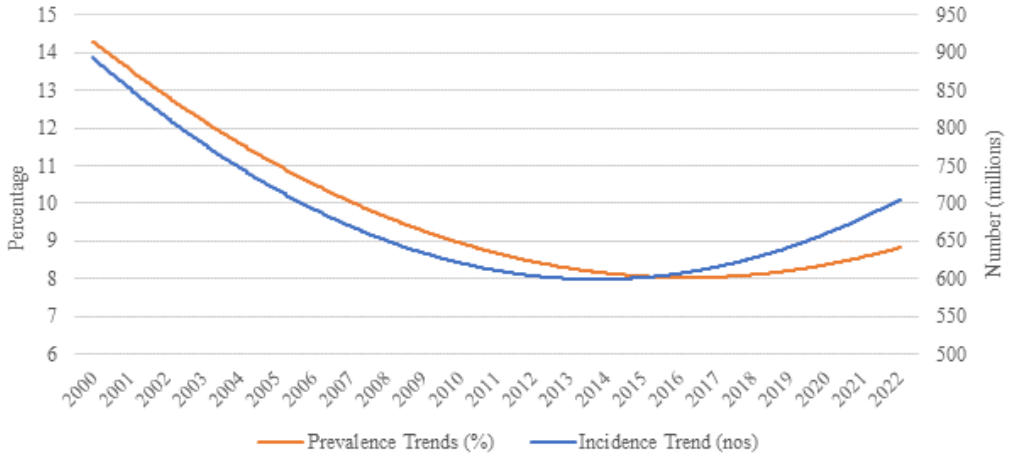
[6] Sutton, B., A. Lotsch, and A. Prasann. 2024. *The Recipe of a Livable Planet: Achieving Net Zero Emissions in the Agrifood System*. Washington, DC.: The World Bank.

[7] FAO, IFAD, UNICEF, WFP, and WHO. 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: FAO.

[8] FAO, IFAD, UNICEF, WFP, and WHO. 2022. *The State of Food Security and Nutrition in the World 2022: Repurposing Food and Agricultural Policies to Make Healthy Diets More Affordable.* Rome: FAO.

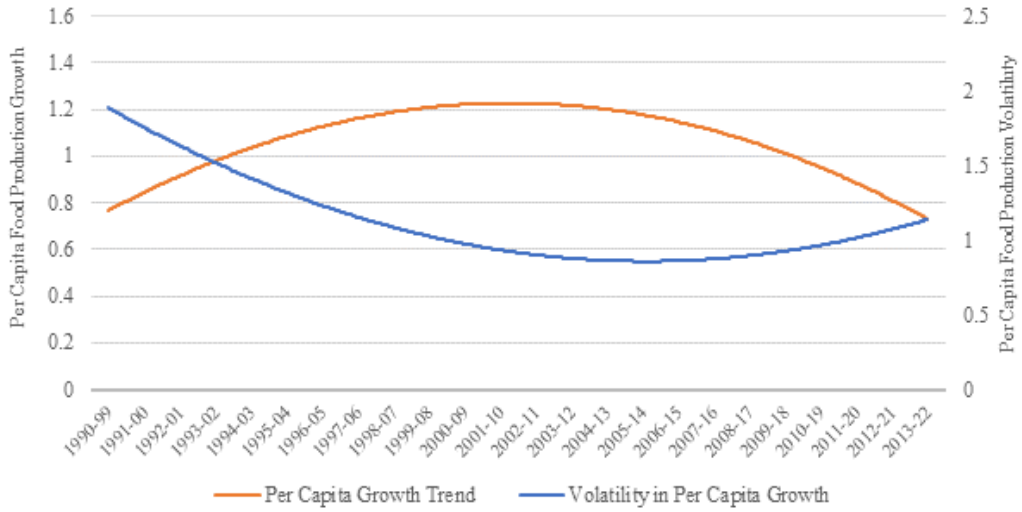
this growth (Figure 4). The average annual global agricultural TFP growth has also decelerated in the past decade, from 1.99 percent during 2001-2010 to 1.12 percent during 2011-2020 (Figure 2).[9]

Figure 3: Prevalence and Incidence of Undernourishment Trends (2000-2022)



Source: World Bank estimates based on FAOSTAT data.

Figure 4: Growth and Volatility Trends in Per Capita Global Food Production (1990-2022)



Source: World Bank estimates based on FAOSTAT data.

6. **Conflicts and external shocks, including those from climate change, are impacting the agrifood system**. These shocks are leading to more frequent instances of food and nutrition insecurity due to reduced agrifood production, yields, and supply. Climate change is an immediate threat, with its effects on agricultural productivity growth already evident and intensifying. Since 1960, climate change is estimated to have reduced global agricultural TFP growth by 21 percent, and by up to 40 percent in parts of Africa and other tropical regions.[10] The consequences of climate change and the depletion of natural resources are particularly severe for the world's impoverished and undernourished populations,

[9] Fuglie, K., S. Morgan, and J. Jelliffe. 2024. *World Agricultural Production, Resource Use, and Productivity, 1961-2020*. Washington, DC.: The US Department of Agriculture, Economic Research Service, Economic Information Bulletin 268.

[10] Ortiz-Bobea, A., T. Ault, C. Carrillo, R. Chambers, and D. Lobell. 2021. *Anthropogenic Climate Change Has Slowed Global Agricultural Productivity Growth.* Nature Climate Change 11: 306-312.

who depend heavily on agriculture for their livelihoods and food and nutrition security. By 2050, climate change could reduce global crop production by 4 percent and decrease livestock production 2 percent,[11] and significantly undermine the food-producing capacity of certain world regions and the oceans.[12]

7. **The United Nations Population Division projects the world's population to reach nearly 10 billion by 2050, necessitating a significant increase in food supply to meet demand**. While agricultural advancements over the past six decades have commendably produced sufficient food to surpass population growth, the task of continuously meeting the world's food requirements in a sustainable manner is becoming increasingly difficult. Moreover, the trend toward greater urbanization is likely to heighten the demand for resource-intensive and GHG-emission-heavy livestock products.

8. **Consequently, ensuring affordable access to a healthy, nutritious, and safe diet for the burgeoning global population, while maintaining environmental sustainability is a substantial challenge**. It is imperative to transform the agrifood system to enhance its resilience to climate change and minimize its environmental footprint. A pivotal aspect of this transformation involves shifting the focus from not only *how much food we produce* but also *how we produce our food*. The structure of agricultural support is crucial in this context. The agrifood system faces the daunting task of increasing food production by at least 50 percent (relative to 2010 levels) on a natural resource base that is already under strain, adapting to the adverse effects of climate change, and achieving this without further increasing GHG emissions. Figure 5 illustrates a heuristic model of the current agrifood system's vicious cycle, where increased food demand leads to accelerated food production, land use changes, and associated emissions, all of which contribute to global warming. This rise in global temperatures, in turn, adversely affects agricultural yields, prompting the agrifood system to intensify production further, resulting in even higher GHG emissions.

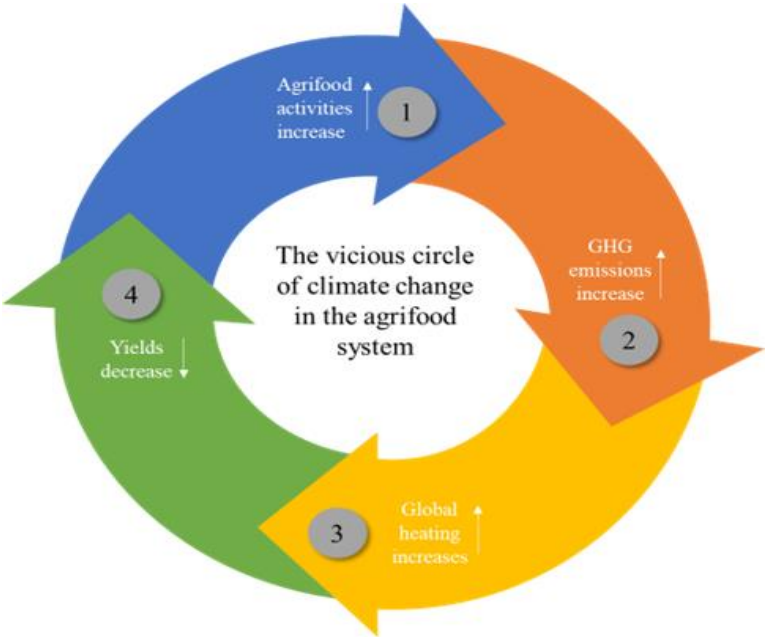
9. **Identifying effective solutions to these challenges requires evaluating whether current agrifood public policies and expenditures are incentivizing decisions that benefit people, the environment, and economies**. Farm support varies across nations and often entails budget expenditures. This support encompasses investments in public goods such as research, advisory services, public infrastructure, and food safety standards, as well as direct agricultural producer support. Producer support manifests itself in various forms, including price supports to maintain domestic prices for certain commodities above world market levels, subsidies linked to the types or amounts of inputs used or agricultural outputs produced, and decoupled payments to farmers that are not contingent on current production levels or input usage, which aim to avoid influencing production decisions.

10. **The agrifood system is influenced by policies and programs that determine the incentives for stakeholders in the system**. For example, input subsidies may inadvertently promote the use of inputs that lead to negative externalities, such as fertilizer overuse, excessive groundwater extraction with subsidized electricity, inefficient use of underpriced water, or monoculture crop systems. Conversely, decoupled support can provide funds to producers without inducing distortions in the production or consumption of specific commodities. Ideally, support would guide producers toward practices that are both environmentally sustainable and economically efficient, such as payments for environmental services or incentives for the adoption of CSA technologies and practices.

[11] Guerrero, S., B. Valin, H. Henderson, C. Janssens, P. Havlík, and A. Palazzo. 2022. *The Impacts of Agricultural Trade and Support Policy Reform on Climate Change Adaptation and Environmental Performance: Model-Based Analysis*. Paris: OECD.

[12] Pörtner, H.-O., D.C. Roberts, H. Adams, I. Adelekan, and C. Adler. 2022. *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge UK and New York, USA: Cambridge University Press.

Figure 5: Feedback Loops between Agrifood Activities and the Climate



Source: Sutton et al. 2024.[13]

11. **Governments worldwide are increasingly acknowledging the importance of repurposing agricultural support to incentivize the transformation of the agrifood system**. Enhancing the global agrifood system's resilience, nutrition, inclusivity, and carbon neutrality is estimated to cost US$500 billion annually (Box 1). As such, mobilizing domestic public resources and attracting additional funding is essential. In recent years, governments have implemented public policies and programs that have provided about US$650 billion of net support[14] annually to farmers and consumers in various forms. However, with fiscal constraints and public debt rising, particularly in low-income countries (LICs),[15] the focus has shifted toward maximizing the efficiency of existing public expenditures rather than increasing spending levels. Moreover, a growing awareness of the substantial and detrimental hidden costs of the agrifood system has spurred a renewed urgency for action. Consequently, in 2023, 160 countries pledged at the COP28 in the UAE to reevaluate or reorient policies and public support related to agriculture and food systems. This commitment aims to promote activities that enhance incomes, reduce GHG emissions, and improve resilience, productivity, livelihoods, nutrition, water efficiency, and the health of humans, animals, and ecosystems, while also reducing food loss and waste and mitigating ecosystem loss and degradation. Transforming the agrifood system has the potential to mitigate climate change, enhance biodiversity, ensure healthier diets, and create new business opportunities potentially worth up to US$4.5 trillion annually.[16]

12. **In 2020, with donor support through the FS2030 MDTF, the World Bank launched a Global TA initiative on Repurposing Agricultural Support Policies and Programs**. Over time, the

[13] Sutton, B., A. Lotsch, and A. Prasann. 2024. *The Recipe of a Livable Planet: Achieving Net Zero Emissions in the Agrifood System*. Washington, DC.: The World Bank.

[14] *Net support* is estimated as gross support *less* negative market price support. In some countries the market price support for farmers is negative, which reduces the amount of total agricultural support. In 2022, for example, the negative market price support reached US$176 billion, effectively reducing the agricultural support from US$796 billion to US$620 billion.

[15] Low-income countries are those with a gross national income per capita of less than US$1,145 in 2023.

[16] The Food and Land Use Coalition. 2019. *Growing Better: Ten Critical Transitions to Transform Food and Land Use*. https://www.foodandlandusecoalition.org/wp-content/uploads/2019/09/FOLU-GrowingBetter-GlobalReport.pdf

TA has expanded to include investments that support repurposing activities and strengthen partnerships for better outcomes, marking a shift in the World Bank's focus from advocacy to action at both global and country levels.

13. **Repurposing does not necessarily mean spending less on agriculture or other parts of the agrifood system**. In fact, many countries require increased support for agrifood systems transformation. However, not all agriculture public support policies and programs are equally beneficial. Some can hinder growth or impose high costs on the environment and FNS (refer to the discussion in Chapter 2). Repurposing is about redirecting and realigning support to achieve better outcomes, not about cutting support. It aims to increase the impact of public policies and programs on agricultural productivity and competitiveness, while also improving environmental sustainability, climate resilience, and FNS outcomes.

Box 1: Recent Cost Estimates for Transforming the Global Agrifood System

The cost to transform the agrifood system, support a basic social safety net, and address malnutrition is recently estimated at US$500 billion per year. Of this, the agrifood system transformation is the main cost, at US$300–400 billion per year.[17] To meet the daily caloric requirements of the projected number of acutely food insecure individuals, an estimated global annual financing needs of around US$90 billion from 2023 to 2030, out of which US$40 billion is required specifically for LICs or the International Development Association (IDA) countries. In a scenario of higher inflation, lower growth, and high commodity prices, the projected needs could increase by 30 percent, rising to an estimated US$120 billion annually. Moreover, addressing malnutrition[18] among women and children will cost over US$11 billion annually.

14. **The report seeks to document the recent progress in the repurposing of agricultural public policies and programs with the support of the World Bank and to outline the agenda for future actions**. Chapter 2 discusses recent developments in agricultural support at global and income group levels. Chapter 3 outlines the World Bank's key engagements in repurposing, including support provided under the FS2030 MDTF. Chapter 4 presents the initial achievements, and Chapter 5 looks forward, including the role of the FS2030 MDTF in driving the repurposing agenda.

[17] UN Food Systems Summit 2021, the World Bank, the Food and Land Use Coalition, and IFPRI. 2022. *Food Finance Architecture*. Washington, DC. https://documents1.worldbank.org/curated/en/879401632342154766/pdf/Food-Finance-Architecture-Financing-a-Healthy-Equitable-and-Sustainable-Food-System.pdf?_gl=1*1isr94w*_gcl_au*MTI3MzgwMTYwNi4xNzE4MTE3MzA3

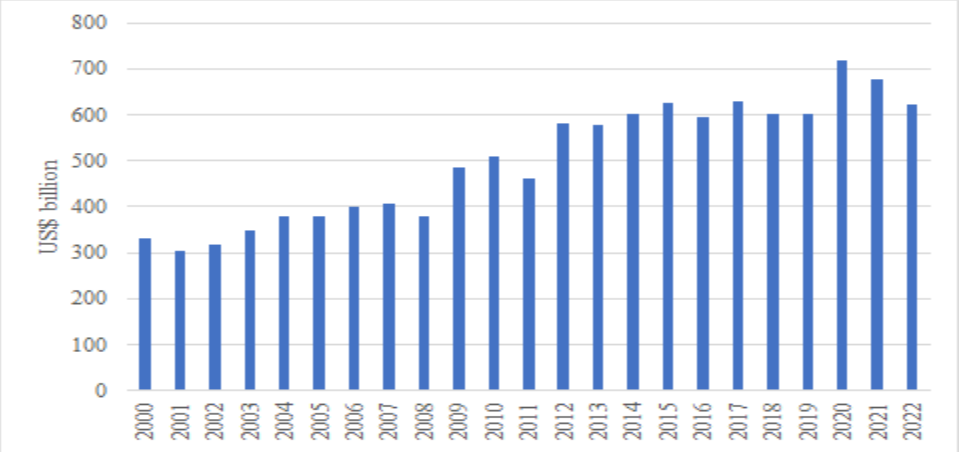
[18] Shekar, M., J. Kakietek, J. Eberwein, and D. Walters. 2016. *An Investment Framework for Nutrition: Reaching the Global Targets for Stunting, Anemia, Breastfeeding, and Wasting*. Washington, DC.: The World Bank Group. https://www.worldbank.org/en/topic/nutrition/publication/an-investment-framework-for-nutrition-reaching-the-global-targets-for-stunting-anemia-breastfeeding-wasting

2. RECENT DEVELOPMENTS IN AGRICULTURAL PUBLIC SUPPORT

2.1 Level of Public Support to Agriculture

15. **Agricultural public support policies and programs are pivotal in shaping the production of food worldwide**. The global agrifood system encompasses millions of economic entities, all reacting to economic incentives. Agriculture is a significant source of employment, providing livelihoods for approximately 500 million farmers, the majority of whom are self-employed on small-scale farms.[19] Recent data indicates that the global public support for agriculture is substantial, averaging US$650 billion annually as net value (Figure 6)[20] or close to US$750 billion as gross value.[21] This figure represents 0.7-0.9 percent of global GDP and 18 percent of the total value added by the agriculture sector. The reported estimates encompass both budgetary expenditures and non-budgetary forms of support, such as market price support (MPS). These figures are derived from three main data sources: the OECD, the Food and Agriculture Organization of the United Nations - Monitoring and Analyzing Food and Agricultural Policies Program (FAO-MAFAP), and the Inter-American Development Bank (IDB). The OECD is the primary source, providing annual assessments of agricultural support for 54 countries, including its own members, the European Union (EU) member states, and 11 non-member emerging economies. Complementary data from FAO-MAFAP includes 13 African countries,[22] while the IDB contributes data on 19 countries from Latin America and the Caribbean. The OECD's methodology serves as the standard due to its extensive coverage, and data from MAFAP and IDB aligned with it to ensure consistency across datasets.

Figure 6: Global Agricultural Support: Net Estimates (2000-2022)



Source: World Bank estimates using data from the Ag-Incentives Consortium (IFPRI, OECD, FAO, IDB, and World Bank).

[19] Davis, B., E. Mane, L. Gurbuzer, G. Caivano, N. Piedrahita, K. Schneider, N. Azhar, M. Benali, N. Chaudhary, R. Rivera, R. Ambikapathi, and P. Winters. 2023. *Estimating Global and Country-Level Employment in Agrifood Systems.* FAO Statistics Working Paper Series, No. 23-34. Rome, FAO. https://doi.org/10.4060/cc4337en; Nico, G. and L. Christiansen. 2023. *Jobs, Food and Greening: Exploring Implications of the Green Transition for Jobs in the Agrifood System.* Washington, DC.: World Bank Group.

[20] The number countries covered varies by year. However, countries covered in any given year represent at least two-thirds of global agricultural output and more than three quarters of the global agricultural value-added.

[21] *Net* support is *gross* support *less* negative market price support.

[22] SSA has the largest data gap. Out of 54 SSA countries, only 13 have recent data available.

16. **Support for the agriculture sector has risen nominally over the past two decades**. Figure 6 illustrates that global net agricultural support increased from US$300 billion in 2000 to US$620 billion in 2022. From 2000 to 2012, net support grew from US$330 billion to US$580 billion, and since then, it has hovered around US$600 billion. There was a spike in support to US$720 billion in 2020 due to the Covid-19 outbreak, but it returned to US$620 billion in 2022.

17. **Understanding the mechanisms of support is crucial as they influence the decisions of economic agents in agriculture and agrifood system**. Not all expenditures have the same effect; some stimulate sustainable growth, while others may incur large hidden costs or even hinder growth. Current farm support is delivered in four forms:

i. **Price Support**: Market price support (MPS) is the simplest and least costly for the budget to implement but is considered highly distortionary. Price supports elevate domestic prices for certain outputs above world market prices, either directly through public procurement or indirectly through import restrictions and other market barriers. In the case of market barriers, domestic producers receive implicit transfers from consumers via higher prices, without public expenditures. Conversely, negative MPS aims to keep domestic prices below world prices through measures like export restrictions, which depress farm profits and yield low returns on public spending.

ii. **Budgetary Producer Support**: Direct payments to farmers are less distortive than MPS but can still promote unsustainable practices. There are five main types of budgetary support instruments: (i) output-based payments; (ii) variable input, fixed capital formation, and on-farm service payments; (iii) current or past area/animal-based payments with production requirements; (iv) past area/animal-based payments without production requirements; and (v) non-commodity criteria-based payments. Coupled subsidies, tied to specific outputs or inputs, are the most distortive, while decoupled payments have the least distortionary effects on farm prices and production decisions.

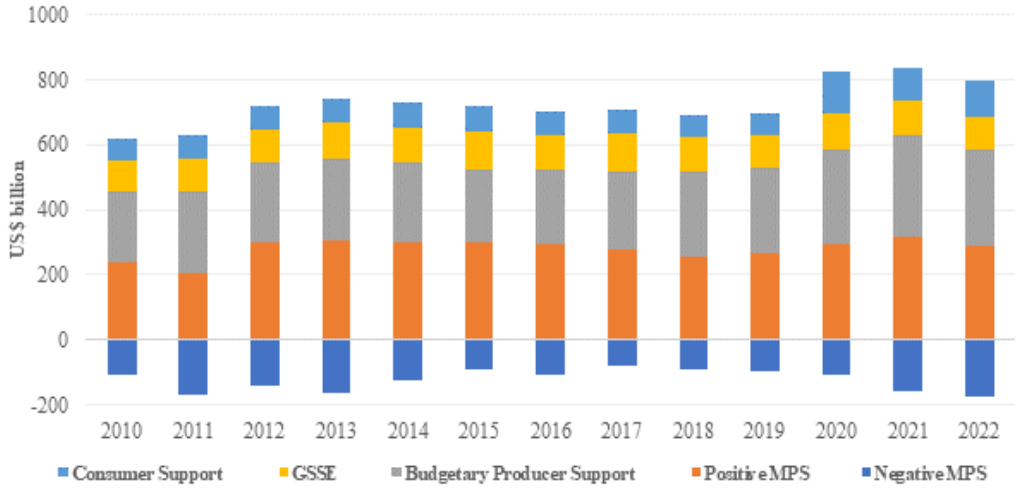
iii. **General Services Support Estimate (GSSE)**: This category includes support for the sector that does not result in direct transfers to farmers, such as spending on agriculture public goods and services that create an enabling environment for sector growth. It covers agriculture research, development, extension, and advisory services, rural public infrastructure, animal and plant health systems, land administration, agriculture public information systems, and food safety and standards.

iv. **Consumer Support**: This support is provided directly to consumers through mechanisms like food aid, school feeding programs, and MPS that lower domestic food prices (i.e. food export bans or taxes).

2.2 Composition of Public Support to Agriculture

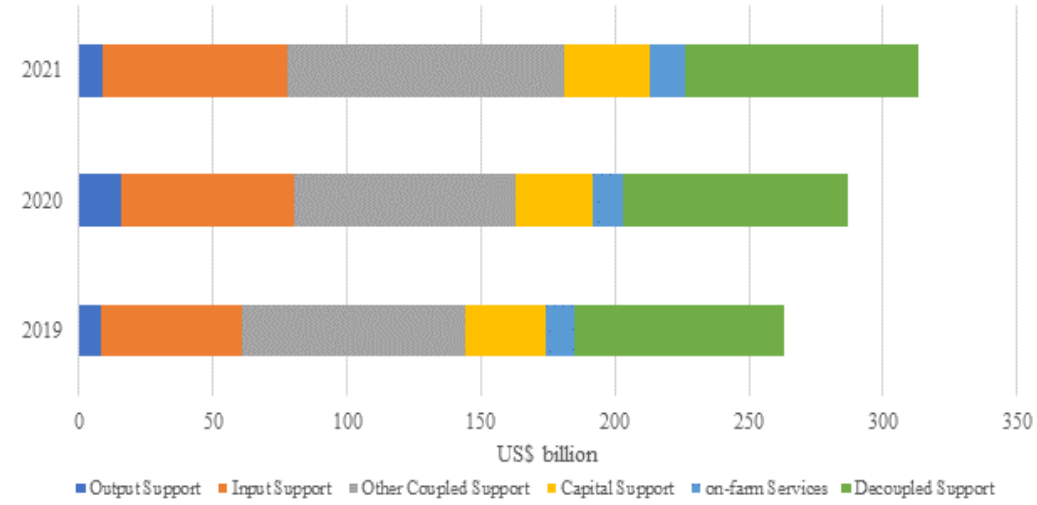
18. **A significant portion of global public support is delivered through distortive instruments, contributing to the hidden costs of the agrifood system**. Countries employ a variety of tools to support agriculture, often driven by fiscal constraints and political considerations. From 2010-2022, about 88 percent of agricultural support was allocated to producers via MPS (46 percent) and direct budgetary support (42 percent), as shown in Figure 7. Much of this budgetary support promoted unsustainable production patterns by encouraging excessive input use and degrading natural resources (Figure 8). Only 18 percent was invested in public goods and services (mainly GSSE) that incentivize productivity increases while reducing environmental impact.

Figure 7: Global Agricultural Support Composition (2010-2022)



Source: World Bank estimates using data from the Ag-Incentives Consortium (IFPRI, OECD, FAO, IDB, and World Bank).

Figure 8: Global Direct Budgetary Support Composition (2010-2022)



Source: World Bank estimates using data from the Ag-Incentives Consortium (IFPRI, OECD, FAO, IDB, and World Bank).

19. **The composition of global agricultural support has been of low quality and has not supported the transformation of sustainable agrifood systems**. MPS and coupled budget support[23] still dominate the total agricultural support. Empirical studies highlight the negative impact of such support on agricultural TFP, job creation, and poverty reduction (Box 2). Conversely, public support for

[23] *Coupled* refer to public policies and programs that seek to influence production decisions for specific crops and livestock products. Examples include input or output subsidies encouraging production of specific outputs and/or payments per hectare or animal for producing specific outputs only. *Decoupled*, on the other hand, refers to the production-neutral or income support. It could be per hectare payment irrespective what is produced on farmland. Decoupling agricultural support means reforming agricultural policies in ways that reduce interference with production decisions.

general support services, especially agricultural research and advisory services, which drives productivity growth essential for sustainable transformation, has been low.[24] In 2016, the latest year for global data, investment intensity in agricultural research and development as a percentage of agricultural GDP was only 0.66 percent in low-income countries (LICs) [25] and middle-income countries (MICs)[26] compared to 2.47 percent in high-income countries (HICs),[27] giving the HICs a competitive edge in agrifood system transformation.[28]

Box 2: Quality of Agricultural Public Expenditures

Empirical studies often find a low impact of aggregate spending on agricultural growth, suggesting that not all public investments are equally effective. Governments frequently invest much in non-public goods, such as output and input subsidies. Moreover, public spending does not always lead to improvements, even when addressing clear market failures, and can sometimes exacerbate problems through government failures and unintended adverse effects.

Lopez and Galinato (2007)[29] analyzed the impact of public spending on agricultural growth in ten Latin American and Caribbean countries during 1985–2000. They found that a 10 percent increase in public expenditures lifted agricultural growth by 0.6 percent. At the same time, they also found that spending on public goods was much more productive than spending on input and output subsidies – the reallocation of 10 percentage points of expenditures from subsidies to public goods increased growth by 2.3 percent. This was obtained without increasing total expenditures.

Another example is the switch from coupled subsidies that favor the production of specific products to decoupled support and investment grants for agriculture modernization and rural development in the EU. Garonne *et al* (2019)[30] found that from 2004 to 2014, the coupled subsidies reduced agricultural TFP in 213 EU regions, while investment grants and, to some extent, decoupled payments increased TFP. The World Bank (2018)[31] found that decoupled payments and investment grants were effective in supporting agricultural productivity and employment in the EU countries. Coupled subsidies reduced growth by encouraging farmers to produce crops picked by governments instead of by markets. As a result, coupled subsidies tend to reduce the TFP.

20. **The low quality of agriculture public support also adversely affects environmental outcomes**. Assessing the environmental impact of agricultural support policies requires detailed information on factors influencing farmer choices and interaction with the broader policy environment.

[24] Fuglie, K. 2018. *R&D Capital, R&D Spillovers, and Productivity Growth in World Agriculture*. Applied Economic Perspectives and Policy 40(3): pp. 421-444.; Fuglie, K., M. Gautam, A. Goyal, and W. Maloney. 2019. *Harvesting Prosperity: Technology and Productivity Growth in Agriculture*. Washington, DC.: The World Bank.

[25] Low-income countries are those with a per capita gross national income of less than US$1,145 in 2023.

[26] Middle-income countries are those with a per capita gross national income from US$1,086 to US$14,004 in 2023.

[27] High-income countries are those with a per capita gross national income of more than US$14,005 in 2023.

[28] Fuglie, K., S. Morgan, and J. Jelliffe. 2024. *World Agricultural Production, Resource Use, and Productivity: 1961-2020*. Washington, DC.: The USDA Economic Research Service, Economic Information Bulletin 268, February 2024.

[29] Lopez, R. and G. Galinato. 2007. *Should Government Stop Subsidies to Private Goods? Evidence from Rural Latin America*. Journal of Political Economics (91): 1071-1094.

[30] Garonne, M., D. Emmers, H. Lee, A. Olper, and J. Swinnen. 2019. *Subsidies and Agricultural Productivity in the EU*. Agricultural Economics (50): 803-817.

[31] World Bank. 2018. *Thinking CAP: Supporting Agricultural Jobs and Incomes in the EU*. Washington, DC.: EU Regular Economic Report #4.

However, such information is often scarce. Following the OECD's approach, support instruments can be categorized to illustrate how different policies might affect the environment (Table 1). This categorization assists in evaluating if current support policies may encourage unsustainable agriculture and if countries ought to repurpose support toward alternative forms or enhance targeting mechanisms.

Table 1: Environmental Impacts of Agricultural Policies

Form of Support	Risk of Negative Environmental Impact
Price (dis) Incentives	**High**: Market Price Support (MPS) is highly distortionary as they directly affect revenues by influencing market prices. For example, increasing the price of sugarcane through an export ban or a support price would incentivize increased production and higher emissions. This is due to inefficient overuse of inputs such as fertilizers and energy and/or expansion of land under cultivation by displacing other crops, land use change, or bringing marginal land into production.
Variable Input Subsides (e.g. fertilizer, energy, credit, insurance) Output Subsidies	**High:** Direct budgetary support linked to the inputs used or types of products produced are less distorting than MPS in the economic sense. However, these would also directly affect the costs and benefits of production and lead to higher emission by encouraging excess production of the targeted output, and/or excessive use of the targeted input such as fertilizer or energy.
Fixed Capital Formation	**Moderate:** Support for capital linked to the modernization of agriculture through improvements in productivity has the potential to reduce environmental impact by improving productivity and reducing emission intensity. However, in the absence of effective management this can also lead to higher emissions as increased capacity and higher financial returns due to efficiency can encourage intensification and extensification.
Decoupled Subsidies	Low: Decoupled subsidies are income support, which is not linked to production. This method is the least distortive as it does not directly influence beneficiaries' production choices.
General Support for public goods and services	Very Low: Spending under general support is focused on the provision of efficiency and productivity-enhancing public goods and services such as research and development, extension, training, monitoring and surveillance, and infrastructure. In principle, this should reduce the environmental footprint through improved agricultural efficiency. However, without considering the quality of public institutions and the effectiveness of delivery mechanisms, the high impact of these expenditures is not guaranteed.
Consumer Support	Low: Most consumer support is via in-kind or cash consumption subsidies, such as domestic food aid programs.

Source: World Bank derived from Henderson and Lankoski 2020.[32]

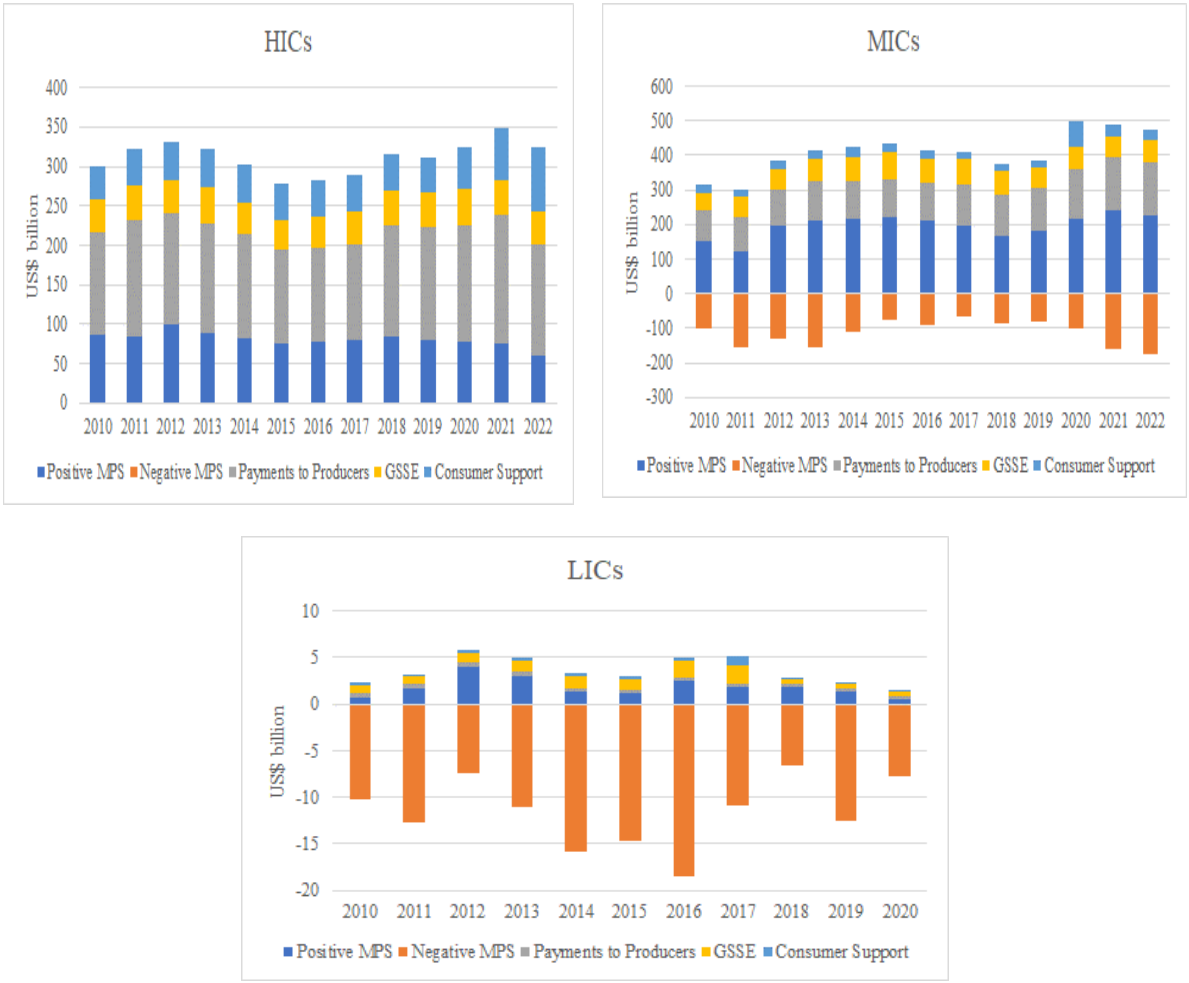
2.3 Agriculture Support Across Income Groups

21. **Agricultural support exhibits considerable variation across different income groups of countries**. HICs have maintained a steady level of support, around US$300 billion over the last decade, primarily through budgetary measures and positive MPS (Figure 9). A key characteristic of HICs is the absence of negative MPS imposed on producers. While MPS remains positive, it has been on a downward trend, with consumer support systems in place to protect vulnerable groups. MICs, in

[32] Henderson, B. and J. Lankoski. 2020. *Assessing the Environmental Impacts of Agricultural Policies*. Applied Economic Perspectives and Policy, 43(4): pp. 1487-1502.

contrast, predominantly rely on MPS to support their farmers, with some nations also employing negative MPS to shield consumers. Thus, the net agricultural support in MICs varies, reflecting diverse approaches to balancing producer and consumer interests. In total, the annual net agricultural support in MICs has increased from US$200 billion in 2010 to US$300 billion in 2022, largely driven by the increased support in China. LICs impose a significant tax burden on their agricultural sectors, as evidenced by large negative MPS values that outweigh any fiscal support. Fiscal support in LICs is relatively modest, ranging between US$1 and US$3 billion.

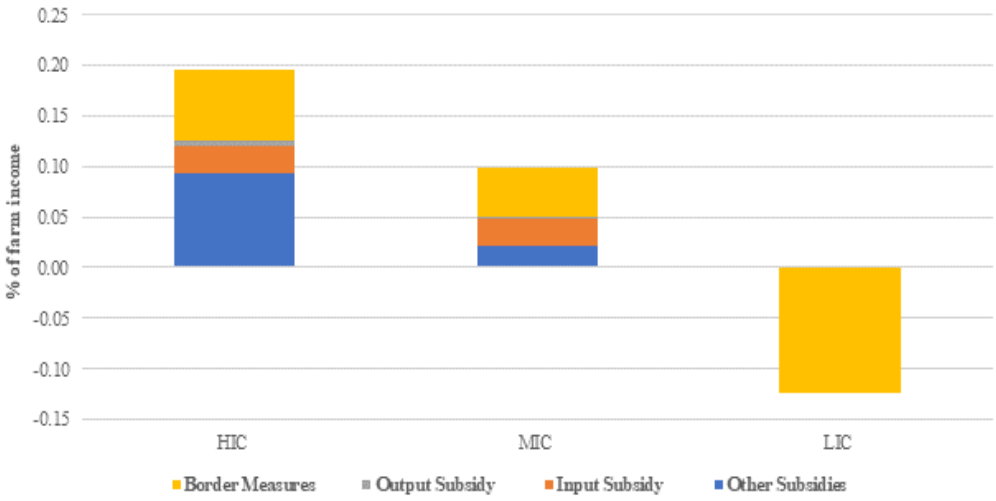
Figure 9: Agricultural Support Composition by Income Group (2010-2022)



Source: World Bank estimates using data from the Ag-Incentives Consortium (IFPRI, OECD, FAO, IDB, and World Bank).

22. **It is important to consider support mechanisms in relation to income levels to gauge their influence**. Figure 10 depicts the Nominal Rate of Assistance (NRA) for the past five years (2018-2022), defined as the percentage of farm revenue supported through budgetary transfers and market interventions. Farmers in HICs receive the highest level of support, with 19 percent of their farm receipts stemming from a combination of public expenditures and MPS policies. MICs also receive substantial support, amounting to 10 percent of their farm receipts. Conversely, farmers in LICs still receive agrifood output prices that are below export or import parity levels, being a subject to price taxation through MPS, with budgetary support being negligible. As a result, LICs experience an implicit tax of 12 percent of their income due to the negative MPS, which reduces the returns on public expenditures.

Figure 10: Producer Support by Income Category (2018-2022)

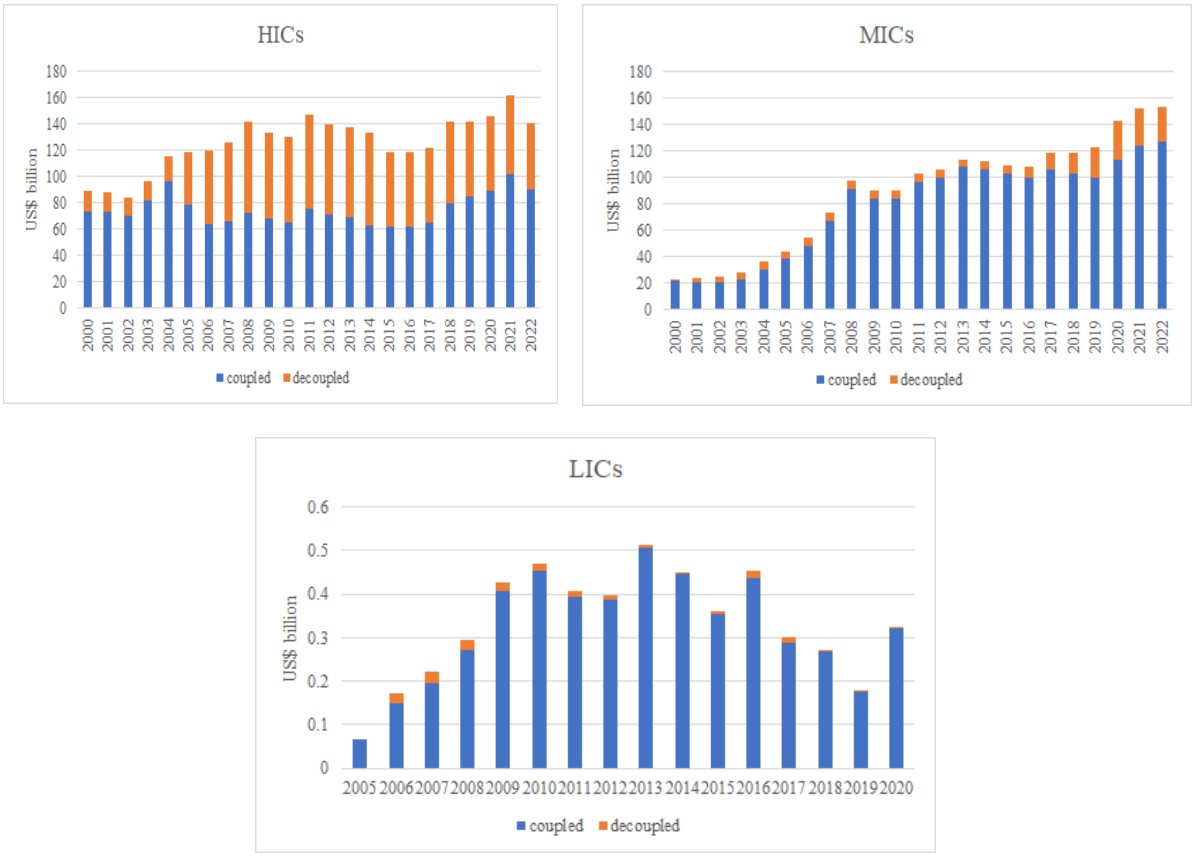


Source: World Bank estimates using data from the Ag-Incentives Consortium (IFPRI, OECD, FAO, IDB, and World Bank).

23. **The level and nature of budgetary producer support also vary across countries by income groups**. In the last five years, direct producer support in HICs has been stable, averaging US$150 billion (Figure 11). The mid-2000s witnessed a shift from coupled to decoupled support, particularly in the EU. However, since 2018, the trend has slightly reversed, with an increase in coupled subsidies. In MICs, the level of budgetary support to agricultural producers has risen, mainly through the provision of coupled support, with decoupled support showing a gradual increase in recent years. In LICs, the level of budgetary support is very small compared to MICs and HICs, and most of it is coupled, often provided as input subsidies. In SSA countries, producer support is predominantly in the form of fertilizer subsidies (Figure 12).The distortionary nature of the existing agricultural support in SSA implies that any increase in the level of support, which is so much needed there, would need to be accompanied by repurposing of existing support to induce a sustainable agrifood system transformation.

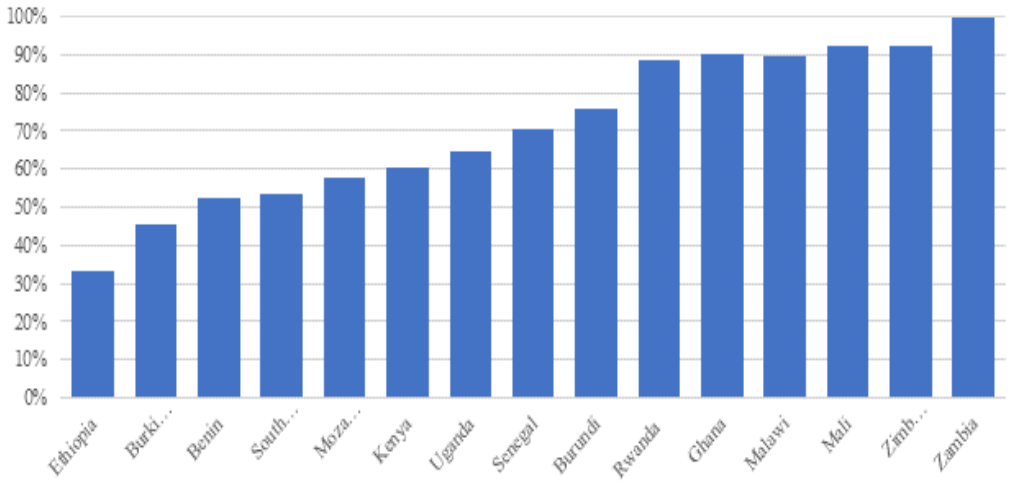
24. **The composition of agricultural support has significantly influenced the quality of agricultural growth**. In HICs, public investments in agricultural research and development, along with the shift from coupled to decoupled support, have led to a reduction in the use of intermediary inputs and land in the 1990s and 2000s. This transition to "getting more from less" enabled agricultural output to grow through TFP growth (see Chapter 1 for background). As farmers in HICs adapted to lower input use, their agricultural output growth led the global growth from 2010-2020 (Figure 13). In LICs and MICs, on the other hand, agricultural output growth was driven by a combination of increased use of intermediate inputs and natural resources (land and water) and their more efficient use (TFP growth). However, the "getting more from more" approach has recently lost momentum, leading to a slowdown in both TFP and agricultural output growth. As a result, while the growth model in HICs has reduced the GHG emission intensity of agriculture, the growth model in LICs and MICs has increased it. Going forward, sustaining positive TFP growth in agriculture, decoupled from GHG emissions, requires both the protection of natural resource quality and a steady stream of technological improvements that farmers really adopt. The current composition of agricultural support in LICs and MICs does not seem to support these developments.

Figure 11: Budgetary Producer Support Composition by Income Group



Source: World Bank estimates using data from the Ag-Incentives Consortium (IFPRI, OECD, FAO, IDB, and World Bank).

Figure 12: Input Subsidies in Direct Production Support in SSA (av. 2015-2021)



Source: World Bank estimates using data from the Ag-Incentives Consortium (IFPRI, OECD, FAO, IDB, and World Bank).

Figure 13: Sources of Growth in Agricultural Output in HICs vs. LICs and MICs (1961-2020)

Source: USDA Economic Research Service 2024.[33]

25. **In summary, despite some minor global shifts toward better practices, most of the agricultural support continues to fund programs that impose significant hidden costs on both the agrifood system and the wider economy and environment**. SSA is the only region where agriculture public expenditures are still overshadowed by negative MPS. In other regions, policy incentives provide higher returns on public spending. However, the impact of agricultural support could be significantly improved by shifting from coupled to more decoupled support instruments and GSSE, which are key to promoting green innovations. Redirecting just 10 percent of global agricultural public expenditures from the most distortive subsidies to green innovations could yield additional gains of US$2.4 trillion by 2040, as indicated by a 2022 report from the World Bank and IFPRI.[34] Enhancing agricultural research and development investments is particularly crucial to encourage high-quality agricultural growth, which could ultimately lead to a sustainable agrifood system transformation.

[33] Fuglie, K., S. Morgan, and J. Jelliffe. 2024. *World Agricultural Production, Resource Use, and Productivity: 1961-2020*. Washington, DC.: The USDA Economic Research Service, Economic Information Bulletin 268, February 2024.

[34] Gautam, M., D. Laborde, A. Mamun, W. Martin, and R. Vos. 2022. *Repurposing Agricultural Policies and Support: Options to Transform Agriculture and Food Systems to Better Serve the Health of People, Economies, and the Planet*. Washington, DC.: World Bank and IFPRI.

3. OVERVIEW OF THE WORLD BANK'S REPURPOSING INITIATIVES

26. **Since 2021, the World Bank has intensified its efforts to advocate for repurposing agricultural support**. This scale-up was made possible partly by donor contributions to the FS2030 MDTF, and partly by the growing recognition of the need to repurpose agricultural support among countries. This is seen as a crucial driver for transforming agrifood systems, a point highlighted in Chapter 1. As fiscal pressures and public debt have surged, the focus has shifted toward enhancing the cost-effectiveness of public funds rather than increasing spending levels. Moreover, governments worldwide are becoming increasingly aware of the substantial hidden costs associated with agrifood systems, prompting a renewed urgency for the repurposing of agricultural support.

27. **In recent years, the World Bank has progressed from advocating to taking concrete actions to advance the repurposing agenda**. The World Bank's support for repurposing initiatives can be categorized into six main workstreams: (i) global advocacy through the global policy dialogues; (ii) comprehensive analytical work at the global level; (iii) the Global Challenge Program on the Food and Nutrition Security (FNS-GCP); (iv) country-specific deep dives (AgPERs) that inform financing for repurposing for governments, the World Bank, and other development partners; (v) pilot projects focused on repurposing; and (vi) initiatives for knowledge sharing and forming partnerships.

3.1 Global Policy Dialogues on Repurposing Agriculture Support

28. **Since 2021, the World Bank has been instrumental in mobilizing global support for the repurposing of agricultural policies and support programs**. At COP26, the UK launched a campaign to increase visibility and commitment to policy action, innovation, and investment for a just rural transition to sustainable agrifood systems. The UK, in partnership with the World Bank, initiated the "Policy Dialogue to Accelerate Transition to Sustainable Agriculture" aimed to redirect public policies and support and scale innovation. This initiative was launched in January 2021 at the Global Forum for Food and Agriculture (GFFA). The World Bank has co-convened a series of policy dialogues with the Foreign, Commonwealth, and Development Office (FCDO) of the United Kingdom, supported by Germany's BMZ and the FS2030 MDTF. As of September 2024, there had been 15 policy dialogues at the ministerial or high-level technical official stage.

29. **The policy dialogues seek to mobilize global ambition and leadership on policy action**, including but not limited to the reform of subsidies and other fiscal instruments. The aim is to incentivize and invest in sustainable agriculture that benefits people with healthy diets and strong economies, climate mitigation and adaptation, and efforts to reverse the depletion of our natural capital. The dialogues serve to catalyze change by providing a global platform for sharing experiences between countries and mobilizing peer support for policy reforms to achieve sustainable agrifood systems.

30. **In 2021, two ministerial and two senior officials' meetings involving 34 countries were organized in the lead-up and during the 26th UN COP26**. This process led to the creation of a Policy Action Agenda, which was launched at a COP26 plenary event on Nature Day in November 2021. A platform for continued high-level and technical dialogues and learning across countries that have signed on to the Policy Action Agenda or have participated in the dialogues provides avenues for peer-to-peer exchange and support.

31. **The policy dialogue continued in 2022**. It has evolved from establishing a common understanding of what sustainable agriculture means for public policy to developing policy pathways briefs that provide explanations of different technical aspects of sustainable agriculture for policymakers. The dialogue has engaged participants from many countries, fostering learning and cross-fertilization of approaches on how to undertake policy reforms. In April and June 2022, two additional senior expert

meetings focusing on success criteria and milestones to repurpose policies and public support for sustainable agriculture were organized, driving further action and peer support to design and deliver public policies and investment. An investors roundtable took place in September 2022, co-hosted with the UK FCDO, the EAT Foundation, the Good Food Finance Network, and the World Business Council for Sustainable Development. The first ministerial meeting for 2022 was an invitation-only event at the WBG-IMF Annual Meetings in October 2022. High-level policy dialogues across countries with the Chair's summary and a note on "success criteria" were presented at the Sustainable Agriculture Day event at the launch of the Food and Agriculture for Sustainable Transformation initiative at COP27 in Sharm El-Sheikh, Egypt.

32. **In 2023 and 2024, the regional policy dialogue continued to support engagement in the repurposing of agricultural support agenda**. In the World Bank's Africa region, for example, the policy dialogues in Lusaka and Dar es Salaam in 2023 and Kigali in 2024 respectively focused on reforms of fertilizer support programs aimed at improving soil health (Box 3). In East Asia and Pacific region, the policy dialogue in Singapore in 2024 focused on transitioning to low-methane rice value chains.

Box 3: Reforms of Fertilizer Subsidies in Sub-Saharan Africa

Fertilizer use in SSA has historically been low compared to the rest of the world. The importance of fertilizers in enhancing agricultural output has been acknowledged and increasing their usage has become a key focus for policymakers. The 2006 Abuja Fertilizer Declaration emphasized the need to improve agricultural productivity by increasing fertilizer use. It set a bold goal to boost usage from 8 kg/ha to 50 kg/ha within ten years. Since then, SSA policymakers have implemented a variety of public policies and support mechanisms, with input subsidy programs (ISPs) being widely used to promote adoption. However, nearly two decades on, while some advancements have been made, fertilizer use in Africa remains among the lowest globally, averaging just 20 kg/ha of cultivated land compared to a worldwide average of 135 kg/ha. Beyond the issue of low usage, fertilizer application is often disproportionate, leading to soil degradation. Many farmers apply fertilizers without properly considering the nutrients that are essential for promoting sustainable crop growth.

One of the primary reasons for these shortcomings is that the design and implementation of public support programs have not yielded the anticipated results. The SSA region faces the formidable task of increasing food production and agricultural productivity while also dealing with declining soil health, climate change, and subpar farming techniques. These factors together create a negative cycle that leads to decreasing yields and a deteriorating natural resource base. Public policies and support programs are pivotal in supplying necessary public goods and services, including "smart" subsidies. However, direct support for producers still mainly centers on ISPs (Figure 12), although there is ample evidence that such subsidies are often misused and fail to reach their intended recipients. Additionally, the subsidies are used inefficiently due to a lack of technical knowledge about proper application and inadequate access to technical advisory services.

In this context, the focus of the global policy dialogue in SSA is on repurposing fertilizer subsidies. The policy dialogues aim to enhance the reform of ISPs by integrating e-vouchers to attract private investment, establishing digital farm registries for improved targeting, and providing advisory services that offer soil-specific fertilizer recommendations to improve soil health. Additionally, the policy dialogues will help tailor subsidies more closely to farmers' needs by sharing experiences and learning from them. By reorienting these public policies and support programs toward more effective targeting of limited public funds, encouraging more efficient fertilizer use, incentivizing sound soil management practices, and reducing logistical transaction costs, a significant contribution can be made toward addressing the escalating food crisis in SSA.

33. **Through TA, the World Bank has actively engaged in numerous high-profile events, advocating for the repurposing of agricultural support**. These events include the UN Food Systems

Summit, the Committee on World Food Security's Annual Meeting in October 2021, and the GFFA in January of 2022, 2023, and 2024. Additionally, the World Bank has been involved in various multi-stakeholder engagements organized by the Just Rural Transition initiative. The COP28 UAE Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action, endorsed by 159 countries, underscores the urgency of reevaluating policies and expenditures. This call to action aligns closely with the objectives of the repurposing efforts championed by the global policy dialogue.

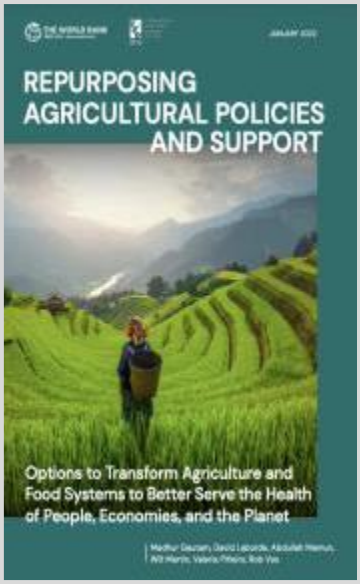
3.2 Global Analytical Agenda

34. **The World Bank has significantly contributed to expanding global knowledge on repurposing agricultural support**. The collaborative World Bank-IFPRI flagship report "Repurposing Agricultural Policies and Support: Options to Transform Agriculture and Food Systems for Better Health of People, Economies and Planet" has been pivotal in advocating for and guiding the repurposing agenda, as well as providing a robust evidence base (Box 4).[35] The key messages of the report are below:

- Agricultural policies are essential for the development of resilient agrifood systems, yet many current policies incentivize unsustainable production, leading to increased emissions, land degradation, and a neglect of nutritional focus.
- Governments globally provide over US$650 billion annually in net public support to agriculture, which often yields short-term benefits at the expense of long-term outcomes for people, economies, and the planet. This support is frequently misdirected, with each dollar of subsidy resulting in only 35 cents of additional agricultural output.
- Investing in technologies and practices that make production less harmful, more efficient, and sustainable is key to achieving "triple wins" of improved health for people, better outcomes for nature, and enhanced economic performance.
- Redirecting just 10 percent of total public support, or 30 percent of budget spending from the most distortionary subsidies to "green" innovations, i.e. those that simultaneously reduce GHG emissions and increase farm productivity—could result in a substantial payoff. By 2040, this could lead to an additional US$2.4 trillion in output compared to continuing with business as usual.
- Repurposing public support in this manner could also reduce emissions from agriculture and land use by over 40 percent, return 105 million hectares of agricultural land to natural habitats, and deliver significant gains in poverty reduction, nutrition, and economic growth.

[35] Gautam, M., D. Laborde, A. Mamun, W. Martin, and R. Vos. 2022. *Repurposing Agricultural Policies and Support: Options to Transform Agriculture and Food Systems to Better Serve the Health of People, Economies, and the Planet*. Washington, DC.: World Bank and IFPRI. https://openknowledge.worldbank.org/entities/publication/a3c86032-523e-5975-b15d-8a5dc44e18b9

Box 4: Repurposing Agricultural Policies and Support: Options to Transform Agrifood Systems to Better Serve the Health of People, Economies, and the Planet



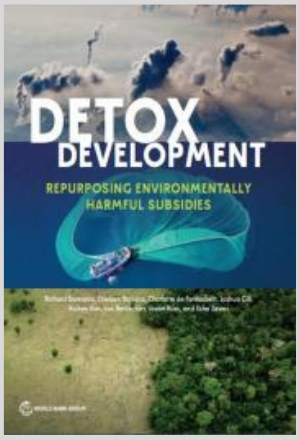
The report "Repurposing Agricultural Policies and Support: Options to Transform Agriculture and Food Systems to Better Serve the Health of People, Economies, and the Planet" assesses how agricultural support policies can be repurposed to make the food system deliver better outcomes. Given the scale and structure of the support to agricultural producers globally, this study assesses several options for repurposing current agricultural policies and support. The scenarios analyzed include: (i) a business-as-usual (or "zero") scenario; (ii) the removal of domestic support to producer or both domestic support and trade barriers or market price supports; (iii) two forms of restructuring domestic support relying on currently available technologies and practices; (iv) conditionality of support for producers who adopt emissions reduction practices; (v) repurposing a portion of current domestic support.

All solutions are not equal when it comes to rethinking agricultural public policies and support. The report finds that GHG emissions will increase substantially in the future if current policies remain the same. Simply rearranging or even removing current support would not bring about the changes needed for sustainability, nor would applying environmental conditionality to the support provided while relying solely on currently available technologies. While it could help reduce emissions in the short term, lower yields could induce farmers to expand land use for agricultural production. Policy conditionality tying support to the adoption of environment-friendly but lower-yielding farm practices could potentially reduce emissions, but would entail trade-offs for people, nature, and economic prosperity with lower agricultural production, higher poverty, higher agricultural land use and an increase in the cost of healthy diets.

Both changes in incentives and investments in innovations that simultaneously pursue productivity enhancements and GHG emission reductions are needed to deliver broad and long-standing wins. The report shows that repurposing a portion of government spending on agriculture each year to develop and disseminate more emission-efficient technologies for crops and livestock could reduce overall emissions from agriculture by more than 40 percent. Meanwhile, millions of hectares of land could be restored to natural habitats. The economic payoffs of this type of repurposing would be large. Redirecting about US$70 billion a year, equivalent to one percent of global agricultural output, would yield a net benefit of over US$2 trillion in 20 years.

35. **The Global TA on Repurposing carried out by the World Bank's Global Department for Agriculture and Food has contributed to other relevant global reports**. The flagship report *Detox Development: Repurposing Environmentally Harmful Subsidies*,[36] examines how subsidy reform can help safeguard the world's foundational natural assets—clean air, land, and oceans. These assets are critical for human health and nutrition and underpin much of the global economy. However, subsidies for fossil fuels, agriculture, and fisheries are driving the degradation of these assets and harming people, the planet, and economies. These subsidies could instead be used to finance much-needed climate action in countries across the world (Box 5).

[36] Damania, R., E. Balseca, C. de Fontaubert, J. Gill, K. Kim, J. Rentschler, J. Russ, and E. Zaveri. 2023. *Detox Development: Repurposing Environmentally Harmful Subsidies*. Washington, DC.: World Bank. http://hdl.handle.net/10986/39423



Box 5: Detox Development: Repurposing Environmentally Harmful Subsidies

Subsidies for fossil fuels, agriculture, and fisheries exceed US$7 trillion per year in explicit and implicit subsidies or about 8 percent of GDP. These subsidies lead to environmental degradation and harm people, the planet, and economies. Poor air quality caused by fossil fuel subsidies is responsible for approximately one in five deaths globally. Agriculture is subsidized in ways that promote inefficiency, inequity, and unsustainability. Oceans are in a collective state of crisis, with more than 34 percent of fisheries overfished due to fishery subsidies.

Clean air, land, and oceans are natural assets that are essential for human health, nutrition, and the global economy. The report, Detox Development: Repurposing Environmentally Harmful Subsidies, examines the impact of subsidy reform in safeguarding the world's foundational natural assets. The report aims to enhance understanding of the magnitude, consequences, and drivers of policy successes and failures to render reforms more achievable. Specifically, the report assesses the distributional, efficiency, and environmental effects of fossil fuels, agriculture, and fisheries subsidies. Findings on agricultural subsidies show that they are responsible for the loss of 2.2 million ha of forest per year, equivalent to 14 percent of global deforestation. These subsidies are also implicated in the spread of zoonotic and vector-borne diseases, especially malaria. Moreover, subsidies tend to benefit wealthier farmers and incentivize excessive fertilizer usage to the extent that it suppresses agricultural productivity.

Sector	Explicit subsidy estimates	Implicit subsidy estimates
Fossil fuels	• US$577 billion: estimate for 191 countries (Parry, Black, and Vernon 2021)	• US$5.4 trillion: impacts from local air pollution, greenhouse gas emissions, road congestion, and forgone tax revenues (Parry, Black, and Vernon 2021)
Agriculture	• US$635 billion: estimate for 84 countries (based on data from Gautam et al. 2022)	• US$548 billion to US$1.1 trillion from greenhouse gas emissions (chapter 1 of this report) • US$5.3 trillion (Pharo et al. 2019), which includes: – US$1.5 trillion from greenhouse gas emissions – US$1.7 trillion from natural capital loss – US$2.1 trillion from pollution, pesticides, and antimicrobial resistance
Fisheries	• US$35.4 billion: estimate for 152 countries (Sumaila, Ebrahim, et al. 2019; Sumaila, Skeritt, et al. 2019)	• US$83 billion: lost economic benefits from open access (World Bank 2017)
Total	• US$1.25 trillion	• US$6 trillion to US$10.8 trillion

Source: World Bank.

The report reveals that subsidy reform can remove distorted incentives that obstruct sustainability goals. However, it also can unlock significant domestic financing to facilitate and accelerate sustainable development efforts that would have greater, wider, and more equitable benefits.

3.3 Global Challenge Program on Food and Nutrition Security

36. **The World Bank established the Global Challenge Programs (GCP) to address the multifaceted global challenges impacting people, the environment, and economies.** These programs aim to address urgent challenges at scale, with greater speed and efficacy. They provide flexible and transferable solutions for key areas such as energy; FNS; water resource management; forest conservation and biodiversity; prevention, preparedness and response to health emergencies; and access to digital services.

37. **The Global TA on Repurposing has influenced the Food and Nutrition Security Global Challenge Program (FNS-GCP), catalyzing repurposing agricultural policies and support**. The FNS-GCP is committed to enhancing climate resilience and bolstering individuals' food security through initiatives that focus on crisis prevention, preparedness, and response; integrated nutrition and healthy diet solutions; and the development of low-emission, climate-resilient agrifood systems. It supports vulnerable farming households in transitioning to low carbon and climate-resilient agrifood systems,

thus bolstering their resilience to climate risks. At the heart of the FNS-GCP's value proposition is the strategic leveraging of public spending—effectively and at scale—through repurposing. Consequently, the repurposing of agricultural support has evolved from a pilot initiative in 2020 to a central enabler for agrifood system transformation in 2024.

3.4 Country Deep Dives to Inform Repurposing Options

38. **Country-level deep dives, i.e. Agricultural Public Expenditure Reviews (AgPERs), are instrumental in identifying reform options within specific national contexts, including socio-economic and politically sensitive analyses of trade-offs**. This moves the needle from global advocacy to actionable local strategies. Among other things, the country AgPERs underpin the World Bank's lending investments that aim to repurpose agricultural support. These engagements capitalize on existing development partner coordination mechanisms to ensure coherent and coordinated policy dialogue, knowledge sharing, and implementation support. The implementation of these country-level AgPERs involves engaging policymakers and government officials to secure buy-in and conducting organized stakeholder consultations, surveys, interviews, and focus groups to build broader ownership. AgPER implementation also requires taking stock of public policies and programs in agriculture and the wider agrifood system, assessing the range of impacts of these public policies and programs, and predicting potential outcomes of reforms. Implementation also involves evaluating the political economy of reform options to identify actionable plans and engage relevant in-country donor working groups to build support and leverage resources for national reform programs.

39. **Since the inception of the repurposing TA in 2020, the World Bank has been conducting AgPERs in about 40 countries** (Table 2). Repurposing options are already available in 13 countries with completed AgPERs. In 26 countries, the analysis of agricultural public policies and programs and the development of repurposing options are still underway. Most of the countries examined are from the African region, which faces the biggest data and knowledge gaps. In this region, the country AgPERs are conducted in close collaboration with the FAO-MAFAP and the FAO Investment Center. In some countries, such as Indonesia, Uzbekistan, and Vietnam, the first-generation deep dives have generated new demand from governments for more in-depth follow-up studies on repurposing.

Table 2: Country AgPERs Supported by the FS2030 MDTF (2020-2024)

No	Region/Country	Completed AgPER	Ongoing AgPER
	Africa Region		
1	Ethiopia	x	
2	Sierra Leone	x	
3	Zambia	x	
4	Zimbabwe	x	
5	Tanzania	x	
6	Madagascar		x
7	Malawi		x
8	Mozambique	x	
9	Ghana		x
10	Niger		x
11	Liberia		x
12	Namibia		x
13	Rwanda		x
14	Kenya		x

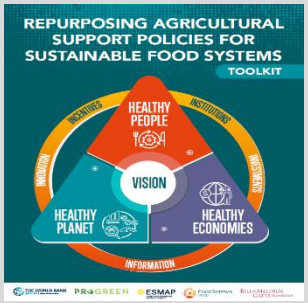
15	Cote d'Ivoire		x
	South Asia Region		
16	India		x
17	Pakistan		x
18	Nepal		x
19	Sri Lanka		x
20	Bangladesh		x
21	Bhutan		x
	East Asia and Pacific Region		
22	Mongolia	x	
23	China	x	
24	Indonesia	x	x
25	Viet Nam	x	x
26	Philippines		x
	Middle East and North Africa Region		
27	Morrocco	x	
28	Jordan		x
	Europe and Central Asia Region		
29	Armenia		x
30	Kyrgyz Republic		x
31	Uzbekistan	x	x
	Latin America and Caribbean Region		
32	Brazil		x
33	Columbia	x	
34	Argentina	x	
35	Peru		x
36	Paraguay		x
37	Regional Fiscal		x

Source: World Bank.

3.5 Knowledge Sharing

40. **The World Bank, in collaboration with the FAO-MAFAP and supported by the FS2030 MDTF and other partners, has developed a comprehensive toolkit for repurposing agricultural policies and support**. This "how-to" guide is designed to facilitate upstream policy and support analytics. Its primary aim is to assist policymakers, civil society, development professionals, and scholars in the identification, classification, and assessment of agricultural policies and support programs. It ensures these are in line with national objectives and broader goals, such as the Sustainable Development Goals. The toolkit compiles insights on various instruments that can be used to evaluate policy support in the agricultural sector (Box 6).

Box 6: Toolkit on Repurposing of Agricultural Support



The toolkit includes the following key chapters. Module 1 sets the repurposing agenda, including the description of the country's economic context, a review of agricultural and rural policy framework, an assessment of the coherence of existing policies, and global agricultural policy dialogues. Module 2 focuses on measuring the level and composition of agricultural public expenditures. Module 3 discusses the price incentives, including key indicators and price incentive analysis. Module 4 presents the methods to evaluate policy impacts, including through modeling. Module 5 sheds light on political economy aspects and suggests options for political economy analysis. Conclusions and key takeaways are presented in Module 6 of the toolkit.

41. **The World Bank's Agriculture Policy Community of Practice (APCoP) has been pivotal in spreading global analytics and key insights from external research in the sector**. Regular APCoP seminars have been a staple since the APCoP's establishment in October 2021. To date, more than 20 policy discussion sessions have been convened, each attracting significant participation and sparking vital policy dialogues between the World Bank's operational teams and leading subject matter experts. These discussions have been crucial in aiding participants to grasp new research findings and methodologies for the sustainable transformation of agrifood systems. The APCoP events have delved into a variety of topics, including the political economy of repurposing policy options, the implications of the EU Green Deal, the challenges of measuring resilience, the influence of agricultural trade on structural transformation, trade policy and FNS, reforms in agricultural policy for climate adaptation, and rural income diagnostics.

4. INITIAL ACHIEVEMENTS

42. **The World Bank's initiatives under the FS2030 MDTF have begun to yield transformative results in support of the Repurposing agenda**. These early successes include: (i) the creation of the Ag-Incentives Consortium, a collaboration among international organizations to consolidate agricultural support data; (ii) the development of an agricultural support dashboard providing data and resources for repurposing by country; (iii) the implementation of transformational agricultural reforms in selected countries with the World Bank's support; and (iv) expansion of the Agricultural PforR portfolio to facilitate comprehensive repurposing of agricultural support in various regions. Detailed accounts of these achievements set the stage for a forward-looking perspective presented in the report's final chapter.

4.1 Ag-Incentives Consortium

43. **In 2013, leading international organizations monitoring agricultural policies, including the IDB, IFPRI, FAO-MAFAP, OECD, and World Bank, established the Ag-Incentives Consortium**.[37] This initiative aims to collate a comprehensive global database of agricultural support indicators, such as the Nominal Rate of Protection (NRP) [38] and the Nominal Rate of Assistance (NRA).[39] In the most extensively covered years, this dataset spans from 2005 to 2021 for over 70 countries (treating all EU members as a single entity), representing nearly 90 percent of the global agricultural production value. This data, for instance, is used in Chapter 2 of this report. In recent years, the Consortium has received a new impetus from more attention to the repurposing agenda.

44. **Within the Consortium**, the OECD generates policy support indicators for its member countries, non-member countries, and certain emerging economies: Argentina, Brazil, China, Colombia, Costa Rica, India, Indonesia, Kazakhstan, the Philippines, Russia, South Africa, Ukraine, and Viet Nam. The IDB focuses on most other countries in Latin America and the Caribbean, while FAO-MAFAP contributes data for several SSA nations. IFPRI harmonizes and aggregates data from various partner organizations using the standard NRP methodology. As data from countries conducting AgPERs becomes available, the World Bank will incorporate this data into the Ag-Incentives database. The agencies involved in the Consortium continue to update the data for countries, in which they specialize.

4.2 Agricultural Support Dashboard

45. **The global and country-level data and analytical work on repurposing will soon feature on the GFNS Dashboard**. The GFNS Dashboard provides the latest global and country-specific data on food crisis severity, crisis preparedness, global FNS financing, emerging risks, and potential measures to enhance agrifood systems.[40] Starting in early October 2024, the GFNS Dashboard will include the *Agricultural Support* dashboard, showcasing the most recent data on public expenditures in absolute and relative terms, price incentives (NRA and NRP), and the World Bank's analytical work by country. The dashboard facilitates quick comparisons between countries, regions, and income groups and will be regularly updated with new information and data.

[37] For further information, see https://www.agincentives.org/

[38] The Nominal Rate of Protection (NRP) measures the extent to which a set of agricultural policies affect the market price of a commodity relative to world prices. It is computed as the price difference, expressed as a percentage, between the farm gate price received by producers and an undistorted reference price at the farm gate level.

[39] The Nominal Rate of Assistance (NRA) indicators provide measures of the full set of interventions affecting markets for food, including the extent of border protection or taxation; subsidies on inputs, outputs, or factors; and support for provision of public goods affecting agriculture.

[40] For further information, see https://www.gafs.info/home/

4.3 Leveraging Financing

46. **The World Bank offers a variety of financing instruments to support repurposing of agricultural support through projects and programs**. Many of these projects and programs are being informed by the country deep dives/AgPERs described in Chapter 3 and by other analytical work. The World Bank's financing is provided through PforRs, Development Policy Financing (DPF), and Investment Project Financing (IPF). PforRs and DPFs are particularly effective in supporting the repurposing of agricultural support at scale. At the same time, when these instruments are complemented by IPFs and part of Multiphase Programmatic Approach (MPA), they are more powerful and form a strategic framework for cross-country learning from agricultural reform initiatives within and outside the World Bank projects. Below is a summary of the World Bank's financing instruments:

- **DPF** provides budget support to assist countries in implementing policy and institutional reforms, such as public financial management, governance, and social sector reforms. Disbursements are made against agreed policy actions and institutional reforms and are not linked to specific investment projects.
- **PforR** is a results-based financing tool that supports government programs in delivering results. It requires a well-defined government program and strengthens borrower systems. Disbursements are linked to achieving disbursement-linked indicators.
- **IPF** funds specific investment expenditures or incremental operating costs not covered by government resources.

47. **MPA allows the countries to structure a long, large, or complex engagement as a series of smaller linked operations financed by IPF, PforR, trust funds, or a combination thereof**. Each phase may be financed by IPF or PforR, with the financing instrument for a future phase being determined at the concept stage. MPAs are based on a results chain that addresses the development challenge and emphasizes learning through explicit statements of what will be learned, the learning modality, and how the learning will contribute to the program development objective.

48. **One of the most significant outcomes of the FS2030 MDTF support for repurposing has been leveraging World Bank financing**. As the largest financier of agrifood system development assistance, the World Bank's influence on financing toward the repurposing agenda has been transformative. For instance, during 2018-2021, the World Bank provided an estimated US$12 billion annually for agrifood systems, according to the 3FS Tool project using the OECD data.[41] For comparison, during the same period, the EU was the second largest financier, with an annual financing of US$8 billion, followed by the Asian Development Bank (US$3.6 billion), IDB (US$2.1 billion), and the African Development Bank (US$1.2 billion). Below are examples of transformative results supported by World Bank financing.

Development Policy Financing

49. **Country AgPERs underpin repurposing and inform numerous World Bank operations, including DPOs**. These reviews provide a comprehensive analysis of agricultural sector public expenditures, assessing their alignment with policy objectives and effectiveness. While not all DPOs support only agricultural repurposing, a large share of prior actions (PAs), which need to be achieved

[41] The 3FS was co-developed by the International Fund for Agricultural Development (IFAD) and the World Bank in collaboration with the Inter-American Institute for Cooperation on Agriculture and the UN Food Systems coordination hub. The 3FS also leverages the expertise and instruments of the ecosystems of support. The 3FS is a response to the lack of information on financial flows to food systems. It aims at providing decisionmakers and stakeholders with evidence on the scale and scope of such flows at country and global levels to inform impactful decisions and foster mutual accountability for transformative to food system financing.

before the DPOs disburse funds, has focused on increasing the value for money of agricultural public expenditures and/or reforming distortive agricultural policies. From 2014 to 2023, the World Bank committed a total of US$139.4 billion in DPOs, with 68 percent provided by the International Bank for Reconstruction and Development (IBRD) for MICs, 25 percent by the IDA for LICs, and 7 percent by a mix of IBRD/IDA financing. Of these commitments, US$6.8 billion, or 5 percent, was allocated to DPOs with agricultural PAs.

50. **The DPO series has supported transformational agricultural reforms in countries like the Philippines and Uzbekistan, informed by country AgPERs and other analytical work**.[42] These reforms have addressed significant agricultural price disincentives and initiated the repurposing of public spending. The need for reforms in these countries was recognized over two decades ago, but the opportunity for implementation only arose recently. In the Philippines, the 2019 rice tariffication law liberalized rice importation, reducing the gap between domestic and international prices, benefiting poor Filipinos.[43] In Uzbekistan, agricultural price liberalization reforms in the 2020s eliminated taxation on cotton and wheat prices, providing significant relief to farmers estimated at 1.6 percent of GDP.

51. **In the Philippines, rice imports were heavily regulated, leading to high and volatile prices**. Rice is a staple food, and its production was one of the most protected, with strict import restrictions. These restrictions led to high import costs and timing issues relative to domestic demand, resulting in price disparities with international markets, smuggling, and disincentives for domestic market investment. Domestic rice prices in the Philippines were consistently well above international export prices from Thailand and Viet Nam, with an increasing price difference over time. Consequently, the agricultural sector stagnated, with slow TFP growth and limited progress in poverty reduction.

52. **The World Bank's DPO series in 2019 and 2020 supported the Philippine government's efforts to liberalize rice importation and create a more competitive sector**. The Rice Liberalization Act passed in February 2019 eliminated import restrictions and introduced a transparent tariff regime.[44] Tariff revenues have been used to safeguard rice farmers and improve local rice productivity.[45] Since the reform, rice prices have declined, but production has continued to grow. Comparing the five years prior to the implementation of the Rice Tariffication Act (2015–2019) with the five years following its implementation (2019–2023), paddy production increased by 5.2 percent, with the poorest Filipinos benefiting the most (Figure 14). In July 2024, the government decided to further reduce the import tariff for rice from 35.0 to 17.5 percent until 2028 to contain food price inflation, which would further reduce the extent of distortion in the Philippine's agriculture.

53. **The World Bank's involvement in economic reforms in Uzbekistan, which began in 2017, has been crucial in the country's shift from a centrally planned to a market-based economy**. Before these reforms, Uzbek farmers were burdened by artificially low state procurement prices for cotton and wheat, leading to a loss of 1.6 percent of GDP annually, while the government invested 2.0 percent of GDP in various agricultural programs. These low farmgate prices, along with a narrow focus on cotton and wheat production, resulted in a low return on agricultural public expenditures. This situation led to

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[42] World Bank. 2019-2020. *Philippines Rice Policy ASA*. Washington, DC: World Bank; Zorya, S. 2007. *Philippines: Agriculture Public Expenditure Review*. Washington, D.C.: World Bank. http://documents.worldbank.org/curated/en/508941468298444655/Philippines-Agriculture-public-expenditure-review

[43] Tolentino, B. and B. Pena. 2020. *Deregulation and Tariffication Act at Last: The Saga of Rice Sector Reform in the Philippines*. Manila: BSP Working Paper Series 2020-06.

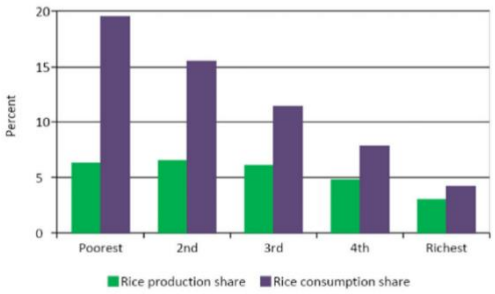
[44] The agricultural PA: *Through the Rice Liberalization Act (RA No. 11203) and implementing rules and regulations, the government has liberalized the rice import market by shifting a quantitative restriction system to a transparent tariff system*. For further information, see https://projects.worldbank.org/en/projects-operations/project-detail/P170052.

[45] The agricultural PA: *Through Department of Agriculture resolutions No. 1 and 6, the Department of Agriculture established clear and transparent eligibility criteria for assessing the Rice Competitiveness Enhancement Fund to implement the Rice Liberalization Act and the joint Memorandum Circular Number 01-2019*. For further information, see https://projects.worldbank.org/en/projects-operations/project-detail/P170914.

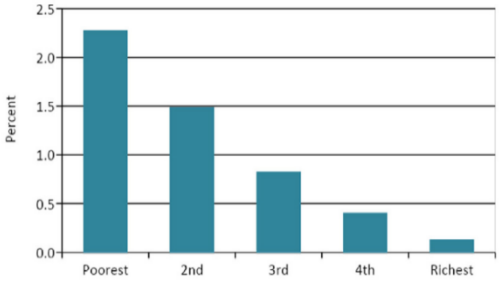
stagnation in cotton and wheat production, which used 70 percent of the most productive irrigated land, causing an increase in wheat imports, a decrease in cotton exports, soil degradation, limited crop diversification, inadequate public support for soil health, and excessive water use for irrigation—all worsened by climate change.

Figure 14: Impact of the Rice Tariffication on Poverty Reduction in the Philippines

(a) Share of rice production and consumption by poverty quantile



(b) Poverty reduction from the lower rice prices by poverty quantile



Source: Balie et al. (2021). [46]

54. **The World Bank's DPO series from 2019 to 2021 supported Uzbek government's efforts to liberalize cotton and wheat prices and phase out the state production and procurement system**. The 2019 DPO helped increase procurement wheat prices and liberalize bread prices.[47] In 2020, the cotton state production system was abolished, and cotton prices were liberalized.[48] The 2021 DPO backed the liberalization of the wheat pricing system.[49] These reforms removed the implicit taxation on farmers, contributing to an increase in agricultural growth from 0.8 percent in 2017-2018 to 3.3 percent in 2020-2022.[50]

55. **The enhanced agricultural price incentives allowed for investments in key public programs for agricultural development in Uzbekistan**. In 2020, the World Bank approved a US$500 million agricultural modernization project to boost productivity-supporting agricultural services, invest in horticulture value chains, and facilitate trade and marketing. This project marked a significant move toward repurposing agricultural support, which previously focused on promoting cotton and wheat production and compensating farmers for the imposed taxation through low farmgate output prices.

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[46] Balie, J., N. Minot, and H. Valera. 2020. *Distributional Impacts of the Rice Tariffication Policy in the Philippines*. Economic Analysis and Policy 69(3).

[47] The agricultural PA: *To increase agricultural exports and incomes for farmers, the Borrower has (i) removed mandatory pre-payment and minimum export price requirements for horticultural exports, (ii) removed controls on the sale price of shaped bread; and (iii) increased the state farmgate procurement price offered to farmers for the 2019 wheat harvest*. For further information, see https://projects.worldbank.org/en/projects-operations/project-detail/P168280.

[48] The agricultural PA: *In accordance with the Borrower's agricultural modernization strategy to increase climate resilience, diversify agriculture, increase the transparency and efficiency of land distribution, and eliminate state agricultural production, the Borrower has abrogated the state cotton order system by removing mandatory cotton production targets and mandatory state procurement of cotton*. For further information, see https://projects.worldbank.org/en/projects-operations/project-detail/P171751.

[49] The agricultural PA: *In accordance with the Borrower's agricultural modernization strategy to increase climate resilience and eliminate state-controlled agricultural production, the Borrower has abrogated restrictions that required wheat farmers to sell a fixed quota of production to the State, at a price regulated by the State, thereby allowing farmers full freedoms to determine their buyers and to set farmgate prices based on market conditions*. For further information, see https://projects.worldbank.org/en/projects-operations/project-detail/P176353.

[50] Zorya, S. 2022. *Review of Implementation of Uzbekistan's Agricultural Strategy 2020-2030*. Washington, DC.: World Bank.

56. **The reforms in Uzbekistan were supported by the analytical work of the World Bank and other donors, which informed the funding for reforms through DPFs and IPF**. In 2019, the World Bank provided TA to help the government prepare the Strategy for Agriculture Development 2020-2030. The first AgPER in 2020 set the baseline for the level and allocative efficiency of agricultural public expenditures, compared Uzbekistan with its peers, and analyzed agricultural price incentives.[51] The second AgPER, completed in 2021, conducted a more comprehensive review of agricultural support and assessed the implementation's quality of selected programs.[52] In 2022, the World Bank reviewed the two-year implementation of the government's Strategy for Agriculture Development 2020-2030.[53] This transformative analytical work, some of which was supported by the FS2030 MDTF, has been instrumental in guiding the country's agricultural reforms.

Programs for Results

57. **PforR is a financing instrument that aligns with country programs to achieve specific outcomes**. It is grounded in a robust government program and enhances government systems by linking financing to Disbursement-Linked Indicators, ensuring funds are released upon achieving targeted results. PforRs typically span an average of five years and are bolstered by the country-level AgPERs and the FS2030 MDTF, which are instrumental in supporting Agricultural PforRs. During the 2019-2024 fiscal years, the PforRs amounted to US$3.4 billion, accounting for 14 percent of the World Bank's total agricultural lending (Table 3). The agricultural PforRs have been either underway or recently closed in China, Bangladesh, Jordan, Morocco, Pakistan, Rwanda, Senegal, Tanzania, Ukraine, and Zambia. New Agricultural PforRs are in the pipeline for China, Morocco, and the Philippines.

Table 3: Agricultural PforRs in the World Bank's Agricultural Portfolio (Commitments), US$ Million (2019-2024 Fiscal Years)

Approval fiscal year	IPF	PforR	Total
2019	2,240.9	271.0	2,511,9
2020	2,805.8	150.0	2,955.8
2021	4,262.8	750.0	5,012.8
2022	5,079.9	435.0	5,514.9
2023	4,301.1	1,622.6	5,923.7
2024	2,370.3	200.0	2,930.3
Total	**21,420.7**	**3,428.6**	**24,849.3**

Source: The World Bank.

58. **Many agricultural PforRs seek to realign domestic policies and expenditures with CSA objectives**. In China, several recent PforRs have concentrated on the agricultural sector's environmental sustainability. They include US$320 million Green Agricultural and Rural Revitalization PforR for Guangxi and Guizhou provinces approved in 2022,[54] and US$345 million China Green Agricultural and Rural Revitalization PforR for Hubei and Hunan provinces,[55] alongside a US$255 million Methane

[51] Zorya, S. 2019. *Uzbekistan: First Agriculture Public Expenditure Review*. Washington, DC: World Bank Group.

[52] Zorya, S., M. Gautam, T. Tesfaye, S. Babaev, and P. Nazarov. 2021. *Uzbekistan: Second Agriculture Public Expenditure Review*. Washington, DC: World Bank, https://documents1.worldbank.org/curated/en/381251635752865696/pdf/Uzbekistan-Second-Agricultural-Public-Expenditure-Review.pdf

[53] Zorya, S., T. Tesfaye, D. Khidirov, S. Babaev, and P. Nazarov. 2022. *Uzbekistan: Review of Agriculture Strategy Implementation in 2020 and 2021*. Washington, D.C.: World Bank.
Group. http://documents.worldbank.org/curated/en/099235005262218526/P1777350ef54ee03f0abb302afebb4015e9

[54] https://documents1.worldbank.org/curated/en/797551649092529851/pdf/China-First-Phase-of-Green-Agricultural-and-Rural-Revitalization-Program.pdf

[55] https://documents1.worldbank.org/curated/en/099041123075018489/pdf/BOSIB043346cdf0d40825b098d7cd615887.pdf

Reducing and Waste Saving Paddy Rice PforR for Hunan Province, both approved in 2023.[56] These initiatives position the World Bank to continue its support for the transition towards environmentally sustainable agricultural practices in China.

59. **In 2023, the World Bank endorsed a US$500 million Program for Agricultural and Rural Transformation for Nutrition, Entrepreneurship, and Resilience in Bangladesh.**[57] This PforR is founded on robust analytical work and supports the execution of the National Agriculture Policy 2020's Plan of Action. It redirects the sector's strategic focus toward diversification, value addition, and climate resilience. Diverging from the historical emphasis on rice and fertilizer subsidies within the Ministry of Agriculture's spending, the PforR champions policies and investments that encourage diversification, food safety, nutrition, value chain development, entrepreneurship, and climate resilience. A critical element of this new program is the trial of an e-voucher system, which explores innovative approaches to agricultural subsidies. This pilot program provides farmers with multiple direct support options to improve diversification, productivity, efficiency, resilience, and profitability. It also aims to analyze how different subsidy scenarios affect these factors. Furthermore, with backing from the FS2030 MDTF, the TA for Repurposing Agricultural Public Support Towards a Sustainable Food System Transformation in Bangladesh is in progress, with the goal aim to improve e-voucher pilot's design and implementation and inform strategies for reallocating input subsidies to programs that foster CSA.

60. **In 2019, the World Bank approved a US$200 million PforR for Ukraine - Accelerating Private Investments in Agriculture.**[58] This PforR aimed to reduce sectoral barriers to enhance the participation of the private sector, especially small and medium-sized enterprises, in agricultural input and output markets. The PforR was restructured in 2022 and 2023 to adjust to the shifting policy environment following Russia's invasion of Ukraine. Despite war-related challenges, the PforR successfully aided the transition of agricultural support from large to small and medium-sized farms, establishing a functional state agrarian registry for transparent and targeted delivery of public support and facilitating the agricultural land market liberalization reforms started in 2021.

61. **In Zambia, the World Bank approved a US$300 million Growth Opportunities PforR**[59] **in 2022**. This PforR backs the reduction in the ISP (fertilizer subsidy) budget, the improved targeting of agricultural support, the facilitation of agricultural exports without restrictions, and the private sector's role in managing public food stocks through the Food Reserve Agency. The PforR has enabled the subsequent approval of a US$170 million Agribusiness and Trade Project[60] in 2023, which aims to increase market access and finance and promote growth in Zambia's agribusiness sector. Among other initiatives, the project's key interventions include supporting productivity-enhancing investments through credit lines and strengthening regulatory institutions to create a favorable business environment for agribusiness and trade.

Repurposing investment projects

62. **The FS2030 MDTF has been pivotal in transitioning the repurposing agenda from analytical work to practical implementation**. As of September 2024, it has allocated implementation grants totaling US$95 million to support repurposing IPF projects in seven pilot countries: Bangladesh, Colombia, Ghana, Indonesia, Malawi, Mozambique, and Tanzania. These projects seek to test innovative

[56] https://documents1.worldbank.org/curated/en/099051123171042393/pdf/BOSIB00cc979df0a30bc610e840f8cc6be2.pdf

[57] https://projects.worldbank.org/en/projects-operations/project-detail/P176374

[58] https://documents1.worldbank.org/curated/en/903491559008866876/pdf/Ukraine-Accelerating-Private-Investment-in-Agriculture-Program-Project.pdf?_gl=1*1eumvyi*_gcl_au*MTI3MzgwMTYwNi4xNzE4MTE3MzA3

[59] https://documents1.worldbank.org/curated/en/969601656370418030/pdf/Zambia-Growth-Opportunities-Program-for-Results-Project.pdf

[60] https://documents1.worldbank.org/curated/en/099053023171028978/pdf/BOSIB045c5f1d40ad0bf0f062d1a5e11729.pdf

methods for repurposing fertilizer support and other public programs. The goal of these tests is to leverage more substantial investment operations and influence a significant portion of agricultural public expenditures. While these projects are still being prepared, the willingness of the countries to engage through these pilots in agricultural reforms is a significant achievement. The following is a summary of current initiatives in the seven pilot countries:

- **Bangladesh**: An US$18 million grant, together with the US$500 million from the World Bank-financed PforR, is facilitating direct support to farmers through an e-voucher system for input subsidies. This initiative is designed to inform the gradual repurposing of the current fertilizer subsidy program, which has a budget exceeding US$2 billion, and to expand its coverage nationwide. The grant agreement was signed in June 2024, and the project's implementation commenced in July 2024.
- **Colombia**: A US$10 million grant, as part of the US$667 million's World Bank investment project, aims to redirect public spending from direct producer support to GSSE such as research and advisory services. The grant also seeks to improve small farms' access to finance, enabling them to adopt green/climate-smart agriculture (CSA) technologies by making CSA technology packages more suitable for small-scale farms, bundling financial services with advisory services, and enhancing public institutional capacity to track the repurposing of agriculture support policies and programs. This grant is part of the World Bank investment financing project "Access to Finance for the Sustainable Transformation of the Agrofood Systems" under the Multiphase Programmatic Approach (MPA) Colombia Agrifood System Transformation, which will be submitted for the approval of the World Bank's Board of Executive Directors in December 2024.
- **Ghana**: A US$17 million grant, leveraging a US$250 million investment project by the World Bank, is reorienting existing agricultural public support from the public delivery of inputs toward a private sector-led and digital platform-based input support delivery mechanisms. This new approach will improve the efficiency and effectiveness of public expenditure in the sector. The grant is linked to the West Africa Food System Resilience Program (FSRP) MPA, with the grant agreement signed in June 2024 and implementation started in July 2024.
- **Indonesia**: A US$10 million grant will support a pilot in various locations to inform the reform of the nearly US$3 billion annual fertilizer subsidy program. The pilot will test more direct and better-targeted input subsidy transfers to farmers, develop a digital farm registry platform for improved targeting, combine input support with advisory services, soil testing, and other complementary services, and conduct impact evaluations for future scaling. This pilot will also underpin the proposed investment project under the Low-Methane Agriculture Transformation in East Asia MPA, with the grant agreement expected to be signed in the second quarter of 2025.
- **Malawi**: A US$20 million grant, along with a US$250 million's World Bank investment project, will provide farmers with technical support to ensure more efficient use of fertilizer subsidies through e-vouchers and allow a better targeting of support through a digital farm registry. Incentives for crop diversification, soil health restoration practices, and payments for ecosystem services will also be introduced. The government intends to use the results of the pilot project to inform the repurposing of its existing affordable inputs program, which is valued at US$300 million annually. The grant is linked to the East Africa FSRP MPA project, with the grant agreement scheduled for signing in November 2024.
- **Mozambique**: A US$10 million grant, part of US$75 million World Bank investment project, will reward farmers for improved efficiency of inputs through the repurposing of fertilizer support program. The targeted subsidy reforms will provide technical training, incentivize the adoption of more sustainable practices and technologies, and revise policies to encourage

private sector investment, including through e-vouchers. The grant is part of the investment project prepared under the FSRP MPA, with submission for the approval of the World Bank's Board of Executive Directors projected for the first quarter of 2025.

- **Tanzania**: A US$10 million grant, as an additional financing to $300 million PforR financed by the World Bank, will pilot initiatives to strengthen the quality of public programs for soil health, crucial for the more efficient use of fertilizers. The integration of services such as advisory services, soil maps and testing, and digital farmer registry is expected to improve the efficiency, efficacy, and transparency of public support. The grant is linked to the East Africa FSRP MPA project, with the grant agreement was signed on September 26, 2024.

63. **Supporting the implementation of these repurposing projects offers a unique opportunity to learn and share knowledge with other countries on designing and implementing politically sensitive reforms**. As such, a comprehensive impact evaluation will be conducted for each project, with the results to be widely disseminated within the World Bank and externally.

64. **The initial achievements mentioned above establish a solid foundation for the World Bank to scale up its work on repurposing**. The forthcoming chapter presents a forward-looking perspective.

5. FORWARD LOOK

65. **As the agenda for repurposing agricultural support gains traction globally and at the country level, the World Bank is committed to intensifying its support**. Moving forward, the World Bank's Global TA on Repurposing will build on the initiatives outlined in Chapter 3, aiming to broaden and deepen their impact. The forthcoming sections detail the focus areas of this forward-looking strategy.

5.1 Continue to Provide Inputs into High-Level Global Forums and Deepen Policy Dialogues

66. **The World Bank will sustain the global momentum for repurposing by continuing to offer a platform for exchanging experiences and fostering peer support in agricultural policy through high-level policy dialogues**. Contributions from the repurposing efforts will be presented at the WBG-IMF Annual and Spring Meetings, G20, COPs, and other strategic high-level engagements. Key policy dialogues will be co-hosted in collaboration with partners like the UK FCDO, the German BMZ, Alliance for a Green Revolution in Africa (AGRA), and others.

67. **Regional policy dialogues will be intensified**. In SSA, discussions will center on policies and support mechanisms for soil health and the reform of fertilizer support programs. In Asia, the dialogues will serve as a platform to share experiences and shape the policy debate on promoting low-emission agriculture, particularly within the rice value chain, to reduce methane emissions. In Latin America, new dialogues are planned to commence on sustainable livestock, focusing on policy incentives for methane emission reduction from livestock production. Further dialogues will be organized on a demand-driven basis.

5.2 Scale Up the Country Deep Dives to Inform the Financing

68. **The World Bank plans to increase the number of country-level AgPERs to identify repurposing options that the World Bank and other partners could finance in a larger number of countries**. The aim is to prepare repurposing options for annual agricultural support in the amount of at least US$50 billion through these AgPERs. This analytical foundation will inform the design of agricultural PAs as part of DPOs and PforRs to facilitate reforms with the World Bank's financing, including under MPAs. The Global TA on Repurposing will continue to collaborate with MPAs in SSA, East Asia, and countries such as Brazil and Colombia to foster strategic knowledge generation and sharing, maximizing the benefits of MPAs.

69. **The implementation of the GCP-FNS will maintain the momentum for the repurposing agenda**. This agenda is a core component of the GCP-FNS's comprehensive and ambitious financing strategy. The strategy's central value proposition is to leverage public spending more effectively—and on a larger scale—through repurposing and de-risking, thereby enabling more agile responses from private sector stakeholders, increasing additionality and concessionality through climate finance, and scaling up by defragmenting and streamlining the GCP-FNS donor landscape. The GCP will use a range of financial mechanisms by: (i) focusing on more effective use of public sector resources and revenue generation, with cross-sectoral policy reform as a central element; (ii) eliminating negative price taxation of farmers where it persists, in particular in SSA; (iii) leveraging finance and programmatic co-financing from other multilateral entities or dedicated funds; (iv) engaging the private sector and philanthropies; and (v) optimizing the use of MDTFs and Financial Intermediary Funds.

5.3 Deepen the Analytical Agenda

70. Alongside the country-level AgPERs, the World Bank will produce global insights on the utilization of various policy instruments to advance the repurposing agenda. In 2025 and 2026, the Global TA on Repurposing will concentrate on selected topics, some of which are outlined below.

71. **The first topic is strategic grain reserves (SGRs)**. The objective is to develop global knowledge and policy recommendations for managing SGRs in the context of climate change and the increasing threats to global FNS. This initiative is in partnership with the World Food Programme. SGRs have been increasingly used in recent years by LICs and MICs to address the uncertainties in global agrifood markets and the volatility of agrifood prices. This analytical work aims to review recent SGR management experiences, compare them with historical successes and failures, and propose guiding principles and recommendations for more efficient SGR utilization to enhance FNS.

72. **The second topic is fertilizers and soil health enhancement in SSA**. This study will concentrate on SSA, the region with the world's lowest fertilizer usage rates, contributing to food and nutrition insecurity and soil degradation. The focus will be on promoting sustainable fertilizer use, increasing the supply response of fertilizers, reducing fertilizer costs at the farmgate, and designing public support programs that incentivize soil health improvement and result in a stronger supply response with increased private sector participation. The study will also evaluate past efforts on 'smart subsidies' for efficient fertilizer use and extract lessons for future fertilizer support programs in the region. This research will both inform and be informed by the repurposing projects and the policy dialogues on reforming fertilizer support programs.

5.4 Support Implementation of the Repurposing Projects

73. **The World Bank will support the implementation of the repurposing pilot projects financed by the FS2030 MDTF** (see Chapter 3). With projects in Bangladesh and Ghana already prepared and another five in the late stages of preparation, efforts will soon move to implementation. The World Bank's project implementation support to countries will generate knowledge and experience beyond targeted countries to inform similar reform efforts regionally and globally, including through an e-knowledge academy (see Chapter 5.5).

74. **The number of repurposing pilot projects will expand, using funds already secured within the FS2030 MDTF**. Depending on the demand from countries, two additional country awards, each amounting to roughly US$10 million, will be granted, increasing the total number of repurposing projects from seven to nine and the funding from US$95 to US$115 million. The number of repurposing projects could be increased should more funds become available.

5.5 Enhance Cross-Country Learning Through the Knowledge Academy

75. **An e-knowledge academy on repurposing agricultural policies and support for sustainable food system transformation will be launched**. The e-knowledge academy's primary objective is to provide comprehensive guidance to both internal (World Bank's staff) and external (policymakers and other stakeholders) audiences by offering an overview of the repurposing agenda, tools, and resources for identifying repurposing options. It also aims to facilitate evidence-based policy dialogue to promote the implementation of repurposed policy options.

76. **The program will be delivered through e-learning and hybrid knowledge exchange and learning interventions, with updates based on feedback from evaluations**. It will feature several modules, that, for example, cover 'setting the context,' 'tools and approaches for identifying repurposing policy options,' and 'pathways to repurposing,' which will provide foundational knowledge about the repurposing agenda. Completion of the program will take approximately 95 minutes via the WBG Open Learning Campus. Future thematic modules, or 'Repurposing for What,' will delve into specific areas

under “Repurposing Agricultural Policies and Support Thematic Entry Points.” The e-knowledge academy will raise awareness, strengthen coalitions for accelerated repurposing of agricultural public policies and expenditures, and equip stakeholders with the knowledge, data, tools, examples, and cross-country experiences needed to operationalize repurposing successfully.

5.6 Include Agricultural Support Data on the GFNS Dashboard

77. **In May 2022, the World Bank and the German G7 Presidency jointly launched the global Agriculture and Food Security initiative to catalyze a coordinated response to the global FNS crisis**. The GFNS Dashboard provides the latest global and country-level data on the severity of the food crisis, crisis preparedness, global food security financing, and innovative research to enhance crisis response and resilience.[61] In October 2024, the GFNS Dashboard will be expanded to include a new module on agricultural support, as discussed in Chapter 4. This module will compile data from organizations such as the OECD, FAO-MAFAP, IDB, and the World Bank, offering information on key spending parameters like NRP, NRA, direct support to farmers, and budgetary support to agriculture, along with the major mechanisms used globally and at the country level. In addition to providing agricultural support data, the module will feature various AgPER reports prepared by the World Bank, repurposing publications and policy documents, and examples of repurposing actions undertaken by countries worldwide.

78. **The agricultural support dashboard will be updated regularly**. As new data and information from ongoing AgPERs and other efforts become available, they will be uploaded to the website, and additional user-friendly features will be incorporated to encourage both external and internal stakeholders to use the data and information for informing their repurposing strategies.

5.7 Strengthen Partnerships

79. **The World Bank will enhance existing partnerships with the FCDO, BMZ, and other donors, as well as strategic engagements with countries and other partners, including the African Union and AGRA**. Additionally, the World Bank will leverage the advanced knowledge and collaboration with CGIAR, particularly through the Accelerating Impacts of CGIAR Climate Research for Africa and through IFPRI, to model and design repurposing options. Concurrently, the World Bank will foster innovative partnerships such as the Ag-Incentive Consortium and the 3FS Tool for assessing the agrifood system financing flows with IFAD.

[61] For further information, see https://www.gafs.info/home/