MOZAMBIQUE

Agriculture Support Policy Review

Realigning Agriculture Support Policies and Programs

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List of Acronyms

AfCFTA	Africa Continental Free Trade Area
Ag GDP	Agriculture Gross Domestic Produc
AgPERs	Agriculture Public Expenditure Reviews
CAADP	Comprehensive Africa Agriculture Development Program
CAP	Common Agriculture Policy
CFMP	Medium Term Fiscal Scenario (Cenário Fiscal do Médio Prazo)
CIF	Cost, insurance and Freight
CO2	Carbon Dioxide
COVID-19	Coronavirus disease
CSA	Climate Smart Agriculture
CSE	Consumer Support Estimate
EU	European Union
FAO	Food and Agriculture Organization
FDI	foreign direct investment
FOB	Free on Board
FTA	Free Trade Area
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GSSE	General Services Support Estimate
Ha	Hectare
IADB	Inter-American Development Bank
IFC	International Finance Corporation
IFPRI	International Food Policy and Research Institute
INE	National Institute of Statistics of Mozambique
KPI	Key Performance Indicator
MADER	Ministry of Agriculture and Rural Development
MAFAP	Market-oriented Smallholder Agriculture Project
MEF	Ministry of Economy and Finance
MFN	Most Favored Nation
MGS	matching grant schemes
MPS	Market Price Support
MSME	Micro, small, and medium enterprise
Mts	Metical
MT	Metric Tons
NAFTA	North American Free Trade Agreement
NEPAD	New Partnership for Africa's Development
NSmartAg	Nutrition Smart Agriculture
OECD	Organisation for Economic cooperation and Development
PEDSA 2	Second Agrarian Sector Development Strategy
PNIDSA 2	National Agriculture Investment Plan
PSE	Producer Support Estimate
SADC	Southern Africa Development Community
SCT	Single Commodity Transfer

SREP	Sustainable Rural Economy Program
SSA	Sub-Saharan Africa
TSE	Total Support Estimate
WB	World Bank
WFP	World Food Programme
WTO	World Trade Organization

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Executive Summary

This report assesses agriculture policy support estimates in Mozambique. These estimates represent the monetary value assigned to different agriculture support policies and programs using the OECD methodology[1] for 2018. The advantages of using the OECD methodology are that: (a) it provides a systematic and integrated view of agriculture support policies and programs (not limited to the more traditional public expenditure reviews or rate of protection); (b) given the large number of countries using this same methodology to measure support estimates, an immediate benchmarking is possible across a large set of comparators[2] ; and (c) the methodology is simple and can be integrated into the agriculture public policy analysis conducted by the Government and other stakeholders.[3] The methodology also has some disadvantages and limitations, mainly: (a) while it quantifies the level of support provided to producers and consumers, it does not further disaggregate support received by type of agricultural producers (small-scale/large-scale; family farm/commercial) or consumers; (b) since the estimates are based on the monetary value of budget and price support, non-monetary support, like the quality of policies, is not captured (e.g., the methodology is able to identify how much policy/program support is invested in land administration efforts, but unable to qualify the impact (quality) of those policies/programs). Finally, given that data for only 1 year was obtained (2018), results should be seen as partial given potential for year-on-year changes in international vs. domestic prices. At least 2 or 3 year averages are ideal for using this methodology for estimating supports. Nevertheless, the broader structure of agriculture support estimates and messages remain valid.

This assessment aims to support the Mozambique Government in reviewing its agriculture policies and programs, in particular to: (a) provide new estimates and a new approach to assess sector support for policy decision-making; (b) allow for benchmarking agriculture support policies with a large global database of countries using the same estimate methodology; and (c) help kickstart a policy dialogue on realigning agriculture policies and programs in Mozambique towards greater sector competitiveness and fast economic recovery from the COVID-19) pandemic, increased food security and nutrition outcomes, and climate sustainability through a build back better approach.

1 *See methodology manual at: http://www.oecd.org/agriculture/topics/agricultural-policy-monitoring-and-evaluation/documents/producer-support-estimates-manual.pdf*

2 *At present, the OECD methodology for agriculture support estimates covers 109 countries. This includes OECD countries, non-OECD EU Member States (subject to data availability), and a number of developing countries where monitoring is done by the OECD, IADB, and FAO's MAFAP unit. The 54 countries monitored by the OECD are Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, the European Union (Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Spain, Slovakia, Slovenia, Sweden, the United Kingdom), India, Indonesia, Iceland, Israel, Japan, Kazakhstan, Korea, Mexico, New Zealand, Norway, the Philippines, the Russian Federation, South Africa, Switzerland, Turkey, Ukraine, the United States and Viet Nam.*

3 *As part of this assessment, a training of more than 15 public sector staff was undertaken to build capacity and allow for Government to update the estimates going forward.*

Report Highlights

- **Mozambique allocated US$509 million in annual support to the agriculture sector, representing 3.3 percent of total GDP.**
  Total Support Estimate (TSE) to agriculture from public policies and programs[4] in Mozambique in 2018 was estimated to be US$509 million. This was equivalent to 12.8 percent of its agriculture gross domestic product (GDP), higher than South Africa but lower than Angola (Fig. 11), the value was below OECD member countries (40.2 percent on average). A neighbor and close trading partner, South Africa, has a TSE of 9 percent of agriculture GDP and 0.4 percent of total GDP, lower than Mozambique, while OECD countries' support to agriculture represents 0.6 percent of total GDP.

- **Although total agriculture support in Mozambique is high compared to other developing countries, the portion of support going to public goods and services is relatively low.**
  The Total Support Estimate (TSE) is composed of support to producers (measured as Producer Support Estimate, PSE), Consumer Support Estimate (CSE), and support to general agriculture public goods and services (General Services Support Estimate, GSSE)[5]. The analysis revealed that 95 percent of TSE was through producer support (largely in the form of market price support), while just 5 percent went to GSSE. Benchmarking the TSE composition across countries where data is available, we observe that Mozambique's investment in GSSE is the lowest globally. As a share of the agriculture GDP, GSSE accounted for just 1 percent, which was low compared to other developing countries average (2.7 percent) and the OECD's average (5.4 percent) in 2018.

- **Only 7 percent of gross farm receipts were accounted by Mozambique's support to producers, more than 11 percent points lower than the OECD average.** In Mozambique, 7 percent of producer's gross farm receipts (%PSE) came from agriculture support policies and programs in 2018. This is 11 percent points lower than the OECD average for that same year. This shows that although total support (TSE) is relatively high in relation to total GDP, TSE as percentage of Ag GDP and %PSE are average or slightly below average given the large size of the sector. %PSE in Mozambique was comparable with that of countries with medium levels of support, such as Canada, Mexico and Costa Rica.

- **Agriculture producer support in Mozambique is overwhelmingly funded by policies that raise domestic agriculture prices**. Ninety-five percent of the support to agriculture producers (PSE) is through by Market Price Support (MPS), while budgetary support only represented 5 percent in 2018. These transfers occur due to public policies (mainly border measures) are making the domestic prices of agriculture and food products higher than the international prices (compared at farm gate). In other words, border measures are creating an "implicit tax" for food consumers in Mozambique and most beneficiaries of higher prices are agriculture producers that participate in market sales. MPS are thus, monetary transfers from Mozambican food consumers to Mozambican producers.

- **The structure of producer support only benefits a small number of commercial producers and does not enhance sector competitiveness.** MPS is based on the amount of agriculture production that a farmer sells in the market, it is therefore poorly targeted and favors producers who generate larger commercial surplus rather than smallholders with smaller surpluses or who only produce for self-consumption[6]. Given that small-scale and subsistence-oriented family farms dominate in Mozambique and that MPS policies have been implemented mainly based on food security arguments, the effect of MPS is the opposite, benefiting only a small proportion of producers and taxing agriculture households which are net food consumers. It is important to note that these estimates are from 2018 and aggregate support across entire commodity producers, so it is possible that in recent years the situation may have changed for some farmers and subsectors. Nevertheless, it is well-known in the literature and evidence shows that MPS distorts production decisions and investments in competitive agriculture products as it protects producers from international market prices.

- **Food consumers in Mozambique pay an implicit tax of about 5 percent.** Support to food consumers (CSE) is negative in Mozambique. CSE measures the support to (or tax on) food consumers arising from public agriculture policies. Although Mozambique does provide some-support to food consumers in the form of food aid and school feeding programs, the overwhelming majority of

[4] *Agriculture support was estimated using the OECD methodology (https://www.oecd.org/agriculture/topics/agricultural-policy-monitoring-and-evaluation/documents/producer-support-estimates-manual.pdf). The total support estimate measure (TSE) is the annual monetary value of all gross transfers from taxpayers and consumers arising from public policy measres that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products.*

[5] *GSSE's include agriculture public goods and services such as innovation systems (agriculture R&D and education), animal and plant health services, food safety,*

[6] *In some settings, other value chain actors (such as input suppliers) also capture part of the transfers. It's conceivable that in those settings, they benefit more than even large-scale producers.*

the CSE is negative, due to public policies protecting domestic prices. CSE as a percentage of total food expenditures by food consumers was approximately 5 percent in 2018. This 5 percent implicit tax is a transfer from consumers to producers through higher domestic food prices. It is also a regressive tax since poor consumers spend a larger share of their income on food than high-income consumers.

- **Agriculture support to producers in Mozambique is basically concentrated in maize and pork meat and is relatively high for these commodities compared to other countries.** Of the total gross revenues perceived by farmers producing maize, 43 percent came from agriculture public support policies and programs, while pork meat had 31 percent support, in 2018 (commodity-specific support is measured by Single Commodity Transfers—SCT). In comparison, the %SCT in OECD countries was 3 percent for maize and 8 percent for pork meat in the same year, the Mozambique levels were similar of the Indonesia and Colombia for maize and Costa Rica or Norway for pork meat. Although the actual dollar value of SCTs, and in particular MPS, measured only for a single year (2018 in this case) may not reflect exactly the support received by that commodity given temporary distortions caused by production shocks (natural disasters) or real exchange rate misalignments, the results are still valid to point out relative imbalances in support (often OECD support estimates are measured as a multi-year average to avoid distortions in specific years) Therefore, the relative large differences in agriculture public sector support—and therefore profitability—across commodities in Mozambique signals the distortions that farmers face when making production decisions. For example, support to sweet potatoes was US$39/ha while maize was US$60/ha and cassava was US$170/ha in 2018[7].

- **Mozambique is in the process of defining its 10-year strategy and investment plan for the agriculture sector, recovering from the COVID-19 pandemic, and moving towards a more competitive and sustainable agriculture sector.** In the past, support consisted largely of price support (through border measures), without addressing underlying competitiveness bottlenecks. This approach will need to be phased out as Mozambique moves towards full participation in regional and continental free trade agreements. Programs like the Sustainable Rural Economy Program (SREP) seek to improve the resilience and competitive position of the agriculture sector. Developing agribusinesses is high in the country's development agenda, with an important private sector development program and technical assistance provided by the World Bank (WB) and IFC. The multiple natural disasters of the last years and the COVID-19 pandemic have also renewed the urgency to focus on supporting the climate resilience and nutrition of the poorest households.

This report presents some important recommendations for realigning agriculture support policies and programs towards competitiveness, climate resilience and nutrition and food security objectives.

Agriculture Policy Shift	Competitiveness objective (diversification and trade integration)	COVID-19 Recovery: Building back better	
		Climate Resilience	Nutrition—Food Security
PSE to GSSE	✓		
MPS to non-distortionary PSE	✓	✓	✓
CSE (-) to CSE (+)			✓
SCT to non-commodity specific PSE	✓	✓	✓

7 *Authors calculations, based on OECD data.*

Recommendations:

- **Shift agriculture support from private towards public goods and services.** Agriculture support in Mozambique is mainly geared towards private goods (subsidies and market price support) rather than towards investments in agriculture public goods and services: almost half of all agriculture public expenditures (2018) went towards investments in private goods (subsidies), such as payments based on agriculture inputs and services —programs that subsidize technical assistance, extension services, and agriculture inputs like seeds, fertilizers, machinery and land preparation. Mozambique should seek to shift its agriculture sector support towards investments in public goods and increase GSSE's share of agriculture GDP from its current level of 0.6 percent to at least the level of South Africa, or the average of developing countries (2.3 percent and 5.4 percent, respectively), given the overwhelming and long-standing evidence that public sector investments and support to agriculture public goods and services deliver higher economic returns than public sector investments in private goods (World Bank, 2017[8] ; Lopez and Galinato, 2007[9] ; Lopez, 2005[10] ; World Bank, 2001[11]). This shift will require a fiscal exercise to ensure that is as neutral as possible to the overall Government budget, but also addressing some of the current structural issues with agriculture public expenditures (i.e. most of sector expenditures go to salaries rather than investments).

- **Shift from distortive measures to competitive agriculture policy support.** Given that an overwhelmingly large share of Mozambique's agriculture support is MPS (or coupled to the production of specific agriculture products), a transition plan (including a fiscal plan) for agriculture to move towards a more competitive policy support environment is very much needed. In fact, Mozambique will likely be engaging in MPS reduction commitments in agriculture trade agreements such as the Africa Continental Free Trade Area (AfCFTA), so a complementary trade agenda is needed to support smallholders of protected agriculture products transition to face market prices and take advantage of trade [12]. The formulation of an appropriate sector strategy (PEDSA 2) and investment plan (PNISA 2) are good opportunities to lay out such shift and complementary agenda, learning from the lessons of the implementation of PEDSA and PNISA 1.

- **Shift from implicit taxation to positive support to food consumers**. As the negative CSE estimates in this report demonstrate, Mozambican food consumers are funding the bulk of agriculture support to the sector. A shift away from MPS, as suggested above, will reduce the implicit food tax to food consumers, consequently increasing the welfare of the poorest. However, other public policies and programs could be further enhanced to directly safeguard consumers from food insecurity and nutrition challenges, by targeting support through social protection programs (food aid, school feeding) and countercyclical safety nets.

- **Shift support to integrate environmental and nutrition objectives within agriculture support policies and programs.** Given the country's fiscal limitations and the implicit tax imposed by agriculture public policies on Mozambican food consumers, producer support should be geared towards achieving objectives beyond supporting farmer incomes. Support can contribute towards (i) food production intensification (seeking to health area expansion as a source of agriculture growth); and (ii) nutrition objectives, leveling the playing field for a product like sweet potatoes vis-a-vis cassava. A cassava farmer receives more than double the support of what a tomato farmer receives in a per hectare bases and more than 4 times the support a sweet potato farmer receives, thus making a simple plate of food—as defined by the WFP "Counting the Beans" methodology—costlier [13]. Furthermore, Climate Smart Agriculture (CSA)[14] and Nutrition Smart Agriculture (NSmartAg)[15] technologies and practices should be integrated into farmer input and technology support incentives, to promote productivity growth, and fulfill environmental and nutrition objectives. Moreover, decoupling producer support from specific agriculture products would enable farmers to make production decisions mainly on market opportunities (and not on the level of public sector support).

8 *Goyal, Aparajita; Nash, John. 2017. Achieving Better Results: Public Spending Priorities for Productivity Gains in African Agriculture. Africa Development Forum;. Washington, DC: World Bank and Agence Francaise de Développement. World Bank. https://openknowledge.worldbank.org/handle/10986/25996 License: CC BY 3.0 IGO*

9 *López, R., and G. I. Galinato. 2007. "Should Governments Stop Subsidies to Private Goods? Evidence from Rural Latin America." Journal of Public Economics 91:1071-94.*

10 *Lopez, Ramon. Under-investing in public goods: evidence, causes, and consequences for agriculture development, equity and the environment. Journal of Agriculture Economics, Volume 32, Issue 1. January 2005: https://onlinelibrary.wiley.com/doi/full/10.1111/j.0169-5150.2004.00025.x*

11 *World Bank. World Development Report 2001: https://elibrary.worldbank.org/doi/pdf/10.1596/0-1952-1606-7*

12 *An update to the World Bank's 2006 Diagnostic Trade Integration Study (DTIS) is under preparation and is expected to take on these questions in more detail.*

13 *Based on an extrapolation from the World Food Programme (WFP)'s measurement of the cost of a minimum diet globally. This methodology defines a simple plate of food to consist of pulses, a local carbohydrate—such as rice, bread, maize meal—vegetable oil, tomatoes, onions and water. https://cdn.wfp.org/2018/plate-of-food/ However, Mozambique has not yet made it into the database and this qualitative assessment assumes that maize will be considered part of Mozambique's plate of food.*

14 *For a definition and approach to CSA, see: https://www.worldbank.org/en/topic/climate-smart-agriculture*

15 *For a definition and approach to NSmartAg see: https://www.worldbank.org/en/topic/agriculture/publication/nutrition-smart-agriculture-when-good-nutrition-is-good-business*

1. **This report assesses agriculture policy support estimates in Mozambique.** These estimates are the monetary value assigned to different agriculture support policies and programs using the OECD methodology[16] for 2018. The objective of undertaking this assessment is to support the Government in reviewing its agriculture policies and programs, and to: (a) provide new estimates and a new approach to assess sector support for policy decision-making; (b) allow for benchmarking agriculture support policies with a large global database of countries using the same estimate methodology; and (c) help kickstart a policy dialogue on realigning agriculture policies and programs in Mozambique towards greater sector competitiveness, food security and nutrition outcomes, and climate sustainability.

2. **Previous work in other developing countries has shown policymakers the value of using such estimates in a process of transformation of the agriculture sector.** The OECD methodology a complete picture of all public policies and programs supporting agriculture and food consumption, bringing the support from taxpayers and consumers alike. The advantages of using this methodology are that: (a) it provides a systematic view of agriculture support policies, programs (not limited to the more traditional public expenditure reviews or rate of protection), and incentives at different levels of the food system, allowing to envision policy reforms to improve sector competitiveness, reduce distortions and improve equality with trading partners; (b) given the large number of countries using this same methodology to measure support estimates, an immediate benchmarking is possible across a large set of comparators[17]; and (c) it is simple and can be integrated into the agriculture public policy analysis conducted by the Government and other stakeholders[18]. The methodology also has some disadvantages and limitations, mainly: (a) few African countries have carried out agriculture support estimates with it, meaning Mozambique can only benchmark against South Africa and Angola; and (b) since the estimates are based on the monetary value of budget and price support, non-monetary support, like the quality of policies, are not captured (for example, the methodology is able to identify how much policy/program support is invested in land administration efforts, but not to qualify the impact (quality) of those policies/programs).

3. **Agriculture support estimates are also expected to inform Mozambique's upcoming trade negotiations on agriculture and food products in the Africa Continental Free Trade Area (AfCFTA), the Southern Africa Development Community (SADC), and other international trade agreements.** These estimates enable Mozambique to benchmark against South Africa and Angola for the level and composition of agriculture support, which is key to successfully negotiating agriculture trade agreements and developing policy reforms that enhance agriculture trade competitiveness. Notably, this assessment builds on the Food and Agriculture Organization's (FAO) recent support to Mozambique, which included budgetary data collection as part of an analysis of agriculture price distortions. This report fills existing coverage and price data gaps, expanding the scope of assessment from a public expenditure review to a comprehensive review of agricultural support[19]. Given the current fiscal constraint faced by Mozambique and the need to grow its economy, there is a window of opportunity for the Government of Mozambique to gradually open up the trade of agriculture inputs and products, while shifting public support policies and programs towards more targeted interventions that can achieve competitiveness objectives, as well as climate resilience and nutrition/food security.

4. As part of this assessment, four main activities were conducted between September 2020 and June 2021 as the basis for the drafting of this report:

   - **Training of in-country technical experts** on the recognized OECD agriculture support estimate methodology. In February 2021, the WB team delivered a comprehensive training course (seven modules) to build capacity on data collection, processing, and analysis among public sector staff within the Ministries of Finance, Economy, and Agriculture and technical experts outside of the Government (independent consultants). The objective of the training was twofold: (a) to enable the national Government to update the estimates every two years following the OECD cycle to maintain benchmarking capacity; and (b) to help validate and

16 *See methodology manual at: http://www.oecd.org/agriculture/topics/agricultural-policy-monitoring-and-evaluation/documents/producer-support-estimates-manual.pdf*

17 *At present, the OECD methodology for agriculture support estimates covers 109 countries. This includes OECD countries, non-OECD EU Member States (subject to data availability), and a number of developing countries where monitoring is done by the OECD, IADB, and FAO's MAFAP unit. The 54 countries monitored by the OECD are Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, the European Union (Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Spain, Slovakia, Slovenia, Sweden, the United Kingdom), India, Indonesia, Iceland, Israel, Japan, Kazakhstan, Korea, Mexico, New Zealand, Norway, the Philippines, the Russian Federation, South Africa, Switzerland, Turkey, Ukraine, the United States and Viet Nam.*

18 *As part of this assessment, a training of more than 15 public sector staff was undertaken to build capacity and allow for Government to update the estimates going forward.*

19 *Under FAO (MAFAP)'s support to Mozambique, data was collected for prices and Public Expenditures since 2009.*

discuss policy options based on the 2018 estimates.

- **Stocktaking of agriculture public support programs and policies impacting the agri-food system and technical analyses** to produce quantitative estimates of agriculture support to producers (PSE), consumers (CSE), and to general services and support to agriculture (GSSEs). This activity also identified specific commodities and classified the support per OECD categories to assess the level of distortion, while enabling an automatic benchmarking with other countries. The WB team collaborated with the trained staff to undertake a policy inventory to gain experience in the production of a detailed assessment on the nature and extent of public support.

- **Discussion of preliminary estimates and options for policy and program reform with sector stakeholders**: The team discussed and validated preliminary agriculture support estimates with relevant policymakers, private sector representatives, and other agri-food sector stakeholders in May 2021. This presentation included benchmarked indicators of agriculture support and draft policy conclusions. dicators of agriculture support

- **Database construction and institutionalization of future updates** in Mozambique, to enable comparability with regional and global agriculture support estimates. The database of agriculture support estimates for Mozambique is expected to feed directly into the Government's ongoing formulation of its second Agrarian Sector Development Strategy (PEDSA 2) and its second National Agriculture Investment Plan (PNISA 2), its reporting for the African Union's CAADP Biennial Review Scorecard, and other regional and global initiatives targeted at capturing information on Mozambique's support to the sector (such as MAFAP, Agrimonitor, OECD and others). and draft policy conclusions.

Country Context

5. **Mozambique is a low-income country of 29.6 million people located in Southeastern Africa**. Mozambique has a gross domestic product (GDP) of approximately US$12 billion and a GDP per capita of US$417, which is among the lowest in the world. Poverty was high at 48 percent in 2015, albeit lower than the 60 percent rate in 2003[20]. Most of the poor (84.9 percent) are in rural areas. The country's GDP growth had a high average of 7.9 percent between 2001 and 2015 but fell to about 3.3 percent between 2016 and 2019. Even under declining poverty rates, the total number of people living in poverty has grown in the past few years, as population growth outpaced GDP growth, and is expected to drastically increase in 2020 due to the COVID-19 pandemic. Poverty levels are also significantly higher in the northern and central regions of Mozambique, which have larger populations and are more distant from major urban centers and economic hubs.

6. **The rural space is the backbone of the livelihoods for most of the population**. It also accounts for most of the country's poor. While the share of the population that lives in urban centers increased from 25 to 35 percent between 1995 and 2017, more than half of the population is projected to remain in rural areas through 2040. On the back of this trend is fast population growth, particularly among rural households in the northern and central regions, where on average 2.1 more children are born per rural woman (6.6) than urban woman (4.5). Fast rural population growth combined with a persistent young age structure is adding an estimated 450,000 youth to the (rural) workforce every year. Mozambique is projected to remain largely rural for this generation, making the focus on rural income growth imperative.

7. **Agriculture continues to represent the key economic activity in Mozambique**. Agriculture has a vast growth potential by virtue of the variety of agroecological zones and strategic geographical position that the country has (especially with the neighboring landlocked countries and the various export departure points). There are about 4 million smallholder producers in Mozambique, and these account for approximately 98 percent of the total workforce and production in the sector, with the remaining 2 percent including micro, small, and medium enterprises (MSMEs) and larger agribusinesses andcommercial farms. Even though 45 percent of the country is suitable for agriculture, less than 16 percent is currently cultivated.[21]

8. **Although rural households depend mainly on agriculture income, they remain net food consumers.** The rural poor produce agriculture products largely for self-consumption, but they remain net food consumers, meaning that increases in food prices affect them nega-

[20] *World Bank. 2018. Poverty Assessment (Report Number 131218).*
[21] *World Bank. 2020. Cultivating Opportunities for Faster Rural Income Growth and Poverty Reduction: Mozambique Rural Income Diagnostic. Overview Policy Report.*

tively. A study[22] of increases in food prices in Mozambique show how this is translated in reductions in food consumption and increases in rural poverty. Therefore, policies that seek to increase prices of food and agriculture products do not have an overall negative welfare impact on the poor smallholder farmer community, while benefiting the relatively larger commercial farmers.

9. **Economic expansion in agriculture yields the highest impact on poverty reduction.** The sector's potential continues to be challenged by low productivity levels, mostly due to low input intensity and technology adoption, limited provision of agricultural services, coupled with high seasonality in production and increasing climate vulnerability. Simulations show that growth in agriculture would decrease poverty and inequality over three times faster than growth in any of the other sectors[23]. In addition, access to finance, quality assurance, competitiveness, and value addition, together with general integration along value and supply chains, continue to be persistent challenges that limit the full potential of the sector's growth. At the same time, agriculture plays a critical role in ensuring food security. Rather than maximizing profit, the production choices of most smallholders is focused on food security, yet most households in the bottom 40 percent of income produce below subsistence level, being net food consumers. A structural transition from agricultural employment to employment in industry and services, which characterizes the development process in all countries, would not be possible in the absence of rising agricultural productivity rates without endangering food security[24].

10. **The country is richly endowed with natural resources but has not been able to effectively translate these into sustained poverty reduction.** Mozambique has ample arable land, water, mineral, and energy resources, including natural gas offshore. Its substantial natural capital includes 36 million ha of arable land and 32 million ha of natural forests. Its long coastline, the 4th longest in Africa, harbors some of the most spectacular coral reefs in the world and several highly productive estuaries. The country has outstanding terrestrial, freshwater, marine, and coastal species biodiversity, counting more than 10,000 species, 10 percent of which are endemic or nearly endemic. Growth has been driven by conversion of its nonrenewable natural resources through mega-project investments, with modest links to broader areas of the economy. The country also faces challenges to the sustainability of its renewable natural resources. Deforestation is high, 267,000 ha of forests have been lost annually for 2003–2013. This led to around 46 million tons of climate-change-causing CO_2 being emitted every year into the atmosphere, representing 43 percent of Mozambique's overall greenhouse gas (GHG) emissions . Deforestation is mostly driven by expansion of shifting agriculture, contributing to land degradation, water scarcity, and climate vulnerability.

11. **Mozambique is ranked the third most vulnerable country to climate change in Africa.** Large areas of the country are exposed to tropical cyclones, droughts, and river/coastal storm surge flooding. This vulnerability is heightened by the country's 2,700 km of coastline and socioeconomic fragility. About 60 percent of the population lives in low-lying coastal areas, where intense storms from the Indian ocean and sea level rise put infrastructure, coastal agriculture, key ecosystems, and fisheries at risk. As the intensity of these storms increase, the impacts are starting to also be felt inland. Access to markets, already a challenge for many rural producers, is becoming increasingly difficult after disasters hit. As 70 percent of the population depends on climate-sensitive agricultural production for their food and livelihoods, increased frequency and intensity of storms, droughts, and floods are likely to put pressure on agricultural income and food security. Historic climate trends show average temperatures have increased 1.5-2°C (1961–2010), and future climate projections in Mozambique show more marked temperature increases in the interior, southern, and coastal areas. Associated variability in rainfall and increase in droughts are expected to lead to decrease in crop yields, particularly for drought-sensitive crops. As agriculture becomes less productive, and less land area is available due to increased flooding, more land needs to be cleared, increasing the already high rate of deforestation and exacerbating the problem of land degradation and temperature rise. With the increase in number of hot days, there is an upsurge of crop and livestock pests and diseases as well as forest fires, leading to increased forest degradation.

22 *World Bank (2018). Who wins and who loses from staple food price spikes? Welfare implications for Mozambique. Policy Research Working Paper 8612. https://openknowledge.worldbank.org/bitstream/handle/10986/30580/WPS8612.pdf?sequence=1&isAllowed=y*

23 *World Bank. 2020. Cultivating Opportunities for Faster Rural Income Growth and Poverty Reduction: Mozambique Rural Income Diagnostic. Overview Policy Report.*

24 *World Bank. 2019. Agrarian Sector Transformation: a Strategy for Expanding the Role of the Private Sector.*

25 *Intended Nationally Determined Contribution (INDC) for Mozambique: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Mozambique%20First/MOZ_INDC_Final_Version.pdf*

26 *World Risk Index, 2016 apud IMF, 2018. Republic of Mozambique: Selected Issues.*

Coastal resources are also affected both by natural disasters and increasing temperatures, damaging ecosystems that sustain ocean life and fisheries such as coral reefs, mangroves, and seagrass. Warming and acidifying oceans cause loss of revenue from tourism and fisheries. As ocean-atmospheric conditions continue to change, larger alterations in patterns of species richness, changes in fisheries community structure and ecosystem functions, and consequential changes in marine goods and services are expected.[27] The risk of declining fish stocks posed by warming is compounded by overfishing, which makes fisheries more vulnerable to warming, and continued warming will challenge efforts to rebuild overfished populations.

12. **The gender gap in agriculture is extensive**. Rural women in Mozambique face large constraints in accessing essential productive resources and services, technology, market information, and financing. They are underrepresented in local institutions and governance mechanisms and tend to have less decision-making power than men. Prevailing gender norms and discrimination often lead to excessive work burden, and much of their labour remains unpaid and unrecognized. Female participation in the labour force is relatively high at around 80 percent but women are disproportionately concentrated in subsistence agriculture and the informal sector. Recent data from two WB projects[28] in Mozambique implementing matching grant schemes (MGS) in the agriculture and fisheries sectors show that women benefit less from these schemes compared to men[29]. Gender-specific obstacles put female farmers at a significant disadvantage. Improving gender equity in the agriculture and fisheries sectors would not only empower women to achieve their highest economic potential but also help reduce poverty and food insecurity.

13. **Due to the COVID-19 pandemic, it is expected that a sizable number of Mozambicans will fall back into poverty.** Mozambique's already difficult poverty situation is expected to be aggravated further. The February–September 2021 FEWS NET[30] projection for Mozambique is that there will be an increase of 14 percent of the population that will be living in areas under crisis or worse food security conditions, bringing the total number of people in this category of food insecurity to 7.8 million (or 24.6 percent of the total population of the country). The additional 1.4 million poor in Mozambique is due to the growing conflict in the north as well as the slowdown in economy activity[31]. The negative impacts on income are expected to be felt relatively more in urban and peri-urban areas, where social distancing measures and business closures are having the greatest impact. The pandemic is also likely to exacerbate the fiscal situation and availability of public budget going to the sector as well as pre-existing factors of fragility and widen inequalities across the country. The spatial distribution of poverty is skewed, it is almost twice as high in rural as in urban areas and inequality between rural and urban areas is increasing.

Sector Context

14. **The contribution of agriculture to the Mozambican economy has been mixed**. Although it was the second largest sector contributor, with an average contribution of 23 percent to GDP during the period 2013 to 2017, the agricultural sector's annual growth rate has been low and erratic in recent years (1.9 - 4.3% per annum), and well below the target annual growth rate of 6 percent established under CAADP. This is because of low agricultural productivity influenced by: (i) low use of improved inputs; (ii) inadequate agricultural support services, including extension, research and financial services; (iii) high reliance on variable rainfall in predominantly rain-fed agriculture; (iv) unsustainable land use practices, such as widespread slash and burn agriculture, resulting in significant threats to the sustainability of natural resources, particularly soil and water, exacerbating low productivity levels; (v) limited accessibility to input and output markets, especially in the northern and

[27] *World Bank. 2019. Climate Change and Marine Fisheries in Africa: Assessing Vulnerability and Strengthening Adaptation Capacity. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/33315. License: CC BY 3.0 IGO.*

[28] *Agriculture and Natural Resources Landscape Management (SUSTENTA, P149620) and South-west Indian Ocean Fisheries Governance and Shared Growth Project 1 (SWIOFish1, P132123).*

[29] *Within the context of the Agriculture and Natural Resources Landscape Management (SUSTENTA) project, only 14 percent of the commercial smallholder farmers (Pequeno Agricultor Comercial Emergente, PACE) and 13 percent of smallholder farmers (PA) benefitting from the MGS are women. In the fisheries sector, only 29 percent of the beneficia ries of the Mais Peixe mechanism are women, and, on average, receiving smaller grants, totalling 22 percent of the total budget. These numbers refer to data collected from the beginning of these projects up to November 2020.*

[30] *The Famine Early Warning Systems Network is a leading provider of early warning and analysis on food insecurity. See: http://www.fews.net/mozambique.*

[31] *Simulations done by the World Bank's Poverty and Equity Global Practice of the potential short-term effects of the COVID-19 shock on income and consumption provide a first order approximation of the distributional impacts on household welfare. A hypothetical reduction of 10 percent in consumption across all rural households would increase poverty from 50.7 percent (baseline rate projected for 2020) to 56.6 percent. This translates into 1.4 million more Mozambicans slipping below the poverty line. This scenario would wipe out the gains in poverty reduction achieved in the last 5–6 years, underscoring the high levels of vulnerability among rural households. Limiting the shock to urban areas and workers in sectors at high risk translates into a 2.1-percentage point increase in poverty (from 32 to 34.1 percent), or 250,000–300,000 newly urban poor. More information on the impacts of COVID-19 and the response of the Government of Mozambique (GoM) can be found in annex 5.*

central regions; road networks provide access to only about 33 percent of the rural population; (vi) lack of formal land property rights; (vii) lack of other key rural infrastructure (particularly storage, water storage and irrigation, with only small area under irrigation (only about 3 percent of the cultivated area and potentially irrigable area); and (viii) fragmentation of institutional arrangements and roles, at central and sub-national levels.

15. **GDP growth decelerated to 3.8% in 2016 and 3.7% in 2017**. During the 2011 – 2015 period, Mozambique's growth in gross domestic product (GDP) was amongst the highest in Sub-Saharan Africa (SSA), averaging 7 percent per year. In subsequent years, the scenario changed to a downward trend, mainly due to an economic crisis provoked by unsustainable debt. Additionally, annual average inflation increased from 3.6% in 2015 to 18.0% in 2016, decreasing slightly to 15.5% in 2017. Moreover, small and medium-size enterprise profitability levels, and capacity to generate employment, have also decreased. The balance of payments for the current account fluctuated from a negative 2.2 billion USD in 2011, to a negative 498 million USD in 2017. This change was mainly due to a decrease in imports, influenced by limited availability of funds for purchasing foreign products and services. Also, limited funds were in part due to the withdrawal of development partners from the funding government activities, and to invest in Mozambique, resulting in a decrease in foreign direct investment (FDI) levels from an average of 4.8 billion USD per year during the period from 2011 to 2015, to 3.1 billion USD in 2016, and 2.3 billion USD in 2017. This slowing and erratic macro-economic performance has adversely affected Government revenues and a fiscal imbalance, and a decrease in external assistance and public expenditure for all sectors and functions of Government.

16. **However, the contribution of agriculture to the economy did not change significantly and its contribution to GDP remained stable at about 23% during the period 2013 - 2017** (Table 1). Apart from service sector, which is composed of several economic activities/sub-sectors, agriculture is the main contributor to the GDP. The relative importance of the agricultural sector is even greater when its linkages to other sectors (industry, manufacturing and services) are taken into consideration, and which are directly driven by the agricultural sector, as well as by the fact that approximately 80% of the total labor force in the country is employed in agricultural or related activities.

Table 1. Structure of the Economy and Sector Contributions to GDP (2013 – 2017)

Sector	2013	2014	2015	2016	2017
Agriculture	24	23	23	23	21
Manufacturing	9	9	9	9	9
Industry.	8	10	11	11	16
Services	59	58	57	57	54

Source: INE (2019)

17. **Agriculture is the largest economic sector in Mozambique** (see Table 1), and more so, when considering direct and indirect linkages with other key sectors/activities. On average, the agriculture sector has accounted for 23% of direct GDP in the last five years and employs about 80% of the labor force. However, the majority of the population is engaged in smallholder, rain-fed, subsistence agriculture which frequently suffers from climate-induced shocks, with significant negative impacts on overall economic growth and poverty reduction. Only 16% of a total of 36 million hectares of arable land is currently under cultivation. In the 2013/2014 agricultural season, there were about 4 million farmers in Mozambique, of which 99% were smallholders (with average farm size of 1.3 ha.), with only 1% medium- and large-scale commercially oriented farmers involved in competitive value chains, primarily for cash crops (see Table 1.2). These features reveal important implications for the roles of the public and private sectors working together to further develop the sector, and especially in the management of the state agricultural budget.

Table 2. Mozambique farm typology

Farmer category	Number	
	Number of farmers	
Small farmers (thousand)	3,999	98.91%
Medium farmers (thousand)	44	1.08%
Large farmers	436	0.01%
Total (thousand)	4,043	100.00%
	Cultivated area (ha)	
Small farmers (thousand)	5,207	96.69%
Medium farmers (thousand)	117	2.17%
Large farmers (thousand)	61	1.14%
Total (thousand)	5,386	100.00%

Source: IAI 2014

18. **The predominance of smallholder farmers relying mainly on rain-fed agriculture, using traditional, low productivity agricultural technologies, has significantly limited the performance of the agriculture sector.** The annual growth rate of the sector has been erratic and significantly lower than the established Malabo growth target (6% per year) and PNISA target (7% per year) fluctuating from 1.9% in 2013 to 4.3% in 2017. This fluctuation partly reflects the climate and precipitation dependency of the agricultural sector, which implies the need for the expansion of climate resilient agricultural technologies and low-cost irrigation infrastructure/schemes.

19. **Potential and Sources for Expanded and Diversified Growth.** Mozambique has favorable natural conditions for intensifying and diversifying its agricultural production and value-chain development in the majority of the country through increased productivity and agribusiness-driven investment. Based on the recent WB study, the main sources of agricultural income include:[32] productivity growth in existing food and cash crops; expanded area and commercialization levels, enabled by increased market integration; a shift toward high value crops (especially cotton, sesame, tobacco and sugar cane) and animal products (e.g., poultry); and expanded rural infrastructure (especially irrigation and rural/feeder roads). Irrigation has the potential to significantly enhance smallholder agricultural productivity. Mozambique has a potential to irrigate 3 million hectares enabling increased productivity and diversification. However, only about 180,000 hectares (6%) are equipped with irrigation infrastructure, and only about 50% of this infrastructure is currently fully operational. Thus, only about 3% of the country's irrigation potential is currently being used.

20. **The recent growth in commercial agriculture and outgrower schemes, from a low base, points to the country's untapped agribusiness investment potential.** Emerging value chains include poultry, soy, sesame and cashew, and there is significant scope to intensify and expand sustainable cultivation of agricultural land and domestic food processing. Thriving value chains in agriculture and forestry could form the backbone of the rural economy by creating jobs, increasing rural incomes, strengthening food security, and facilitating better nutrition[33]. The realization of this agricultural and value-added potential will require an expanded role of an inclusive private sector, catalyzed by enhanced and appropriate agricultural policies/regulations, institutional reforms and prioritized public investment[34]. Furthermore, as per the WB's Enabling the Business of Agriculture report (2019)[35], Mozambique performs better than the Regional SSA average for a number of agribusiness sector indicators, which bodes well for a reform agenda towards further agriculture commercialization.

[32] *Refer to the WB report, "Mozambique Rural Income Diagnostic" study (2019).*

[33] *There are a series of value chain studies being carried out by the WB-supported Let's Work Program, including: Cashew Value Chain Development Strategy; Cassava Value Chain Strategy; and Plantation Forestry Value Chain Strategy. The findings of these studies illustrate the potential for expanded agricultural growth, and the main types of constraints to be addressed.*

[34] *There is an on-going parallel study on: Private Sector Strategy for the Agricultural Sector (draft report, March, 2019). This report integrates relevant emerging findings and recommendations from this parallel study.*

[35] *See: https://eba.worldbank.org/content/dam/documents/eba/MOZ.pdf*

21. **Low agricultural productivity is a binding and dominant constraint to Mozambique's economic growth and poverty reduction**. The country's agriculture productivity levels are lower than the average for low- income countries in Southern Africa, particularly for maize and rice, key food crops. Key constraints to realizing Mozambique's significant agricultural sector and rural income growth potential (in production and value-chain development) include:[36]

- Low (but growing) levels of crop productivity, for both food and cash crops, including low input usage/intensity (of improved seeds, chemical fertilizers): less than 3% of farmers use improved crop varieties; less than 5% of farmers use fertilizers; less than 9.5% of farmers used animal traction in 2014;
- Inadequate agricultural public goods and services, including agriculture research and extension services; there are only 1,200 agricultural extension officers employed by the public sector, resulting in a high farmer to extension officer ratio; this is exacerbated by low technology adoption rates by most farmers;
- Inadequate agriculture risk management mechanisms and strategies, including high reliance on variable rainfall in predominantly rain-fed agriculture, with increasing climate change threats; Mozambique is ranked the third most vulnerable country to climate change in Africa;
- Llack of formal land property rights, limited access to finance (less than 5% of smallholders), and low levels and rates of agricultural investments and economic diversification; and
- fragmentation of institutional arrangements and roles, at central and sub-national levels (further detailed below).

22. **Overall, the performance of the agricultural sector has been erratic and below expectations/targets** in relation to sectoral growth rates, reduction in rural poverty, increased employment, increased productivity, commodity diversification, and competitive value chain development. Annex A highlights these indicators and targets and their corresponding erratic performance. While establishing attribution of this erratic performance is always a challenge, these findings highlight structural constraints in the sector and the serious challenges involved in ensuring appropriate and consistent agricultural policies and sound agricultural public expenditure.

Overview of Agricultural Support in Mozambique

23. **Over the last two decades, Mozambique has witnessed low and declining public spending on agriculture.** The average share of agriculture in the national budget was slightly above 4.0 percent from 2010 to 2014, and fell to 4 percent in the subsequent five-year period (2015-2019)[37] [38]. Over the 2008–2018 period, Mozambique ranked half way among SSA countries in terms of the share of agriculture in total public expenditure, investing less than half of the New Partnership for Africa's Development (NEPAD) target of 10 percent (Fig. 1)[39]. In addition to the need for greater public investment, is also a heightened need to improve the effectiveness and efficiency of public spending in the current fiscal environment. Sector spending as a share of agriculture GDP—a rough indicator of investment effectiveness-was 14.8 and 19 percent in 2017 and 2019 respectively, as reported by Mozambique to the CAADP Biennial Reviews[40]. With disaggregated information on the composition of public spending limited to just one year and the absence of greater data coverage, assessments of investment trends and efficiency are not possible. Notably, no Agriculture Public Expenditure Reviews (AgPERs) have been conducted in Mozambique since 2007, leading to large evidence gaps in the understanding of public support to the sector[41].

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[36] *Many of these constraints are identified in the recent Rural Income Diagnostic Study (WB, 2019).*

[37] *Source: WB Africa Agriculture Policy Inventory (2021). Agriculture's share of the national budget declined from 1.10 percent in 2013 (US$702 million) to 0.41 percent (US$544.0 million) in 2015. It is important to note that the budget allocations for the agriculture sector not only fall under the Ministry of Agriculture (MINAGRIP), but also under the Ministries of Commerce, Industry, and Transport. World Bank (2017). "Republic of Mozambique: Selected Policy Notes for Incoming Administration of Mozambique".*

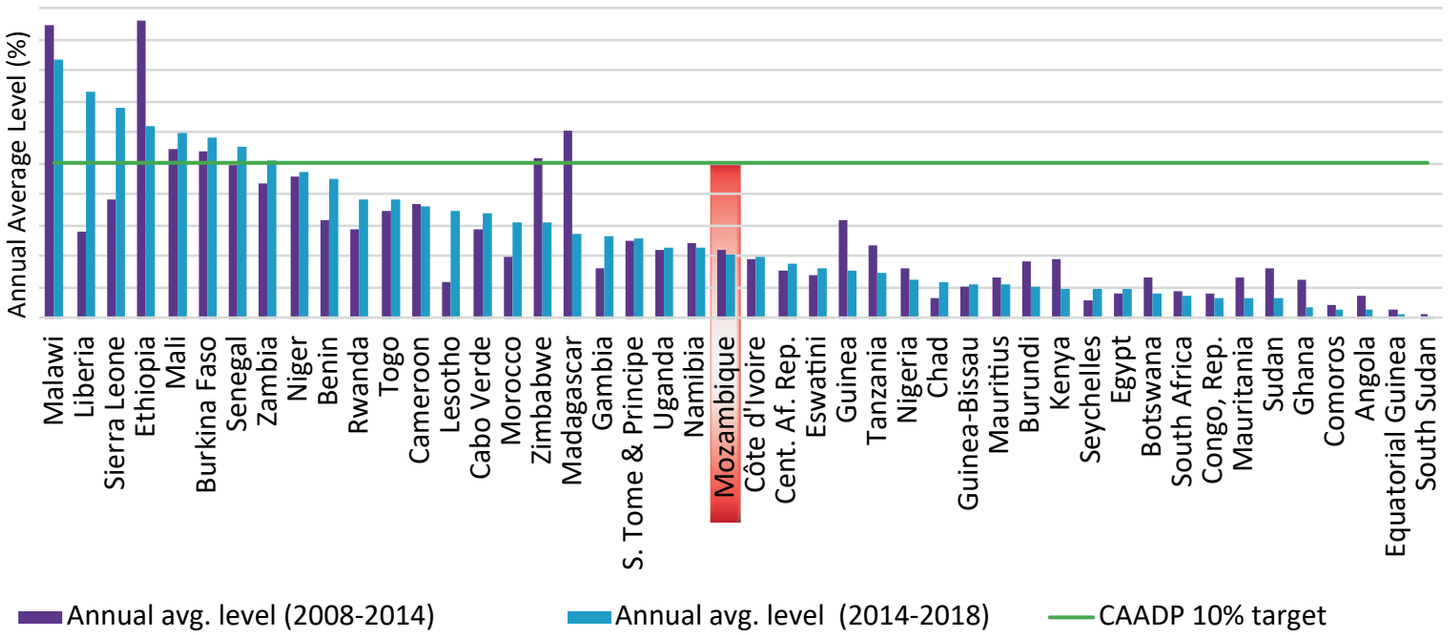
[38] *Preliminary FAO estimates show that this share rose then to 0.5 and 0.9 percent in 2018 and 2019 respectively. MAFAP Presentation to MADER, October 2020..*

[39] *IFPRI, 2019.*

[40] *Note: The authors calculated amounts for public expenditure on agriculture to be $1.47 billion and $1.66 billion in 2016 and 2018 by multiplying share of agriculture GDP (CAADP AATS Scorecards) by agriculture GDP (WDI). In absolute terms, this would indicate a large jump in resources allocated to the sector relative to 2014 and 2015.*

[41] *At the time of the last AgPER (2007), total the investment budget was overwhelmingly directed towards irrigation projects (70%) and mechanization (21%) largely due to the priorities of external donors. The spatial concentration of these investments was also quite concentrated and did not reflect overall agricultural potential. A large portion of agricultural investment was off budget entirely, being funded from various external sources. Also, a huge amount of public expenditure, both on and off budget, is devoted to improving roads, bridges and railroads, expenditures that directly benefit both producers and consumers by bringing down the cost of transporting both inputs and outputs. https://openknowledge.worldbank.org/bitstream/handle/10986/7648/397100v20ER0P01disclosed0Feb0602008.pdf?sequence=1&isAllowed=y*

Figure 1: Share of Government Agriculture Expenditure in Total Public Expenditure (%), 2008–2018



Source: ReSAKSS based on IFPRI (2015), World Bank (2019), and national sources.
Note: Every Increment on the Y-axis represents 2 percentage points.

24. The WB conducted an Agriculture Public Expenditure Review for the period 2013-2017, which has yielded the following results:

- **Budgetary Cycle and Processes:** The budgetary cycle and processes in Mozambique are, in overall terms, sound, providing the agricultural sector, and its Ministries and Departments at central and provincial levels, with vital tools to ensure sound expenditure allocations. Yet, two cross-cutting issues impede realizing the expected benefits of the management of the budgetary cycle and support processes, managed by MEF, namely (a) capacity constraints, which need to be addressed at various levels; and (b) uncertainty regarding budgetary ceilings, which impact planning and prioritization. Furthermore, the review found that the forward budget projections were not aligned with the planned investments under PNISA 1.

- **Levels & Trends of Agricultural Sector Expenditures :** Some of the key findings relevant for this policy review in terms of public expenditure levels and trends are as follows: (a) Agricultural budgetary allocations are erratic and decreasing among all ministries (except MITADER); and (b) The budgetary allocation to the agricultural sector was well below the 10% expenditure target under the MAPUTO/MALABO commitment, and misaligned with the relative importance of the sector's share of GDP estimated at 23% p.a. With respect to expenditure classification, the main results are as follows: (a) Recurrent and investment expenditure allocations vary significantly across ministries; (b) Expenditure is often misclassified; and (c) The appropriate balance between recurrent/investment, wage/non-wage, and internal/external expenditure have to be determined by each ministry and specific functions, based on efficiency-based benchmarks. Regarding the efficiency of agricultural expenditure, the results show that: (a) There are overall high budget execution rates (80%) in the agricultural sector (in part due to the expenditures having to do with recurrent items like personnel and inputs, making them more predictable that in other countries), and for internal vs. external funds. The timing of disbursement is crucial with higher execution rates being "forced" to meet end-of-year expenditure targets; (b) This pattern may suggest misalignment between donor and government procurement procedures, and higher budget unpredictability for external funds; (c) Provinces that contribute a higher share to GDP are receiving relatively lower public expenditure in the sector; and (d) This misalignment suggests the need for MEF (at central and provincial levels) to ensure appropriate criteria for the allocation of expenditure consistent with the relative importance of the sector in the respective province.

- **Expenditure on Selected Strategic Programs**: Three programs, namely agricultural research, extension and irrigation were analyzed in detail as they comprise the engine for the transformation of the agrarian sector. With respect to the Agricultural Research Program, results reveal the following relevant aspects: (a) significant underfunding of agricultural research, about 0.43% of the agricultural GDP and well below the KHARTOUM target[41] of 1%; (b) a need to explore appropriate public-private partnerships for expanded agricultural research, especially involving high value-chains; and (c) a low and shrinking capital investment share in agricultural research public expenditure, coupled with limited operating funds, are constraining the potential and tangible benefits of highly specialized agricultural researchers. Regarding the Agricultural Extension Program, the results indicate the following: (a) Although - operating funds are significant, there is no clear improvement in expected outputs and outcomes (e.g. adoption rates; crop yields; $/adopter), per PNISA assessment (2017); (b) There is a need, as in the case of research, to explore appropriate public-private partnerships for expanded extension services, especially involving high value commodities/value-chains; and (c) There is a large dependence on external funding sources (about 70%), raising questions about scalability and sustainability in providing improved extension services, and securing sustained increases in agricultural productivity. Finally, the results for the irrigation program show : (a) that there has, and continues to be, significant underfunding of irrigation, ranging from 2.5 to 25% of the original PNISA 1 budget (with a 25% share in 2017); (b) significant underfunding of agricultural irrigation, except in 2017, primarily from external funds; and (c) a need to explore appropriate cost-recovery levels and public-private partnerships for expanded agricultural irrigation infrastructure, especially involving high value crop production and value chains.

- **Financing of Agricultural Public Expenditures**: Regarding the government budget, financing is mainly on-budget including for funds from other sources such as development partners. The results reveal that for On-Budget Financing, there is (a) erratic financing levels and sources: Government (52-72% of total financing); External Loans (7-32%); and External Grants (8-20%); (b) a dominance of government revenues (about 70%) and increasing external borrowing; and (c) internal funding sources are linked to improved revenue collection and are more predictable than external funds. For agricultural expenditure funded by donors, on-budget sources vary from 58-68% and off-budget sources vary from 32-42%. The private sector share of agricultural finance is very small (varying between 5.5 – 7.5 % of total private sector financing). Although the agriculture sector has the largest impact on poverty reduction, and makes a sizable contribution to GDP, the sector receives a small share of the total private sector finance/credit. Various constraints impede access to credit for agricultural development (land security; collateral; high interest rates). The agriculture sector ranks 4th in terms of Foreign DirectInvestment (FDI), despites its higher importance; a considerable share of FDI for industry is agro-based.

- **Assessment of Forward Agricultural Expenditure Allocations:** The *Cenário Fiscal do Médio Prazo* (CFMP) provides a good basis for budgetary planning and is used to define the annual PES targets and provides an instrument to mobilize donor funding.

25. **A new Government took office in February 2020 after the general elections.** The new administration adopted a Five-Year Government Plan 2020–-2024 (*Programa Quinquenal do Governo, PQG*) with a strong emphasis on promoting sustainable rural productive development and a focus on the central and northern part of the country, particularly in agriculture. The GoM's strategic vision is to integrate the promotion of rural development with increased resilience and sustainability of natural resources and lay the foundation for an integrated land use approach that recognizes the interdependence between value chains in agriculture, forestry and fisheries, and natural resources (soil, water, forests, and biodiversity). It seeks to increase rural households' income while strengthening the resilience and sustainability of these natural resources. More resilient rural areas will simultaneously meet local needs (for example, water availability for households and rural businesses) while also contributing to national commitments and international targets on climate change (NDC[42], REDD+ Strategy) and biodiversity (National Biodiversity Strategy and Action Plans, NBSAPs).

26. **With the aim of promoting integrated rural development, the Government is developing the Agrarian Sector Strategic Plan 2021–2031 (PEDSA II, Plano Estratégico de Desenvolvimento do Sector Agrário II 2021-2031).** The main objective of PEDSA II is to contribute to accelerating the growth and sustainable transformation of the rural economy based on an improvement in the incomes of rural families in line with the preservation of key ecosystem services. Initial key objectives include the following: (a) increase the sector's contribution to the national GDP; (b) substantially increase the productivity of key agricultural crops and improve their competitiveness; (c) increase rural household incomes; (d) create jobs in agriculture, agro-processing, forestry, fisheries, aquaculture, nature-based tourism, and wildlife economy; (d) reduce chronic malnutrition; (e) increase private investment into the rural economy; and (f) improve effectiveness of the management of natural resources on which the rural economy depends. To achieve this objective, PEDSA II is based on eight strategic pillars (see Table 3 below). The GoM Program is adopting an approach supported by a multiyear effort led by the WB for the Land Use Planning for Enhanced Resilience of Landscapes in Mozambique (LAUREL, P160760). It is expected that PEDSA II will include detailed investment programs (under a National Investment Plan, NAIP II) and that it will be aligned with the approach of building resilience of vulnerable food-insecure rural households.

27. **PEDSA II aspires to align government initiatives from sectors engaged in the development of the rural economy in Mozambique, capturing synergies and harmonizing approaches**. It also aspires to serve as a tool for mobilizing funding and coordinating interventions from development partners, civil society, and the private sector. While it reflects priorities from the PQG 2020–2024, it identifies a series of complementary interventions, with emphasis on cross-sectoral coordination. The PEDSA II preparation process has involved 11 different government agencies across eight different ministries. The Ministry of Agriculture and Rural Development (MADER) is leading the development of PEDSA II with the Ministries of Land and Environment (MTA); Sea, Inland Waters, and Fisheries (MIMAIP); Industry and Commerce (MIC), Minerals and Energy, Tourism and Culture; Public Works, Habitation and Water Resources (MOPHRH); and Economy and Finance (MEF)[43]. PEDSA II is expected to be approved by the Council of Ministers and the Agrarian Sector Coordination Committee (Comité de Coordenação do Sector Agrário, CCSA) by January 2022.

28. **The full implementation of PEDSA II is expected to deliver significant improvements in rural productivity, job creation, and sustainability, although it faces key challenges.** Based on recent studies and analysis focused on the agrarian sector[44], PEDSA II identifies the following key issues: (a) weak production sustainability and resilience; (b) weak private sector participation; (c) lack of statistical data, research and innovation; (d) limited private sector investment and public financing; (e) negative food balance; (f) weak governance due to lack of formal and structured value chains; and (g) weak intra and interinstitutional agrarian sector coordination.

[42] *NDC = Nationally Determined Contribution; REDD+ = Reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.*

[43] *Government agencies involved within these line ministries include (a) National Sustainable Development Fund (Fundo Nacional de Desenvolvimento Sustentavel, FNDS); (b) National Directorate for Commercial Agriculture; (c) National Directorate for Family Agricultura; (d) National Forest Directorate (Direção Nacional de Florestas, DINAF); (e) National Administration of Conservation Areas (Administração Nacional de Áreas de Conservação, ANAC); (f) Blue Economy Development Fund (PROAZUL); (g) Institute of Cereals of Mozambique; (h) Energy Fund; (i) National Tourism Directorate; (j) National Planning and Budget Directorate; and (k) National Roads Administration (Administração Nacional de Estradas, ANE).*

[44] *Cultivating Opportunities for Faster Rural Income Growth and Poverty Reduction (World Bank 2020); Republic of Mozambique Agrarian Sector Transformation: a Strategy for Expanding the Role of the Private Sector (World Bank 2019); Rationalization of Investments in Mozambique's Agrarian Sector: Assessment and Emerging Strategies and Priorities (MADER 2020); Mozambique National Agricultural Investment Plan (PNISA): Assessment (MASA, 2019).*

29. **PEDSA II will be accompanied by an investment plan (PNISA II).** In its current form[45], PNISA II identifies over US$1 billion in investments over 5 years through a series strategic pillars laid out in PEDSA II (see Table 3 below) and the financing gap (80 percent) is expected to be covered by Government and donor resources in an approximate ration of 2:1. Donors that have been in discussion with the Government and development partners about financing PEDSA II include the WB, African Development Bank (AfDB), UK Department for International Development (FCDO), Japan International Cooperation Agency (JICA), International Fund for Agricultural Development (IFAD), among others.

Table 3. PEDSA II Expected Strategic Pillars

PEDSA II Expected Strategic Pillars
Pillar 1: Agrarian Productivity and Competitiveness
Pillar 2: Agrarian Markets
Pillar 3: Agrarian Infrastructure
Pillar 4: Food and Nutrition Security
Pillar 5: Natural Resources
Pillar 6: Agrarian Institutions
Pillar 7: Gender Equity and Equality and Youth Engagement
Pillar 8: Climate Change and Natural Disasters

Source: PEDSA II (October 2021 draft version) .

30. **The GoM has recognized the need to devote significant attention to northern provinces.** The Northern Integrated Development Agency (Agência de Desenvolvimento Integrado do Norte, ADIN) is a public institution established in March 2020 with the mandate to promote integrated development in Mozambique's northern provinces. ADIN's tutelage was transferred in June 2020 from the Council of Ministers to MADER, highlighting the key role of rural development within the overall approach. ADIN will focus on boosting economic development in Cabo Delgado, Niassa, and Nampula, based on four main pillars: (a) humanitarian assistance, (b) economic development, (c) community resilience, and (d) communication.

[45] *No draft of PNISA II is under preparation along with PEDSA II. However, the Government did prepare an investment plan in 2020 (called PODERS – Sustainable Rural Economy Development Operational Program) that was never approved but which is serving as input to PNISA II. PODERS was not approved given the significant expected overlaps with PEDSA II, which the Government had decided to develop by the time PODERS draft was completedhas been shared, but only a Powerpoint dated December 2021..*

Methodology: Rationale and Coverage

31. **Each year since 1987, the OECD has measured monetary transfers associated with agricultural policies in a growing number of countries using a standard method.** The OECD agriculture support estimates were developed in order to monitor and evaluate agricultural support policies and programs using a common and easy-to-use methodology for policy dialogue among countries, and to provide economic data to assess the effectiveness and efficiency of policies. The estimates were mandated by OECD Ministers in 1987, and have since been calculated for the OECD and an increasing number of non-OECD countries, and are widely referred to in the public domain.

32. The objectives of agricultural policies in OECD countries have evolved over time—from overcoming food shortages or surpluses in the post-war period to securing food safety, environmental quality, and preservation of rural livelihoods. Policy instruments have also changed, reflecting changes in domestic political and economic settings and, progressively, developments in international economics. Given this diversity, the OECD has developed a methodology—referred to as PSE in the literature—to compute support indicators measuring transfers to the agriculture sector and enabling comparability over time and across countries[46] PSE indicators provide insights into the burden that agricultural support policies place on consumers (i.e., market price support) and taxpayers (budgetary transfers). This is the most widely and systematically used methodology to monitor support to the agriculture sector in the world. The results, published annually, provide important contributions to the international policy dialogue on agriculture and trade[47].

33. There are at least three clear benefits to adopting this methodology for reviewing agriculture policies at a global level:

    a. **Monitoring and evaluation of agricultural policies developments:** This includes policy reforms achieved by countries over time, through specific reform efforts (e.g., the U.S. Farm Bills and EU Common Agriculture Policy (CAP) reforms), as well as progress towards achieving international commitments agreed to by countries (EU, CAADP)[48].

    b. **Establishment of a common base for policy dialogue:** By using a consistent and comparative method to evaluate the nature and incidence of agricultural policies, countries are able to engage in trade negotiations and common agriculture policy discussions (WTO, WB, IMF, and FAO). They are also useful for farming and non-government organizations, and research institutions in the discussions on differentiated impact of agriculture policies. Mexico, Colombia, Central America and the Andean countries used these estimates to develop their transition into the FTAs with the U.S. and the EU.

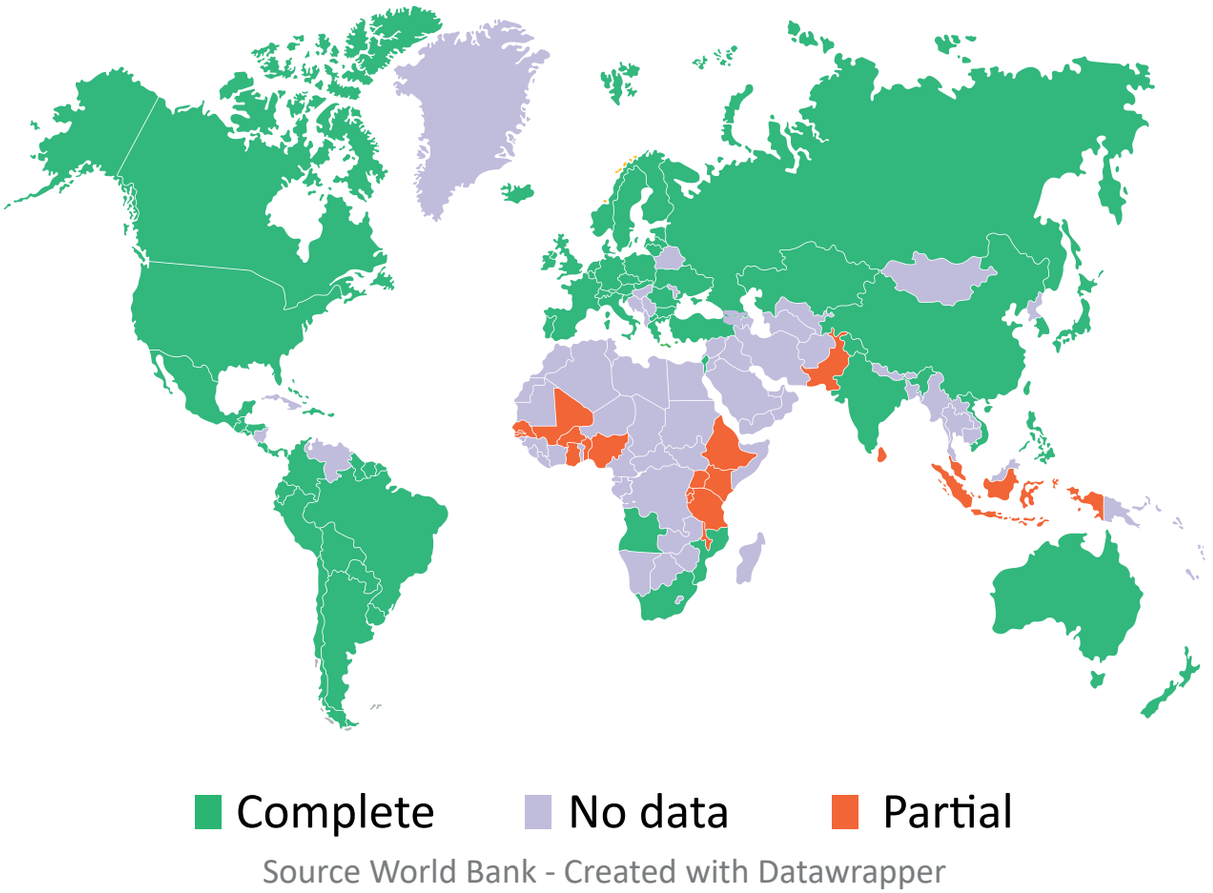
    c. **Undertaking research on policy impacts:** The data serves as an input into modeling to assess the effectiveness and efficiency of policies in delivering the outcomes for which they were designed and to understand their effects on production, trade, income, the environment, etc. While the indicators cannot by themselves quantify these impacts, the economic information upon which they are based is an important building block for further analysis. The WB is undertaking an analysis with IFPRI at a global level, modeling the repurposing of agriculture support policies and programs towards climate change mitigation/adaptation objectives.

46 *As it is neither affected by inflation nor the size of the sector, it allows comparisons in the level of support to be made both over time and between countries*

47 *OECD's Producer Support Estimate and Related Indicators of Agricultural Support: Concepts, Calculations, Interpretation and Use (The PSE Manual).*

48 *This commitment stated that "agricultural trade should be more fully integrated within the open and multilateral trading system,", and it called for OECD countries to pursue "a gradual reduction in protection and a liberalization of trade, in which a balance should be maintained as between countries and commodities." Ministers also requested the OECD to develop a method to measure the level of protection in order to monitor and evaluate progress.*

Figure 2: Coverage of OECD Methodology of Agriculture Support Estimates



Note: The map represents all the countries using the OECD methodology with at least one year of estimates for agriculture support. The OECD has tracked a subset of countries over multiple years.

34. **There are strong advantages, but also some limitations, to using the OECD methodology for undertaking the agriculture policy review for Mozambique.** The advantages are that: (a) it provides a systematic and integrated view of agriculture support policies and programs (not limited to the more traditional public expenditure reviews or rate of protection); (b) given the large number of countries using this same methodology, an immediate benchmarking is possible across a large set of comparators[49] ; and (c) the methodology is simple and can be integrated into the agriculture public policy analysis conducted by the Government and other stakeholders[50]. The methodology also has some disadvantages and limitations, mainly: (a) Only two African countries have carried out agriculture support estimates with it, meaning Mozambique can only benchmark against South Africa and Angola, and (b) since the estimates are based on the monetary value of budget and price support, non-monetary support, like the quality of policies, are not captured. As an example, the methodology is able to identify how much policy/program support is invested in land administration efforts, but unable to qualify the impact (quality) of those policies/programs.

35. **This report produces indicators covering a range of agricultural support, and is expected to inform upcoming trade negotiations and policy reforms enhancing sector competitiveness and economic diversification.** In particular, the indicators of support are expected to be relevant to AfCTA trade negotiations on agriculture

[49] *At present, the OECD methodology for agriculture support estimates covers 109 countries. This includes OECD countries, non-OECD EU Member States (subject to data availability), and a number of developing countries where monitoring is done by the OECD, IADB, and FAO's MAFAP unit. The 54 countries monitored by the OECD are Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, the European Union (Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Spain, Slovakia, Slovenia, Sweden, the United Kingdom), India, Indonesia, Iceland, Israel, Japan, Kazakhstan, Korea, Mexico, New Zealand, Norway, the Philippines, the Russian Federation, South Africa, Switzerland, Turkey, Ukraine, the United States and Viet Nam.*

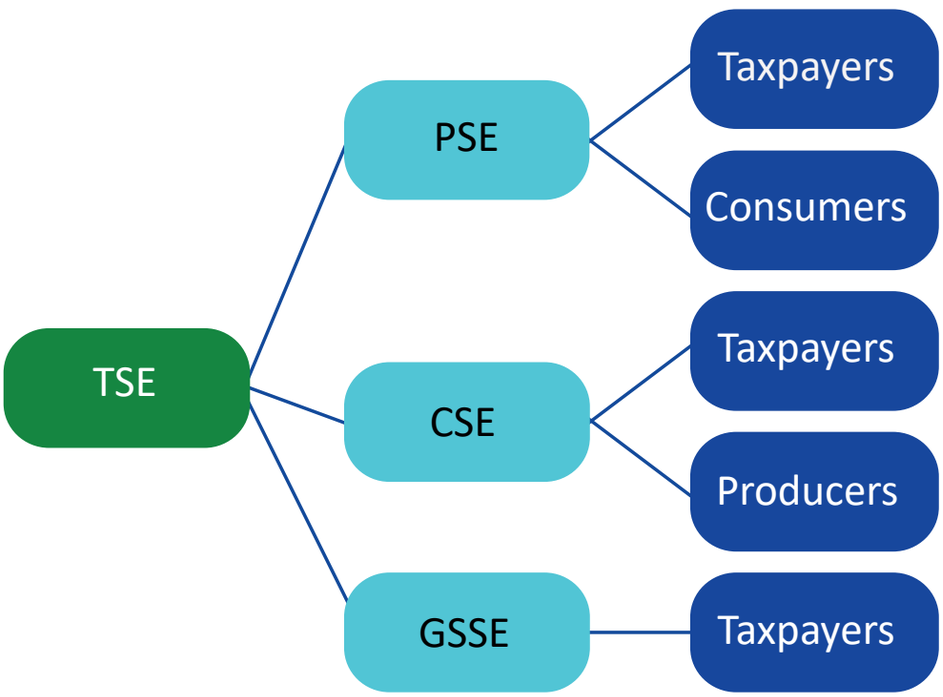
[50] *As part of this assessment, a training of more than 15 public sector staff was undertaken to build capacity and allow for Government to update the estimates going forward.*

and food products. This estimation will enable Mozambique to benchmark against trading partners and comparator countries like South Africa, in relation to the level and composition of agriculture support. Given the current fiscal constraint and the need to diversify its economy, there is a window of opportunity for the Government of Mozambique to gradually open up the trade of agriculture inputs and products, while shifting public spending towards more targeted interventions. However, in the absence of comprehensive estimates of agriculture support, the evidence base for capitalizing on this opportunity does not currently exist.

OECD Methodology: Technical Concepts and Calculation

36. **According to the OECD methodology, agricultural support is defined as gross transfers to agriculture from consumers and taxpayers, arising from public policies that support agriculture.** This definition covers both budgetary and non-budgetary expenditures such as credit concessions and direct subsidies (electricity, fuel, water, farm inputs). It also includes implicit support arising from border trade (tariffs, taxes) and domestic market measures (e.g., minimum support prices). Overall, the methodology enables a computation of total transfers to producers (PSE), consumers (CSE), and general services (GSSE) respectively, with a clear identification of transfer sources (domestic and international taxpayers, consumers) (Fig. 3)[51]. The OECD methodology also allows the calculation of disaggregated PSE for each product considered. The different levels of support are reflected in the Producer Single Commodity Transfers (SCT), a measure of commodity-specific agricultural policies indicating policy flexibility for producers in their choices of product mixes.

Figure 3: OECD Methodology –Main Indicators of Transfers, by Source



Source: Agricultural Policy and Monitoring OECD, 2020

37. The main indicators of support are grouped into three categories—producers, consumers, and general support. Box 1 and 2 below show how indicators are defined and computed. Annex B provides further details on classification of support across OECD categories:

[51] *The PSE is an indicator that measures the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm-gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income. The GSSE is a proxy for public support to agricultural public goods such as research and extension, agricultural education and some infrastructure investments closely linked to agriculture. It is defined as the annual monetary value of gross transfers arising from policy measures that create the public goods and the enabling conditions for the primary agricultural sector through development of private or public services, and through institutions and infrastructures regardless of their objectives and impacts on farm production and income, or consumption of farm products.*

Box 1. OECD indicators of support to agriculture

Indicators of Support for Producers

Producer Support Estimate (PSE): The absolute annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level[52] , arising from policy measures that support agriculture, regardless of their nature, objectives, or impacts on farm production or income. The PSE includes market price support and budgetary payments. Specifically, PSE includes gross transfers from consumers and taxpayers to agricultural producers arising from policy measures based on current output, input use, area planted/animal numbers/receipts/incomes (current, non-current), and non-commodity criteria (considered one of the least distortive).

Percentage PSE (%PSE): %PSE represents monetary gross transfers to producers as a share of gross farm receipts. As it is neither affected by inflation nor by the size of the sector, it allows comparisons in the level of support to be made over time, products, and between countries. %PSE is the OECD's key indicator to measure support to agricultural producers, as it provides insights into the burden that agricultural support policies place on consumers (i.e., market price support) and taxpayers (budgetary transfers).

Producer Single Commodity Transfers (producer SCT): The annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures linked to the production of a single commodity that the producer must produce to receive the transfer.

Producer Percentage Single Commodity Transfers (producer %SCT): The commodity SCT as a share of gross farm receipts for the specific commodity.

Indicators of Support to Consumers

Consumer Support Estimate (CSE): The annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm-gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on the consumption of farm products. If negative, the CSE measures the burden on consumers (implicit tax).

Percentage CSE (%CSE): CSE as a share of consumption expenditure (measured at farm gate) net of taxpayer transfers to consumers. It estimates the transfers as a share of consumption expenditure on agricultural commodities (at farm-gate prices), net of taxpayer transfers to consumers. The %CSE measures the implicit tax (or subsidy, if CSE is positive) placed on consumers by agricultural price policies.

Indicators of Support to General Services for Agriculture

General Services Support Estimate (GSSE): The annual monetary value of all transfers from taxpayers to policy measures and programs supporting general agriculture public goods and services such as rural infrastructure, animal and plant health, research and development, promotion of agriculture, agriculture schools, arising from policy measures that support agriculture, regardless of their nature, objectives and impacts on farm production, income, or consumption. The GSSE does not include any transfers to individual producers or activities related to a particular agriculture commodity[53].

Percentage GSSE (%GSSE): GSSE as a share of Total Support Estimate (TSE).

Indicators of Total Support to Agriculture

Total Support Estimate (TSE): The annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or the consumption of farm products.

Percentage TSE (%TSE): TSE transfers as a share of GDP.

52 *The price paid to the farmer at the farm, which excludes transport costs to the market.*

53 *There are six main GSSE support categories and the amount of subsidies allocated under them is derived from public expenditure data. Considering the previous budget analysis made by FAO in Mozambique, we select each program according its characteristics and we classify it in the corresponding category (Agricultural research, public Infrastructure, Marketing and promotion, etc.). For example, subsidies under the program "Building and maintenance of rural roads" were considered under "Infrastructure GSSE category". Public resources of Instituto de Investigación Agronomica were considered under "Agricultural Research GSSE" category.*

Box 2. Calculation of PSE for Mozambique

Broadly, the PSE has two main components: market price support and budgetary allocations.

1) Market Price Support (MPS)

MPS is the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers arising from policy measures that create a gap between the domestic market price and the border price (without tariffs/import taxes) of a specific agricultural commodity, measured at the farm gate level. Policies creating a price gap include domestic measures, such as administered pricing or market interventions. These policies include trade measures such as import tariffs, import quotas, tariff quotas, export subsidies, export taxes, as well as quantitative restrictions on exports. In some cases, the gaps between domestic and international prices are also explained by factors that are not strictly policy-related, e.g., deficiencies in physical infrastructure, inadequate information, and weak market institutions. MPS is financed by consumers through higher prices. In Mozambique, MPS is calculated based on the following information:

Period covered: 2018

Products covered: Cassava, tomato, pork meat, maize and sweet potato. These five commodities account for 65.7 percent of the total value of gross agricultural output (GAO) in Mozambique for 2018[54]. For the purpose of the PSE estimation, are treated as net imports (M)[55].

Producer prices: These are average prices received by producers at the farm gate level. This information has been provided by a local consultant, sourced from producer surveys, farmer cooperatives and the National Institute of Statistics of Mozambique (INE) (See Annex C for technical details)[56].

External reference prices: Average import/export prices were used for the products considered in this analysis[57]. Prices were adjusted (added) with international transportation cost and other processing costs in order to make reasonable comparisons with domestic prices[58].

For all five products covered, we used average import unit prices (CIF) at the border adding transport cost to the production zone and subtracting processing costs. Data for CIF prices was provided by FAOSTAT and transport and processing cost by surveys to local producers for 2018.

Marketing margins: Marketing margins are estimations of processing and handling costs for a given commodity. Marketing margin adjustment to the reference prices is required to compare them with domestic prices measured at the farm gate. For products, margins data was provided by surveys to local producers.

Price gap estimates: The "zero price gap" was used when negative gaps were obtained between producer prices and adjusted reference prices (farm level), as the estimated negative price gaps reflect factors other than agricultural policies. This adjustment considers transport costs from border to farm gate and the costs of processing farm products into exported products.

2) Budgetary Support

Budgetary support is funded by taxpayers (government revenues). Budgetary information for 2018 was provided by FAO and complemented by line-item data sourced from the Ministry of Economy and Finance (MEF), the Ministry of Agriculture and Rural Development (MADER), and consumption subsidies from the National Institute of Social Action (see Annex D for complete list)[59].

54 *Source: FAOSTAT, 2020 and own estimation.*

55 *In the case of cassava—a thinly traded commodity—there is ambiguity on whether, on average, it is an import or export commodity for Mozambique. According to COMTRADE, for all years prior to 2018 Mozambique was a net importer (no data for 2019). According to FAOSTAT for all years Mozambique was a net exporter, but this is not official data. It is an estimate based on other sources.*

56 *In the case of producer prices, the arithmetic annual average (at national level) was considered. Source: Local consultant survey.*

57 *For a Representative Import Tariffs, the "Most Favored Nation Tariff" was considered for each product analyzed. Source: Tarifa de Pauta Aduanera. Diario de la Republica de Mozambique.*

58 *In the case of exchange rate, the arithmetic average "Sell" price was considered, as it better reflects the cost of US dollar to make local currency conversions. Source: Banco de Mozambique.*

59 *FAO AgPER data was complemented with other information directly from Ministry of Finance (that was not included in FAO exercise).*

38. **In Mozambique's data-poor setting, the quality of price information collected is a potential limitation of the OECD methodology**. Like other measures used tocompute indicators of agriculture support[60] , the OECD methodology has limitations associated with the availability, quality, and nature of market information in general, and prices in particular. Since an official source of producer prices and other parameters used in the analysis did not exist, a survey of producers and exporters was conducted by the study team. To validate this data, the survey results were reviewed by the Government's technical staff and were found to have yielded credible price levels within plausible bounds. The team's previous experience in other countries has shown that the use of this methodology allows dialogue between parties and the construction of better public policies, and there are incentives to systematize the generation of key information and develop a key public good. It is noteworthy that one of the results of these estimates indicates an underinvestment in market information systems in Mozambique, despite its positive externalities for market development.

Agriculture Support Estimates: Global Snapshot and Trends

39. In the 2017–2019 period, the 54 countries monitored by the OECD provided net total transfers of US$619 billion to their agriculture sectors annually. According to the OECD's Agriculture Policy Monitoring and Evaluation Report (2020)[61], the net transfers or total support to agriculture (TSE) included US$708 billion of gross support, offset by an implicit taxation of farmers worth more than US$89 billion in countries like Argentina and India, which used measures that depressed the domestic prices of some commodities. US$425 billion of total transfers constituted budgetary spending for various support programs, and the rest was market price support (MPS). About US$536 billion, comprising 72 percent of TSE, was in the form of support to producers (PSE).

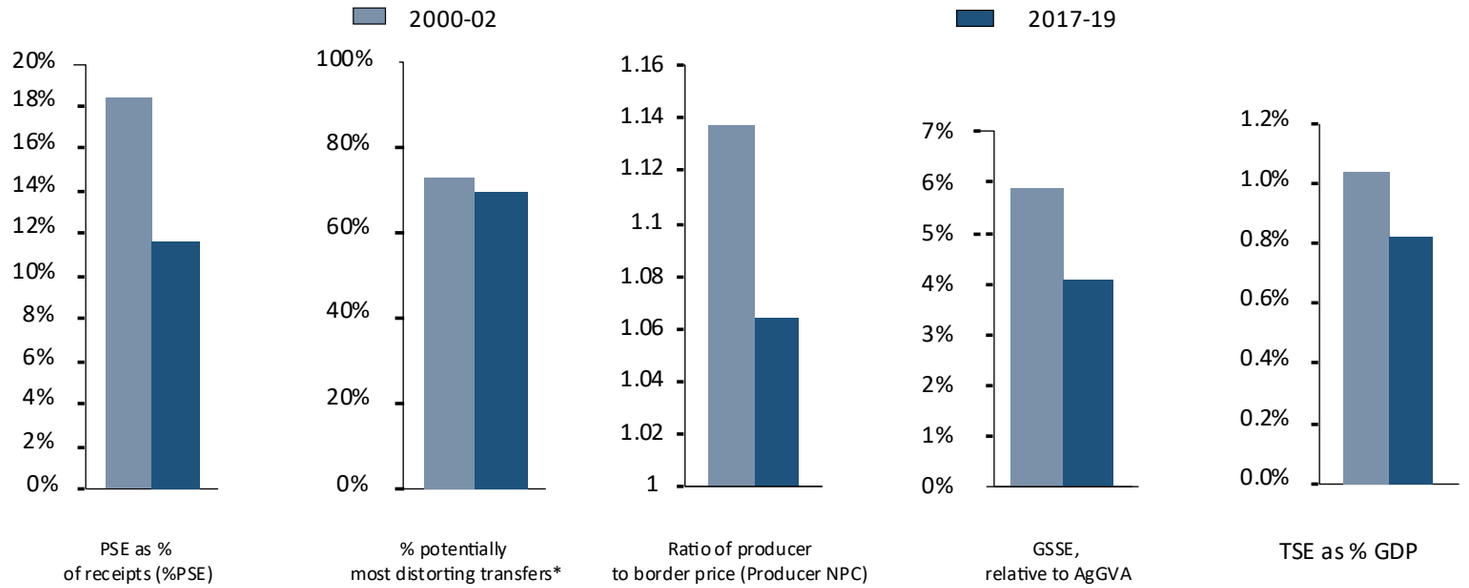
40. **Over half of producer support was provided via policy instruments most likely to distort agricultural production and trade.** The OECD methodology identifies support based on commodity output—MPS and subsidies linked to output or the unconstrained use of variable inputs—as having the strongest potential to distort agricultural production and trade. During the 2017-2019 period, the effective prices received by producers were 6 percent higher than world prices, with the largest price gaps for sugar and rice. Correspondingly, Single Commodity Transfers (SCT) represented above 50 percent of PSE and sugar and rice had the highest share of SCT in commodity gross farm receipts. MPS is the main component of the SCT's in most cases. On the other hand, the expenditures financing general services to the sector (GSSE) reached an annual average of US$106 billion in 2017–2019, with financing of infrastructure projects, agricultural knowledge and innovation, and public stockholding accounting for US$45 billion, US$26 billion, and US$21 billion, respectively.

41. **The changes in the structure of support were relatively moderate over the last two decades, when averaged over all countries covered by the methodology.** During the 2017–2019 period, producer support represented 11.7 percent of gross farm receipts (%PSE), a reduction from 18.4 percent in 2000–-2002 (Fig. 4). Comparing the same periods, the share of the most distorting forms of transfers has declined slightly from 72 to 69 percent of gross producer transfers in absolute terms. In terms of aggregate gross farm receipts, this share has declined from 13 percent in 2000–2002 to 8 percent in 2017-2019. Notably, while distortionary transfers based on output are shrinking in relative terms, those based on unconstrained input use have increased. Among the remaining forms of producer support, payments based on areas planted, animal numbers, and historical parameters not requiring production are significant, accounting for 18 percent of all producer support. Notably, payments decoupled from current production and therefore less distorting, have increased significantly and represent 14 percent of all producer support (Annex, Fig. 29). On average, relative expenditures for GSSE (%GSSE) have declined as agricultural GDP has grown more rapidly. Conversely, the total support to agriculture as a share of GDP (%TSE) has declined slightly over time, mainly driven by the smaller relative size of the sector within overall economies.

60 *Four widely known measures are used in various studies to estimate support: the nominal rate of protection (NRP), the nominal rate of assistance (NRA), the effective rate of protection (ERP) and the effective rate of assistance (ERA). The NRP measures the increase in gross receipts from the sale of the commodity; the NRA measures the increase in gross receipts including support not linked to the sale of the commodity. The ERP measures the increase in the value added from the sale of the commodity, i.e. taking into account the price of inputs; the ERA measures the increase in value added from both the sale of the commodity and support not linked to the sale of the commodity.*

61 *OECD (2020), Agricultural Policy Monitoring and Evaluation 2020, OECD Publishing, Paris, https://doi.org/10.1787/928181a8-en*

Figure 4: Agriculture Support Trends (54 Countries)



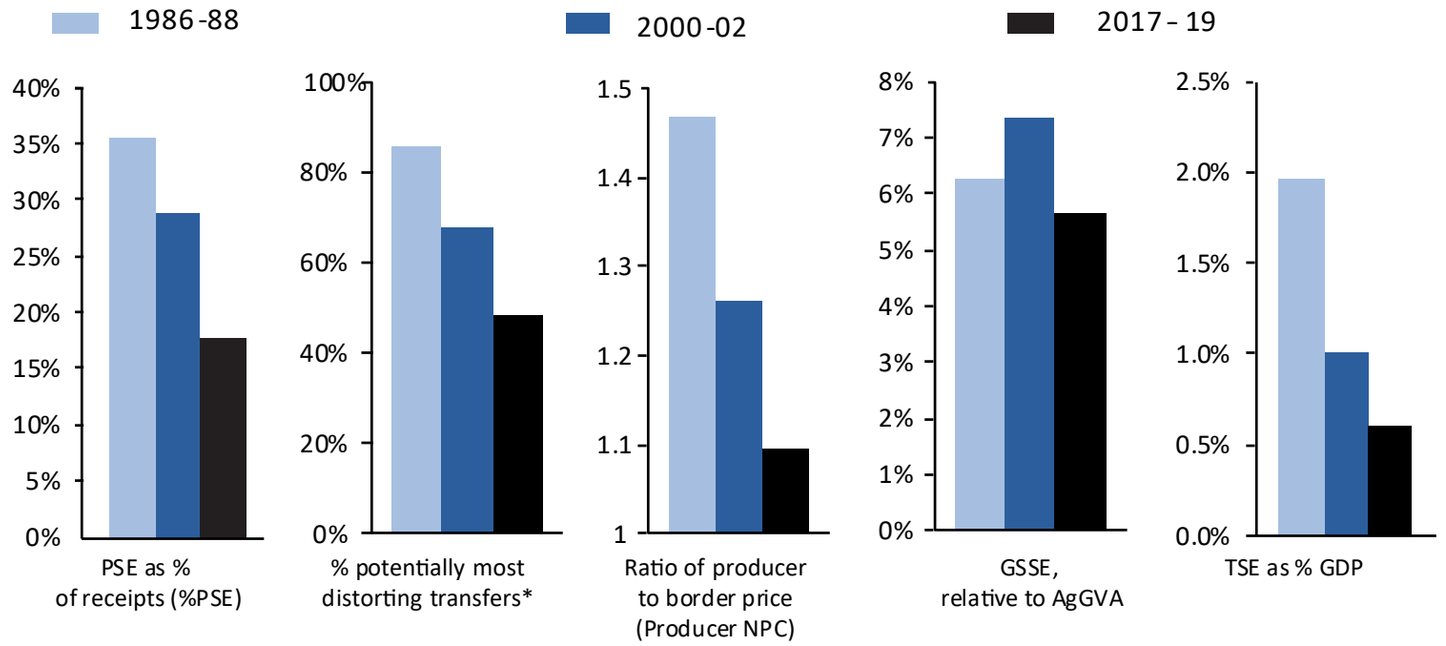
Note: * Share of potentially most distorting transfers in cumulated gross producer transfers.
Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-pcse-data-en.

OECD and Emerging Economies: A Comparison

42. **Despite a strong decline in the OECD area, producer support has continued to account for double the share of gross farm receipts, relative to emerging economies, albeit increasingly focused on achieving environmental services.** The numbers below show that overall there are substantial variations at the country and commodity levels in both groups (OECD and emerging economies). During the 2017–2019 period, the total support to agriculture (TSE) in OECD countries[62] was US$319 billion and the corresponding figure for emerging economies[63] was US$295 billion. While TSE as a share of GDP had declined to nearly half of the 2000–2002 level in the OECD, it had only marginally declined in emerging economies. The support provided to producers individually (PSE) was nearly identical in the OECD and in emerging economies, at 72 and 71 percent of the TSE respectively. However, OECD producer support accounted for 17.6 percent of gross farm receipts (%PSE), twice that of emerging economies at US$89 billion (8.5 percent), partly due to the implicit taxation of producers due to a large negative MPS in Argentina and India. The %PSE indicator of producer support has trended upward in emerging economies, growing from 4.2 percent, even as it has declined from 29 percent in the OECD since 2000-2002 (Fig. 6, 7). The effective prices received by producers were 9 percent higher than the world prices, on average, but showed a declining trend over the last three decades. In contrast, effective prices were 5 percent higher than the world prices in emerging economies, rising from 1 percent in 2000-2002.

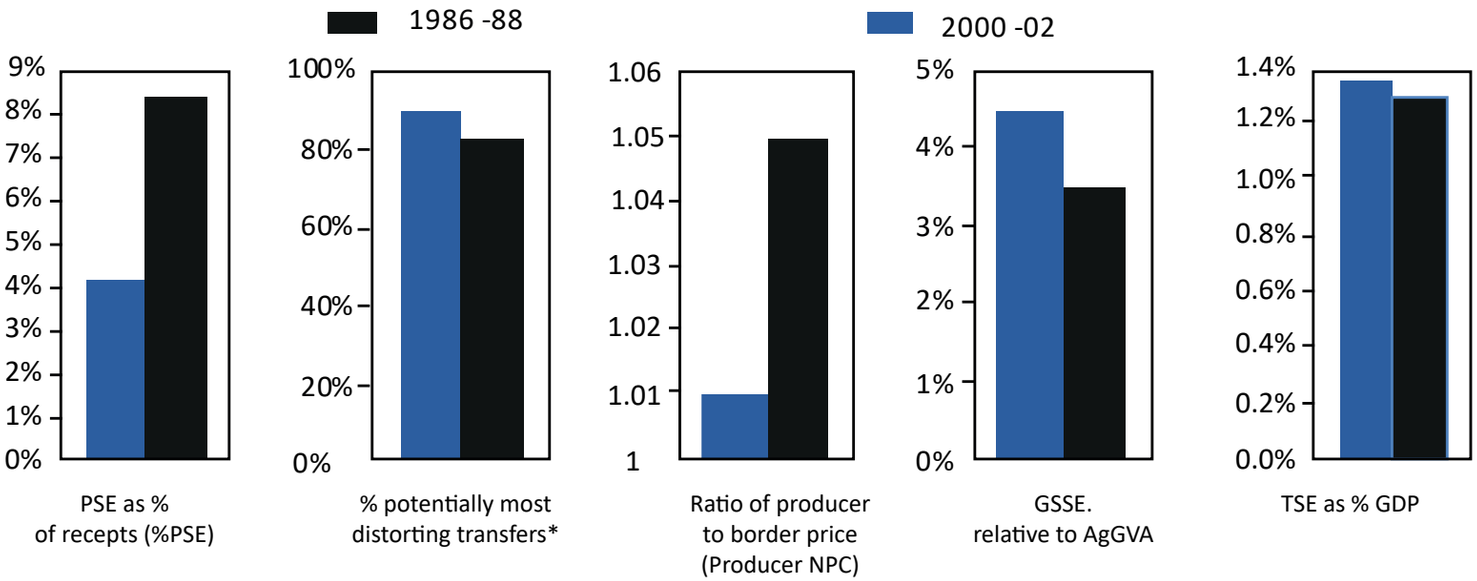
62 *The OECD total does not include the non-OECD EU Member States, nor Colombia which joined the OECD in April 2020.*
63 *The Emerging Economies total includes Argentina, Brazil, People's Republic of China, Costa Rica, India, Indonesia, Kazakhstan, Philippines, Russian Federation, South Africa, Ukraine and Viet Nam, as well as Colombia which joined the OECD in April 2020*

Figure 5: Agriculture Support Trends –OECD Countries



Notes: * Share of potentially most distorting transfers in cumulated gross producer transfers. Colombia became the 37th member of the OECD in April 2020. In the data aggregates used in this report, however, it is included as one of the 13 Emerging Economies.
Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-pcse-data-en

Figure 6: Agriculture Support Trends—Emerging Economies

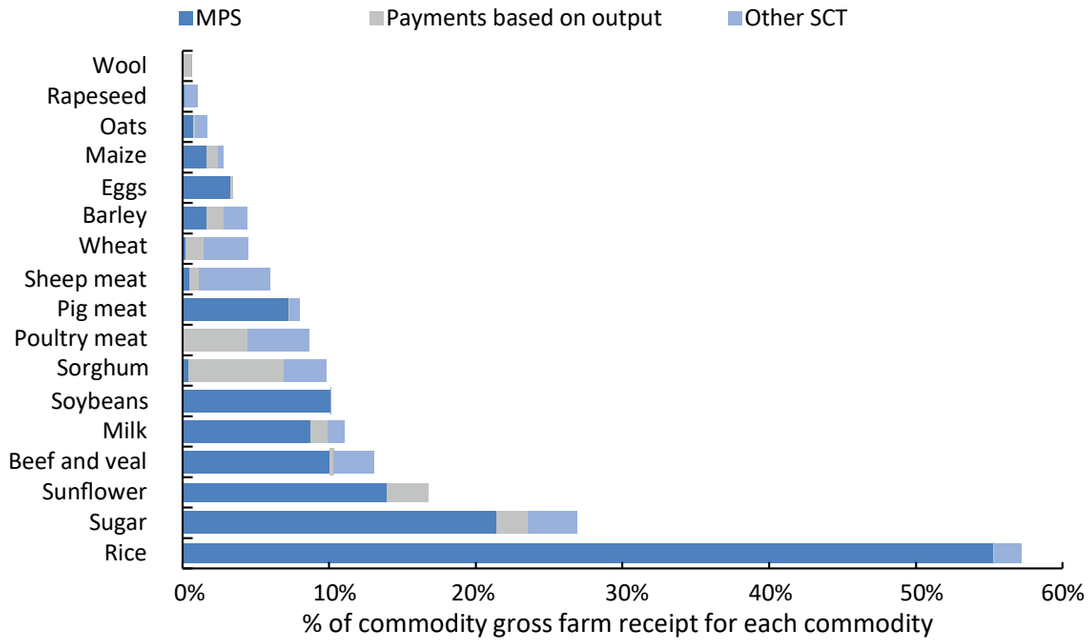


Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-pcse-data-en.

43. **Single Commodity Transfers (SCT) accounted for more than half of PSE in both OECD and emerging economies; sugar remained among the most supported commodities in both groups.** SCT represented about 51 percent of total PSE in OECD and emerging economies, with MPS accounting for the largest component in both groups. There was significant variation across commodities in the OECD, with domestic prices for rice being more than twice the world price in 2017–2019, accounting for the largest share of gross farm receipts. Sugar,

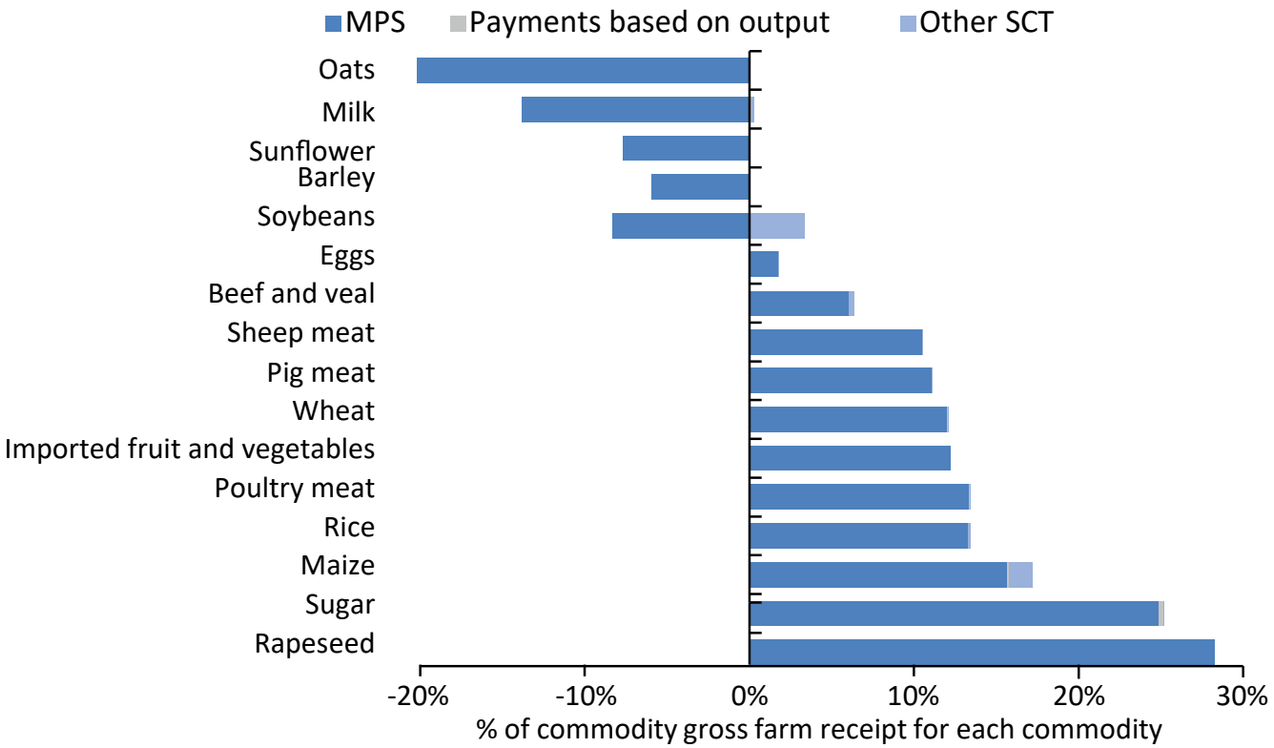
sunflower, milk, and beef prices were 35 percent, 30 percent, 13 percent and 13 percent above world prices. In emerging economies, SCT witnessed a falling trend in recent years partly due to more negative SCTs in India and Argentina and the extended direct income scheme in India. Rapeseed, sugar, maize, rice and wheat had the highest share of SCT in commodity gross farm receipts, while SCTs were negative for barley, oilseeds, milk and oats.

Figure 7: Transfer to Specific Commodities (STC) -- OECD, 2017-2019



source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database)

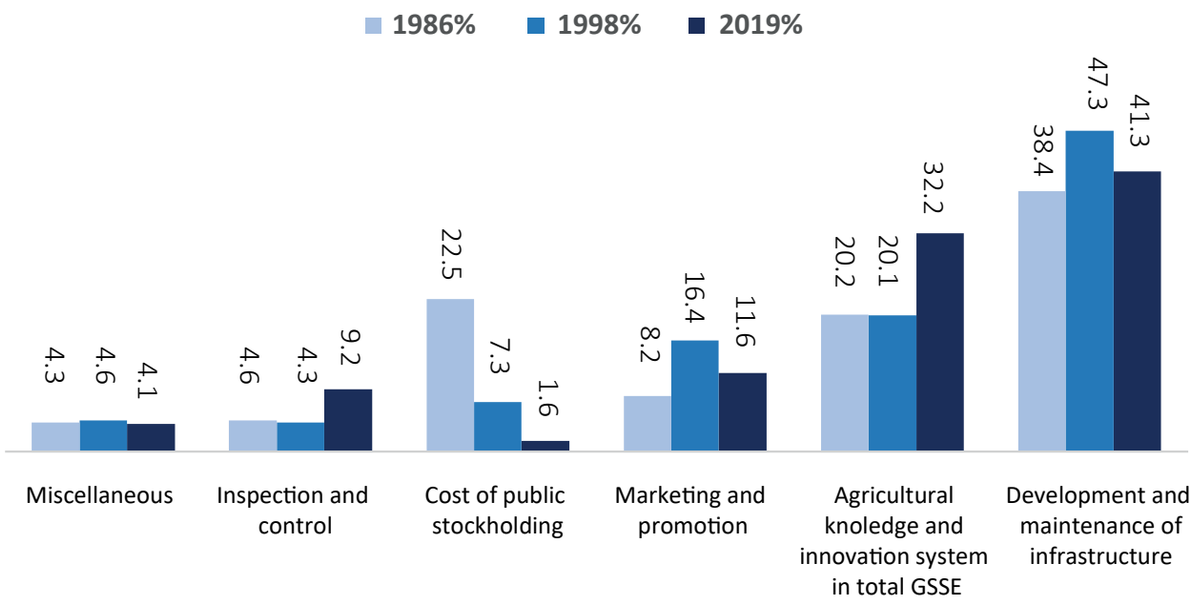
Figure 8: Transfer to Specific Commodities (SCT) – Emerging Economies, 2017-2019



Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database).

44. **The composition of support has shown a larger shift towards fewer distortionary policies in the OECD, relative to emerging economies.** In contrast with the long-term OECD decline in the share of transfers based on output and input use[64], the shares of less distorting forms of support such as payments decoupled from commodity criteria but linked to environmental services and animal welfare objectives have grown[65]. Over the 2017–2019 period, they account for 3.5 percent of gross farm receipts and a fifth of PSE. GSSE had also grown in nominal terms, with infrastructure financing recording a small increase and expenditures on agriculture knowledge and innovation growing by two thirds, and inspection and control services also doubling (Annex, Fig. 29)[66]. Fig. 9 below illustrates the growth in the share of the agricultural knowledge, inspection and marketing category (from 20.2 to 32.2 percent) and corresponding decline in the share public stockholding (from 22.5 to 1.6 percent) over the 1986–2019 period.

Figure 9: GSSE Composition in OECD Countries, 1986-2019



45. **On the other hand, the share of output and input-based transfers remains high at 83 percent in emerging economies, having declined from 89 percent in 2000-2002.** In terms of gross farm receipts, they have grown from 4 to 7 percent, but remain below the OECD average. Payments based on areas and animal numbers were almost non-existent in 2000–2002 but reached close to 13 percent of aggregate support to producers in 2017-2019. In turn, the relative importance of support for investments, often related to irrigation, has declined over time, now representing some 9 percent of PSE. GSSE reached an annual average of US$64 billion, with infrastructure projects, again largely irrigation-related, accounting 40 percent of expenditures. Public stockholding and agricultural knowledge and innovation accounted for 31 and 13 percent respectively (Annex, Fig. 29).

64 *MPS, payments based on output and unconstrained use of variable inputs.*

65 *Payments decoupled from current production, based on non-commodity criteria such as land set aside or payments for specific environmental or animal welfare outcomes. Payments based on current crop area and animal numbers have remained largely unchanged compared to 2000-02, and currently represent around 22% of total producer support.*

66 *The expenditures financing general services to the sector (GSSE) increased (in nominal terms) in the OECD area from US$ 36 billion per year in 2000-2002 to US$ 43 billion in 2017-2019. Most of these expenditures in 2017-2019 go to the financing of infrastructure (US$ 18.4 billion), recording a slight increase compared to 2000-2002, while the expenditures for agricultural knowledge and innovation (US$ 13 billion) have increased by two thirds. Expenditures for inspection and control services doubled, while spending for marketing and promotion activities and, more substantially, public stockholding declined over the same period, but all of these represented smaller shares of the GSSE expenditure.*

Total Support Estimates (TSE)

46. **Mozambique's total support to agriculture was 3.3 percent of GDP in 2018, more than six times the OECD average.** Mozambique's total support to agriculture averaged 3.3 percent of GDP in the 2018, highest value of analyzed countries, in part highlighting the large weight of the agriculture sector in total GDP. The level of total support provided to agriculture (TSE) in 2018 was US$509 million, equivalent to 3.3 percent of GDP, it was highest value in the analyzed countries and almost seven times OECD average of 0.6 percent. Representing the sum of PSE, GSSE, and CSE (Annex, Fig. 27, 28), Mozambique's TSE as a share of GDP was comparable to Philippines and Indonesia, and higher than Angola and South Africa in the SSA region (Fig. 10). As a share of agriculture GDP, Mozambique's TSE was equivalent to 12.8 percent in 2018, higher than South Africa but lower than Angola (Fig. 11), the value was similar to Costa Rica's value. Measured in proportion to producer income, this level of %PSE is relatively low (7 percent in 2018), compared to OECD countries (18 percent) or Angola (47 percent) but higher of South Africa (5 percent).

Figure 10: Benchmarking TSE as share of GDP, 2018

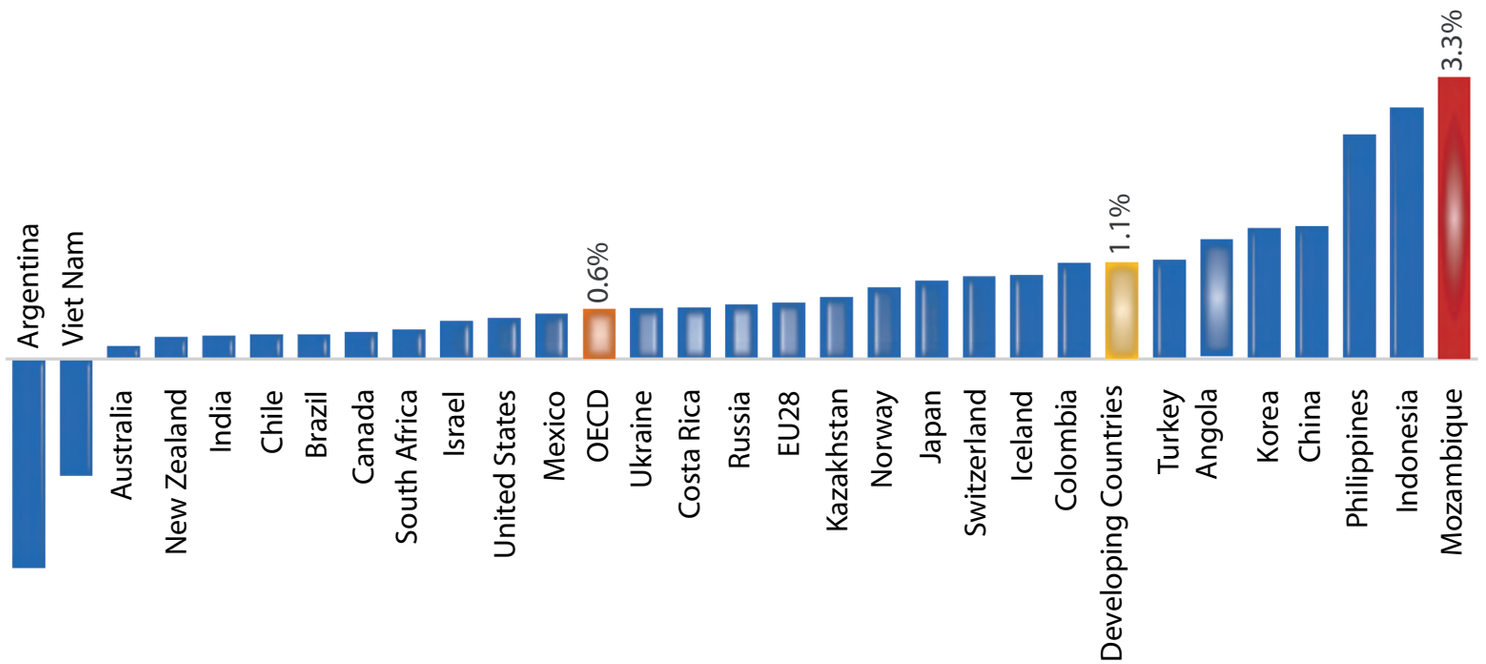
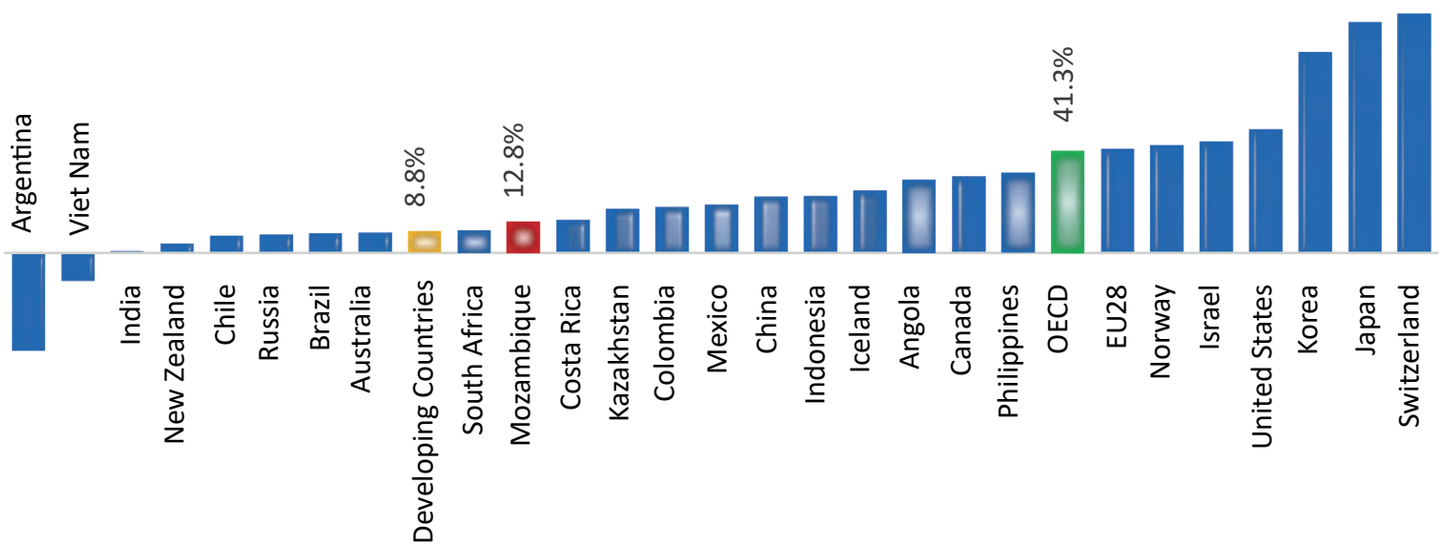
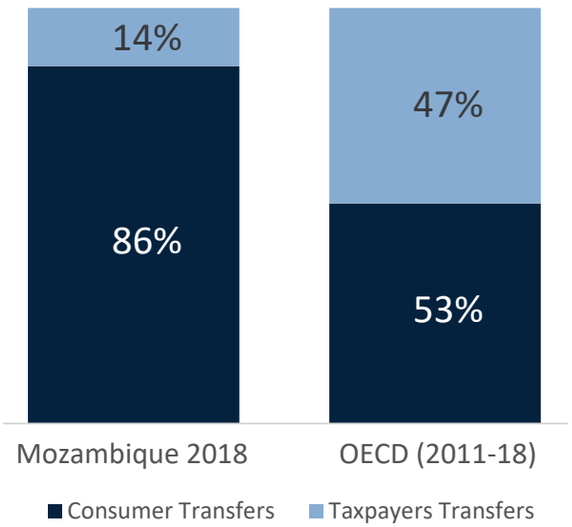


Figure 11: Benchmarking TSE as a share of Agriculture GDP, 2018



47. **MPS accounted for 86 percent of Mozambique's TSE in 2018, reflecting the relatively small role of budgetary transfers in relation to total agriculture support.** Within budgetary transfers, GSSE and the support to farmers were nearly equal and accounted for 3 percent mainly for the support based on the use of service input. It is worth noting that the sources of transfers were mainly consumers, who provided 86 percent of the support. Taxpayers contributed the remaining 14 percent[67]. This pattern is in stark contrast to OECD countries, where taxpayers are the ones generating the most transfers compared to consumers.

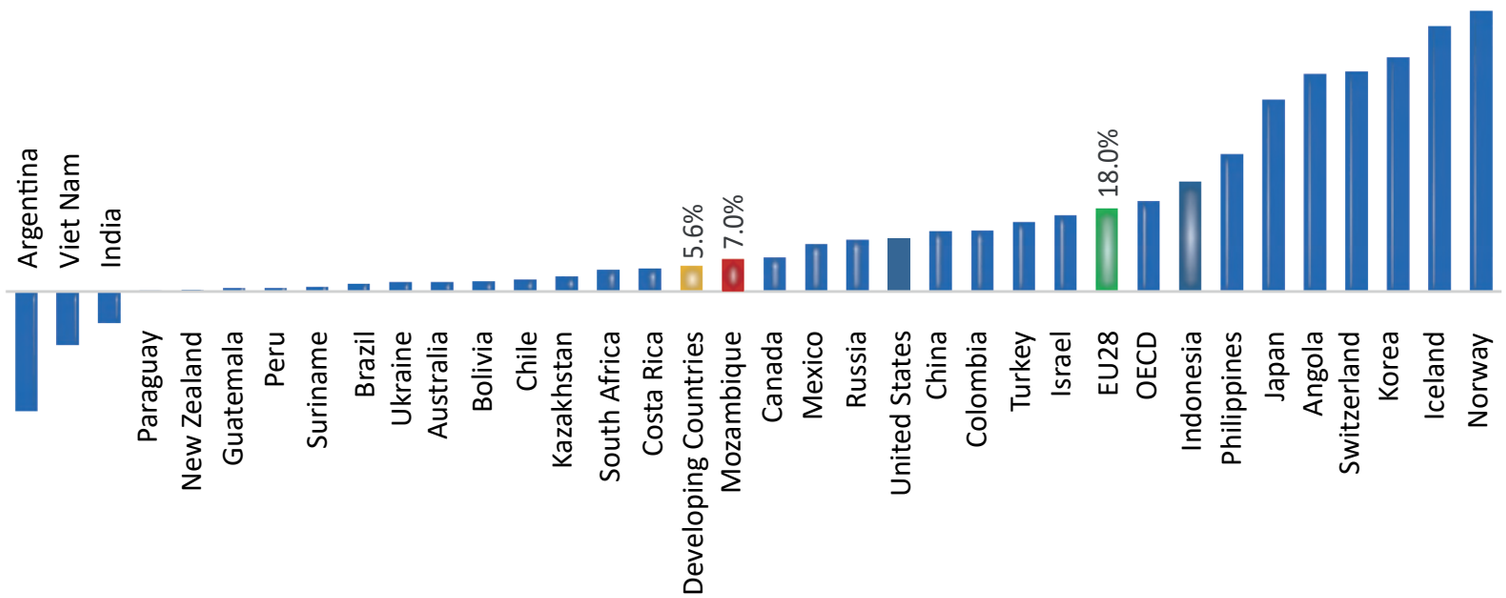
Figure 12: Benchmarking Mozambique's TSE, by Source of Transfers



Support to Agricultural Producers (PSE)

48. **MPS accounted for 86 percent of Mozambique's TSE in 2018, reflecting the relatively small role of budgetary transfers in relation to total agriculture support.** Within budgetary transfers, GSSE and the support to farmers were nearly equal and accounted for 3 percent mainly for the support based on the use of service input. It is worth noting that the sources of transfers were mainly consumers, who provided 86 percent of the support. Taxpayers contributed the remaining 14 percent[67]. This pattern is in stark contrast to OECD countries, where taxpayers are the ones generating the most transfers compared to consumers.

Figure 13: Benchmarking %PSE, 2018



67 *This is a result of the high participation of MPS in total support. Consumers generate transfers through the payment of prices above international reference.*

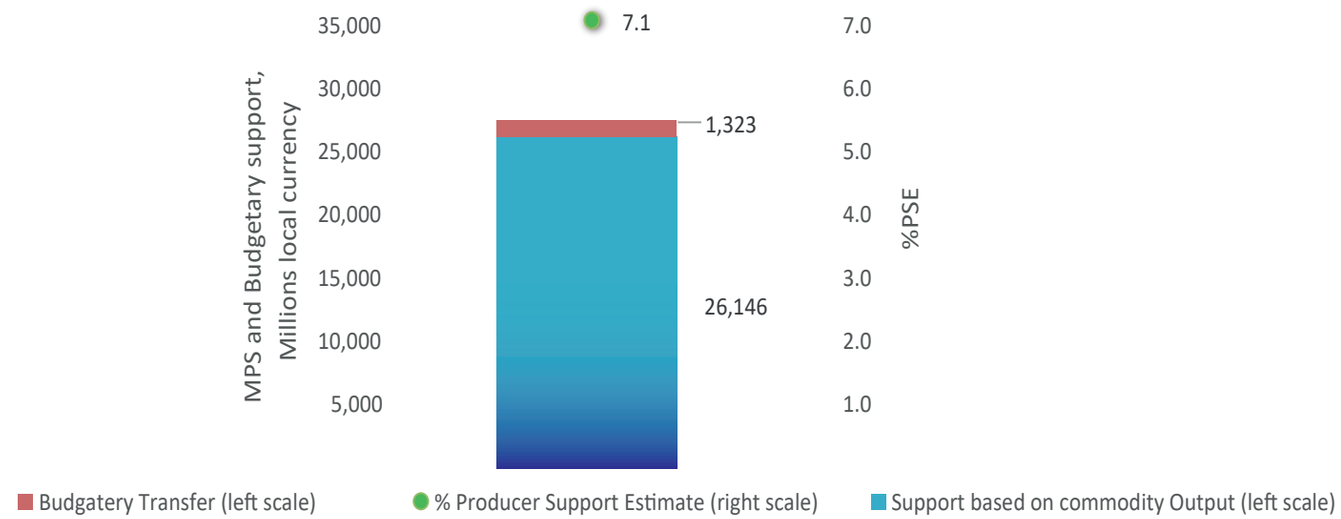
49. **Market price support comprised nearly all of producer support in Mozambique in 2018.** MPS accounted for 95.2 percent of Mozambique's PSE in 2018, over budgetary support (Table 3)[68]. In fact, Mozambique ranked top among the countries monitored by the OECD in terms of MPS share of PSE in 2018 (Fig. 16). Given the dominance of direct agricultural support—i.e., coupled to commodity output, inputs, and financed by consumers—it is likely to be highly distortionary for domestic food production, consumption, and trade decisions. This type of support also imposes additional costs on domestic food consumers[69] and distorts farmer production decisions as it changes domestic relative prices, reducing the exposure of farmers to international prices. MPS tends to be regressive, as it favors large producers who generate commercial surplus rather than smallholders, who tend to have smaller commercial surpluses or only produce for self-consumption. It also generates a regressive tax on low-income food consumers since a relatively large share of their income is spent in food, compared to high-income consumers.

Table 4: Composition of PSE, 2018

Concept	2018 US$ Mill	2018 (%)
Producer Support Estimate (PSE) (A+B+C+D+E+F+G)	457	100.00%
A.1 MPS	435	95.2%
A.2 Payments based on output	2	0.3%
B. Payments based on inputs[70]	20	4.5%
C. Payments based on current production	0	0.0%
D. Payments based on Non-current production[1]	0	0.0%
E. Payments based on Non-current production[2]	0	0.0%
F. Payments based on non-commodity criteria[3]	0	0.0%
G. Miscellaneous	0	0.0%

Source: WB Estimates. 1. Production required, 2. Production required, 3. Production not required

Figure 14: Level and Composition of Mozambique's PSE, 2018



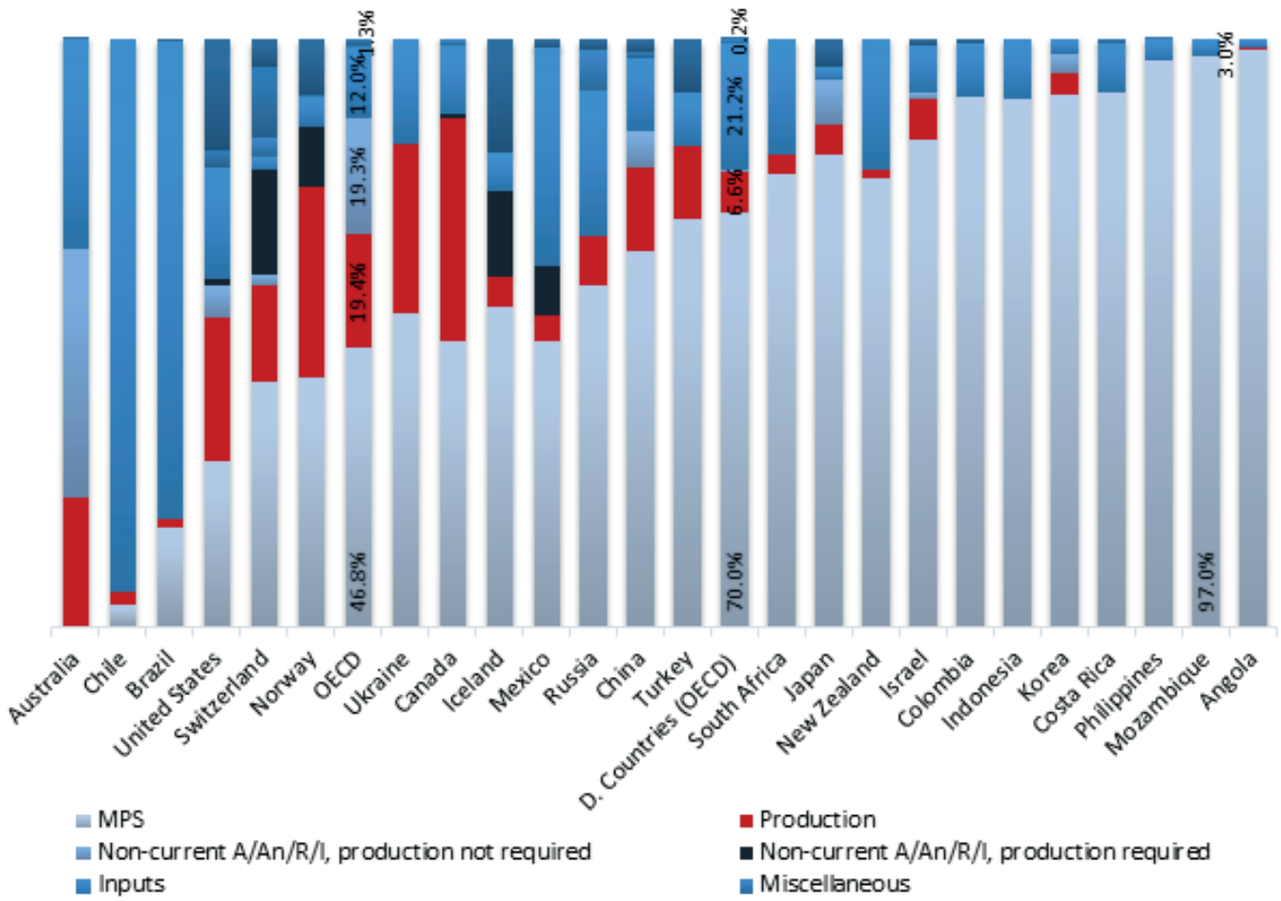
[68] *The aggregate value of MPS is the outcome of implicit taxation through negative price gaps for some commodities (a negative MPS) and price support of others (a positive MPS). Annual variations depend on movements in world prices, domestic prices and exchange rates, as well as changes in production levels. Major components of the MPS are the price differential (gap between domestic producer price and reference price) for products analyzed.*

[69] *OECD, 2008.*

[70] *Note that inputs include technical assistance provided along with physical inputs (i.e. extension).*

50. **Exchange rate volatility and other factors outside of agricultural policies, such as natural disasters impacting domestic food prices, could also partially explain MPS estimates.** MPS is generated by a price gap between domestic and external reference prices. This differential is commonly related to border measures[71] or direct market prices interventions (regulated prices) that generate the gap. In Mozambique, border measures in the form of import tariffs on products like maize, cassava, tomato, sweet potato and pork meat at least partially explain the high share of MPS[72]. However, other factors that are not derived from domestic agricultural policies, such as market structure (monopolies/monopsonies), exchange rate movements, temporary disruptions in supply or demand due to shocks such as natural disasters, and support policies in other countries, could also explain variations in MPS estimates. An additional, in-depth marginal analysis to disaggregate the effects of each potential factor affecting the MPS estimate is possible, but was determined to be beyond the original scope of this study.

Figure 15: Composition of Mozambique's PSE, by Category of Support, 2018



51. **Budgetary support directly benefiting farmers averaged just 2 percent of PSE, with input-based payments comprising the largest share.** As part of this analysis, data was also collected on a diverse range of government programs financed by taxpayers and executed by the Government of Mozambique (Ministry of Agriculture and Rural Development, Ministry of Industry and Commerce, Ministry of Land and Environment and other ministries, or public agencies) at the national and subnational level. Following the PSE methodology, expenditure on programs like Pro-Poor Value Chain Development in the Maputo and Limpopo Corridors (PROSUL), programs for intensification and diversification of crops, livestock development programs, rural finance support program, intensifying the production of food crops of cereals and legumes in provinces and extension services, etc. were allocated to PSE categories based on their characteristics. Considering only budgetary payments, it was observed that payments based on inputs—like land preparation subsidies and machinery subsidies- comprised the largest share, accounting for 93.0 percent of PSE budgetary payments in 2018 (Table 5). Also

[71] *In general, border measures include import (export) tariffs or quotas and import (export) licenses or other measures that constitute restrictions or supporting on trade.*
[72] *The Most Favored Nation (MFN) import tariff was 10 percent during the study period (WTO).*

output-based payments were 7 percent in 2018, reflecting the effect of programs like Programa Intensificar a Producao de Culturas Alimetares (Cereais e Leguminosas) and Programa du Producao de Horticulturas. Mainly, public resources were directed through support to output and input based payments[73].

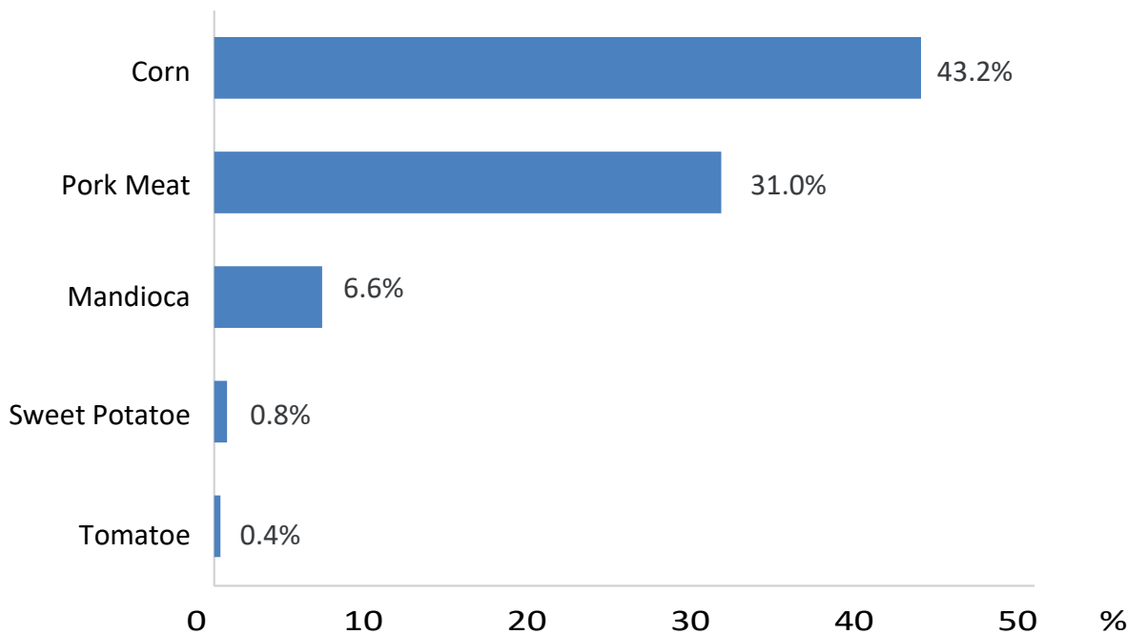
Table 5: Composition of PSE Budgetary Payments

Concept	2018 US$ Mill	2018 (%)
Budgetary Payments (A.2+B+C+D+E+F+G)	**22**	100
A.2 Payments based on output	2	7
B. Payments based on inputs	20	93
C. Payments based on current production [1]	0	0
D. Payments based on Non-current production [2]	0	0
E. Payments based on Non-current production [3]	0	0
F. Payments based on non-commodity criteria	0	0
G. Miscellaneous	0	0

Source: WB Estimates. 1: Production required; 2: Production required; 3: Production not required.

52. **Producer support was highest for maize and pork meat**. Disaggregating Mozambique's PSE at the product-level, this analysis examined the producer support provided to major crops through commodity-specific policies. In 2018, the SCT was calculated to be US$179 million for maize, US$124 million for cassava, US$2 million for pork meat, US$2 million for tomato and US$1 million for sweet potato. Expressed in terms of share of gross receipts, %SCT was also calculated all five agricultural products. The results show that %SCT for maize was 43 percent but the pork meat was 31 percent meanwhile for cassava was 7 percent, principally reflecting MPS through border and price measures. In contrast, the %SCT for sweet potatoes and tomato were 0.8 percent and 0.4 percent respectively, implying that all the support was budgetary.

Figure 16: Benchmarking %SCT by Commodity, 2018



[73] *A detailed information for each program and amounts are included in the PSE Excel calculations, which is part of this analysis.*

53. **Mozambique's support to maize and cassava is significantly higher than its OECD comparators.** Of the total revenues perceived by farmers who produce maize, 43 percent came from support policies and programs in 2018, significantly higher than the OECD average of 3.2 percent (Fig. 17). Similarly, 6 percent of the revenue received by cassava farmers was due to support policies in this year. While OECD countries do not measure specific commodity support (SCT) for cassava, the corresponding support in Indonesia and Angola was 0 and 0.3 percent respectively was minimum (Fig. 19). This large variation in public sector support among agriculture commodities has an impact on the domestic market by distorting incentives and consequently, the production decisions made by farmers. To illustrate the difference, a maize farmer in Mozambique received the equivalent of US$58/ha and US$170/ha for cassava[74] in 2018, while sweet potatoes received US$39/ha

Figure 17: Benchmarking SCT% for maize, 2018

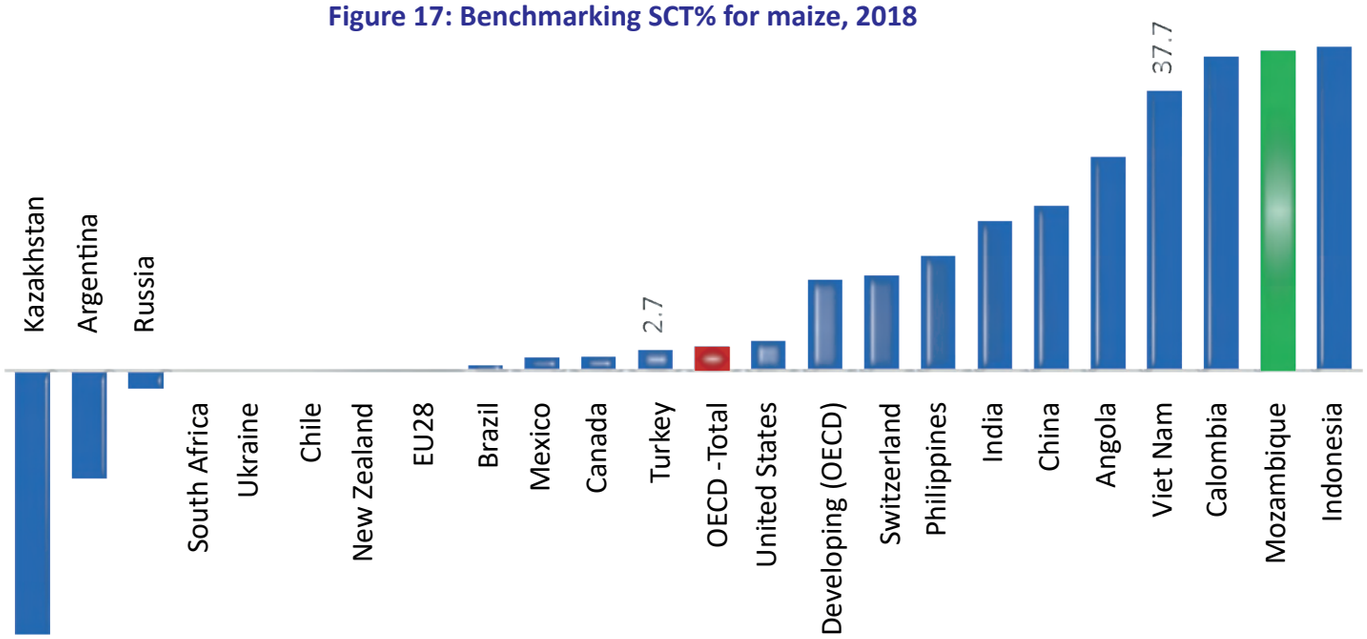
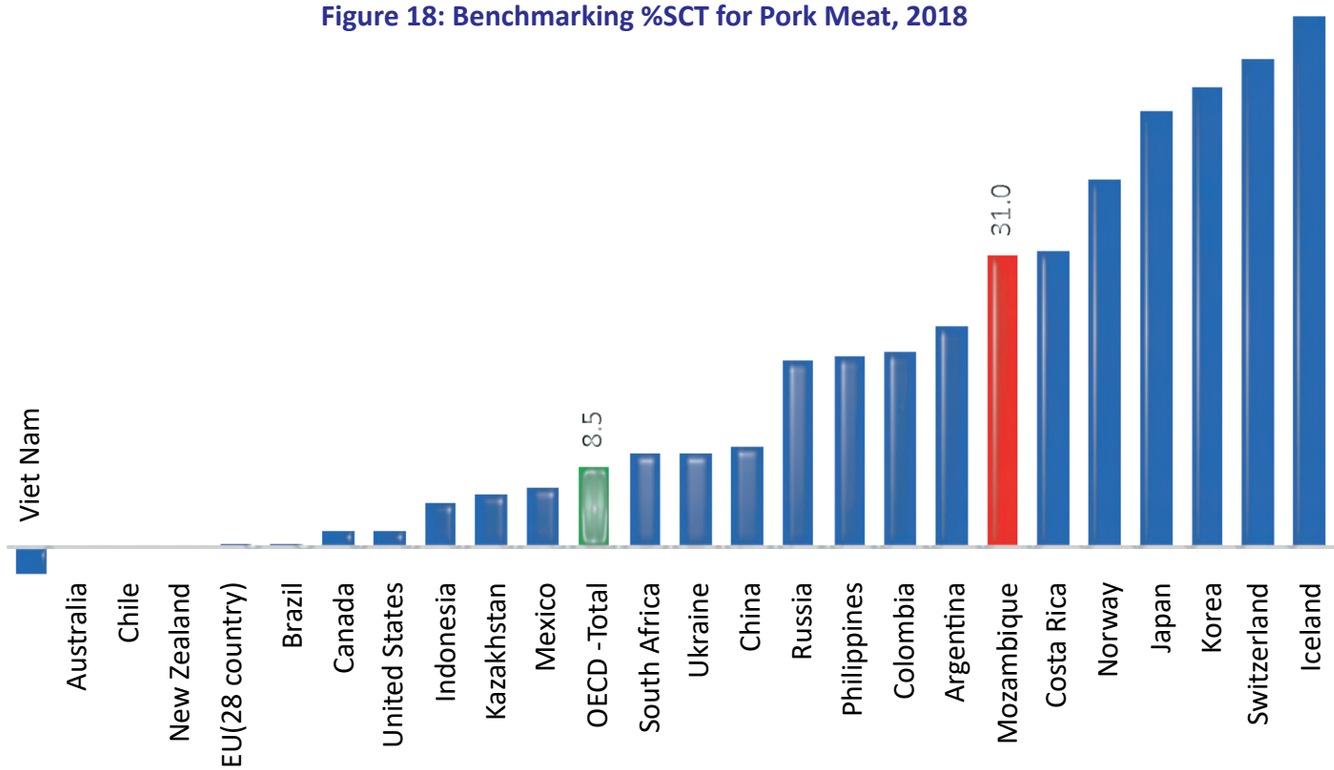
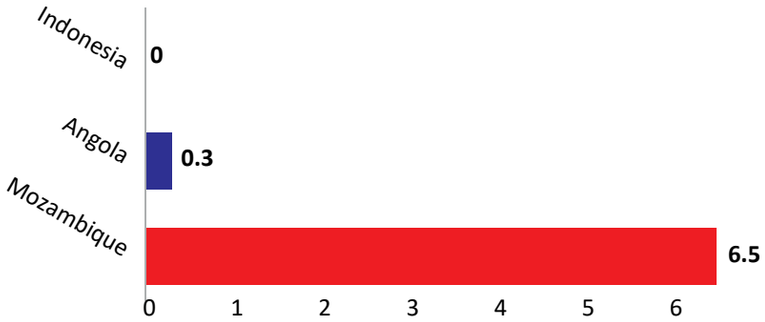


Figure 18: Benchmarking %SCT for Pork Meat, 2018



[74] *Note that in the case of cassava, international prices are very volatility due to relatively thin markets, so MPS for cassava could not be as accurate as for other commodities.*

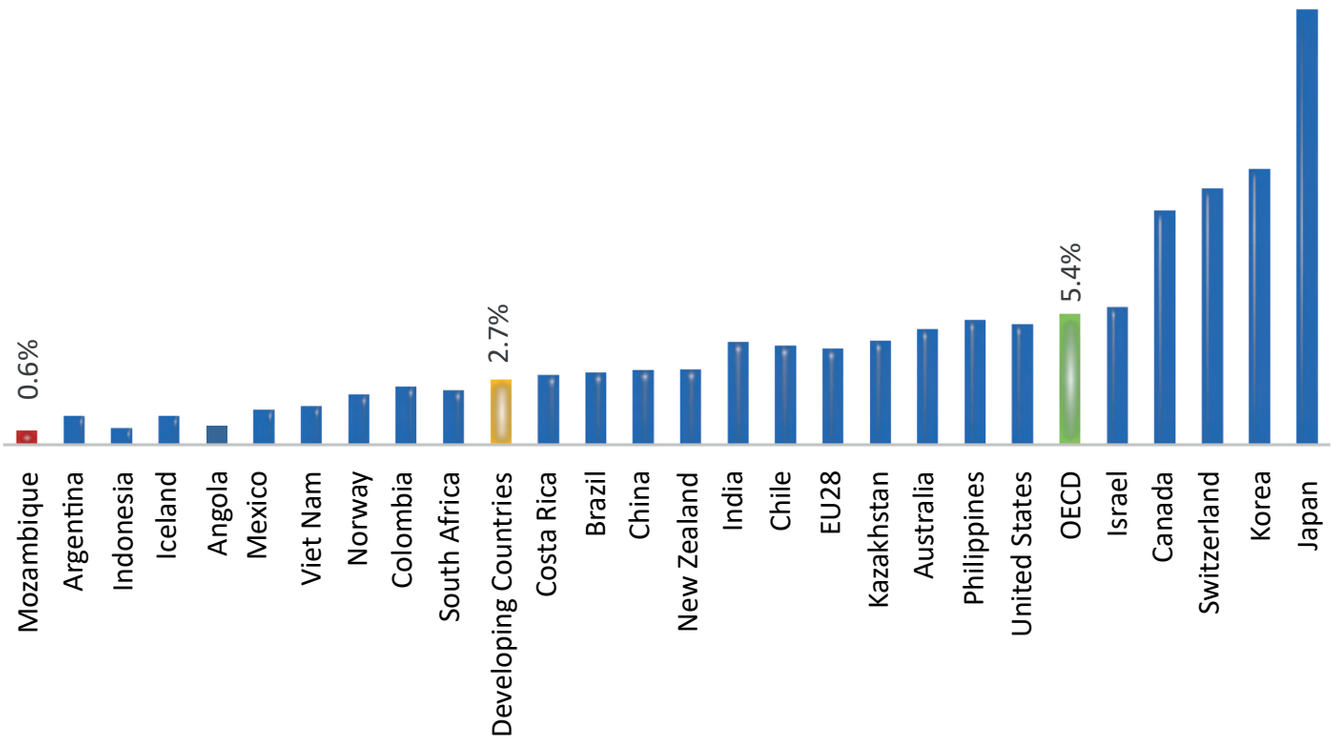
Figure 19: Benchmarking %SCT for Cassava, 2018



Support to General Services for Agriculture (GSSE)

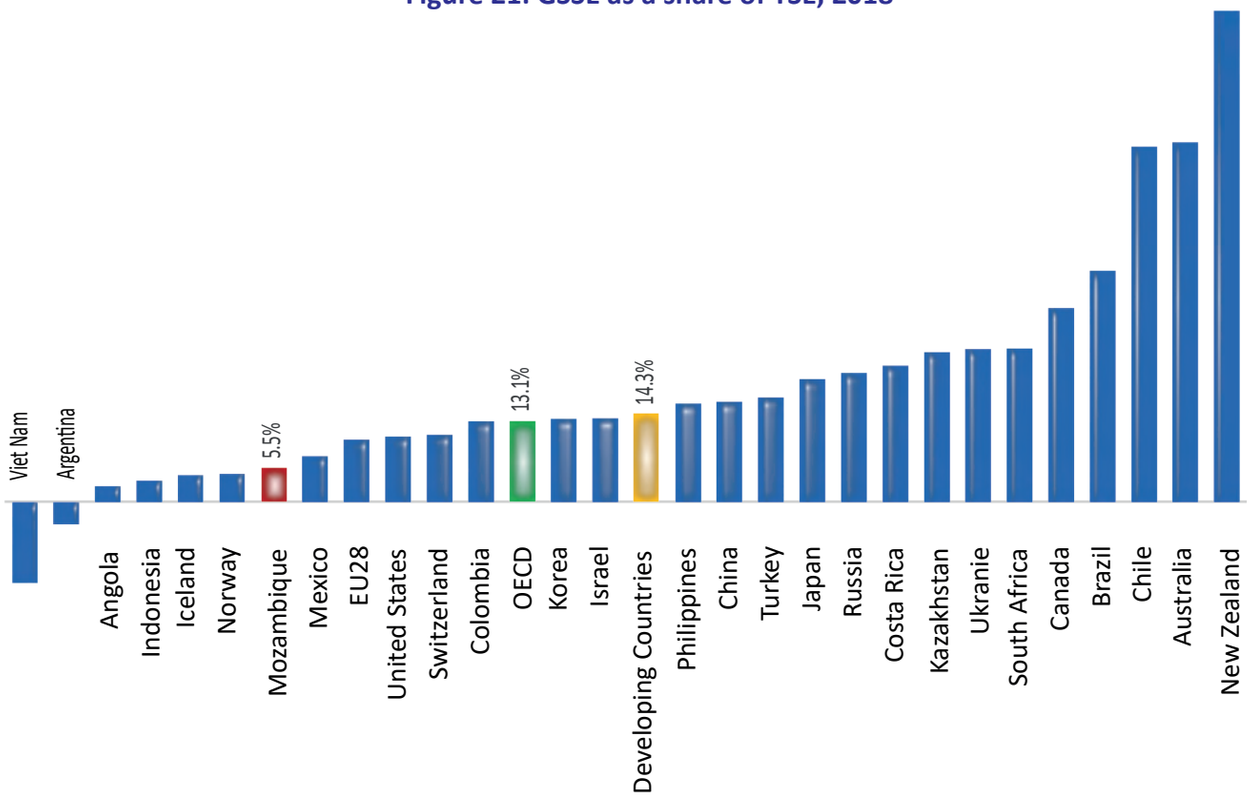
54. **Agriculture supports funded by taxpayers (through public expenditures) are mainly allocated to investments in private goods (subsidy-PSE) rather than public goods (GSSE).** Financed by taxpayers in the form of budgetary payments, GSSE support activities providing general benefits or goods with public characteristics, i.e., agricultural innovation (R&D and education), animal/plant health services, marketing and promotion, rural infrastructure, and public stockholding. Positively correlated with country income-level, agricultural growth and competitiveness[75], GSSE represented only 0.6 percent of agricultural GDP in 2018, it was lower level of the analyzed countries. On the other hand, the corresponding averages for OECD, developing countries, South Africa and Angola were 2.7 percent, 5.4 percent, 2.3 percent and 0.8 percent, respectively (Fig. 20). Similarly, GSSE accounted for 5.5 percent of TSE, less than one half of the averages for OECD (13.1 percent) and developing countries (14.3 percent) (Fig. 21). Most public expenditures went towards infrastructure development (81 percent), Research (10 percent) and Marketing and Promotion (7%) in 2018.

Figure 20: GSSE as a share of agriculture GDP, 2018



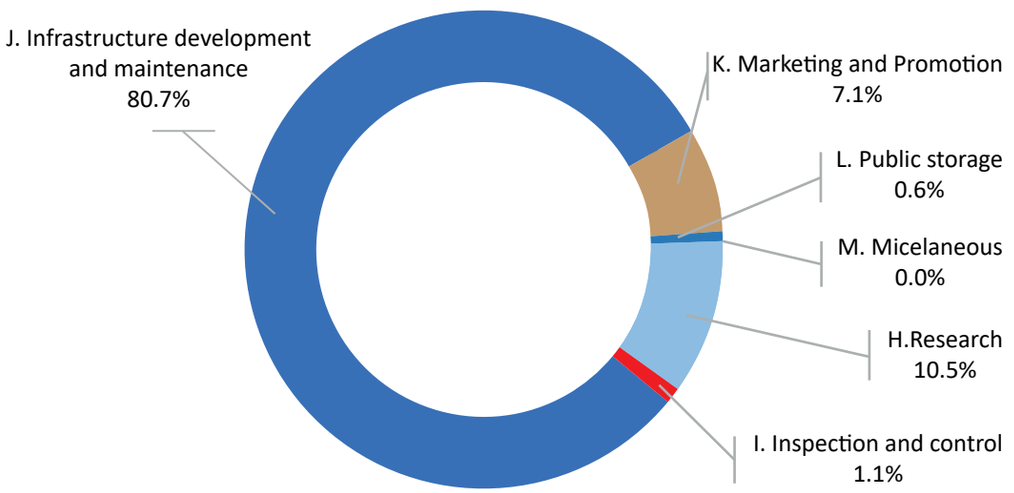
75 *One interesting point is that in some countries that are currently referenced in international markets, highly market oriented and export leaders (New Zealand, Australia, Canada), the GSSE is the most important way to support their agricultural sector.*

Figure 21: GSSE as a share of TSE, 2018



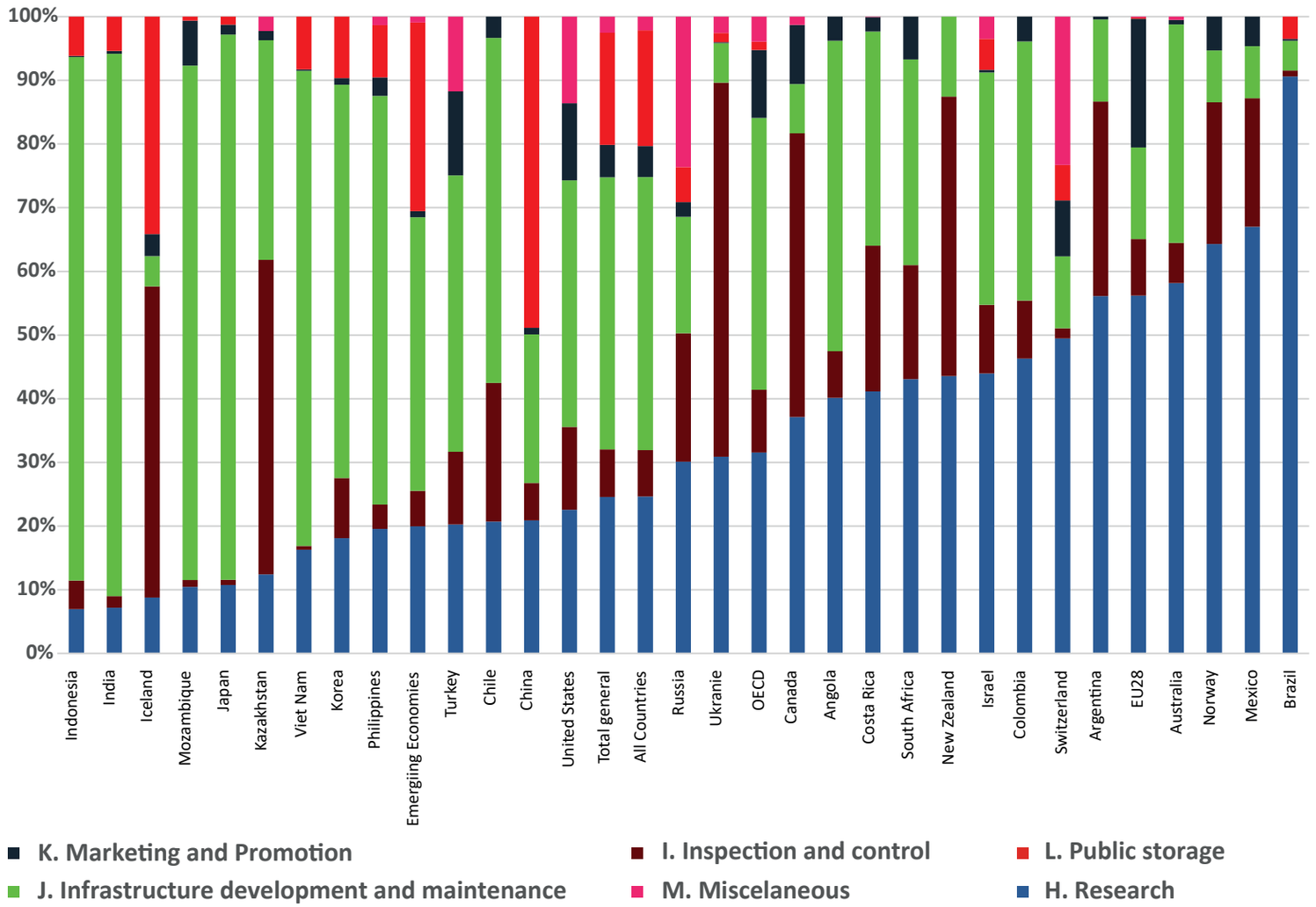
55. **GSSE was the lowest among the countries monitored by the OECD.** In 2018, 80.7 percent of the relatively small GSSE outlay (US$28 million) was allocated to agricultural infrastructure and maintenance, i.e., irrigation equipment, hydraulic infrastructure, dam's rehabilitation and construction, agro-meteorology equipment, rural water infrastructure (PRONASAR). Ten percent was allocated to agricultural knowledge and innovation systems[76] and 7.1 percent to marketing and promotion, with the remainder in other categories. Benchmarking against other countries, Mozambique's GSSE was 0.6 percent of agricultural GDP in 2018, similar to Angola (0.8) and Indonesia (0.7) but lower than South Africa (2.3), Mozambique is the lowest value of all analyzed countries.

Figure 22: Composition of the GSSE in Mozambique



76 *Training, R&D and resources for agricultural research institutes*

Figure 23: Benchmarking GSSE by Component, 2018



56 **During the study period, approximately 90 percent of Mozambique's total support could be classified as belonging to the WTO amber box and be subject to countervailing measures by its trade partners.** In WTO's terminology, agricultural support is classified in three boxes: green (measures with no distortive effect on production and trade)[77], amber (distorting measures of production and trade), and blue ("amber box with conditions") subsidies that are tied to programs limiting production. Notably, amber box support is subject to reduction commitments and is actionable by importing countries. On the other hand, blue and green box measures are not subject to reduction commitments and are non-actionable ("Peace Clause"). Based on an approximate classification, the 90 percent of Mozambique's TSE could be classified as belonging in the amber box (Green box is 5.5 percent) given that they include measures to support prices, or subsidies directly related to production quantities (Table 6). A large share of Mozambique's agriculture support—because of its reliance on MPS—is therefore subject to reduction commitments and is actionable by importing countries, i.e., they may apply countervailing measures. The blue box was not included since it carried commitments to reduce support. Since OECD and WTO methodologies do not fully correspond, this analysis is intended to be indicative and instructive for policymakers.

[77] *For example, research, direct payments decoupled from production, and infrastructure investment.*

Table 6: WTO Classification of Mozambique's TSE

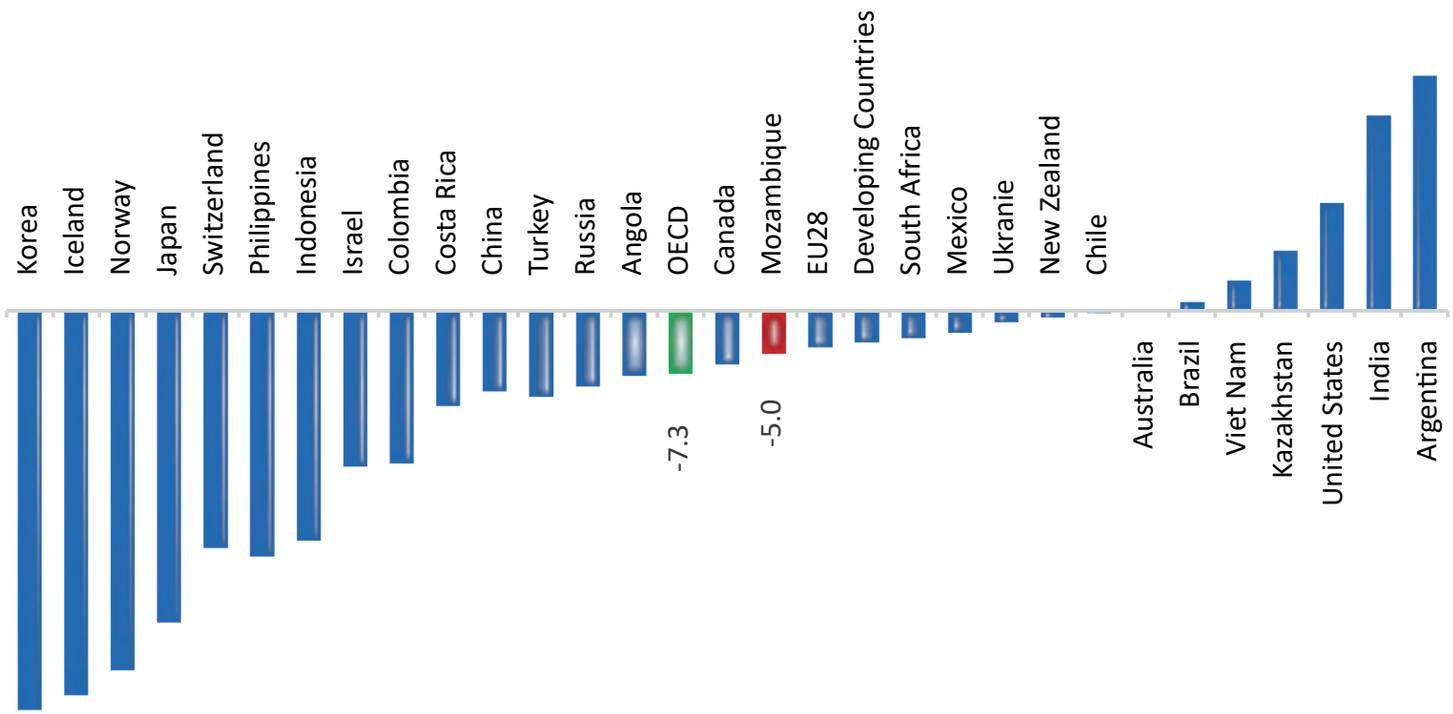
Box	Total according to WTO Box 2018 (US$, Mill.)	As % of TSE 2018 (%)
Amber box	457.1	89.9
Green Box	27.8	5.5

Note 3: The shares do not sum up to 100%, because OECD estimations include other support (mainly consumer support) not considered by WTO.

Support to Consumers of Agricultural Products (CSE)

57. **Mozambique consumers have borne the cost of MPS, paying an implicit food consumption tax equivalent to 5 percent of food basket value in 2018.** The CSE measures the cost to consumers arising from agricultural policies[78]. Similar to the PSE, CSE can be expressed in relative terms as a share of consumption value (%CSE). The CSE% for Mozambique was estimated to be 5 percent in 2018, indicating that policies supporting agriculture (particularly through domestic producer prices) acted as an implicit tax. Consequently, consumers paid higher domestic prices than international prices and their consumption expenditure rose. Comparing across countries, this aggregate tax on consumers in Mozambique is higher than OECD average or Angola, -7.3 and -7.5 percent, respectively, and lower than South Africa (-3.2 percent).

Figure 24: Benchmarking %CSE, 2018



78 *In the PSE methodology, the consumer is understood to be the first buyer of agricultural products.*

Main Findings

58. Based on the assessment of the agriculture support estimates, the main findings to be considered for agriculture policy decisions going forward are the following:

- **Mozambique allocated US$509 million in annual support to the agriculture sector, representing 1.53.3 percent of total GDP.** Total Support Estimate (TSE) to agriculture from public policies and programs[79] in Mozambique in 2018 was estimated in US$509 million. This was equivalent to 12.8 percent of its agriculture GDP, higher than most developing countries (8.8 percent on average) (Fig. 11), the value was below OECD member countries (41.3 percent on average). A neighbor and close trading partner, South Africa, has a TSE of 9.2 percent of agriculture GDP and 0.3 percent of total GDP, while Angola has 29.5 percent and 1.4 percent in the same items, also OECD countries' support to agriculture represents 0.6 percent of total GDP.

- **Although total agriculture support in Mozambique is high compared to other developing countries, the portion of support going to public goods and services is relatively low**. The Total Support Estimate (TSE) is composed of support to producers (measured as PSE), consumer support (CSE), and support to general agriculture public goods and services (GSSE)[80]. The analysis revealed that 90 percent of TSE was through producer support (largely in the form of market price support), while just 5 percent went to GSSE. Benchmarking the TSE composition across countries where data is available, we observe that Mozambique's investment in GSSE is the lowest of the analyzed countries. As a share of the agriculture GDP, GSSE accounted for just 0.6 percent, which was low compared to other developing countries average (2.7 percent) and the OECD's average (5.4 percent) in 2018.

- **Only 7 percent of gross farm receipts were accounted by Mozambique's support to producers, more than 11 percent points lower than the OECD average.** In Mozambique, 7 percent of producer's gross farm receipts (PSE%) came from agriculture support policies and programs in 2018. This is 11 percent points lower than the OECD average for that same year. PSE% in Mozambique was comparable with that of countries with medium levels of support, such as Canada, Mexico and Costa Rica.

- **Agriculture producer support in Mozambique is overwhelmingly funded by policies that raise domestic agriculture prices.** Ninety-seven percent of the support to agriculture producers (PSE) is funded by Market Price Support (MPS), while budgetary support only represents 3 percent (in 2018). These transfers occur due to public policies (mainly border measures) are making the domestic prices of agriculture and food products higher than the international prices (compared at farm gate). In other words, border measures are creating an "implicit tax" for food consumers in Mozambique and most beneficiaries of higher prices are agriculture producers that participate in market sales. MPS are thus, monetary transfers from Mozambican food consumers to Mozambican producers.

- **The current structure of producer support only benefits a small number of commercial producers and does not enhance sector competitiveness.** MPS is based on the amount of agriculture production that a farmer sells in the market, it is therefore poorly targeted and favors large producers who generate commercial surplus rather than smallholders with smaller surpluses or who only produce for self-consumption[81]. Given that small-scale and subsistence-oriented family farms dominate in Mozambique and that MPS policies have been implemented mainly based on food security arguments, the effect of MPS is the opposite, benefiting only a small proportion of producers and taxing most poor

[79] *Agriculture support was estimated using the OECD methodology (https://www.oecd.org/agriculture/topics/agricultural-policy-monitoring-and-evaluation/documents/producer-support-estimates-manual.pdf). The total support estimate measure (TSE) is the annual monetary value of all gross transfers from taxpayers and consumers arising from public policy measures that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products.*

[80] *GSSE's include agriculture public goods and services such as innovation systems (agriculture R&D and education), animal and plant health services, food safety, infrastructure, agriculture promotion, land administration, and other public services..*

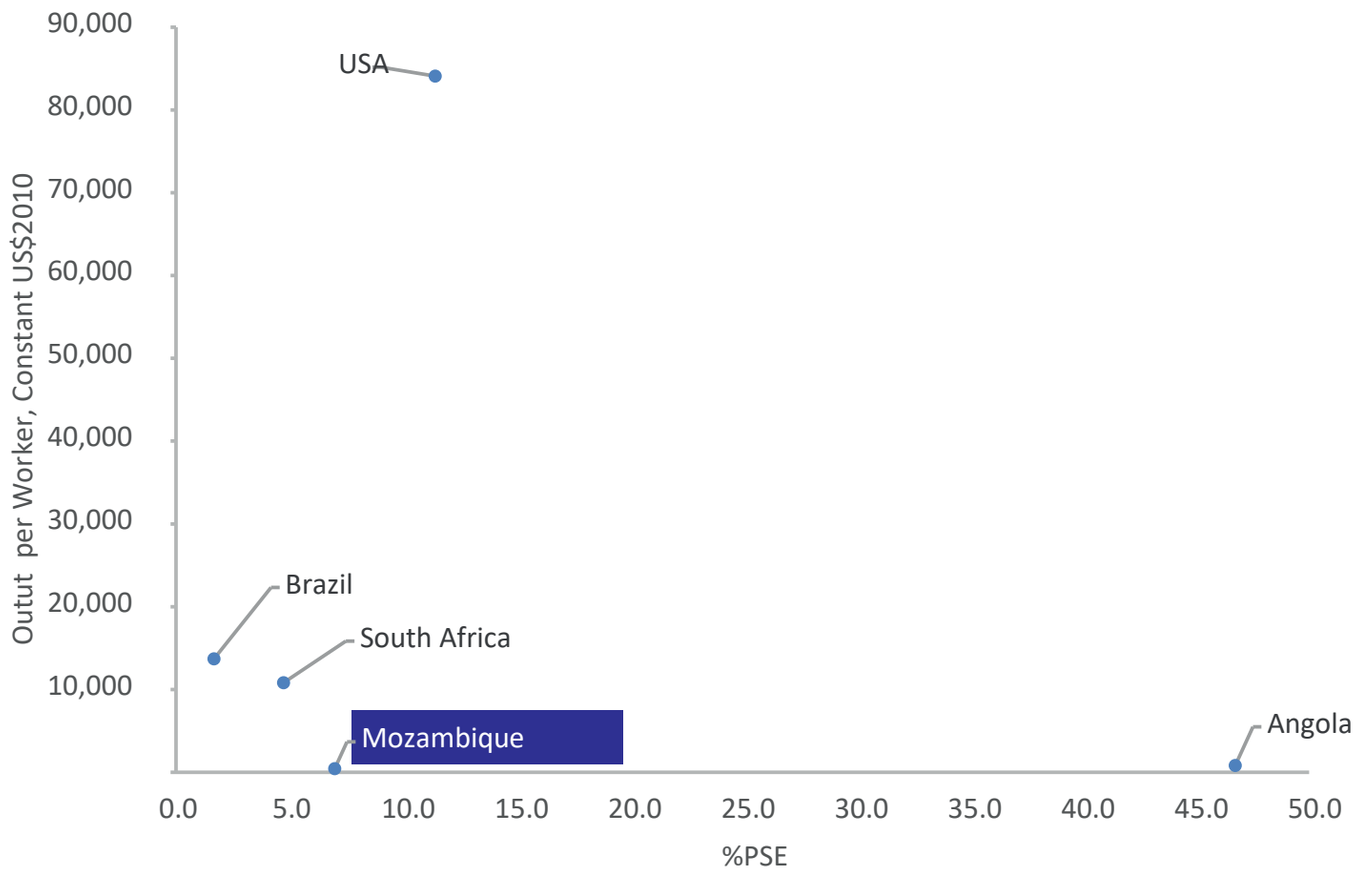
[81] *In some settings, other value chain actors (such as input suppliers) also capture part of the transfers. It's conceivable that in those settings, they benefit more than even large-scale producers*

agricultural households which tend to be net food consumers. Furthermore, MPS distorts production decisions and investments in competitive agriculture products as it protects producers from international market prices.

- **Food consumers in Mozambique pay an implicit tax of about 5 percent.** Support to food consumers (CSE) is negative in Mozambique. CSE measures the support to (or tax on) food consumers arising from public agriculture policies. Although Mozambique does provide some support to food consumers in the form of food aid and school feeding programs, the overwhelming majority of the CSE is negative, due to public policies protecting domestic prices. CSE as a percentage of total food expenditures by food consumers was approximately 5 percent in 2018. This 5 percent implicit tax is a transfer from consumers to producers through higher domestic food prices. It is also a regressive tax since poor consumers spend a larger share of their income on food than high-income consumers.

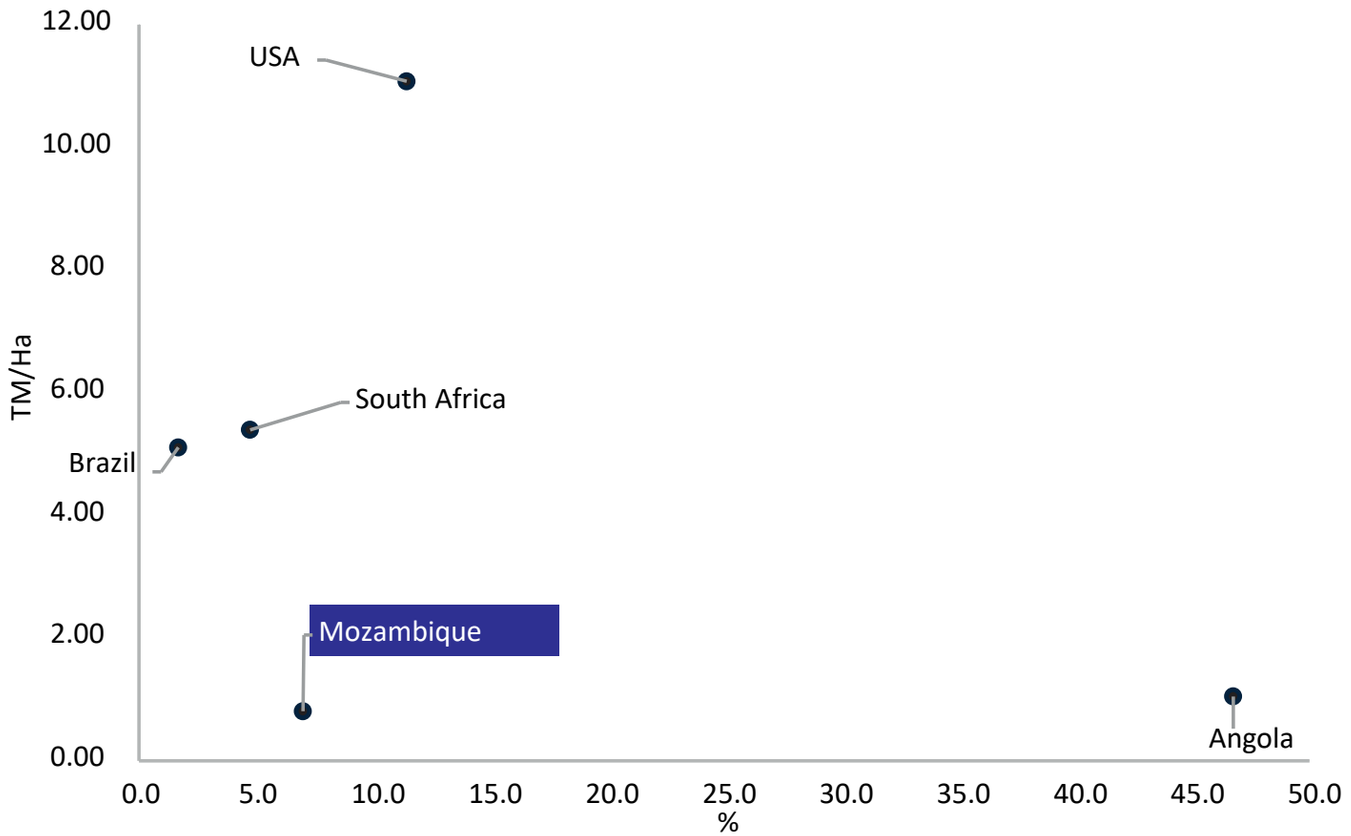
- **Agriculture support to producers in Mozambique is basically concentrated in maize and pork meat and is relatively high for these commodities compared to other countries.** Of the total gross revenues perceived by farmers producing maize, 43 percent came from agriculture public support policies and programs, while pork meat had 31 percent support, in 2018 (commodity-specific support is measured by Single Commodity Transfers—SCT). In comparison, the %SCT in OECD countries was 3 percent for maize and 8 percent for pork meat in the same year, the Mozambique levels were similar of the Indonesia and Colombia for maize and Costa Rica or Norway for pork meat. This large variation in agriculture public sector support—and therefore profitability—across commodities signals the distortions that farmers face when making production decisions. For example, support to sweet potatoes was US$39/ha while cassava US$170/ha in 2018[82].

Figure 25: Agriculture Support and Value Added per Worker, 2018



82 *Authors calculations, based on OECD data.*

Figure 26: Support to Maize vs Yields, 2018



Proposed Agriculture Policy Reform Agenda

59. **Mozambique is in the process of defining its 10-year strategy and investment plan for the agriculture sector, recovering from the COVID-19 pandemic, and moving towards a more competitive and sustainable agriculture sector.** In the past, support consisted largely of price support (through border measures), without addressing underlying competitiveness bottlenecks. This approach will need to be phased out as Mozambique moves towards full participation in regional and continental free trade agreements. Programs like the Sustainable Rural Economy Program (SREP) seek to improve the resilience and competitive position of the agriculture sector. Developing agribusinesses is high in the country's development agenda, with an important private sector development program and technical assistance provided by the WB and IFC. The multiple natural disasters of the last years and the COVID-19 pandemic have also renewed the urgency to focus on supporting the climate resilience and nutrition of the poorest households. It is in this context that this report presents some important recommendations for realigning agriculture support policies and programs towards Government competitiveness, climate resilience and nutrition and food security objectives. The four main recommended policy shifts are summarized here below and are tagged for the following expected Government objectives: competitiveness (COMP), climate resilience (CC) and nutrition/food security (NFS). The recommendations are also identified as policy reforms to be undertaken in the short (ST) and long term (LT). Fiscal implications need to be taken into account when considering such policy shifts, as well as the international experience with such transitions (see Box 1 for a summary of studies of country experiences).

60. This report presents some important recommendations for realigning agriculture support policies and programs towards competitiveness, climate resilience and nutrition and food security objectives.

Agriculture Policy Shift	Competitiveness objective (diversification and trade integration)	COVID-19 Recovery: Building back better	
		Climate Resilience	Nutrition—Food Security
PSE to GSSE	✓		
MPS to non-distortionary PSE	✓	✓	✓
CSE (-) to CSE (+)			✓
SCT to non-commodity specific PSE	✓	✓	✓

61. **Shift agriculture support from private towards public goods and services [COMP; LT].** Agriculture support in Mozambique is mainly geared towards private goods (subsidies and market price support) rather than towards investments in agriculture public goods and services: almost half of all agriculture public expenditures (average for 2018 and 2019) went towards investments in private goods (subsidies), such as payments based on inputs—programs that subsidize agriculture inputs like seeds, fertilizers, machinery and land preparation. Mozambique should seek to shift its agriculture sector support towards investments in public goods and increase GSSE's share of agriculture GDP from its current level of 0.6 percent to at least the level of South Africa, or the average of developing countries (2.3 percent and 5.4 percent, respectively), given the overwhelming and long-standing evidence that public sector investments and support to agriculture public goods and services deliver higher economic returns than public sector investments in private goods (World Bank, 2017[83] ; Lopez and Galinato, 2007[84]; Lopez, 2005[85]; World Bank, 2001[86]). Commercial agricultural producers would benefit from the opportunities to supply the domestic and regional market created by the various Government programs for agribusiness development.

62. **Shift from distortive measures to competitive agriculture policy support [COMP; LT].** Given that an overwhelmingly large share of Mozambique's agriculture support is MPS (or coupled to the production of specific agriculture products), a transition plan for agriculture to move towards a more competitive policy support environment is very much needed. In fact, Mozambique will likely be engaging in MPS reduction commitments in agriculture trade agreements such as the Africa Continental Free Trade Area (AfCFTA), so a complementary trade agenda is needed to support smallholders of protected agriculture products transition to face market prices and take advantage of trade[85].

63. **Shift from implicit taxation to positive support to food consumers [NFS; LT]**. As the negative CSE estimates in this report demonstrate, Mozambican food consumers are funding the bulk of agriculture support to the sector. A shift away from MPS, as suggested above, will reduce the implicit food tax to food consumers, consequently increasing the welfare of the poorest. However, other public policies and programs could be further enhanced to directly safeguard consumers from food insecurity and nutrition challenges, by targeting support through social protection programs (food aid, school feeding) and countercyclical safety nets.

83 *Goyal, Aparajita; Nash, John. 2017. Achieving Better Results: Public Spending Priorities for Productivity Gains in African Agriculture. Africa Development Forum;. Washington, DC: World Bank and Agence Francaise de Développement. © World Bank. https://openknowledge.worldbank.org/handle/10986/25996 License: CC BY 3.0 IGO*

84 *López, R., and G. I. Galinato. 2007. "Should Governments Stop Subsidies to Private Goods? Evidence from Rural Latin America." Journal of Public Economics 91:1071—94*

85 *Lopez, Ramon. Under-investing in public goods: evidence, causes, and consequences for agriculture development, equity and the environment. Journal of Agriculture Economics, Volume 32, Issue 1. January 2005: https://onlinelibrary.wiley.com/doi/full/10.1111/j.0169-5150.2004.00025.x*

86 *World Bank. World Development Report 2001: https://elibrary.worldbank.org/doi/pdf/10.1596/0-1952-1606-7*

87 *An update to the World Bank's 2006 Diagnostic Trade Integration Study (DTIS) is under preparation and is expected to take on these questions in more detail.*

64. **Shift support to promote environmental and nutrition security objectives [COMP, CC. NFS; ST].** Given the country's fiscal limitations and the implicit tax imposed by agriculture public policies on Mozambican food consumers, producer support should be geared towards achieving objectives beyond supporting farmer incomes. Support can contribute towards food and nutrition security objectives, leveling the playing field for a product like sweet potatoes vis-a-vis cassava. A cassava farmer receives more than double the support of what a tomato farmer receives in a per hectare bases and more than 4 times the support a sweet potato farmer receives, thus making a simple plate of food—as defined by the WFP "Counting the Beans" methodology—costlier[88]. Furthermore, Climate Smart Agriculture (CSA)[89] and Nutrition Smart Agriculture (NSmartAg)[90] technologies and practices should be integrated into farmer input and technology support incentives, to promote productivity growth, and fulfill environmental and nutrition objectives. Moreover, decoupling producer support from specific agriculture products would enable farmers to make production decisions mainly on market opportunities (and not on the level of public sector support).

Box 3. Strategies for shifting from MPS to decoupled support

Several studies and experiences point to potential pathways for Mozambique to transition from protecting a few commodities and producers through market prices, to supporting a more competitive agriculture sector and poor households through targeted and decoupled support. The implementation of such agriculture policy reform strategy is urgent and opportune as it can help provide a building back better recovery from COVID-19, but also take advantage of SADC and AfCFTA. Parikh et al. (1995) studied several agriculture sector trade liberalization post GATT (Uruguay Round). The conclusions point out that the policy package that has shown superior growth, welfare and distribution effects, without raising taxes, includes: (a) switching from agriculture input subsidies to safety nets (reducing PSE and increasing CSE); and (b) increasing public investments in public goods and services (rural infrastructure)[91].

Various studies show how agriculture trade liberalization and discontinuity in policy reforms can lead to negative impacts in the most vulnerable farming population. Nyairo et al. (2010) point to the mixed experience of some African countries in agriculture trade liberalization[92] and McCorrston et al. (2013) to the mixed experience of a global set of 34 countries, finding clear drawbacks from "stop-go" policy reform programs, and results depending on the way food security and other impact variables are assessed. Uganda is one of the interesting cases of a mixed experience in shifting from MPS to direct farmer support. Reforms did not automatically translate into an increased value of agriculture exports, largely because world prices are beyond the control of small-country exporters. Often, the anticipated benefits from reducing MPS do not materialize because only limited or partial reforms are actually implemented, i.e., there is no significant increase in incentives for diversifying and/or exporting. This is especially true of many SSA countries. Furthermore, even when significant trade reforms are implemented, important constraints remain. Several reasons explain the limited agricultural supply response towards higher competitiveness following a reduction in MPS. In particular, farmers' ability to increase production and exports to respond to increased incentives will be constrained by farming practices, limited access to inputs, credit and new technologies (McKay et al. 1997). Poor infrastructure and natural barriers act as a tax, often very high, on building a competitive agribusiness and engaging in exports (Milner et al. 2000). Delays in implementing policy and institutional reforms to support the competitive transition of farmers have been suggested as one factor limiting export supply response in Uganda.

[88] *Based on an extrapolation from the World Food Programme (WFP)'s measurement of the cost of a minimum diet globally. This methodology defines a simple plate of food to consist of pulses, a local carbohydrate—such as rice, bread, maize meal—vegetable oil, tomatoes, onions and water. https://cdn.wfp.org/2018/plate-of-food/ However, Mozamque has not yet made it into the database and this qualitative assessment assumes that maize will be considered part of Mozambique's plate of food.*

[89] *For a definition and approach to CSA, see: https://www.worldbank.org/en/topic/climate-smart-agriculture*

[90] *For a definition and approach to NSmartAg see: https://www.worldbank.org/en/topic/agriculture/publication/nutrition-smart-agriculture-when-good-nutrition-is-good-business*

[91] *Parikh, K., N. S. S. Narayana, Manoj Panda, & A. Ganesh Kumar. (1995). Strategies for Agricultural Liberalisation: Consequences for Growth, Welfare and Distribution. Economic and Political Weekly, 30(39), A90-A92. Retrieved May 28, 2021, from http://www.jstor.org/stable/4403270*

[92] *Nyairo, N. M., Kola, J., & Sumelius, J. (2010). Impacts of agricultural trade and market liberalization of food security in developing countries: comparative study of Kenya and Zambia (No. 308-2016-5085).*

Another case is Mexico, analyzed by Henriques et al. (2003)[93]and UNCTAD (2014), pointing out to the sector gains and losses following the country entering the FTA with the USA and Canada (NAFTA) in 1994. Mexico negotiated a 15-year gradual tariff reduction for sensitive crops like maize. The total value of agriculture production and agriculture exports increased, including the production of maize. However, some smallholder farmer support shifted mainly from MPS to decoupled payments (per hectare payments and social safety nets). This made them shift out of agriculture rather than investing in improving their production system. Particular attention must be paid to the food security and transition strategy of smallholder farmers in accessing the needed public sector support and incentives to embark in an agriculture transition path to increased competitiveness, in particular investing in agriculture public goods and services.

Finally, a successful case of policy shifts in the context of reduction of MPS is Brazil, as documented by the World Bank (2014). In thirty years, it went from a food-importing country (as most SSA countries), with mainly subsistence farmers, to a food exporting powerhouse, through a combination of public policy reforms including (a) direct support to vulnerable households through safety nets; (b) direct support to farmers through incentives for technology adoption (through credit programs); and (c) large investments in agriculture public goods and services (mainly agriculture innovation systems)[94].

Lessons from Mozambique for other Countries

Box 4: Lessons for Capacity Building and Database Institutionalization

As part of this review, the joint WB-FAO team undertook capacity building of technical counterparts in Mozambique with the objective of institutionalizing the use of OECD indicators into the country's policy analysis and policymaking process. The key lessons and experiences from this approach are summarized below. Given the low but growing coverage of this methodology in SSA, these lessons are intended to serve as a guide for other countries that are considering similar reviews of their agricultural support.

i. **Identification of key responsible staff,** often within the Ministry of Agriculture, is critical for following the data collection and analysis methodology correctly and ensuring institutional memory within the Government.

ii. **To widen the pool of expertise**, it is also important to target not only staff from the Ministry of Agriculture and of Finance, but also from NGOs, Universities and private consultants that may want to use the estimates for further policy analysis. To the extent possible, the training modules should be delivered in local languages to maximize retention and learning outcomes.

iii. **The development of partnerships with technical organizations** like FAO (MAFAP) is key for building on existing agricultural policy databases and ensuring the sustainability of this review. In particular, the integration of PSE updates with national data sources[95] can leverage higher quality data and increase the depth and granularity of agricultural support estimates.

iv. **Use a phase-in phase-out approach to the capacity building:** Since this exercise is only repeated annually (or every two years), it is advisable to organize refresher courses and to ensure that national counterparts are gradually able to implement the methodology independently.

v. **Linking the results to policies and outcomes that matter to Government:** To institutionalize the OECD indicators in country-level policy analysis, it is key that the mid- and senior management in the Ministry of Agriculture and other ministries appreciate the full range of its applications.

93 *Patel, R., & Henriques, G. (2003). Agricultural trade liberalization and Mexico. Food First Policy Brief, (7).*
94 *Correa, P., & Schmidt, C. (2014). Public research organizations and agricultural development in Brazil: how did Embrapa get it right?. Economic Premise, 145, 1–10.*
95 *In the near future, household-level price data will be available in Mozambique through the data on the Relatório da campanha agrária.*

Annex A

Supplementary Figures and Tables

Figure 27: Producer Support Estimate (PSE) and Sub-Categories

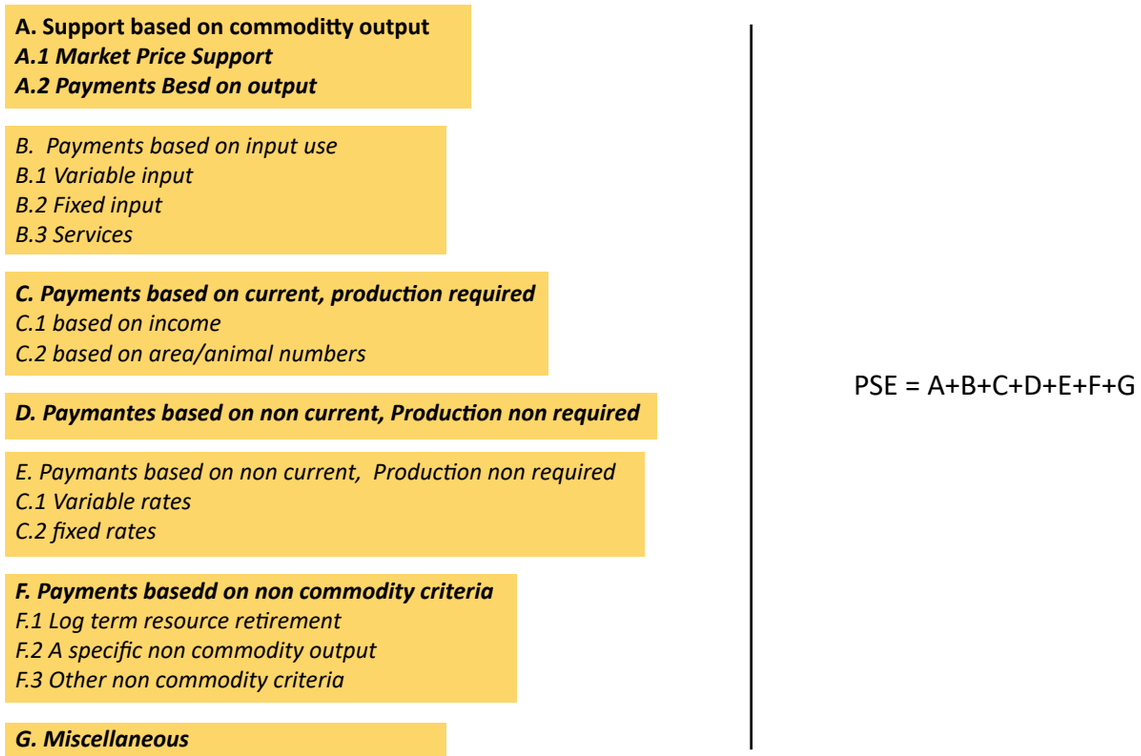


Figure 28: General Services Support Estimate (GSSE) and Sub-Categories

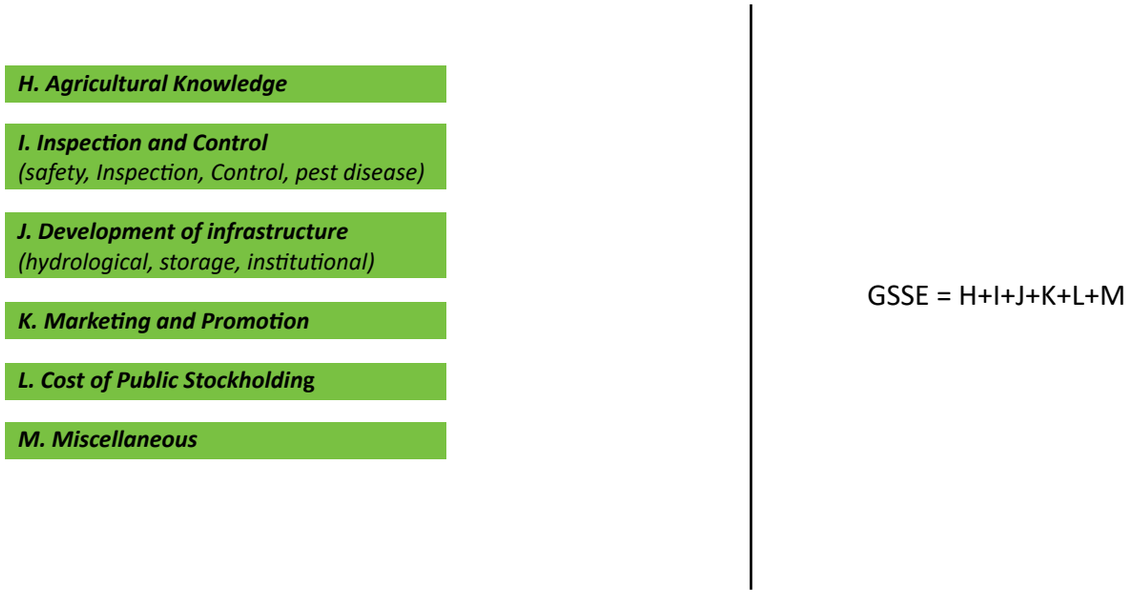


Figure 29: Estimates of Support to Agriculture (54 Countries)

	2000-02	2017-19	2017	2018	2019p
Total value of production (at farm gate)	**1 195 766**	**3 571 747**	**3 503 131**	**3 561 521**	**3 650 590**
***of which:** share of MPS commodities (%)*	72.4	75.0	74.6	75.5	74.9
Total value of consumption (at farm gate)	**1 180 619**	**3 348 913**	**3 260 847**	**3 344 489**	**3 441 404**
Producer Support Estimate (PSE)	**241 131**	**446 424**	**466 296**	**437 050**	**435 925**
Support based on commodity output	142 998	205 118	234 050	197 478	183 824
Market Price Support[1]	127 629	193 372	224 987	180 648	174 481
Positive Market Price Support	151 850	282 785	296 708	277 512	274 136
Negative Market Price Support	-24 221	-89 413	-71 720	-96 864	-99 655
Payments based on output	15 369	11 746	9 063	16 830	9 344
Payments based on input use	36 843	92 425	92 198	94 027	91 051
Based on variable input use	19 491	51 908	50 971	52 276	52 476
with input constraints	342	1 807	2 419	1 604	1 398
Based on fixed capital formation	9 545	29 784	30 101	31 118	28 133
with input constraints	630	4 071	4 428	4 267	3 520
Based on on-farm services	7 807	10 734	11 126	10 634	10 441
with input constraints	967	1 577	1 515	1 623	1 593
Payments based on current A/An/R/I, production required	43 329	78 427	73 017	75 659	86 603
Based on Receipts / Income	3 986	6 126	5 753	6 515	6 109
Based on Area planted / Animal numbers	39 343	72 301	67 264	69 144	80 494
with input constraints	18 032	39 640	33 639	36 180	49 101
Payments based on non-current A/An/R/I, production required	71	2 277	2 017	2 447	2 367
Payments based on non-current A/An/R/I, production not required	14 091	61 418	58 169	60 038	66 048
With variable payment rates	4 318	3 495	3 640	3 021	3 826
with commodity exceptions	4 079	3 346	3 486	2 864	3 689
With fixed payment rates	9 773	57 923	54 529	57 017	62 223
with commodity exceptions	6 081	2 539	2 574	2 510	2 532
Payments based on non-commodity criteria	3 664	5 333	5 826	5 466	4 707
Based on long-term resource retirement	3 358	3 876	4 530	3 940	3 157
Based on a specific non-commodity output	237	1 389	1 225	1 451	1 491
Based on other non-commodity criteria	69	69	71	75	60
Miscellaneous payments	136	1 426	1 019	1 934	1 324
Percentage PSE (%)	**18.4**	**11.7**	**12.5**	**11.4**	**11.1**
Producer NPC (coeff.)	**1.14**	**1.06**	**1.07**	**1.06**	**1.06**
Producer NAC (coeff.)	**1.23**	**1.13**	**1.14**	**1.13**	**1.13**
General Services Support Estimate (GSSE)	**55 290**	**106 416**	**108 179**	**107 205**	**103 865**
Agricultural knowledge and innovation system	10 996	26 219	26 437	26 428	25 790
Inspection and control	2 719	7 550	7 455	7 822	7 373
Development and maintenance of infrastructure	23 354	44 681	44 734	45 945	43 364
Marketing and promotion	5 602	5 319	5 285	5 209	5 463
Cost of public stockholding	10 144	20 544	22 326	19 503	19 802
Miscellaneous	2 475	2 104	1 941	2 298	2 073
Percentage GSSE (% of TSE)	**17.0**	**17.2**	**16.8**	**17.6**	**17.3**
Consumer Support Estimate (CSE)	**-120 358**	**-173 358**	**-191 073**	**-159 485**	**-169 515**
Transfers to producers from consumers	-128 519	-201 147	-226 362	-191 993	-185 084
Other transfers from consumers	-21 823	-47 749	-43 708	-44 413	-55 126
Transfers to consumers from taxpayers	28 315	65 974	69 762	66 532	61 628
Excess feed cost	1 669	9 563	9 234	10 388	9 067
Percentage CSE (%)	**-10.4**	**-5.3**	**-6.0**	**-4.9**	**-5.0**
Consumer NPC (coeff.)	**1.15**	**1.08**	**1.09**	**1.08**	**1.08**
Consumer NAC (coeff.)	**1.12**	**1.06**	**1.06**	**1.05**	**1.05**
Total Support Estimate (TSE)	**324 737**	**618 814**	**644 237**	**610 787**	**601 419**
Transfers from consumers	150 342	248 895	270 070	236 406	240 211
Transfers from taxpayers	196 218	417 668	417 876	418 794	416 334
Budget revenues	-21 823	-47 749	-43 708	-44 413	-55 126
Percentage TSE (% of GDP)	**1.0**	**0.8**	**0.9**	**0.8**	**0.8**
Total Budgetary Support Estimate (TBSE)	**197 108**	**425 442**	**419 250**	**430 139**	**426 938**
Percentage TBSE (% of GDP)	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**

Note: p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
A/An/R/I: Area planted/Animal numbers/Receipts/Income.
The All countries total includes all OECD countries, non-OECD EU Member States, and the Emerging Economies: Argentina, Brazil, China, Colombia, Costa Rica, India, Indonesia, Kazakhstan, the Philippines, Russian Federation, South Africa, Ukraine and Viet Nam. The All countries total for 2000-02 includes data for all countries except Latvia and Lithuania, for which data are not available.
1. Market Price Support (MPS) is net of producer levies and excess feed cost. MPS commodities: see notes to individual country tables.

Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-pcse-data-en. Statlink 2 https://doi.org/10.1787/888934143603

Figure 30: Mozambique's TSE, 2018

	2018 MZ Mill	2018 USD Mill
I. Total production value (at the farm gate)	386,604.5	6,432.7
1. Of which, share of standard PSE commodities (%)	65.7%	0.0
II. Total consumption value (at the farm gate)	494,729.6	8,231.8
1. Of which standard PSE commodities	324,986.7	5,407.4
III.1 Producer Support Estimate (EAP)	27,469.0	457.1
A.1 Market price support	26,146.0	435.0
1. Of which standard PSE commodities	17,175.3	285.8
A.2 Production - based payments	92.2	1.5
B. Payments based on the use of inputs	1,230.8	20.5
1. Based on the use of variable inputs	190.9	3.2
2. Based on the use of fixed inputs	191.4	3.2
3. Based on usage of services	848.6	14.1
C. Supports based on production A /An/ I. Required production	0.0	0.0
1. Based on revenue	0.0	0.0
2. Based on area or number of animals	0.0	0.0
D. Supports based on A / AN / I Not Current. Production required	0.0	0.0
E. Supports based on A/AN/I Not Current. Production not required	0.0	0.0
1. Variable rates	0.0	0.0
2. Fixed rates	0.0	0.0
F. Support based on non-commodity criteria	0.0	0.0
1. Long term resource	0.0	0.0
2. A specific non -commodity product	0.0	0.0
3. Other non-commodity criteria	0.0	0.0
G. Miscellaneous Support	0.0	0.0

	2018 MZ Mill	2018 USD Mill
III.2 Estimated Percentage of Producer Support (EAP)	7.1	7.1
IV. General Service Support Estimate (GSSE)	1,671.9	27.8
H. Agricultural Knowledge	175.0	2.9
I. Inspection and Control	18.1	0.3
J. Infrastructure Development and Maintenance	1,350.0	22.5
K. Marketing and promotion	118.1	2.0
L. Cost of Public Shares	10.6	0.2
M. Miscellaneous	0.0	0.0
V.1 Consumer Support Estimate (CSE)	-24,833.5	-413.2
N. Transfers from consumers to producers (-)	-26,146.0	-435.0
1. Of which standard PSE commodities	-17,175.3	-285.8
O. Other consumer transfers (-)	-115.4	-1.9
1. Of which standard PSE commodities	-75.8	-1.3
P. Transfers from taxpayers to consumers	1,427.9	23.8
V.2 Percentage of CSE	-5.0	-5.0
VI.1. Total Support Estimate (TSE)	30,568.7	508.6
Q. Consumer transfers	26,261.4	437.0
A. Taxpayer Transfers	4,422.7	73.6
S. Budget revenue (-)	-115.4	-1.9

Figure 31: Disaggregation of Mozambique's TSE, 2018

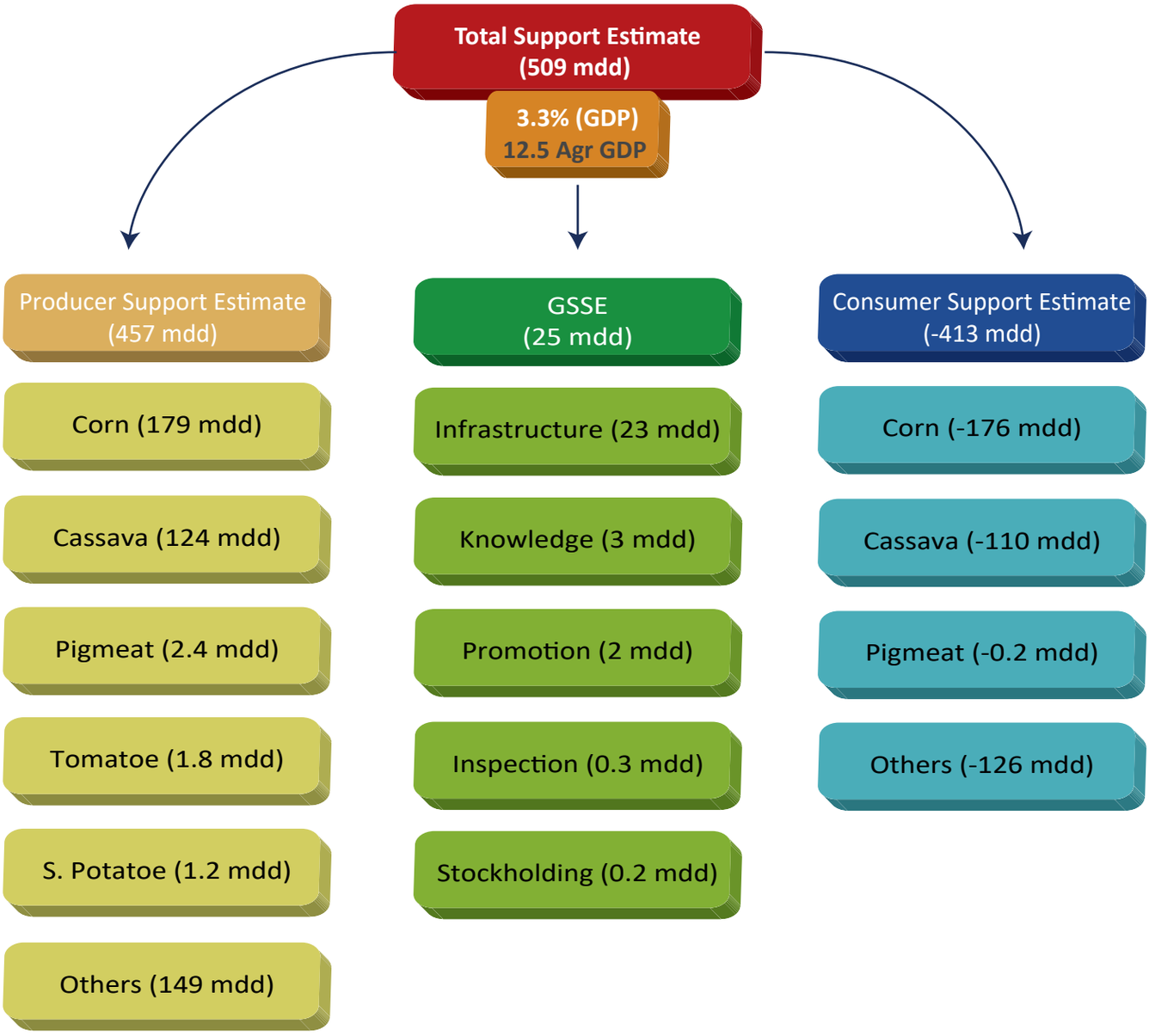


Figure 32: World Trade Organization Boxes

These are distorting measures of production and trade:

These Include measures to support price, or subsidies directly related to production quantion quantitles

This is the "amber box with conditions" - conditions designed to reduce distortion
In the current negotiations, some countries want to keep the blue box as it is because they see it as a crucial means of moving away from distorting amber box subsidies without causing too much hardship

These are measures that have no distortive effect on production or trade, for example: research, direct payments DECOUPLED from production, and infrastructure investment.

- Amber Box support are subject to reduction commitments and are actionable by importing countries (i.e. importing countries may apply countervailing measures).
- Blue box and green box measures are not subject to reduction commitments and are non-actionable ("Peace Clause").

From the definition of the PSE, a policy measure will be included in the estimation of agricultural support if it: (a) provides a transfer whose incidence is at the farm level; and (b) is directed specifically to agricultural producers or treats agricultural producers differently from other economic agents in the economy.

Support for farm product prices, or direct payments based on agricultural production or agricultural area, are clearly agricultural and producer-specific, and are included in the PSE indicator. Similarly, a payment reducing the price of fertilizer or pesticide for application on farm land, or a payment compensating for yield loss as a result of practicing organic farming, is clearly agricultural and producer specific and are also included in the PSE.
The impact of policy measures on variables such as production, consumption, trade, income, employment and the environment depend, among other factors, on the way policy measures are implemented. Therefore, to be helpful for policy analysis, policy measures to be included in the PSE are classified according to implementation criteria.

For a given policy measure, the implementation criteria are defined as the conditions under which the associated transfers are provided to farmers, or the conditions of eligibility for the payment.

Here are the main criteria used to classify programs according to OECD categories:

I. PSE CATEGORIES

A.1. Market price support (MPS)—transfers from consumers and taxpayers (consumption subsidies) to agricultural producers arising from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm gate level.

A.2. Payments based on output—transfers from taxpayers to agricultural producers from policy measures based on current output of a specific agricultural commodity

B.1 Payments based on variable input use—transfers reducing the on-farm cost of a specific variable input or a mix of variable inputs.

B.2. Fixed capital formation—transfers reducing the on-farm investment cost of farm buildings, equipment, plantations, irrigation, drainage and soil improvements.

B.3. On-farm services—transfers reducing the cost of technical, accounting, commercial, sanitary and phyto-sanitary assistance, and training provided to individual farmers.

C. Payments based on current production, production required transfers from taxpayers to agricultural producers arising from policy measures based on current area, animal numbers, receipts or income, and requiring production.

Category C is further broken into two subcategories:

C.1. Based on current receipts/income—including transfers through policy measures based on receipts or income.

C.2. Based on current area/animal numbers—including transfers through policy measures-based area/animal numbers

D. Payments based on non-current A/An/R/I, production required

Transfers from taxpayers to agricultural producers arising from policy measures based on non-current (i.e., historical) area, animal numbers, receipts or income, with current production of any commodity required.

E. Payments based on non-current production, production not required: transfers from taxpayers to agricultural producers arising from policy measures based on non-current (i.e., historical or fixed) area, animal numbers, receipts or income, with current production of any commodity not required but optional.

Category E is further divided in two sub-categories according to the nature of payment rates used:

E.1. Variable rates—transfers using payment rates which vary with respect to levels of current output or input prices, or production/yields and/or area.
E.2. Fixed rates—transfers using payment rates which do not vary with respect to these parameters.

F. Payments based on non-commodity criteria: transfers from taxpayers to agricultural producers arising

from policy measures based on:

F.1. Long-term resource retirement—transfers for the long-term retirement of factors of production from commodity production. The payments in this subcategory are distinguished from those requiring short-term resource retirement, which are based on commodity production criteria.

F.2. A specific non-commodity output—transfers for the use of farm resources to produce specific noncommodity outputs of goods and services, which are not required by regulations.

F.3. Other non-commodity criteria—transfers provided equally to all farmers, such as a flat-rate or lumpsum payment.

G. Miscellaneous payments: transfers from taxpayers to farmers for which there is insufficient information to allocate them to the appropriate categories.

II. General Services Support Estimates

Policy measures included in the General Services Support Estimate (GSSE) are classified into one of seven categories according to the nature of the services provided to agriculture in general (and not to individual producers or consumers).

The transfers in the GSSE are payments to eligible private or public services provided to agriculture generally. Unlike the PSE and CSE, the GSSE transfers are not destined to individual producers or consumers, and do not directly affect farm receipts (revenue) or consumption expenditure, although they may affect production or consumption of agricultural commodities in the longer term.

Services that benefit primary agriculture but whose initial incidence is not at the level of individual farmers: for example, agricultural education, research, marketing and promotion of agricultural goods, general infrastructural investment relating to irrigation, and inspection services beyond the farm gate.

While implementation criteria are used to distinguish whether the transfer is allocated to PSE or GSSE, the definition of the categories in the GSSE and the allocation of policy measures to these categories is according to the nature of the service, as the following:

A. Research and development: budgetary payments financing research and development activities improving agricultural production. Includes payments to institutions for research related to agricultural technologies and production methods. In most cases, these payments include the financing of public research institutions

B. Agricultural schools: budgetary payments financing agricultural training and education. Includes the public funding of education and training targeted specifically on the agricultural sector.

C. Inspection services: budgetary payments financing control of quality and safety of food, agricultural inputs and the environment. Includes payments to finance institutions for the control of food quality, animal health, and agricultural inputs. In most cases, these services are financed by public (governmental) organizations, and hence the budgets of these organizations are included. If the unpaid services are provided on farms (e.g., animal vaccinations), the corresponding costs should be allocated to the PSE.

D. Infrastructure: budgetary payments financing improvement of off-farm collective infrastructure. Includes public expenditure financing the development of production-related infrastructure in rural areas. It is important to distinguish support between on- and off-farm infrastructures.

E. Marketing and promotion: budgetary payments financing assistance to marketing and promotion of agro-food products. This category includes forms of government assistance to increase sales of primary agricultural commodities, such as agricultural exhibitions, fairs, promotional campaigns, advertising, and publications

F. Public stockholding: budgetary payments meeting the costs of storage, depreciation and disposal of public storage of agricultural products. Includes budgetary expenditures that finance investments and operating cost for off-farm storage and other market infrastructure facilities related with handling or marketing agricultural products (silos, docks, etc.)

G. Miscellaneous: budgetary payments financing other general services that cannot be disaggregated and allocated to the above categories due, for example, to a lack of information

III. Consumer Support Estimate

The CSE includes price transfers from consumers, which is the inverse value of Market Price Support. A component of the CSE is transfers associated with market price support for the production of commodities that are consumed domestically; these are called price transfers from (to) consumers. These transfers are the same as those included in the PSE under category Market Price Support, but they are given an opposite sign in the CSE and adjusted to apply to quantities consumed. Another type of payment classified under the CSE is budgetary transfers to consumers of agricultural commodities, where these are provided specifically to offset the higher prices resulting from market price support. Finally, consumption subsidies in cash or in kind (their monetary equivalent) associated with programs of market price support for domestic producers are also included in the CSE. This component includes, for example, domestic food aid programs.

Annex C

Conceptual Note on Price Collection of Agricultural Producers

I. Introduction

The objective of this annex is to describe the methodology employed to collect data for selected agricultural commodities to enable computation – using the Organization for Economic Cooperation and Development (OECD) methodology – of the main indicators of support to agriculture: (i) producer support estimate (PSE), (ii) consumer support estimate (CSE), (iii) general service support estimate (GSSE), and (iv) total support estimate (TSE).

II. Sample selection

Covered agricultural commodities include cassava, maize, sweet potato, potato, tomato, chicken, and pork meat. These commodities were selected because they accounted for more than 70.0% of the total value of gross agricultural output in Mozambique for 2018 and 2019. Farm-gate prices, transport costs and storage costs for these agricultural commodities are not available from official statistics reported by the Mozambique National Institute of Statistics (INE) and the Ministry of Agriculture and Rural Development (MADER). Hence, we collected required data in Manica province in Northern Mozambique and Nampula province in Central Mozambique. Manica and Nampula were purposively sampled because they rank consistently among the top five provinces in terms of total cultivated area, cultivated area under maize, maize production and maize sales; as well as in terms of chicken and pork production, making these provinces relatively important, as illustrated in Table 1 below. Furthermore, Manica and Nampula are also two main surplus markets supplying agricultural commodities to the deficit Maputo province in Southern Mozambique. Empirical evidence also shows that Manica and Nampula markets exhibit price causality in the Granger sense with Maputo market, suggesting that price changes in one market have influence on price changes in another market.

We conducted a census of traders (including producers who sell their production) of the seven commodities in two open markets (Mercado Uaresta in Nampula and Mercado 38 in Manica). Some producers of agricultural commodities were also distributors. Face-to-face interviews were conducted between 19 January 2021 and 23 January 2021 to collect recall data for the 2017/2018 and 2018/2019 agricultural seasons. The data collection period coincided with the lean season; hence, agricultural commodities were scarce in the markets. A total of 60 interviews were completed (39 in Nampula province and 21 in Manica province). This sample sizes are comparable to that of MADER for price data collection through their Agricultural Market Information System (SIMA) under which three observations per day of data collection are collected for each tracked agricultural commodity.

Table 7. Contribution in total cultivated area, sales and production

	Cultivated area		Maize	Production			
Province	Maize	Total	sales	Maize	Cassava	Chicken	Pork
Niassa	5.5%	4.6%	11.3%	8.1%	1.5%	0.6%	6.4%
Cabo Delgado	6.5%	8.1%	4.9%	6.2%	8.7%	0.7%	4.8%
Nampula	7.6%	16.4%	12.3%	10.2%	41.8%	12.6%	19.5%
Zambezia	16.4%	20.0%	16.5%	16.3%	32.1%	0.7%	14.0%
Tete	19.1%	16.2%	37.7%	28.3%	1.6%	0.8%	11.1%
Manica	12.0%	8.6%	10.3%	13.5%	1.4%	6.3%	3.9%
Sofala	16.1%	12.9%	5.9%	11.3%	2.4%	0.5%	13.2%
Inhambane	3.0%	3.7%	0.4%	1.0%	4.2%	1.7%	13.9%
Gaza	11.2%	7.2%	0.3%	4.0%	2.9%	3.3%	5.3%
Maputo	2.7%	2.5%	0.4%	1.2%	3.5%	72.9%	7.8%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

III. Gathered information

We collected the following information during the face-to-face interviews:

- Price received by producers at farm gate level: Interviewees were asked about prices during the harvest and lean seasons. We considered prices in the lean season only because we had very few observations for prices in the harvest season. It is possible that these prices in the lean season are affected by the seasonality effect. Empirical evidence show that retail maize prices have high seasonal price variation ranges with a seasonal price increase of 75% in Manica and 70% in Nampula between 2000 and 2015. Agricultural commodities are generally sold using nonstandard units such as cans of 20 liters or sacks of 12.5 kgs among others. For this case, prices per ton were estimated by dividing reported price charged for nonstandard units by the average weight of the nonstandard unit (kgs) and then multiplied by 1,000;
- Prices paid by consumers at the market: The estimation was similar to that of the farm-gate-level prices;
- Transport cost from the farm gate to the market: For crop commodities, usually transported in packages of various sizes, transport cost per ton was computed by dividing the payment per package by the average weight (kgs) of the package and then multiplied by 1,000. For livestock commodities, usually transported live animals, transport cost per ton was estimated by dividing the payment per animal by the average carcass weight (kgs) and then multiplied by 1,000. Transport cost includes the payment for loading the commodity, truck transportation, and unloading. Transport market is noncompetitive with a few transporters, making transport cost relatively higher especially in Northern and Central Mozambique. Bad road conditions exacerbate transport cost. Data from INE show that about 50.0% of classified roads in Mozambique are in bad conditions; of which 39.9% are located in Central Mozambique and 35.9% in Northern Mozambique;
- Processing and handling cost: This was computed by dividing the processing and handling payment by the average weights (kgs) of the reported unit and then multiplied by 1,000. This cost refers to the cost of expenses related to activities carried out for conservation and handling of commodities – including, but not limited to, manual or mechanical cleaning, grading, slaughtering, cutting, and packaging, but excluding shipping cost – to make them usable as food, feed or industrial raw material;
- Storage costs at the market: The computation was similar to that of the transport cost. This cost includes payments for warehouse storage only;

All Above-mentioned information, collected through face-to-face interviews, is considered representative of domestic markets as they reflect information in the main markets of the country where agricultural commodities are traded. Prices received by producers at farm gate and paid by consumers at the market are summarized in Figures 1 and 2 below. For both prices received by producers and paid by consumers, as expected, livestock commodities have higher prices compared to crop commodities. For all commodities except tomato, both prices trended upward between the 2017/2018 and 2018/2019 agricultural seasons. Prices were validated by government technical staff.

Figure 33. Average farm-gate prices over commodity over year

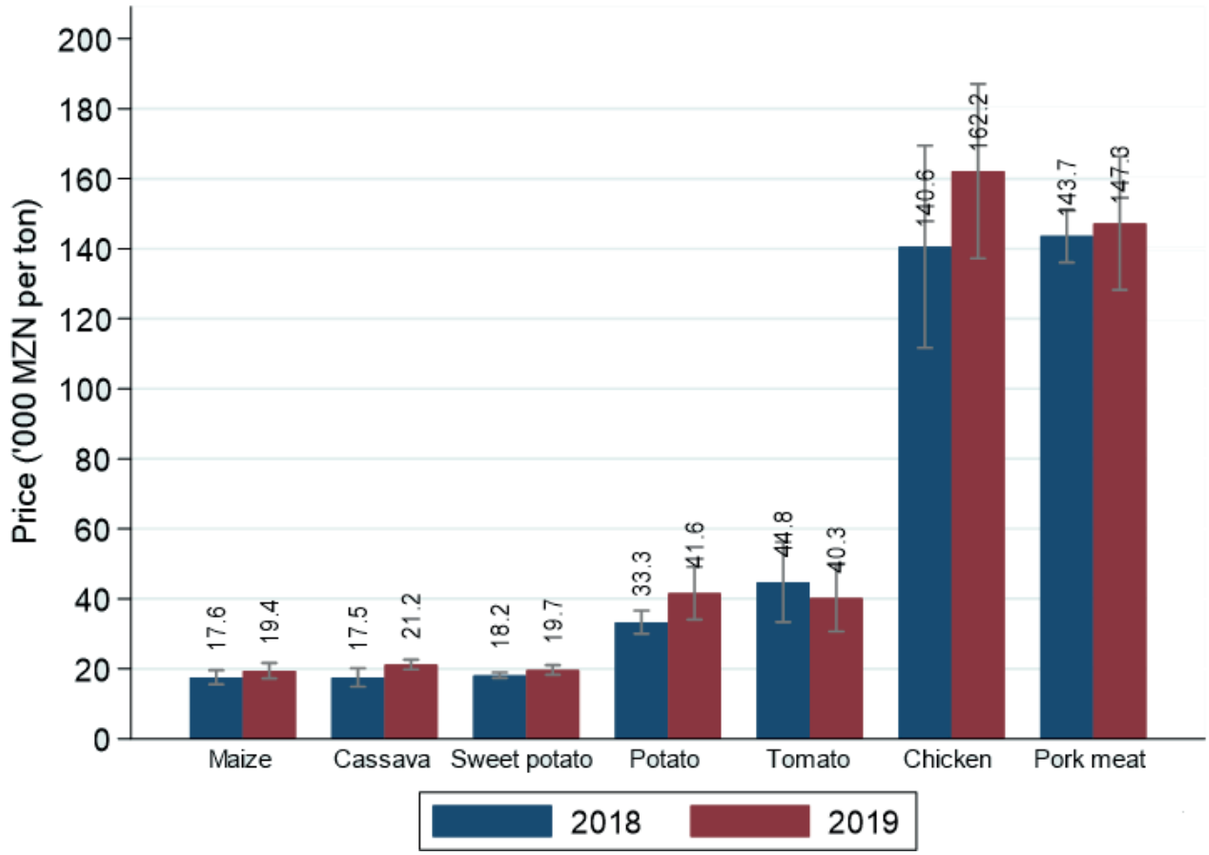
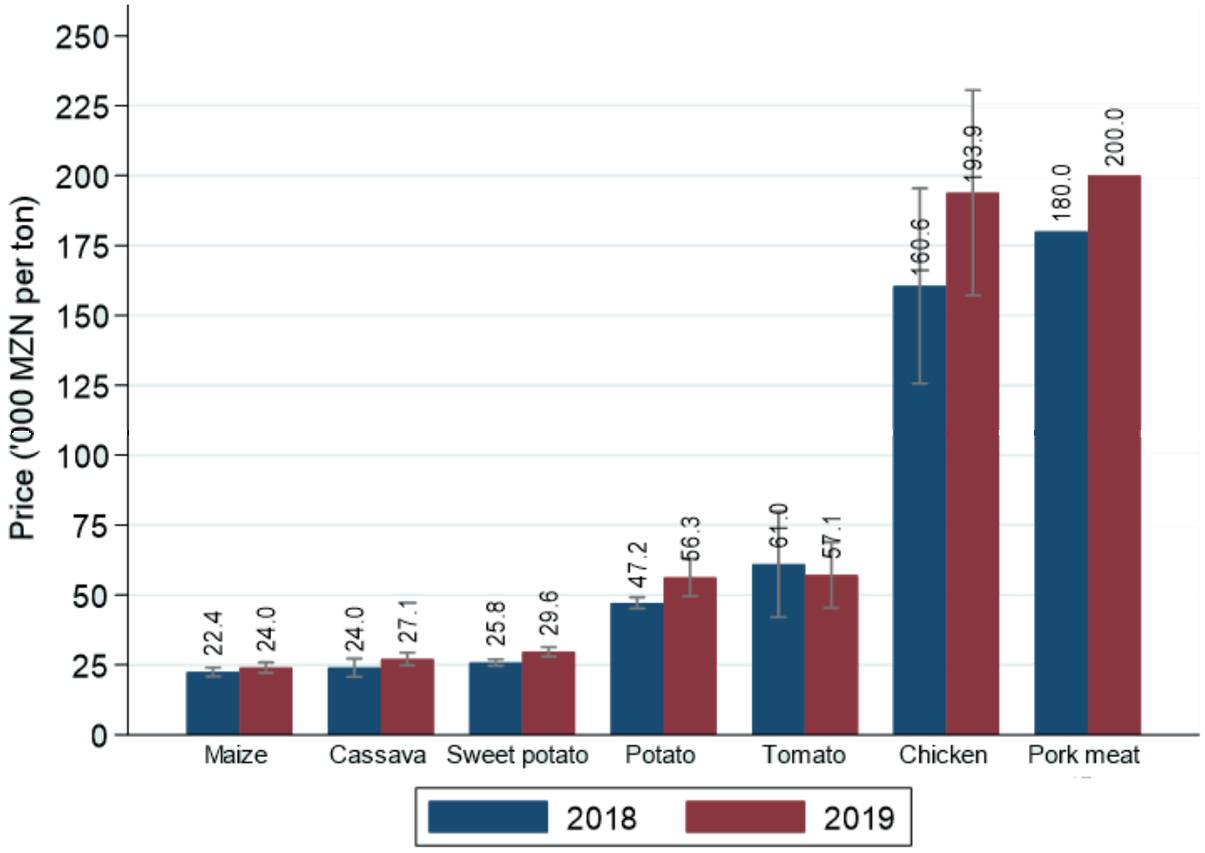


Figure 34. Average consumer price over commodity over year



Transport, processing and handling and storage costs for year 2018 are summarized in Table 1 below. Similar figures were reported for year 2019. Table 1 shows that like prices, transport, processing and handling and storage costs are generally higher for crop commodities than livestock commodities.

Table 8 Transport, processing and handling and storage costs ('000 MZN per ton)

	Mean			Standard deviation		
Commodity	Transport	Processing	Storage	Transport	Processing	Storage
Maize	1.36	1.57	0.24	0.80	1.16	0.05
Cassava	1.20	1.95	0.24	0.40	1.10	0.05
Sweet potato	1.10	0.35	0.22	0.34	0.07	0.04
Potato	4.00	-	0.60	1.07	-	0.35
Tomato	2.40	1.45	0.44	1.57	1.48	0.17
Chicken	4.28	-	0.12	1.95	-	0.02
Pork meat	9.20	-	-	2.52	-	-

Figure 35: Budget PSE, by Category and Program

A. Apoio com base na produção de commoditie

A.2 Apoios com base na produção

	Origem	Unidade	2018
INTENSIFICAR A PRODUCAO DE CULTURAS ALIMENTARES(CEREAIS E LEGUMINOSAS)	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE CABO DELGADO	MZ Mill	5.94
PRODUCAO DE HORTICULAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA	MZ Mill	1.65
PROJECTO DE DESENVOLVIMENTO DE CADEIAS DE VALOR NOS CORREDORES DO MAPUTO E LIMPOPO (PROSUL)	DELEGAÇÃO PROVINCIAL DO FUNDO DE DESENVOLVIMENTO AGRARIO DE GAZA	MZ Mill	52.61
Total		**Mz Mill**	**60.20**

Asignacion Apoios (todos)	**Origem**	**Unidade**	**2018**
MANDIOCA	Incluye varios programas	MZ Mill	77.70
TOMATOE		MZ Mill	3.81
MILHO		MZ Mill	4.76
SWEET POTATOE		MZ Mill	2.50
CERDO		MZ Mill	3.37
TOTAL ASIGNADO		MZ Mill	92.15
OUTRAS		MZ Mill	-31.95

Apoios produtos SELECCIONADOS	**Origem**	**Unidade**	**2018**
ARROZ		MZ Mill	
CAFÉ		MZ Mill	
PESCAS		MZ Mill	
BATATA		MZ Mill	
MILHO		MZ Mill	
Total alocado para produtos selecionados		**MZ Mill**	**0.00**

Total A.2 **60.20**

A.2 Apoios com base na produção

Apoio com base na produção de commodities

B. Apoios com base no uso de insumos

B. 1. Com base no uso de insumos variáveis

Apoios Diversos	**Origem**	**Unidade**	**2018**
PROJECTO DE DESENVOLVIMENTO DE CADEIAS DE VALOR NOS CORREDORES DO MAPUTO E LIMPOPO (PROSUL)	PROSUL	MZ Mill	52.61
INTENSIFICAR A PRODUCAO DE CULTURAS ALIMENTARES(CEREAIS E LEGUMINOSAS)	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE CABO DELGADO	MZ Mill	5.94
DIVERSOS	DIVERSOS	MZ Mill	95.82
INTENSIFICACAO E DIVERSIFICACAO DE CULTURAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA; DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAPUTO PROVINCIA	MZ Mill	17.13
PROGRAMA DE APOIO AS FINANCAS RURAISPAFR	FUNDO DE APOIO A REABILITACAO DA ECONOMIA	MZ Mill	0.21
Total		**MZ Mill**	**171.71**

Asignacion Apoios Diversos		**Unidade**	**2018**
MANDIOCA	PROSUL	MZ Mill	124.18
TOMATOE		MZ Mill	10.88
MILHO		MZ Mill	13.58
SWEET POTATOE		MZ Mill	7.14
CERDO		MZ Mill	9.63
TOTAL ASIGNADO		MZ Mill	155.78
OTROS		MZ Mill	15.93

Apoios SEMENTES	**Origem**	**Unidade**	**2018**
PROJECTO DE PRODUCAO LOCAL DE SEMENTE	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE INHAMBANE	MZ Mill	3.97
Total		**MZ Mill**	**3.97**

Asignación Apoios SEMILLAS	**Origem**	**Unidade**	**2018**
MANDIOCA		MZ Mill	2.01
TOMATOE		MZ Mill	0.31
MILHO		MZ Mill	0.38
SWEET POTATOE	incluye varios programas	MZ Mill	0.20
TOTAL ASIGNADO		MZ Mill	2.90
OTROS		MZ Mill	1.08

Apoios FERTILIZANTES	**Origem**	**Unidade**	**2018**
Total		**MZ Mill**	**0.00**

Asignación Apoios Fertilizantes		**Unidade**	**2018**
MANDIOCA		MZ Mill	0.00
TOMATOE		MZ Mill	0.00
MILHO		MZ Mill	0.00
SWEET POTATOE		MZ Mill	0.00
TOTAL ASIGNADO		MZ Mill	0.00
OTROS		MZ Mill	0.00

Apoios para productos pecuarios	**Origem**	**Unidade**	**2018**
PROMOVER PROGRAMAS DE FOMENTO PECUARIO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DA ZAMBEZIA	MZ Mill	6.69
INCENTIVAR A PRODUCAO PECUARIA	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE CABO DELGADO	MZ Mill	22.75
PROJECTO DE PRODUCAO DE FENO PARA A SUPLEMENTACAO DO GADO NA EPOCA SECA	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MANICA	MZ Mill	0.56
Total alocado para produtos pecuarios		**MZ Mill**	**30.01**

ASIGNACIÓN A PECUARIOS APOIOS	**Origem**	**MZ Mill**	**2018**
CERDO		MZ Mill	22.60
TOTAL ASIGNADO		MZ Mill	22.60
OTROS		MZ Mill	7.41

TOTAL B1	**Mz Mill**	**205.69**

B. 1. Com base no uso de insumos variáveis

B. Apoios com base no uso de insumos

B 2. Com base no formação de capital fixo

INVERSION ACTIVOS FIJOS	Origem	Unidade	2018
PROJECTO DE DESENVOLVIMENTO DE CADEIAS DE VALOR NOS CORREDORES DO MAPUTO E LIMPOPO (PROSUL)	DELEGAÇÃO PROVINCIAL DO FUNDO DE DESENVOLVIMENTO AGRARIO DE GAZA	MZ Mill	52.61
ESTABELECIMENTO DE ESTUFAS PARA PRODUCAO DE HORTICOLAS	DELEGAÇÃO PROVINCIAL DO FUNDO DE DESENVOLVIMENTO AGRARIO DE NAMPULA	MZ Mill	4.15
PROSUL	DELEGAÇÃO PROVINCIAL DO FUNDO DE DESENVOLVIMENTO AGRARIO DE GAZA	MZ Mill	52.61
ESTABECIMENTO DE ESTUFAS PARA PRODUCAO DE HORTICOLAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA	MZ Mill	5.81
ESTABELECIMENTO DE ESTUFAS PARA PRODUCAO DE HORTICOLAS	DELEGAÇÃO PROVINCIAL DO FUNDO DE DESENVOLVIMENTO AGRARIO DE NAMPULA	MZ Mill	4.15
PROSUL	DELEGAÇÃO PROVINCIAL DO FUNDO DE DESENVOLVIMENTO AGRARIO DE GAZA	MZ Mill	52.61
DIVERSOS	Diversos	MZ Mill	13.38
PROGRAMA DE MACANIZACAO AGRARIA	AGENCIA DE DESENVOLVIMENTO DO VALE DO ZAMBEZE	MZ Mill	13.11
FINANCAS E MICROFINANCAS RURAIS	MINISTERIO DA TERRA AMBIENTE E DESENVOLVIMENTO RURAL	MZ Mill	0.16
FINANCAS E MICROFINANCAS RURAIS	MINISTERIO DA TERRA AMBIENTE E DESENVOLVIMENTO RURAL	MZ Mill	0.16
FINANCAS E MICROFINANCAS RURAIS	MINISTERIO DA TERRA AMBIENTE E DESENVOLVIMENTO RURAL	MZ Mill	0.16
TOTAL		**MZ Mill**	**198.90**

ASIGNACION APOIOS (TODOS)		Unidade	2018
MANDIOCA	INCLUYE VARIOS PROGRAMAS.	MZ Mill	135.51
TOMATOE		MZ Mill	12.60
MILHO		MZ Mill	15.73
SWEET POTATOE		MZ Mill	8.27
CERDO	INCLUYE VARIOS PROGRAMAS. VER DIRECTAMENTE	MZ Mill	11.81
TOTAL ASIGNADO		MZ Mill	183.92
OTROS		MZ Mill	14.97

APOIOS PARA PRODUCTOS SELECCIONADOS	ORIGEM	Unidade	2018
		MZ Mill	
TOTAL ALOCADO PARA PRODUTOS SELECIONADOS		**MZ Mill**	**0.00**

APOIOS PARA PRODUCTOS PECUARIOS	ORIGEM	Unidade	2018
FOMENTO PECUARIO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NIASSA	MZ Mill	2.52
FOMENTO PECUARIO E REABILITACAO DE INFRAESTRUTURAS PECUARIAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA	MZ Mill	5.92
PROGRAMA INTEGRADO PARA O DESENVOLVIMENTO PECUARIO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE GAZA	MZ Mill	1.45
TOTAL ALOCADO PARA PRODUTOS PECUARIOS		**MZ Mill**	**9.89**

ASIGNACIÓN A PECUARIOS APOIOS	ORIGEM	Unidade	2018
CERDO		MZ Mill	7.45
TOTAL ASIGNADO		MZ Mill	7.45
OTROS		MZ Mill	2.44

TOTAL B2	**MZ Mill**	**208.79**

B 2. Com base no formação de capital fixo

B. Apoios com base no uso de insumos

B 3. Serviços on-farm

APOIOS EXTENSION	ORIGEM	Unidade	2018
PRODUCAO DE HORTICULAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA	MZ Mill	1.65
DIVERSOS DE EXTENSIONISMO	DIVERSOS	MZ Mill	167.81
DIVERSOS TRANSFERENCIA TECNOLOGIA	DIVERSOS	MZ Mill	27.96
DIVERSOS	DIVERSOS	MZ Mill	4.63
APOIO A PRODUCAO AGRICOLA	MINISTERIO DA AGRICULTURA E SEGURANCA ALIMENTAR	MZ Mill	53.23
ASSISTENCIA TECNICA E FINANCEIRA AS INICIATIVAS DE DESENVOLVIMENTO ECONOMICO E SOCIAL NO VALE DO ZAMBEZE	AGENCIA DE DESENVOLVIMENTO DO VALE DO ZAMBEZE	MZ Mill	470.50
ESTABELECER VIVEIROS DE FRUTEIRAS DIVERSAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NIASSA	MZ Mill	0.10
GESTAO DE TERRAS	DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DE SOFALA	MZ Mill	2.95
GESTAO DE TERRAS	DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DE MAPUTO PROVINCIA; DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DE TETE	MZ Mill	7.14
INTENSIFICACAO E DIVERSIFICACAO DE CULTURAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA	MZ Mill	7.15
INTENSIFICACAO E DIVERSIFICACAO DE CULTURAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAPUTO PROVINCIA	MZ Mill	9.98
PROGRAMA DE APOIO AS FINANCAS RURAISPAFR	FUNDO DE APOIO A REABILITACAO DA ECONOMIA	MZ Mill	0.21
PROJECTO DE DESENVOLVIMENTO DAS CADEIAS DE VALOR	FUNDO DO DESENVOLVIMENTO AGRARIO	MZ Mill	7.33
PROMOVER PROGRAMAS DE FOMENTO PECUARIO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DA ZAMBEZIA	MZ Mill	6.69
APOIO AO DESENVOLVIMENTO AGRARIO	INSTITUTO DE FOMENTO DO CAJU; FUNDO DO DESENVOLVIMENTO AGRARIO	MZ Mill	410.15
PROMOCAO DE PRODUCAO E PRODUCTIVIDADE AGRICOLA NOS CENTROS PENITENCIARIOS ABERTOS	ESTABELECIMENTO PENITENCIARIO REGIONAL NORTE NAMPULA	MZ Mill	2.11
AGRO-PECUARIA	FUNDO NACIONAL DE DESENVOLVIMENTO SUSTENTAVEL	MZ Mill	60.00
PRODUCAO AGRO-PECUARIA	ESTABELECIMENTO PENITENCIARIO PROVINCIAL DE NAMPULA	MZ Mill	1.35
INTENFICACAO DA PRODUCAO AGRICOLA	ESTABELECIMENTO PENITENCIARIO PROVINCIAL DE GAZA	MZ Mill	2.70
APOIO AO DESENVOLVIMENTO AGRARIO	FUNDO DO DESENVOLVIMENTO AGRARIO	MZ Mill	30.07
PROJECTO DE DESENVOLVIMENTO DAS CADEIAS DE VALOR	FUNDO DO DESENVOLVIMENTO AGRARIO	MZ Mill	7.33
TOTAL		**MZ Mill**	**1281.06**

ASIGNACIÓN APOIOS EXTENSION	ORIGEM	Unidade	2018
MANDIOCA		MZ Mill	533.97
TOMATOE		MZ Mill	81.15
MILHO		MZ Mill	101.34
SWEET POTATOE		MZ Mill	54.85
CERDO		MZ Mill	72.48
TOTAL ASIGNADO		MZ Mill	843.80
OTROS		MZ Mill	437.26

APOIOS PARA PRODUCTOS SELECCIONADOS	ORIGEM	Unidade	2018
TOTAL ALOCADO PARA PRODUTOS SELECIONADOS		**MZ Mill**	0.00

APOIOS PARA PRODUCTOS PECUARIOS	ORIGEM	Unidade	2018
FOMENTO PECUARIO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE SOFALA	MZ Mill	3.38
FOMENTO PECUARIO E REABILITACAO DE INFRAESTRUTURAS PECUARIAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA	MZ Mill	2.96
TOTAL ALOCADO PARA PRODUTOS PECUARIOS		**MZ Mill**	**6.34**

ASIGNACIÓN A PECUARIOS APOIOS EXTENSION	ORIGEM	Unidade	2018
CERDO		MZ Mill	4.77
TOTAL ASIGNADO		MZ Mill	4.77
OTROS		MZ Mill	1.56

TOTAL B3	MZ Mill	1287.39

B 3. Serviços *on-farm*

B. Apoios com base no uso de insumos

C. Apoios com base na produção A /An/ I. Produccion necessária

C. 1. Com base na receita

Total C1	**0.00**

C. 2. Com base na área ou número de animais

EXEMPLO: APOIOS DESASTRE	ORIGEM	Unidade	2018
TOTAL		MZ Mill	0.00

ASIGNACION APOIOS (TODOS)		Unidade	2018
MANDIOCA		MZ Mill	0.0
TOMATOE		MZ Mill	0.0
MILHO		MZ Mill	0.0
SWEET POTATOE		MZ Mill	0.0
CERDO		MZ Mill	0.0
TOTAL ASIGNADO		MZ Mill	0.00
OTROS		MZ Mill	0.00

TOTAL C2	**MZ Mill**	**0.00**

C. 1. Com base na receita

C. 2. Com base na área ou número de animais

C. Pagamentos com base na produção A /An/ I. Produccion necessária

D. Apoios com base em A / AN / I NÃO Atual. Produção necessária

	ORIGEM	Unidade	2018
TOTAL		**MZ Mill**	**0.00**

ASIGNACION APOIOS (TODOS)		**Unidade**	**2018**
MANDIOCA		MZ Mill	0.0
TOMATOE		MZ Mill	0.0
MILHO		MZ Mill	0.0
SWEET POTATOE		MZ Mill	0.0
CERDO		MZ Mill	0.0
TOTAL ASIGNADO		MZ Mill	0.00
OTROS		MZ Mill	0.00

TOTAL D.	**MZ Mill**	**0.00**

D. Apoios com base em A / AN / I NÃO Atual. Produção necessária

E. Apoios com base em A / AN / I NÃO Atual. Produção Não necessária

E.1. Taxas variables

PROGRAMA	ORIGEM	Unidade	2018
TOTAL		MZ Mill	0.00

ASIGNACION APOIOS (TODOS)		Unidade	2018
MANDIOCA		MZ Mill	0.00
TOMATOE		MZ Mill	0.00
MILHO		MZ Mill	0.00
SWEET POTATOE		MZ Mill	0.00
CERDO		MZ Mill	0.00
TOTAL ASIGNADO		MZ Mill	0.00
OTROS		MZ Mill	0.00
TOTAL E1		**MZ Mill**	**0.00**

E.2 Tasas Fixas

EXEMPLO: APOIO DIRECTO RENTA	Origem	Unidade	2018
TOTAL		MZ Mill	0.00

ASIGNACION APOIOS (TODOS)		Unidade	2018
MANDIOCA		MZ Mill	0.00
TOMATOE		MZ Mill	0.00
MILHO		MZ Mill	0.00
SWEET POTATOE		MZ Mill	0.00
CERDO		MZ Mill	0.00
TOTAL ASIGNADO		MZ Mill	0.00
OTROS		MZ Mill	0.00
TOTAL E2		**Mz Mill**	**0.00**

E.1. Taxas variables

E.2 Tasas Fixas

E. Apoios com base em A / AN / I NÃO Atual. Produção NO necessária

F. Apoios com base em critérios de não relacionados a commodities

F.1. Recurso de longo prazo

APOIOS REFORESTACION	ORIGEM	Unidade	2018
TOTAL		MZ Mill	0.00

ASIGNACION APOIOS ENERGIA (TODOS)		Unidade	2018
MANDIOCA		MZ Mill	0.00
TOMATOE		MZ Mill	0.00
MILHO		MZ Mill	0.00
SWEET POTATOE		MZ Mill	0.00
CERDO		MZ Mill	0.00
TOTAL ASIGNADO		MZ Mill	0.00
OTROS		MZ Mill	0.00

TOTAL F1 **MZ Mill** **0.00**

F.1. Recurso de longo prazo

F.2. Um produto não commodity específico

APOIO PRODUCCION DE FROJOLES SIN FERTILIZANTES QUIMICOS	ORIGEM	Unidade	2018
TOTAL		MZ Mill	0.00

ASIGNACION APOIOS ENERGIA (TODOS)		Unidade	2018
MANDIOCA		MZ Mill	0.00
TOMATOE		MZ Mill	0.00
MILHO		MZ Mill	0.00
SWEET POTATOE		MZ Mill	0.00
CERDO		MZ Mill	0.00
TOTAL ASIGNADO		MZ Mill	0.00
OTROS		MZ Mill	0.00

TOTAL F2 **MZ Mill** **0.00**

F.2. Um produto não commodity específico

F.3. Outros critérios não relativos a commodities

TOTAL F3 **Mz Mill** **0.00**

F.3. Outros critérios não relativos a commodities

F. Apoios com base em critérios de não commodities

G. Otros				
				G.Otros
TOTAL G		Mz Mill	0.00	

Figure 36: Budget GSSE, by Category and Project

H. Conhecimento Agrícola

Programa	Origem	Unidade	2,018.00
ANALISES LABORATORIAIS DE SOLO E PLANTAS	CENTRO REGIONAL DA ZONA NORDESTE DO IIAM DE NAMPULA UGB	Mz Mill	0.82
CONTROLO E INSEMINACAO DE GADO BOVINO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE INHAMBANE	Mz Mill	0.12
DESENVOLVER VARIEDADES ADAPTADAS A DIVERSAS CONDICOES AGOECOLOGICAS E COM CARACTERISTICAS DESEJAVEIS PARA O CONSUMO BEM COMO AVALIAR E DESENVOLVER TECNOLOGIAS DE PRODUCAO (PRATICAS AGRONOMICAS) ADAPTADAS AS MESMAS CONDICOES	CENTRO REGIONAL DA ZONA NOROESTE DO IIAM DE NIASSA	Mz Mill	0.40
GERAR VARIEDADES DE CULTURAS ALIMENTARES COM ALTA PRODUTIVIDADE PARA GARANTIR A SEGURANCA ALIMENTAR NA REGIAO NORDESTE	CENTRO REGIONAL DA ZONA NORDESTE DO IIAM DE NAMPULA UGB	Mz Mill	1.16
INSEMINACAO ARTIFICIAL	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE GAZA	Mz Mill	1.03
MAPEAMENTO DAS ZONAS ARIDAS E SEMI-ARIDAS	INSTITUTO NACIONAL DE GESTAO DAS CALAMIDADES	Mz Mill	3.99
MELHORAMENTO GENETICO DE RACAS LOCAIS PARA PRODUCAO DE CARNE E LEITE	CENTRO REGIONAL DA ZONA NORDESTE DO IIAM DE NAMPULA UGB	Mz Mill	1.66
PRODUCAO DE SEMENTE BASICA DE CULTURAS ALIMENTARES RAMA DE BATATA DOCE ESTACAS DE MANDIOCA E FRUTEIRAS	CENTRO REGIONAL DA ZONA SUL DO IIAM DE GAZA/CHOKWE	Mz Mill	3.15
PRODUCAO DE SEMENTES BASICA	INSTITUTO DE INVESTIGACAO AGRARIA DE MOCAMBIQUE	Mz Mill	8.16
PRODUZIR SEMENTE DE DIVERSAS CULTURAS PRATICADAS NA REGIAO	CENTRO REGIONAL DA ZONA NORDESTE DO IIAM DE NAMPULA UGB	Mz Mill	1.22
PRODUZIR SEMENTES PRE BASICA E BASICA E INSTALAR UM VIVEIRO MULTIPLO PARA PRODUCAO DE MUDAS	CENTRO REGIONAL DA ZONA NOROESTE DO IIAM DE NIASSA	Mz Mill	0.77
PROJECTO DE ADAPTACAO E GERACAO DE NOVAS VARIEDADES E CULTURAS ALIMENTARES E INDUSTRIAIS	INSTITUTO DE INVESTIGACAO AGRARIA DE MOCAMBIQUE	Mz Mill	11.02
PROJECTO DE AQUISICAO DE TOUROS E BODES MELHORADOS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MANICA	Mz Mill	2.33
PROMOVER DISSEMINAR E PUBLICAR TECNOLOGIAS AGRARIAS AOS PRODUTORES	CENTRO REGIONAL DA ZONA NOROESTE DO IIAM DE NIASSA	Mz Mill	0.20
REALIZACAO DE FORMACOES E TREINAMENTOS NA CADEIA DE VALOR DE FRUTAS	CENTRO REGIONAL DA ZONA NORDESTE DO IIAM DE NAMPULA UGB	Mz Mill	0.55
REFORCO A COORDENACAO DO PROSAVANA	MINISTERIO DA AGRICULTURA E SEGURANCA ALIMENTAR	Mz Mill	1.64
REFORCO INSTITUCIONAL A INVESTIGACAO AGRARIA DE MOCAMBIQUE	INSTITUTO DE INVESTIGACAO AGRARIA DE MOCAMBIQUE	Mz Mill	15.79
ASSISTENCIA TECNICA AOS PRODUTORES	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAPUTO PROVINCIA	Mz Mill	2.65
ASSISTIR PRODUTORES EM TECNOLOGIAS DE EXTENSAO AGRARIAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DA ZAMBEZIA	Mz Mill	2.65
CAPACITACAO E TRANSFERENCIA METODOLOGICA PARA O PROGRAMA MAIS ALIMENTOS AFRICA EM MOCAMBIQUE	FUNDO DO DESENVOLVIMENTO AGRARIO	Mz Mill	44.41
CONSTRUCAO DE AVIARIO	INSTITUTO SUPERIOR POLITECNICO DE GAZA	Mz Mill	1.90
CONSTRUCAO DE LABORATORIO DA ESCOLA AGRO-PECUARIA DE CAIA	DIRECCAO PROVINCIAL DE CIENCIA E TECNOLOGIA, ENSINO SUPERIOR E TECNICO E PROFISSIONAL DE SOFALA	Mz Mill	1.50
GESTAO DE INTERNATO ESTAGIO E PRODUCAO DE HORTICULAS E ANIMAIS DE PEQUENOS RUMINANTES	INSTITUTO MEDIO DE PLANEAMENTO FISICO E AMBIENTE	Mz Mill	2.58
INCUBACAO DE JOVENS NA PRODUCAO INTENSIVA DE AVES E AGRONEGOCIO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAPUTO CIDADE	Mz Mill	1.58
APOIO AS CALAMIDADES NATURAIS	DIRECCAO PROVINCIAL DA EDUCACAO E DESENVOLVIMENTO HUMANO DE TETE	Mz Mill	4.75
RECONSTRUCAO POS CALAMIDADES	DIRECCAO PROVINCIAL DA EDUCACAO E DESENVOLVIMENTO HUMANO DE INHAMBANE	Mz Mill	2.80
INTENSIFICAR A PRODUCAO DE CULTURAS ALIMENTARES	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DA ZAMBEZIA	Mz Mill	16.40
APOIO AO DESENVOLVIMENTO AGRARIO	FUNDO DO DESENVOLVIMENTO AGRARIO	Mz Mill	30.07
PREVENCAO E COMBATE A EROSAO DE SOLOS	DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DE GAZA	Mz Mill	0.85
PROGRAMA INTEGRADO PARA O DESENVOLVIMENTO PECUARIO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE GAZA	Mz Mill	1.45
PROJECTO DE DESENVOLVIMENTO DAS CADEIAS DE VALOR	FUNDO DO DESENVOLVIMENTO AGRARIO	Mz Mill	7.33
ESTABELECER VIVEIROS DE FRUTEIRAS DIVERSAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NIASSA	Mz Mill	0.10
TOTAL Conhecimento Agrícola		**Mz Mill**	**175.05**

H. Conhecimento Agrícola

I. Inspeção e Controle

Program	Origem	Unidade	2,018.00
APOIO AO PROGRAMA DE VACINACAO E SANIDADE ANIMAL	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE TETE	Mz Mill	1.89
CONTROLO DE PRAGAS NAS CULTURAS ALIMENTARES NO SECTOR FAMILIAR	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAN	Mz Mill	1.16
PROJECTO DE PRODUCAO DE VACINAS PARA ANIMAIS	INSTITUTO DE INVESTIGACAO AGRARIA DE MOCAMBIQUE	Mz Mill	8.68
PROJECTO DE VACINACOES OBRIGATORIAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAN	Mz Mill	1.57
REALIZAR CAMPANHAS DE VACINACAO OBRIGATORIA	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DA ZAM	Mz Mill	1.65
VACINAR ANIMAIS CONTRA RAIVA NEW CASTLE CARBUNCULO EMATICO E SINTOMATICO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NIAS	Mz Mill	0.41
REABILITACAO DE INFRAESTRUTURAS DE ARMAZEM DE SEMENTE LABORATORIO E EDIFICIO PRINCIPAL	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAM	Mz Mill	2.72
		Mz Mill	

TOTAL Inspeção e Controle **Mz Mill** **18.09**

I. Inspeção e Controle

J. Desenvolvimento e Manutenção de Infraestrutura

Program	Origem	Unidade	2,018.00
AQUISICAO DE EQUIPAMENTO E INSTRUMENTOS DE IRRIGACAO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE TETE	Mz Mill	0.02
CONSTRUCAO DA BARRAGEM MOAMBA MAJOR	ADMINISTRACAO REGIONAL DAS AGUAS DO SUL	Mz Mill	31.22
CONSTRUCAO DE INFRA ESTRUTURAS PECUARIAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE INHAMBANE	Mz Mill	0.51
CONSTRUCAO DE INFRAESTRUTURAS HIDRAULICAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE INHAMBANE	Mz Mill	1.53
CONSTRUCAO E REABILITACAO DE INFRA ESTRUTURAS DE IRRIGACAO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE TETE	Mz Mill	5.94
CONSTRUCAO E REABILITACAO DE INFRAESTRUTURAS AGRARIAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAPUTO PROVINCIA	Mz Mill	22.83
ELECTRIFICACAO DO SISTEMA DE IRRIGACAO DO DISTRITO DO DONDO NA LOCALIDADE DE MANDRUZE	DIRECCAO PROVINCIAL DOS RECURSOS MINERAIS E ENERGIA DE SOFALA	Mz Mill	18.05
ESTABELECIMENTO DE INFRAESTRUTURAS DE SUPORTE E FACILITACAO DE NEGOCIO PUBLICO E PRIVADO	AGENCIA DE DESENVOLVIMENTO DO VALE DO ZAMBEZE	Mz Mill	41.41
ESTUDOS PARA PROJECTOS DE INFRAESTRUTURAS HIDRO-AGRICOLAS	INSTITUTO NACIONAL DE IRRIGACAO	Mz Mill	1.78
HIDRAULICA DE CHOCKWE	MINISTERIO DA AGRICULTURA E SEGURANCA ALIMENTAR	Mz Mill	10.15
MELHORAMENTO DO SISTEMA DE REGA DRENAGEM E FONTES PARA ABEBERAMENTO DE GADO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE GAZA	Mz Mill	4.40
MONTAGEM DE VIVEIRO	DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DE NAMPULA	Mz Mill	0.47
PROJECTO DE IRRIGACAO DO VALE DO SAVE (PIVASA)	FUNDO DO DESENVOLVIMENTO AGRARIO	Mz Mill	27.22
REABILITACAO DA BARRAGEM DE MACARRETANE	ADMINISTRACAO REGIONAL DAS AGUAS DO SUL	Mz Mill	2.58
REABILITACAO DA BARRAGEM DE MASSINGIR EMPRESTIMO DE EMERGENCIA	ADMINISTRACAO REGIONAL DAS AGUAS DO SUL	Mz Mill	36.29
REABILITACAO DE SISTEMA DE IRRIGACAO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NIASSA	Mz Mill	0.09
REABILITACAO E CONSTRUCAO DE PEQUENAS BARRAGENS	ADMINISTRACAO REGIONAL DAS AGUAS DO SUL	Mz Mill	129.50
REABILITACAO E MANUTENCAO DA BARRAGEM DE CORUMANA	ADMINISTRACAO REGIONAL DAS AGUAS DO SUL	Mz Mill	9.90
REABILITACAO/CONSTRUCAO DE REGADIOS	INSTITUTO NACIONAL DE IRRIGACAO	Mz Mill	1.27
52214 ASFALTAGEM DA ESTRADA NACIONAL N381/R1251: MUEDA-NEGOMANE	FUNDO DE ESTRADAS	Mz Mill	2.20
AQUISICAO DO SISTEMA DE REGA	ESTABELECIMENTO PENITENCIARIO PROVINCIAL DE GAZA	Mz Mill	1.94
AQUISICAO E INSTALACAO DE EQUIPAMENTOS METEOROLOGICOS	CENTRO REGIONAL DO INSTITUTO NACIONAL DE METEOROLOGIA DE SOFALA	Mz Mill	0.45
AQUISICAO E MONTAGEM DE 3 INDUSTRIAS MOAGEIRAS	ESTABELECIMENTO PENITENCIARIO REGIONAL CENTRO MANICA	Mz Mill	0.81
INVENTARIAR E MAPEAR A EXPLORACAO E APROVEITAMENTO DA TERRA	DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DA ZAMBEZIA	Mz Mill	1.70
MONITORAR A CAMPANHA AGRICOLA	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DA ZAMBEZIA	Mz Mill	4.02
REABILITACAO DE ESTACOES HIDROCLIMATOLICAS	ADMINISTRACAO REGIONAL DAS AGUAS DO SUL	Mz Mill	0.37
REFORCO A COORDENACAO NA IMPLEMENTACAO DE POLITICAS AGRARIAS	MINISTERIO DA AGRICULTURA E SEGURANCA ALIMENTAR	Mz Mill	17.48
TERRA SEGURA	FUNDO NACIONAL DE DESENVOLVIMENTO SUSTENTAVEL	Mz Mill	17.48
TRABALHO DE INQUERITO AGRICOLA INTEGRADO	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NAMPULA	Mz Mill	17.48
TRABALHO DE INQUERITO AGRICOLA TIA	MINISTERIO DA AGRICULTURA E SEGURANCA ALIMENTAR	Mz Mill	17.48
AGUA RURAL	DIRECCAO PROVINCIAL DAS OBRAS PUBLICAS, HABITACAO E RECURSOS HÍDRICOSDE CABO DELGADO	Mz Mill	5.16
41009: CONSTRUCAO DE PONTES SOBRE OS RIOS LUCITE NHACUARARA E MUSSAPA	FUNDO DE ESTRADAS	Mz Mill	15.90
CONSTRUCAO DA REPRESA DE MUCANGADZI	ADMINISTRACAO REGIONAL DAS AGUAS DO ZAMBEZE	Mz Mill	3.61
PROGRAMA NACIONAL DE ABASTECIMENTO DE AGUA E SANEAMENTO RURAL PRONASAR	DIRECCAO NACIONAL DE ABASTECIMENTO DE AGUA E SANEAMENTO	Mz Mill	236.88
REABILITACAO DA REPRESA DE MORRUMBALA	ADMINISTRACAO REGIONAL DAS AGUAS DO ZAMBEZE	Mz Mill	1.37
REALIZAR OBRAS DE MELHORAMENTO DE ESTRADAS NAO CLASSIFICADAS DE ACESSO AS ZONAS DE PRODUCAO	DIRECCAO PROVINCIAL DAS OBRAS PUBLICAS, HABITACAO E RECURSOS HÍDRICOSDA ZAMBEZIA	Mz Mill	13.26
DESENVOLVIMENTO RURAL	DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DE TETE	Mz Mill	0.31
PROMOCAO DO DESENVOLVIMENTO RURAL	DIRECCAO PROVINCIAL DA TERRA, AMBIENTE E DESENVOLVIMENTO RURAL DE MAPUTO PROVINCIA	Mz Mill	0.63
35000-MANUTENCAO DE ESTRADAS NAO PAVIMENTADAS	FUNDO DE ESTRADAS	Mz Mill	576.07
ABASTECIMENTO DE AGUA RURAL	DIRECCAO PROVINCIAL DAS OBRAS PUBLICAS, HABITACAO E RECURSOS HÍDRICOSDE INHAMBANE	Mz Mill	7.98
PROGRAMA NACIONAL DE ABASTECIMENTO DE AGUA E SANEAMENTO RURAL PRONASAR	DIRECCAO PROVINCIAL DAS OBRAS PUBLICAS, HABITACAO E RECURSOS HÍDRICOSDE NAMPULA	Mz Mill	0.33
PROGRAMA NACIONAL DE ABASTECIMENTO DE AGUA E SANEAMENTO RURAL PRONASAR	DIRECCAO PROVINCIAL DAS OBRAS PUBLICAS, HABITACAO E RECURSOS HÍDRICOSDE TETE	Mz Mill	0.42
PROGRAMA NACIONAL DE ABASTECIMENTO DE AGUA E SANEAMENTO RURAL PRONASAR	SERVICO DISTRITAL DE PLANEAMENTO E INFRA-ESTRUTURAS DE BARUE	Mz Mill	0.12
PROGRAMA NACIONAL DE ABASTECIMENTO DE AGUA E SANEAMENTO RURAL PRONASAR	SERVICO DISTRITAL DE PLANEAMENTO E INFRA-ESTRUTURAS DE MABALANE	Mz Mill	0.24
PROGRAMA NACIONAL DE ABASTECIMENTO DE AGUA E SANEAMENTO RURAL PRONASAR	SERVICO DISTRITAL DE PLANEAMENTO E INFRA-ESTRUTURAS DE MANDLAKAZE	Mz Mill	0.13
PROJECTO E CONSTRUCAO DA BARRAGEM DE MAPAI	ADMINISTRACAO REGIONAL DAS AGUAS DO SUL	Mz Mill	1.24
ABERTURA DO FURO DE AGUA	DIRECCAO PROVINCIAL DA EDUCACAO E DESENVOLVIMENTO HUMANO DE MANICA	Mz Mill	0.45
DIVERSOS PROGRAMAS DE ABASTECIMIEN TO DE AGUA	DIVERSOS	Mz Mill	59.28
TOTAL Desenvolvimento e Manutenção de Infraestrutura		**Mz Mill**	**1,349.97**

K. Marketing e promoção

Program	Origem	Unidade	2,018.00
FEIRAS AGRARIAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MAPUTO PROVINCIA	Mz Mill	4.71
MADE IN MOZAMBIQUE	DIRECCAO PROVINCIAL DA INDUSTRIA E COMERCIO DE NAMPULA	Mz Mill	2.90
MONITORAR O PROCESSO DA COMERCIALIZACAO AGRICOLA	DIRECCAO PROVINCIAL DA INDUSTRIA E COMERCIO DE TETE	Mz Mill	0.55
PLANO INTEGRADO DE COMERCIALIZACAO AGRICOLA	MINISTERIO DA INDUSTRIA E COMERCIO	Mz Mill	4.68
PROJECTO DE EFECTIVACAO DE FEIRAS E INSUMOS AGRICOLAS	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE MANICA	Mz Mill	2.25
PROMOCAO DE FEIRAS	DIRECCAO PROVINCIAL DA INDUSTRIA E COMERCIO DE SOFALA, DIRECCAO PROVINCIAL DA INDUSTRIA E COMERCIO DA ZAMBEZIA	Mz Mill	1.58
REALIZACAO DE FEIRAS DE PRODUTOS AGRICOLAS A NIVEL DOS DISTRITOS	DELEGAÇÃO PROVINCIAL DO FUNDO DE DESENVOLVIMENTOOCAO AGRARIO DA ZAMBEZIA	Mz Mill	0.44
APOIO AO PLANO ESTRATEGICO DA BOLSA DE MERCADORIAS	BOLSA DE MERCADORIAS DE MOCAMBIQUE	Mz Mill	0.87
DIVULGACAO DE INFORMACAO SOBRE MERCADOS AGROPECUARIOS DA PROVINCIA	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE TETE	Mz Mill	0.70
REALIZACAO DA FEIRA PROVINCIAL E PARTICIPACAO NA FACIM	DIRECCAO PROVINCIAL DA INDUSTRIA E COMERCIO DE NIASSA	Mz Mill	0.67
REALIZAR FEIRA PROVINCIAL E FACIM	DIRECCAO PROVINCIAL DA INDUSTRIA E COMERCIO DE TETE	Mz Mill	4.74
INSTALACAO DA BOLSA DE MERCADORIAS	BOLSA DE MERCADORIAS DE MOCAMBIQUE	Mz Mill	94.06
TOTAL Marketing and Promotion		**Mz Mill**	**118.15**

K. Comercialização e promoção

L. Custo de ações públicas

Program	Origem	Unidade	2,018.00
CONSTRUCAO DE SILOS	ASSEMBLEIA DA REPUBLICA	Mz Mill	10.61
TOTAL Organismo público		**Mz Mill**	**10.61**

L. Organismo público

M. Diversos

Program	Origem	Unidade	2,018.00
REALIZAR MONITORIAS DA CAMPANHA AGRICOLA 2017/2018	DIRECCAO PROVINCIAL DA AGRICULTURA E SEGURANÇA ALIMENTAR DE NIASSA	Mz Mill	0.43
Total Miscelllaneous		**Mz Mill**	-

M. Diversos

Figure 37: Budget CSE

APOYOS	ORIGEM	Unidade	2018
PROGRAMAS DIVERSOS DE SUBSIDIO SOCIAL DIRE	DIVERSOS	MZ Mill	2,092.1
PROGRAMAS DE MERENDA ESCOLAR	MINISTERIO DA EDUCACAO E DESENVOLVIMENTO HUMANO	MZ Mill	0.0
PROGRAMAS DIVERSOS DE ACCION SOCAL	DIVERSOS	MZ Mill	81.5
TOTAL		**MZ Mill**	**2,173.7**

PQG (Strategic objectives/results for the ag sector: 2015-2019)	Indicator	PQG targets	Agricultural sector strategic objectives (PNISA 2013-2017): Impact level	Strategic indicator	Initial strategic targets (cumulative by the end of period)	Performance Estimated actual (by the end of 2017)
Improving the living conditions of the Mozambican people, increasing employment, productivity and competitiveness, creating wealth and generating a development	Households living in absolute poverty (%)		Enhanced food security and nutrition, increased income and profitability of agricultural producers, and the rapid, competitive and sustainable increases in market-oriented agricultural production	Annual agricultural sector growth rate	Average growth rate of 7% per year for the next 10 years (PNISA).	1. Average agriculture growth rate for the period from 2013 to 2016 was 3.1% per year. Significant and consistent shortfalls in achieving the ambitious target.
					Growth rate of at least 6% from 2015 to 2025 (MALABO).	2. Major reasons include significant underfunding of PNISA (public and development partners) coupled with PNISA's limited scope in mobilizing funds, promoting and achieving an expanded private sector role.
					Average growth rate of 7% per year for the next 10 years (PNISA).	
					Growth rate of at least 6% from 2015 to 2025 (MALABO).	
	Households with adequate consumption (%)	75		Reduction rate of poverty headcount ratio	Reduce poverty level by at least 50% at national poverty line, from the year 2015 to the year 2025	Modest reduction in poverty (54.7% in 2009 to 49.2% in 2015) reflects a larger reduction in urban poverty with modest decrease in rural poverty (9% versus 3%), coupled with relatively low agricultural sector growth rate trends.
	Households with chronic malnutrition (%)	16		Prevalence of wasting (under five children)	Bring down wasting to 5% or less by the year 2025 (MALABO and not specified by PNISA).	Achieved: 8% in 2009 (IOF), 11.3% in 2013 (SETSAN) and 4.9% in 2015 (IOF)
	Households with adequate consumption (%)	75		Prevalence of stunting (% of under-five children)	Reduce from 44% in 2008 to 30% in 2015 and 20% in 2020. Targets for intermediate years were not defined	Very unlikely to be met based on modest increase from 45.7% in 2009 (IOF) to 47.9% in 2013 (SETSAN) and modest decrease to 43.6% in 2015 (IOF)
	Incidence of chronic malnutrition in children under 5 years old (%)	35				