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Environment, Rural Development and Disaster Risk Management Division

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Review of Agricultural Support Policies in Latin America and the Caribbean

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This Technical Note presents a review of the main agricultural support indicators available in the IADB Agrimonitor[4] Database as of December 2015 and represents a synthesis of agricultural support policies in Latin America and the Caribbean. The contents of this technical note are expected to be updated annually, taking into account updated information generated by the Agrimonitor initiative.

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I. Executive Summary

This report reviews the agricultural support policies of 18 Latin American and Caribbean (LAC) countries, which together account for 92% of the region's agricultural value added. Although agricultural policies and programs in LAC are structured in different ways, there are some clear trends and commonalities. The review measures agricultural support policies and programs using the OECD Producer Support Estimates methodology[6].

Collectively, in the last year for which data was measured[7], support to farmers in the LAC countries covered in this review amounted to US$27.2 billion (or 18% of agricultural GDP), and an additional US$5.8 billion (or 4% of agricultural GDP) was spent on agricultural public goods and services (here called general support services or GSSE). LAC Countries (as other emerging economies) have gone from taxing their agricultural sector in the 1990s to providing net levels of support. On the other hand, the level of support in high-income (OECD[8]) countries has been reducing, therefore showing some convergence and the opportunity for the agricultural sector of LAC to compete in a more level playing field.

Seven percent of the gross agricultural receipts (agricultural income) of an average farmer in the LAC countries covered under this review (2010-2014) came from agricultural support policies and programs (PSE). However, the average percentage of agricultural support policies and programs (PSE%) across countries in LAC was higher (15%), showing that the largest agricultural economies in LAC (Brazil and Argentina) drive down the level of support (in particular Argentina with a negative TSE). However, this is still very low when compared to the 18% shown by OECD countries (2014). There has also been an important shift within LAC in moving from market price support (MPS) which distorts market prices for agricultural products, to direct farmer support (through fiscal support). However, 37% of producer support still comes from MPS.

II. Economic and Agricultural Market Developments in LAC

Over the last two decades, LAC countries have shown positive trends for agricultural development, and in particular for agricultural trade. As per recent data from FAO (SOCO, 2015), LAC has become the largest net exporter of food in the world, surpassing North America. This trend shows no signs of reverting. FAO estimates[9] that by 2024, net food exports from LAC will reach US$60 billion, three times more the value in 2000. What is particularly interesting is that LAC is a net exporter of basic grains, while other regions are net importers. This bodes well for the food security of the region (and the world), as agricultural production is, on average, more than sufficient to cover local food demand. The exceptions for LAC are wheat and rice, for which there is a net import.

As stated in Chaherli and Nash (2013)[10], although trade in agricultural products has declined as a percentage of overall trade worldwide, its value has grown substantially. The LAC region has captured an increasing share of this growing market and currently holds a much larger portion of world trade in agriculture (13 percent, up from about 8

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6 See: www.oecd.org

7 The last year for which data was measured includes: Argentina (2012), Bolivia (2009), Brazil (2014), Chile (2014), Colombia (2014), Costa Rica (2012), Dominican Republic (2013), Ecuador (2012), Guatemala (2011), Honduras (2012), Jamaica (2012), Mexico (2014), Nicaragua (2010), El Salvador (2012), Paraguay (2013), Peru (2013), Suriname (2011), and Uruguay (2013).

8 Note that there is one country in LAC, Mexico, which is part of the OECD, and therefore is counted in both groups.

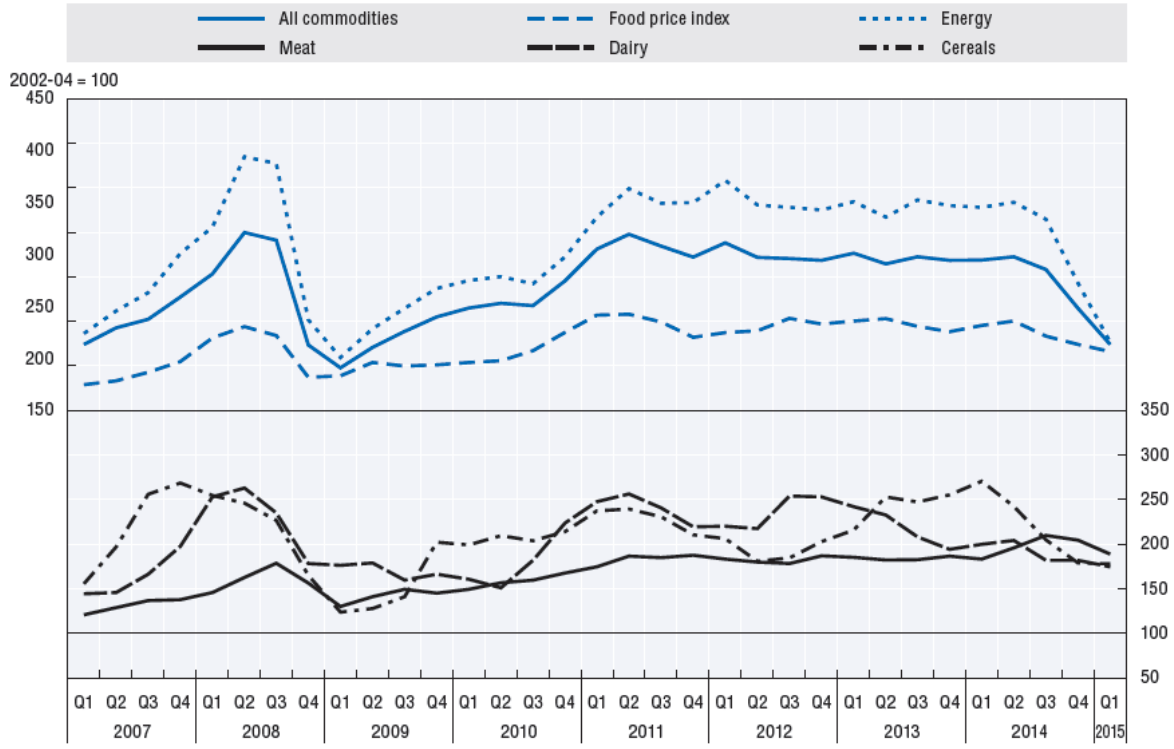
9 See: http://www.fao.org/publications/soco/2015/es/

10 Chaherli, N. and Nash, J. "Agriculture Exports from Latin America and the Caribbean." World Bank. 2013.

percent in the mid-1990s) than in minerals and metals (8 percent) and manufactured goods (3 percent). Agriculture and food now represent about 23 percent of the region's exports and 10 percent of global trade. Over the period 1995–2009, export growth averaged 8 percent a year.

Though the EU and the United States remain LAC's most important destinations—accounting for a combined 45 percent of LAC's exports in 2009, down from 57 percent in 1995—developing countries are becoming the most dynamic destination for the region's exports (UN COMTRADE Data). Over 1995–2009, China and the rest of the world, with a combined 30 percent of the market share, contributed 36 percent of the growth of exports from the LAC region, nearly the 38 percent contribution of the EU (20 percent) and the United States (18 percent). Also, while developed economies imported primarily fruits, animal fodder, coffee, beverages, and seafood from LAC, products from the soybean complex (seeds, oil, and cake), meat, and sugar represented almost 60 percent of the trade with developing economies[11]. However, commodity prices declined broadly in 2014 (see Graph 1) and this has put some downward pressure on sector profits and government revenues from the sector.

Graph 1. Commodity World Price Indices, 2007-2014



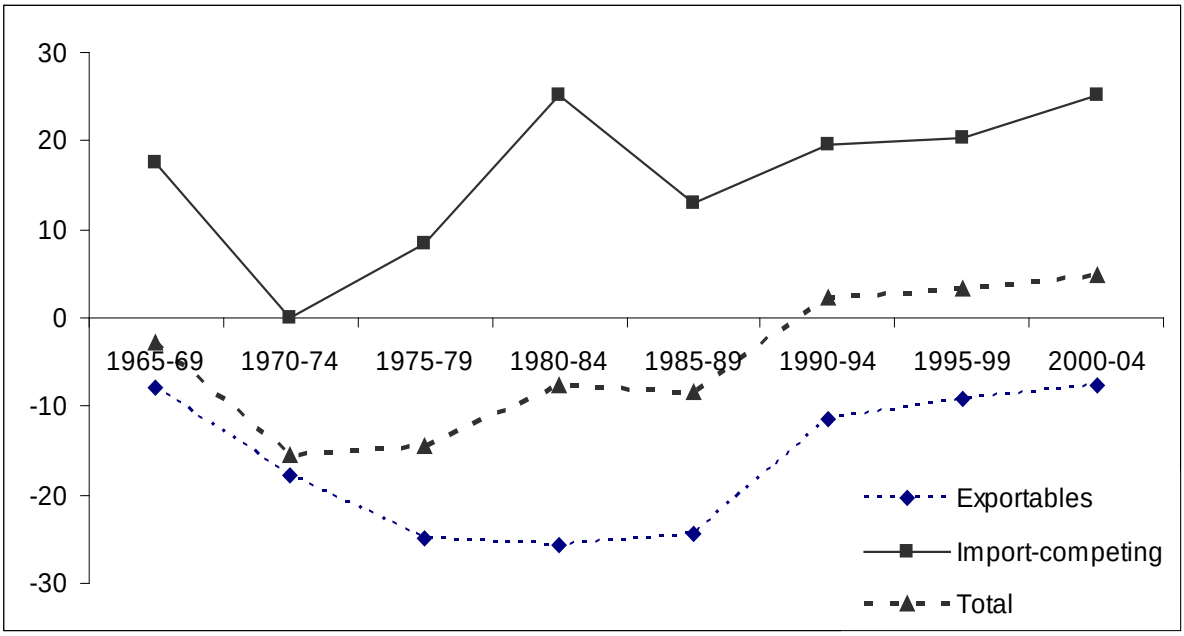
Source: OECD (2015). Agriculture Policy Monitoring and Evaluation 2015. Highlights.

LAC has moved from taxing agricultural trade policy in the 1960s-70s to a slightly positive bias towards agriculture. This is shown in Graph 2 below where the overall incentive structure has moved into positive territory starting only in the 1990s, driven by a reduction in the bias against agricultural exports (export taxes). One of the latest important changes on this front has been the elimination of almost all agricultural export taxes by Argentina at the end of 2015. However, we also observe the increase in the

[11] Gilson, Fouad (2014). Trade Policy and Food Security*:* World Bank.

bias (support) to import competing agricultural products, signaling that there is still ample room to reform the agricultural policies and programs towards a more competitive environment.

Graph 2. Nominal Rate of Assistance (NRA) of agri-food products from LAC



Source: Anderson and Valdez (2008).

III. Main agricultural policies and programs in LAC

Agricultural policies and programs of LAC countries are diverse and change quickly in several countries. While many countries have a mix of policy measures and programs, policy designs differ between countries. Agricultural policies can be characterized by five different approaches:

1. **Market Price Support (MPS), through border measures**: Those policy instruments prevail in the Producer Support Estimates (PSE) in Uruguay, Peru, Suriname, five Central American countries[12], Jamaica, Ecuador and Colombia.

2. **Reducing costs of purchased inputs and capital**: Subsidies to farm-purchased variable inputs, such as energy and fertilizers, have recently become more important in Brazil, Chile, and Mexico. Concessional credit schemes to stimulate agricultural investments are cornerstone policies in Brazil and Colombia.

3. **Emphasis on policies that mitigate the downside risks to revenue and income**: This has recently been reinforced in Peru, Brazil, and Mexico.

4. **Emphasis on extension services to farmers**: Recent increase in provision of extension services to farmers were observed in Chile, Peru, Paraguay, and Uruguay.

[12] This includes Nicaragua, El Salvador, Honduras, Costa Rica and Guatemala.

5. **Emphasis on enabling business environment for agriculture**: Countries that focus their policy instruments on general services with a public good nature include Chile, Peru, and Uruguay.

As shown in Graph 2, agricultural support policies and programs in LAC have a two-pronged approach. On the one hand the support to import competing segments (most of them struggling) on the basis of domestic food security arguments, and on the other, the support (or lack thereof) to a competitive commercial (often export-oriented) segment. Although there is nothing inherently wrong about having two sets of policies/approaches targeting two sets of farmer segments, it is important to limit distortions[13] in farmers' decisions in order to allow farmers to transition towards commercially viable agricultural production. Brazil, for example, has two separate Ministries addressing the two segments: the Ministry of Agriculture (MAPA) supporting the agricultural sector as a whole, but geared towards commercial farming; and the Ministry of Agrarian Development (MDA) targeting support to family farmers. Recent policy discussions in Brazil have brought to the front the need to merge both Ministries and policies in order to ensure that family farmers can transition towards more competitive, market-oriented activities.

Climate change is also going to have an impact on the approach taken by LAC countries towards agricultural support policies and programs. According to the OECD, with agriculture contributing directly and indirectly about a quarter of global greenhouse gas (GHG) emissions, climate change mitigation is increasingly included in the agricultural policy agenda. With a few exceptions (like Brazil and Uruguay[14]), actual policy efforts are relatively limited, however.[15] This inactivity will likely need to be abandoned in the future, pushed by pure necessity, if not by the awareness of policy makers. Argentina, for example, after the large floods caused by El Niño in 2016, has recently realized that they need to completely overhaul their policy towards agricultural emergencies.

IV. Review of agricultural support estimates

Here we present the estimates of agricultural support policies and programs for LAC in order to assess the type of supports, their composition, and their evolution over the past few years. The 18 LAC countries reviewed are the ones with data on agricultural support estimates published in the IDB Agrimonitor database[16]. However, it is important to note that for practical purposes, in some of the graphs and analysis undertaken in this section, Argentina was left out, as it is an outlier in LAC, showing large negative support estimates (Total and Producer Support Estimates) due to the export taxes that were in place until 2015. Also, when looking at the average of OECD countries, it should be noted that Mexico is included in the OECD data.

This section begins with assessing the Total Support Estimates (TSE), its composition and its evolution. It then reviews the Producer Support Estimates (PSE), its composition,

[13] Some specific distortions can be necessary in case of externalities or other market failures.

[14] Brazil has a large climate smart agriculture (CSA) policy, promoting CSA technology adoption (*Programa Agricultura de Baixo Carbono* – ABC. See: http://www.agricultura.gov.br/desenvolvimento-sustentavel/plano-abc). Uruguay also has a major public policy on climate change adaptation (see: http://www.mgap.gub.uy/portal/page.aspx?2,MGAP,mgap-desarrollo-y-adaptacion-al-cambio-climatico,O,es,0,).

[15] OECD (2015). Agriculture Policy Monitoring and Evaluation 2015.

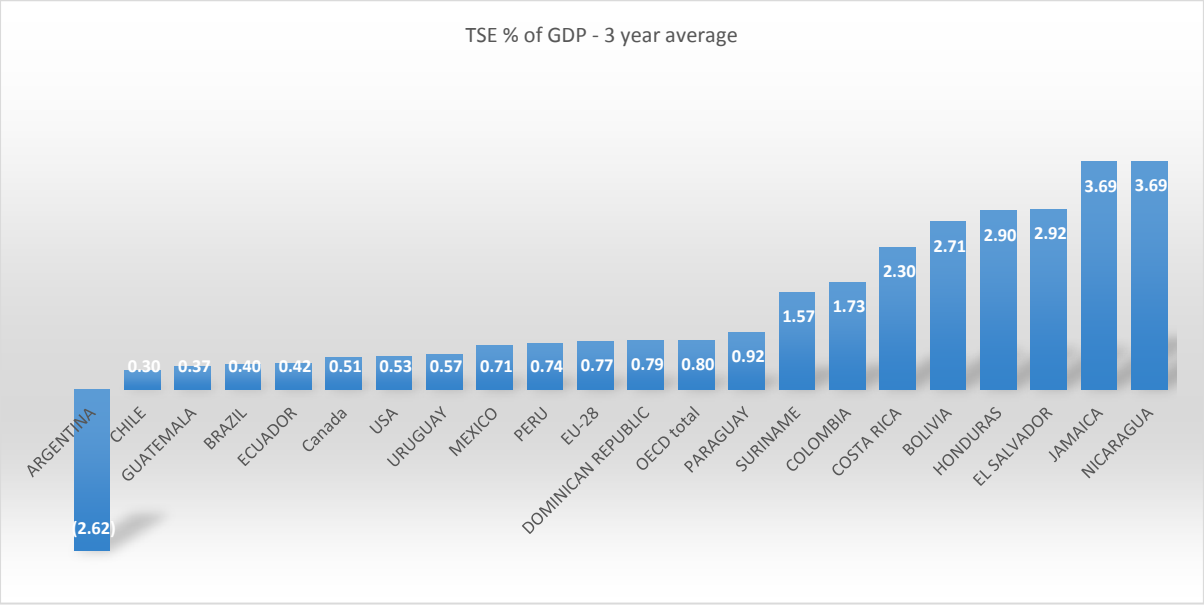
[16] See: http://www.iadb.org/en/topics/agriculture/agrimonitor/agrimonitor-pse-agricultural-policy-monitoring-system,8025.html

and evolution. Finally, the section focuses on the Consumer Support Estimates (CSE) and the General Service Support Estimates (GSSE) or agricultural public goods and services.

Total Support Estimate (TSE), expressed as a percentage of GDP, illustrates the weight that countries assign to agricultural support policies. The TSE combines transfers to agricultural producers individually (measured by the Producer Support Estimate, the PSE), policy expenditures that have primary agriculture as the main beneficiary, but that do not go to individual farmers (measured by the General Services Support Estimate, the GSSE), and budgetary support to consumers of agricultural commodities (the Consumer Support Estimate, CSE, net of the market price element that is already accounted for in the PSE).

a) Total Support Estimates (TSE) and its composition (as percentage of Ag GDP and GDP), using a 3 year average[17]

Graph 3 – TSE% of GDP



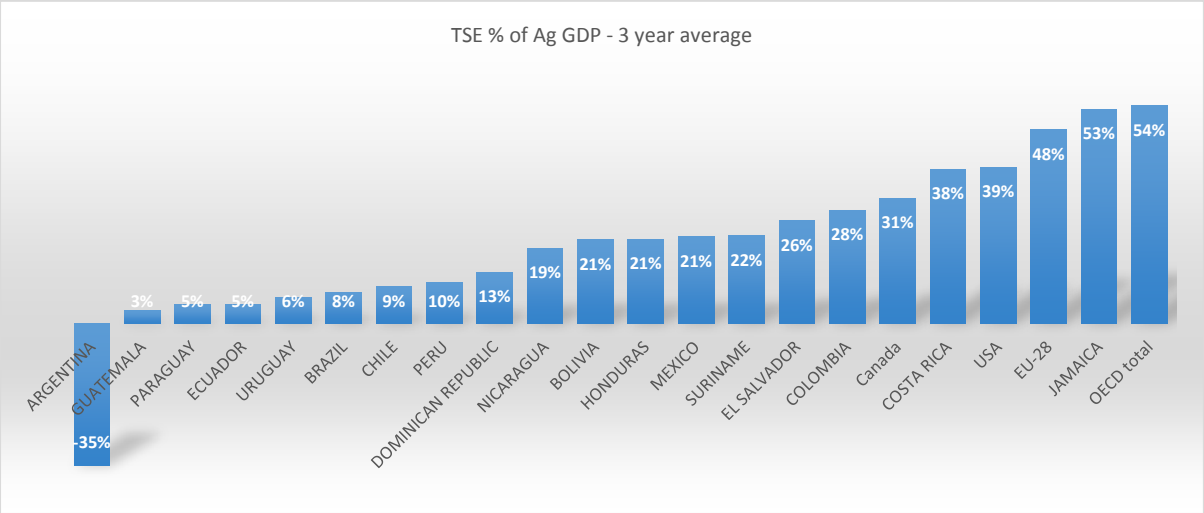
(*) Note: The 3-year average takes the last 3 years of available data on agricultural support estimates (see Agrimonitor database: http://www.iadb.org/en/topics/agriculture/agrimonitor/agrimonitor-pse-agricultural-policy-monitoring-system,8025.html). These 3-year averages can range from 2007 to 2014.

Graph 4 below shows that, with the exception of Jamaica, LAC countries provide a lower level of agricultural support (measured as TSE as % of their agricultural GDP), than OECD, USA, and EU countries. We observe that countries in the southern cone (Argentina, Paraguay, Uruguay, Brazil, Chile and Peru) tend to have lower TSE% (less than 10%) than the rest of the LAC region. However, when comparing the TSE to overall GDP (see Graph 3 above), we observe that the TSE% is lower for OECD, USA, and EU countries than several LAC countries. This reflects the fact that agriculture represents a lower share of the total GDP in high-income countries, and therefore, although the TSE is high relative to the sector, it is low relative to the economy as a whole. On the other hand, several countries in LAC, in

[17] Three year averages in this document refer to the last three years of support estimates available in the Agromonitor. In particular: Argentina (2010-2012), Bolivia (2007-2009), Brazil (2012-2014), Chile (2012-2014), Colombia (2012-2014), Costa Rica (2010-2012), Dominican Republic (2011-2013), Ecuador (2010-2012), Guatemala (2009-2011), Honduras (2010-2012), Jamaica (2010-2012), Mexico (2012-2014), Nicaragua (2008-2010), El Salvador (2010-2012), Paraguay (2011-2013), Peru (2011-2013), Suriname (2009-2011), and Uruguay (2011-2013).

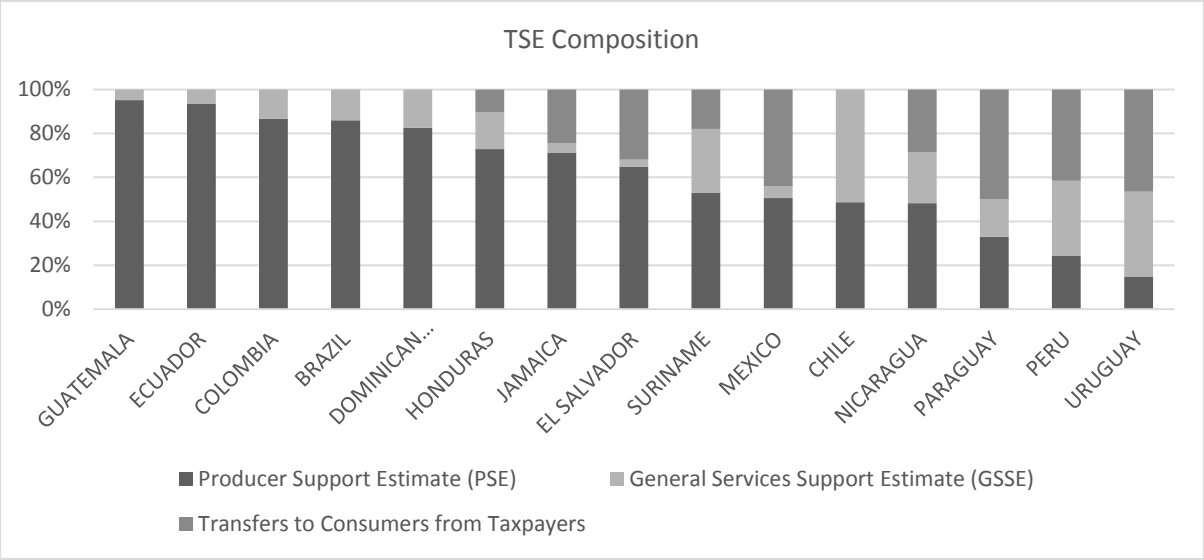
particular the five Central American countries, have an agricultural sector that is more important in relation to the overall economy, so the size of support to their agricultural sector will be larger in relation to their overall GDP than in high-income economies where agriculture represents a smaller share.

Graph 4 – TSE% of Agricultural GDP

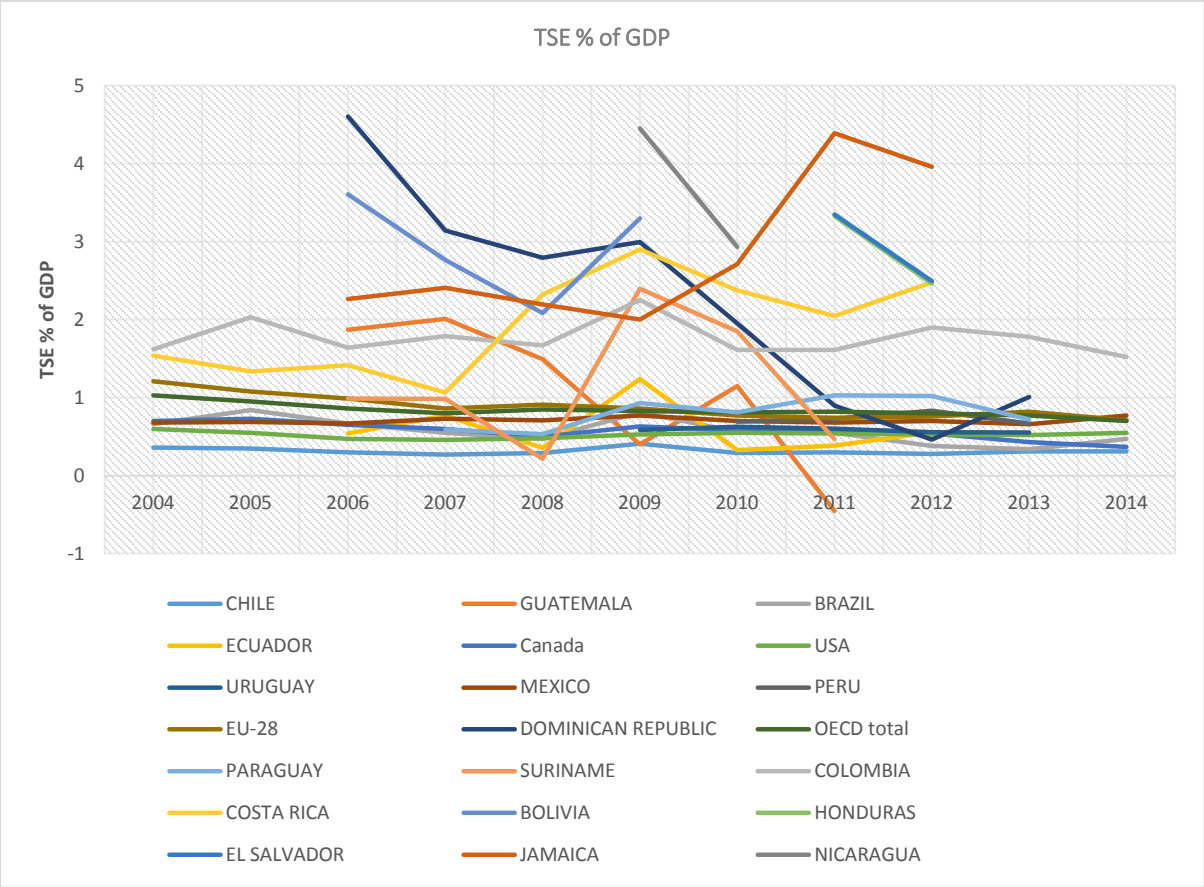


The composition of TSE (see Graph 5 below) shows that support to the producer (PSE) is the main type of agricultural policy in LAC, with the exception of Paraguay and Uruguay, where transfers from taxpayer to consumers and to general service (GSSE) are more important, respectively. Also, the evolution of TSE as % of total GDP (see Graph 6.a below) shows that with the exception of Jamaica and Costa Rica, TSE has been decreasing, as it happened in higher income countries. TSE as % of agricultural GDP (see Graph 6.b below) shows that TSE has been stable, with the exception of a few countries like Dominican Republic where there has been a drastic decrease and Jamaica and Costa Rica where there has been an increase in TSE as a percentage of the overall size of the agricultural sector.

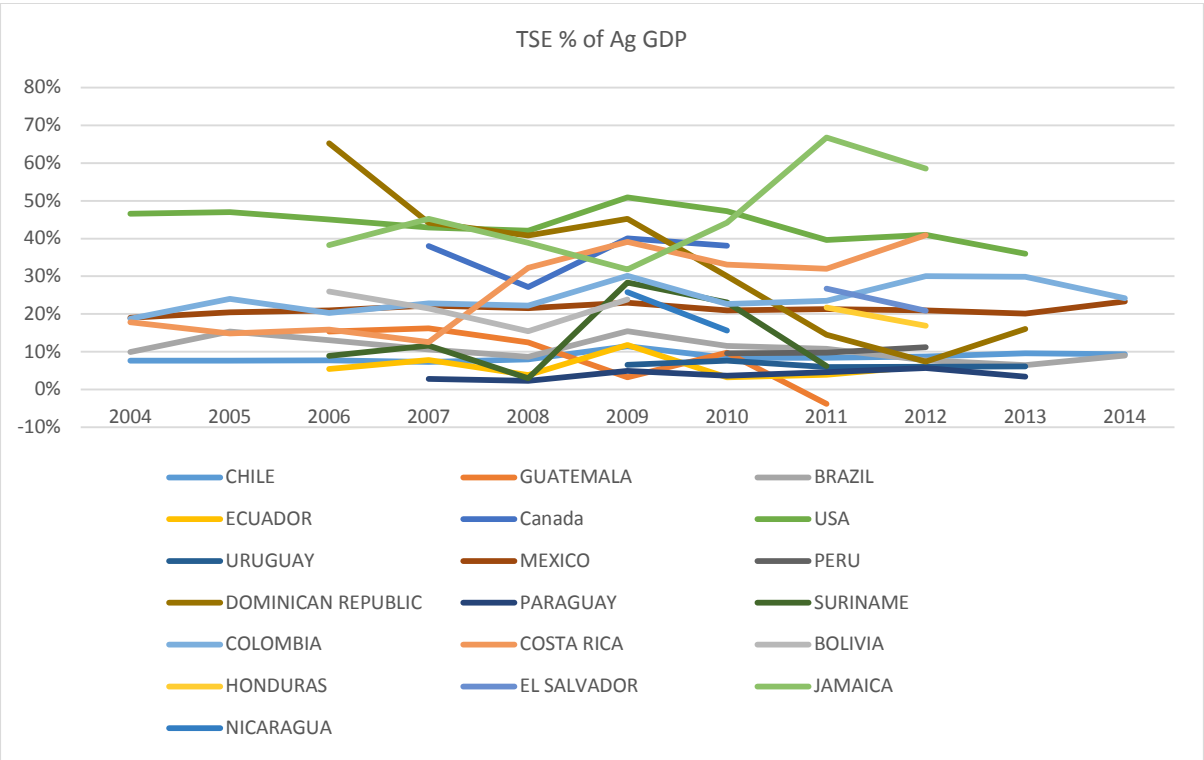
Graph 5 – TSE Composition



Graph 6.a. TSE% of GDP

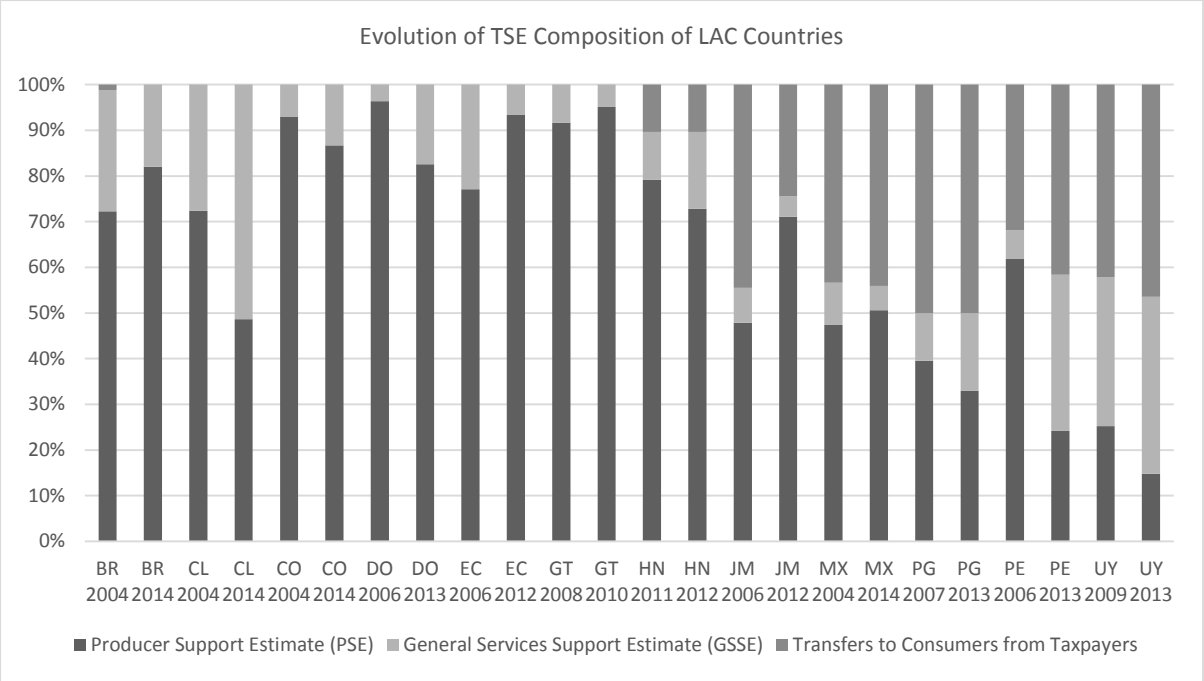


Graph 6.b. TSE% of Agricultural GDP



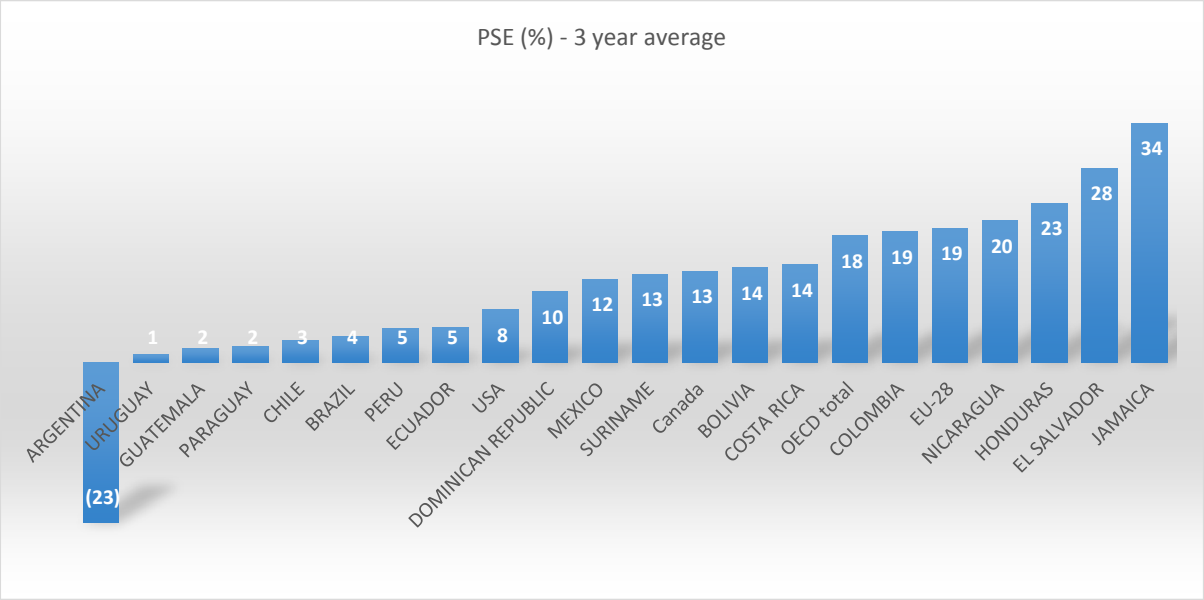
While in 2004 more than half of LAC countries' TSE was above 1% of GDP, by 2013-2014, most were under 1%. Finally, the evolution of the composition of TSE (see Graph 7 below) shows that although PSE is still the main type of agricultural policy in LAC, its importance has been decreasing in several countries. Chile, Colombia, Dominican Republic, Honduras, Paraguay, Peru, and Uruguay have seen their PSE's importance (as % of TSE) reduced while GSSE has increased. On the other hand, Brazil, Ecuador, Jamaica, Argentina, Guatemala, and Mexico have seen their PSE increased (as % of TSE).

Graph 7 – Evolution of TSE Composition in LAC countries



b) Producer Support Estimate (PSE) and its evolution (as percentage of gross farm receipts)

Graph 8 – PSE (%)

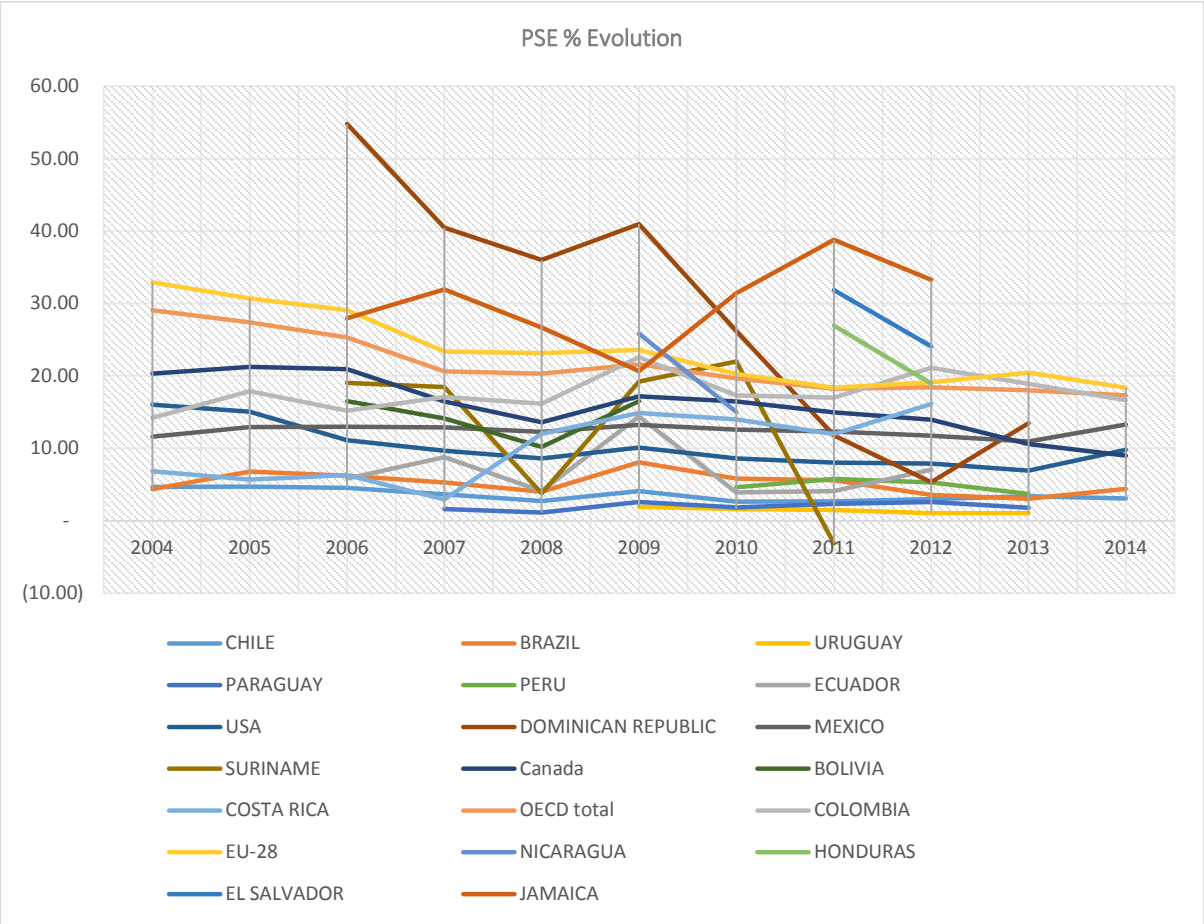


In terms of Producer Support Estimate as a percentage of gross farm receipts (PSE%), we observe again (see Graph 8 above) how Southern Cone countries have lower levels of

support than other LAC countries (with the exception of Guatemala who scores lower than Paraguay, Chile, and Brazil). It is important to note the group of LAC countries with levels at or above the OECD / EU (PSE% above 18%): Colombia, Nicaragua, Honduras, El Salvador and Jamaica.

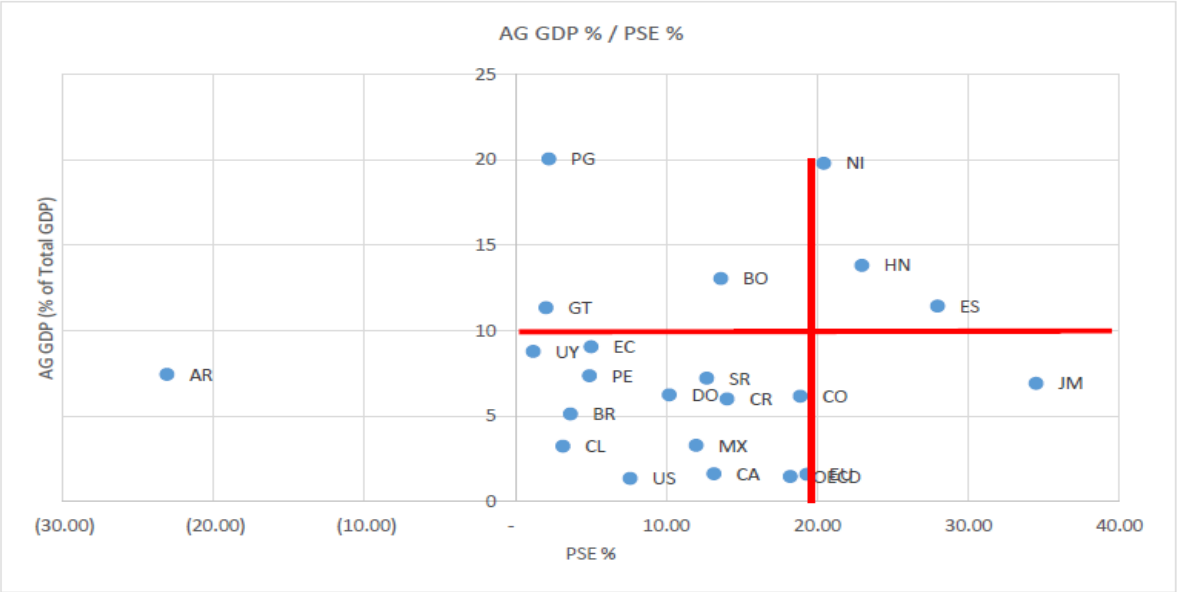
Graph 8 shows important differences in terms of PSE% between LAC countries, even neighboring ones. For example, 2% of the farm income of an average farmer in Guatemala is derived from agricultural support policies and programs, while for an average farmer in neighboring El Salvador it is 28% (more than a quarter of farm income). The evolution of the PSE% over time (see Graph 9 below) shows that there has been a decline in PSE%, with the exception again of Jamaica and Costa Rica, which have seen their PSE% increase. In 2004, several LAC countries showed PSE% above 20%, while by 2014, all countries with available data were under the 20% mark.

Graph 9 – PSE% Evolution



c) Correlations between PSE levels for each country and other variables (GDP/capita, rural/urban population, agricultural GDP)

Graph 10 – Agricultural GDP and PSE%



When comparing the weight of the agricultural GDP in the total GDP with the PSE% (see Graph 10 above), it is clear that most countries with an agricultural sector that represents less than 10% of their total GDP have PSE% of less than 20%. This means that less than 20% of farm income of the average farmer in most countries in LAC (as well as OECD, Canada and the US), comes from agricultural support policies and programs. However, countries like Guatemala, Paraguay and Bolivia, also show relatively low levels of PSE% (less than 20%), but their agricultural sector represents more than 10% of their total GDP. For these countries, where agriculture is a large portion of the country's total GDP, the challenge becomes how to support their agricultural sector without burdening taxpayers (as the fiscal resources required would need to be a high percentage of the country's total public budget).

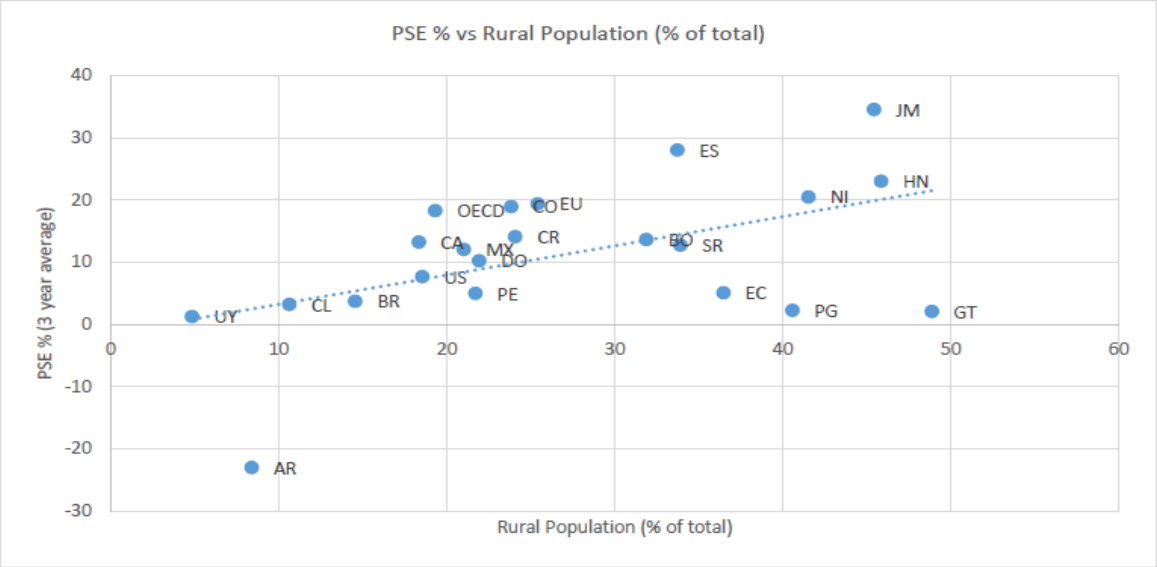
Another interesting group is Nicaragua, Honduras and El Salvador: countries that have agricultural sectors that represent an important size of their economy (more than 10% of total GDP), but with relatively high levels of PSE%. For these countries, not only fiscally, but also for consumers, supporting the agricultural sector is a relatively heavy burden. Improving agricultural public expenditures and ensuring that farmers improve their competitiveness by reforming agricultural policies and programs towards non-distortive approaches should be at the center of the agricultural policy dialogue in these countries.

Finally, Jamaica, a country with an agricultural sector that represents less than 10% of its GDP, but with the highest PSE% of LAC, shows that the economy, its taxpayers and consumers are heavily supporting farmers, and that this can be afforded as its agricultural sector is relatively small compared to other LAC countries.

Therefore, although Graph 10 shows no clear correlation between agricultural GDP (as % total GDP) and PSE%, there are groupings of countries that emerge. One group is found in the lower left hand quadrant of Graph 10, where most countries are, with low levels of agricultural GDP (as % of total GDP) and low levels of PSE%. Then there are three smaller groups (with three countries or less, each). One small group (composed of Guatemala,

Paraguay and Bolivia) with a high importance of agricultural GDP in their economies, but with low levels of PSE%; another small group (composed of Nicaragua, Honduras and El Salvador), with high levels of PSE% and an important role of the agricultural sector in total GDP; and then Jamaica alone with high levels of PSE% but a relative small agricultural sector in relation to total GDP.

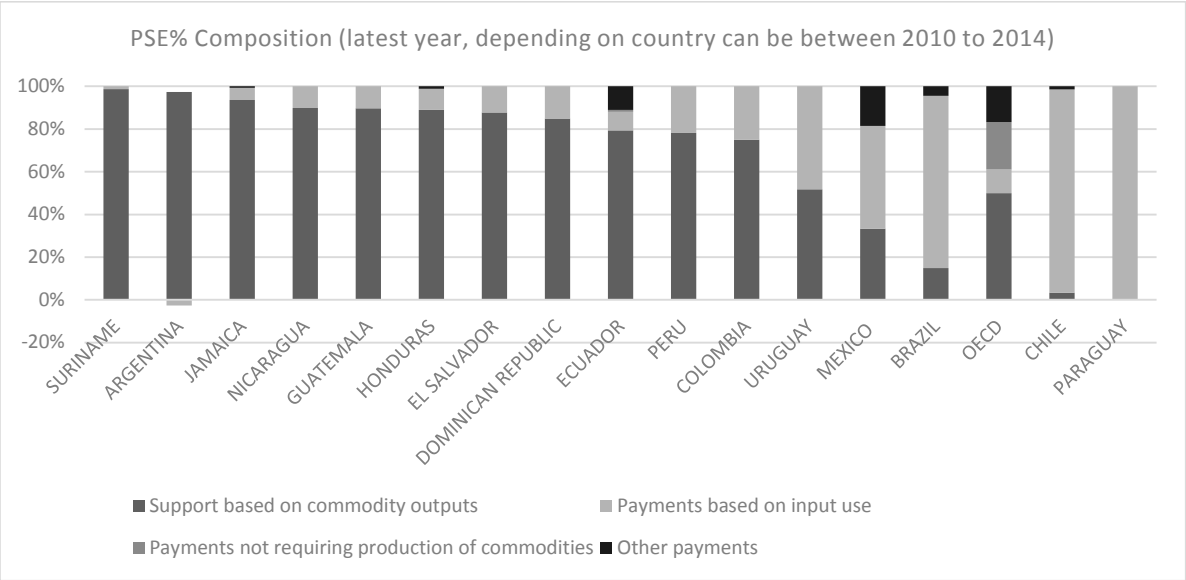
Graph 11 – PSE% and Rural Population



When looking at PSE% in relation to the importance of the rural population (as % of total population), we observe a correlation (see Graph 11 above). The countries with relatively larger rural populations have, on average, higher levels of PSE%. This could be due to the importance that these countries place on supporting the rural population, as agricultural incomes tend to be the single most important source of income for rural households in LAC. The higher levels of PSE% in Central American and Caribbean countries could be driven by the weight that the rural population places on prioritizing agricultural public policies and programs. However, there are some exceptions (outliers) to this correlation, specifically, Guatemala and Paraguay, which have a relatively large rural population but low levels of PSE%. It has to be noted that this paragraph presented a simple correlation, which can of course coexist with wide variations from country to country.

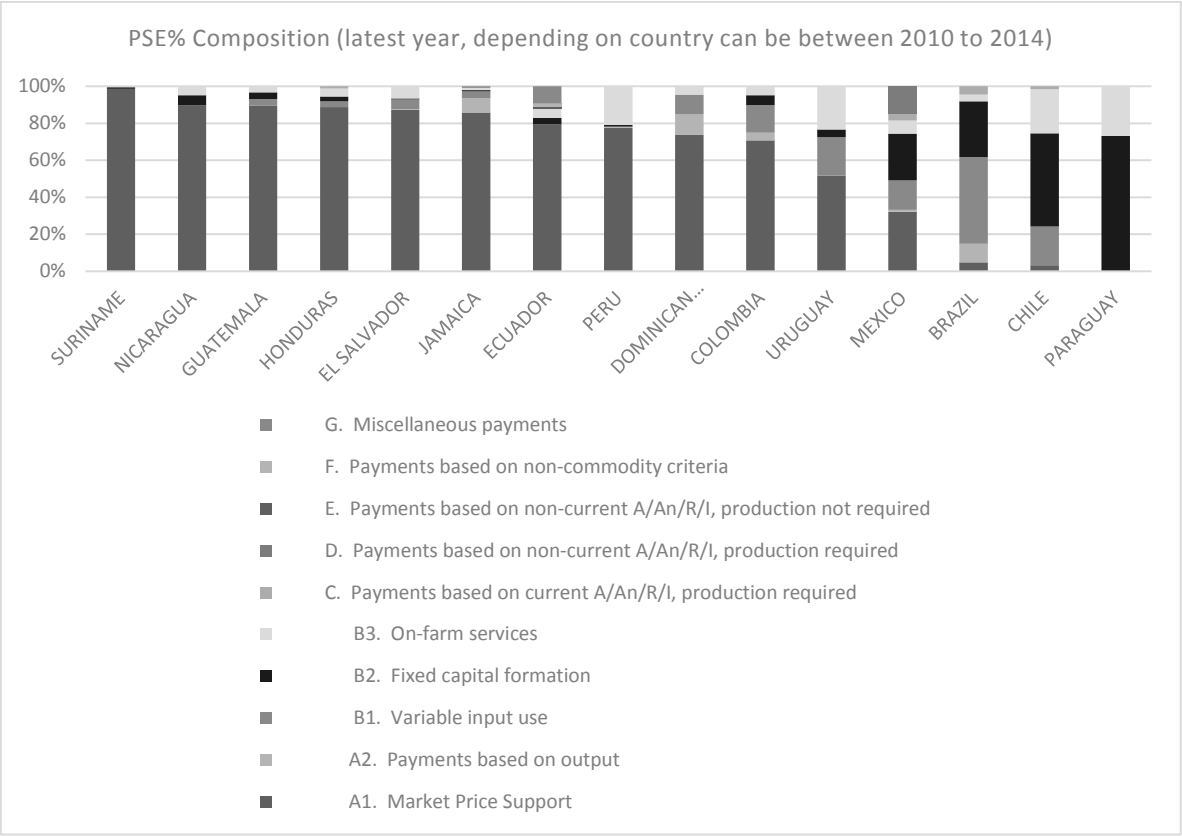
d) Composition of fiscal support of PSEs per country (as percentage of PSE)

Graph 12 – PSE% Composition



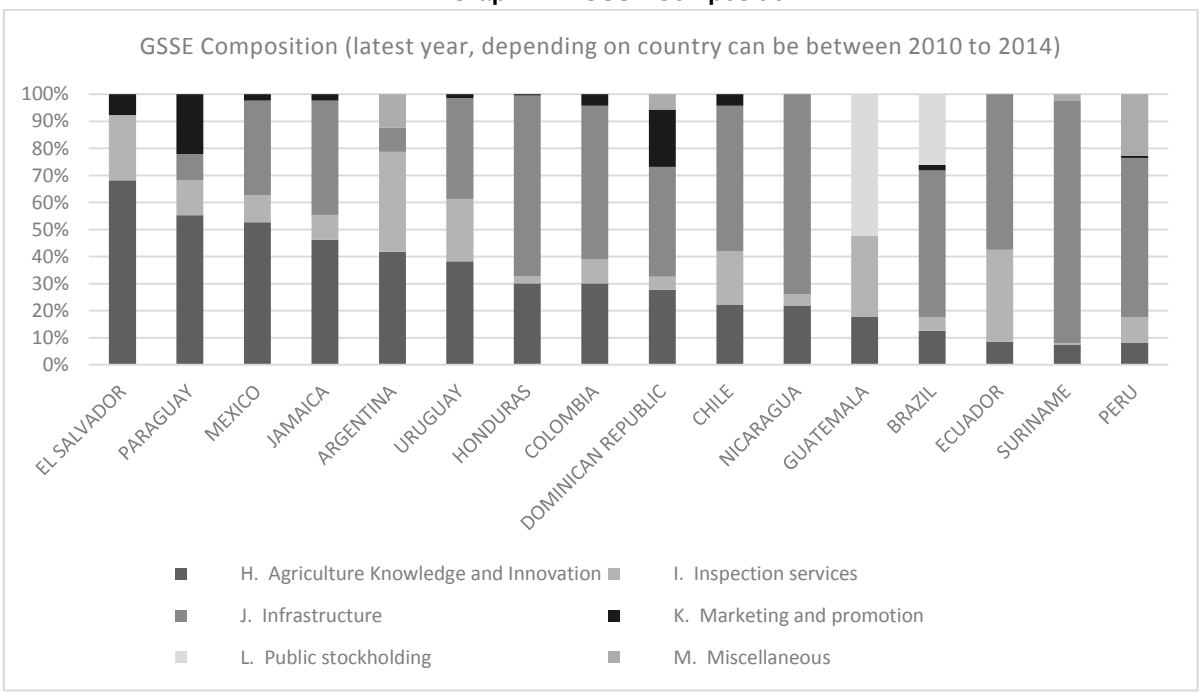
Graph 12 above shows the composition of PSE for LAC countries and the OECD. There is a clear heterogeneity in the composition of PSEs in the region. While OECD countries show a more balanced mix of supports, LAC countries rely heavily on supports based on commodity outputs, and in some countries like Chile, Brazil, and Paraguay, on payments based on inputs. A closer (more disaggregated) view of these PSE compositions (see Graph 13 below) reveal that the larger part of the support based on commodity outputs is derived from Market Price Support (MPS), which represents transfers from consumers to farmers through higher domestic prices due to tariff and non-tariff barriers. MPS does not require public expenditures, while the other types of support do. In countries such as Chile, Brazil, and Paraguay, with very little or no MPS, we observe that the support is mainly focused on on-farm services (extension) and fixed-capital formation (asset creation), while in Brazil and Chile, supports based on variable inputs are also important.

Graph 13 – PSE% Composition



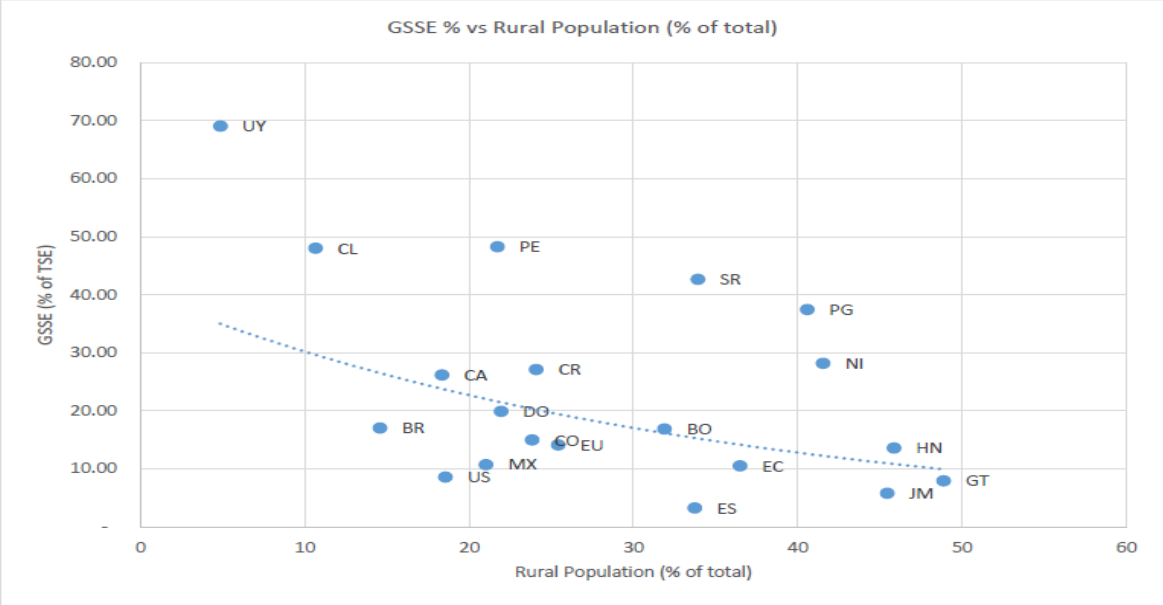
e) Composition of GSSE per country (as percentage of GSSE, US$ and percentage of Ag. GDP)

Graph 14 – GSSE Composition



The composition of General Service Support (or agricultural public goods and services) is also heterogeneous across LAC (see Graph 14). Regardless of the level of GSSE, some LAC countries like Argentina, Uruguay, El Salvador, Jamaica and Paraguay spend a larger portion of GSSE resources on agricultural knowledge and innovation compared to OECD countries (OECD countries spend 30% of the GSSE on agricultural knowledge and innovation). Suriname, Peru, Honduras, Nicaragua, Ecuador, Colombia, Chile, and Brazil spend more on infrastructure development and maintenance compared to OECD countries (OECD countries spend 43% of GSSE on infrastructure development and maintenance). Finally, only Paraguay and the Dominican Republic spend more than the OECD on marketing and promotion (OECD countries spend 11% on marketing and promotion). Public stockholding is virtually inexistent in most LAC countries, but it is a key GSSE category for Brazil and Guatemala.

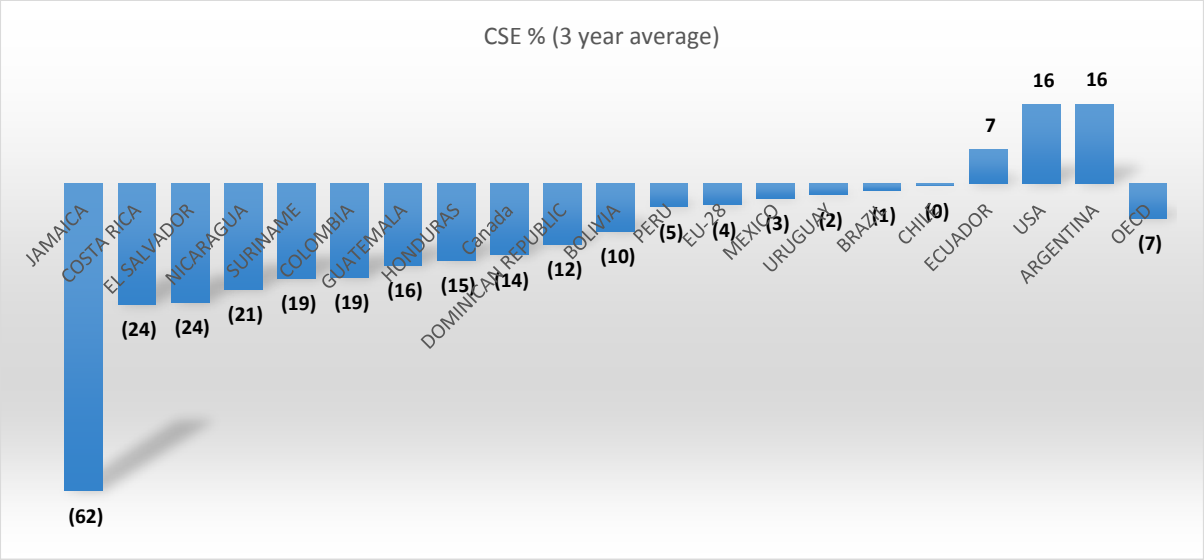
Graph 15 – GSSE and Rural Population



Contrary to the correlation between PSE% and rural population (Graph 11), Graph 15 shows that GSSE (as % of TSE) is negatively correlated with the share of the rural population in the entire population. This means that in countries where the rural population is larger (as % of total population) GSSE expenditures decrease as a percentage of TSE. This could be reflecting a tendency for agricultural public policy to move towards direct farmer support (PSE) in order to provide support to low income farmers, while reducing the allocation towards GSSE. The incidence of poverty (and particularly extreme poverty) is higher in rural areas, and in countries with large rural populations, targeting agriculture as income support could be an effective way to help reduce rural poverty.

f) Consumer Support Estimate (CSE) per country (as percentage of expenditure at farm gate)

Graph 16 – CSE%



Consumer Support Estimates as percentage of overall food consumption expenditures (CSE%) show that most countries (including Canada, EU, and OECD) have negative CSE levels (see Graph 16), meaning that consumers pay a higher price domestically than they would pay in the absence of agricultural policies and programs. Ecuador and USA have positive CSE% given that these countries provide support to consumers for food consumption (i.e. in the USA, the main program is the Supplemental Nutrition Assistance (SNAP) a.k.a. as "foods stamps"). Argentina has positive CSE% due to the high export taxes on agricultural products, which reduce the domestic food prices (until 2015).

V. Conclusions and proposed future agenda for agricultural policy reform

Collectively, the LAC countries covered in this report (excluding Argentina) transferred annually an average of USD 26.3 billion to agricultural producers in the years 2012-14 (compared to USD 601 billion of the OECD countries) and they spent an additional USD 5.5 billion (compared to USD 135 billion of the OECD countries) on general services that support the functioning of the sector. Those transfers are burdening consumers and taxpayers, and reforms should continuously be implemented in order to improve the effectiveness and efficiency of policies.

However, in LAC as a whole (with the exception of Costa Rica and Jamaica), gradual progress has been made in shifting the level of support to farmers towards less distorting forms of support. The level of farmer support was reduced overall and the share of production and trade distorting support fell. Those changes occurred to different degrees and at different speeds, with slow changes particularly in the group of countries that heavily rely on instruments that support prices and production. The GSSE tends to focus on agricultural knowledge and innovation and infrastructure, with less resources allocated to inspection services and promotion and marketing. At the same time, the large use of instruments such as market price support and input subsidies in countries like Peru, Ecuador and the five Central American countries is worrying as this increases distortions on domestic and international markets and is a rather cost-ineffective way to provide assistance.

Given the competitive position of LAC in food production and trade, it is important to think about reducing its vulnerability to shocks and adapting to climate change, in order to maintain a constant and reliable food supply both for the domestic and foreign markets. Argentina, Uruguay, and Colombia (among others) are reviewing their policies and programs towards agricultural emergencies, as these have become more frequent and more catastrophic. Much is to be learned in this area from what Mexico, Brazil and Peru do in terms of insurance-related farmer support policies and programs[18].

OECD countries, including the USA and the EU, are already reforming their agricultural support structures in order to become more competitive in the global agricultural arena. There needs to be an increase in investment on agricultural public goods and services in order to improve the capacity of the agricultural sector of LAC to respond to its challenges and to realize its full economic potential. This also reinforces the need to improve the wider policy environment in which the sector operates so as to attract financial and human resources and to foster an innovative agricultural sector that responds to the needs of the society.

Such a broader re-orientation of policy approaches requires a clear vision of the end-point of policy reforms at national and international levels. In the short term, an agricultural public policy dialogue needs to be undertaken in LAC countries in the following areas:

● **Prioritize investments in agricultural public goods and services**: There is a need in LAC to move away from direct farm support to invest in knowledge, education, and strategic infrastructure that can help improve the long-term productivity, sustainability, and profitability of the sector. This has shown to reap larger economic returns than direct income support to farmers. The OECD countries spend an average of 13% of their TSE in GSSE. This can be used as a benchmark to bring those countries that have less than 13% of TSE allocated to GSSE.

● **Within agricultural public goods and services, invest in agricultural knowledge and innovation**: There is a need to strengthen the governance of agricultural innovation in order to improve its strategic orientation on long-term issues. Several LAC countries invest less on agricultural knowledge and innovation than OECD countries, which invest 30% of GSSE on these areas.

If direct farmer support is needed, it is important to engage in a policy dialogue in the following areas:

● **Market price support should be reduced**, replacing it with non- distortive direct support and/or agricultural public goods and services. LAC consumers pay the bill of MPS, especially low-income households. MPS also delinks farmers from market signals and has been shown to be highly distortive for production and trade. However, fiscal space must be available to carry out such reforms, and therefore external financing could support this transition. Mexico (post NAFTA) can serve as a good example for such transition.

● **Input subsidies** are often inefficient in assisting farmers as they increase the risk of over- or misuse of farm inputs such as fertilizers, which can be environmentally harmful. Concessional credit schemes can pose a big burden to government budgets, as it is the case in Brazil. Variable input support has also been shown to be particularly distortive for production and trade. Transforming from such subsidies to decoupled subsidies (as was done in Mexico and Paraguay) would need to be on the agenda in the short term.

[18] Example of these programs include emergency funds that support farmers after a natural disaster or price drop.

● **Direct payments** may be an efficient means for specific policy objectives, such as to achieve environmental benefits and support farm incomes, as was done by PROCAMPO in Mexico and in Paraguay through the reform of support for cotton producers. However, these payments need to be linked to clear objectives and targets, and be well-tailored to the problem at hand. Direct payments can play an important transitory role in the process of reforming agricultural policies in LAC.