A framework for analyzing the design of public procurement policies

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#### Abstract

Public procurement policies offer governments a key framework to deliver public services and achieve various objectives (efficiency, socioeconomic, and regulatory). However, there are no tools to systematically analyze whether public procurement policies are adequately designed to meet these objectives. This thesis aims to fill this gap by developing a framework to analyze the design of public procurement policies. The framework proposes a four-step process to assess whether public procurement policies are properly designed to fulfill their mission and create public value. The framework is tested in a recently adopted public procurement policy in three Latin American and Caribbean countries: preferential mechanisms for small farmers in public procurement. This study indicates that the proposed analytical framework is useful for evaluating the design of public procurement policies from a long-term focus. It also demonstrates that evaluating public procurement policies through this analytical framework allows for identifying the areas in which policies must be improved to create public value. This result makes it possible to draw attention to policymakers to improve policy design by adopting a strategic and long-term perspective.

Keywords: public procurement, policy design, public value, analytical framework

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#### **1. Introduction**

Public procurement refers to the government's purchase of goods, services, and works required to deliver public services and, ultimately, meet economic and social outcomes (OECD, 2015). It represents a significant part of the public spending of a country. For example, in OECD countries, 12% of GDP is spent on public procurement (OECD, 2016).

Given its importance, governments continuously try to improve their procurement systems to achieve greater transparency and efficiency as well as attain broader socio-economic policies. However, policies to strengthen public procurement systems often fail to deliver the expected effects. For instance, open contracting reforms to increase the transparency of government procurement in Paraguay and Mexico decreased competition and increased the share of high-corruption risk (Adam et al., 2020). Reforms to adopt framework agreements aiming to increase efficiency in public procurement in Brazil and Colombia have reduced unit prices but increased market concentration (World Bank, 2021b). Moreover, Brazil's use of public procurement to stimulate organic food production among low-income family farmers has contributed little to fostering the organic transition (Borsatto et al., 2019).

Several factors may explain the poor results of these policies, including inadequate policy design, inadequate collaborative policymaking, vagaries of the political cycle, and implementation challenges (Hudson et al., 2019). This research focuses on one of these factors: the design of public procurement policies. Policy design is the process of analyzing and identifying the problems, specifying the policy goals, and conceptualizing and selecting specific prescriptions conducted to achieve the policy goals. In this study, it is considered that the design process is where wrong decisions can be made, thus preventing to obtain the expected result with the policy.

This study focuses on policy design as a way to overcome some of the challenges that public procurement policymakers face during this process, such as isomorphism and unplanned and uninformed policy design. Public procurement policies have often been motivated by corruption, which has led to their design in a hasty and unplanned manner (Pimenta & Rizai, 2015). The cost-benefit analysis of policies is almost non-existent in public procurement (Pimenta & Rizai, 2015). Procurement policy is often driven by isomorphism (Schapper et al., 2006; Li, 2017). Furthermore, the lack of systematic evidence on the effects of regulations on public procurement limits the possibility of informed policymaking (Fasekas & Blum, 2021). These issues increase the probability that the design limits the implementation and effects of the procurement policies.

The fact that there are several limitations to designing optimal procurement policies leads to the question at the heart of this study: How well designed are public procurement policies? Answering this question is the first step to identifying how to improve procurement policy design.

However, to answer this question, it is necessary to have a framework to assess the quality of the design of public procurement policies, which is lacking. To the best of our knowledge, there are no widely recognized tools to systematically analyze whether public procurement policies are adequately designed to meet their objectives. This thesis aims to fill this gap by developing a framework to analyze the design of public procurement policies.

The framework proposes a four-step process to assess whether public procurement policies are designed to fulfill their mission and create public value. The first step entails the creation of a Moore's Public Value Chain (Moore, 2013). This Public Value Chain serves to identify which dimensions of public value the procurement policies intend to produce in the short, medium, and long term. Second, the operational capacities dimension of Moore's Public Value Triangle is used to identify the conditions required to obtain the expected public value. This step aims to identify the barriers that the policy expects to overcome. The third step is the evaluation to determine if the policy design includes provisions to overcome the obstacles to creating public value. Finally, the evaluation results show policy design's quality and identify in which areas policymakers should improve the policy.

To show the usefulness of this framework and the operation of the fourth step, the framework is applied in a public procurement policy recently adopted in three Latin American and Caribbean countries. The result of this study shows that the analytical framework serves to evaluate the design of these policies and identify the aspects in which the policies must be improved so that they effectively create public value. The application of the framework also revealed that policies are designed to solve problems mainly in the short term. This result makes it possible to draw attention to policymakers to improve policy design by adopting a public value approach.

This thesis is organized and presented in 7 Chapters as follows. Chapter 1 presents this introduction. Chapter 2 summarizes previous studies, including the main and relevant references for this thesis. Chapter 3 explains the research methodology and procedures. Chapter 4 presents the analytical framework constructed for this study. Chapter 5 provides an overview of the policies in the countries selected for the study. Chapter 6 presents the analysis of the case studies and develops policy recommendations. Lastly, Chapter 7 concludes, identifies the limitations of this study, and sets the bases for further research on public procurement policy design.

#### 2. Literature review

This section aims to identify the existing and relevant research on the design of public procurement policies. In addition, it reviews the concept of public value and explores how this concept can support the design of public procurement policies.

Before starting the literature review, it is important to clarify that, for the purpose of this study, public procurement policies refer to and focus only on regulations. This approach is chosen because the objectives of procurement policies are predominantly put into practice by introducing new regulations (Harland et al., 2021).

#### 2.1. Design of public procurement policies

Despite its relevance to policy effectiveness, procurement policy design suffers several drawbacks. For example, procurement policy has often been driven by isomorphism rather than informed policymaking (Schapper et al., 2006; Li, 2017). This has meant that policy targets are often set through voluntary or involuntary copying or transferring policies. This undermines the effectiveness of policies due to decontextualization and low local capacity to harness it, particularly in developing countries (Kattel & Lember, 2010).

Public procurement policies have often been motivated by corruption, which has led to their design in a hasty and unplanned manner (Pimenta & Rizai, 2015). Cost-benefit analysis of policies is almost non-existent in public procurement. Moreover, the lack of systematic evidence on the effects of regulations on public procurement limits the possibility of creating an informed policy formulation (Pimenta & Rizai, 2015; Fasekas & Blum, 2021).

Policy design in procurement has often been restrictive as it does not regard its broader governance implications (Erridge, 2005; Thai, 2009b). The lack of consensus about what procurement entails for governance performance leads to conceiving procurement policies from a procedural or narrow point of view, limiting the possibilities for large-scale social impact (Schapper, 2007). Broader policy outcomes and effects on other policy areas are therefore neglected. Limitations in coordination and collaboration across public sector agencies also undermine the efforts to design comprehensive policies in procurement (Schapper, 2007).

Although the aforementioned issues have received great attention among scholars, very few studies have emphasized the study of public procurement from the perspective of policy design. These few studies have provided normative statements and frameworks. However, they focused on specific procurement sectors, such as public procurement of innovation (Li, 2020) and defense (Snider & Rendon, 2008).

The framework in the procurement of innovation informs the formulation of policies by analyzing the vertical and horizontal policy coherence (Li, 2020). Vertical coherence refers to the coherence between policy design and implementation processes. Horizontal coherence looks at several competing objectives of the same policy.

In the defense procurement sector, the framework was adapted from the system model used in policy studies (Snider & Rendon, 2008). It serves to analyze four dimensions of procurement policy design: inputs, outputs, results, and impact.

Research on public procurement policies remains at an early stage (Patrucco et al., 2017; Koala & Steinfeld, 2018). It is important to strengthen normative research in this area so that public procurement actors can guide their actions to promote good governance (Koala & Steinfeld, 2018). Considering the need to continue delving into this topic and with the aim to set the basis for improving policy design in this area, this study proposes a framework to analyze the design of procurement policies that can guide this endeavor.

# 2.2. The connection between public value and procurement

The connection between public value and procurement has been investigated as an alternative to understand and evaluate the performance of public procurement based on the amount of public value it creates; but the majority of research studies have not focused on policy design (Kidd, 2005; Grandia & Meehan, 2017; Malacina et al., 2022). Public procurement's primary goal is delivering public value, which translates into achieving broader social outcomes rather than inputs or outputs (Erridge, 2005; Grandia & Meehan, 2017). Therefore, public value is attained when public procurement goals are balanced (commercial, socioeconomic, and regulatory) (Erridge, 2005). It extends beyond market considerations and points to broader social goals (Turrell, 2014; Allen, 2021).

These studies on the connection between public procurement and public value get inspiration from the theory of public value developed by Mark Moore (1995, 2013). In this theory, public value encompasses the traditional concern for efficiency with values such as equity, justice, and fairness and determines the success of policies based on such values. Moore's approach identifies three domains needed to create public value: 1) the identification of the public value a public organization seeks to create; 2) the sources of legitimacy and support that empower the public institution to act; and 3) the resources necessary to sustain the effort to create that value (Moore, 1995; Mazzucato & Ryan-Collins, 2019). These three dimensions integrate the well-known strategic triangle proposed by Moore (1995). The strategic triangle aims to guide public managers in decision-making to create public value.

Several studies recognize the limitations of using the concept of public value. These studies acknowledge that defining and measuring public value is often difficult (Erridge, 2005). The value is not universal but represents the concerns of stakeholders (Malacina et al., 2022). It depends on

particular perceptions and expectations (Kidd, 2005). Therefore, defining public value requires consultative, participatory, and deliberative processes, which are difficult to realize (Erridge, 2005, 2007). Sometimes these multiple perspectives from stakeholders result in competing and conflicting expectations (Malacina et al., 2022). Moreover, when a definition is finally proposed, some values held by members and outsiders may remain excluded, and support for specific values will be associated with positions of power (Erridge, 2007).

Moore (2013) had already recognized these limitations. He recognizes that it is not possible to have a perfect and comprehensive definition of public value. Despite this, Moore highlights the role of this theory in guiding public managers in the face of great uncertainty until the evidence shows that the chosen direction is the wrong one.

To overcome these limitations, Moore (2013) also provides guidelines to build the definition of public value by identifying dimensions of public value. He proposes a public-sector "value chain" as an analytic tool that informs the definition of public value. This "value chain" points to different aspects of the public value production process where performance data can be collected.

To continue deepening into the connection between public procurement and public value, this thesis proposes a four-step process to assess whether public procurement policies are designed to create public value. Moore's work inspires the first and second steps. The first step entails the creation of a Public Value Chain (Moore, 2013). The Public Value Chain serves to identify which dimensions of public value the procurement policies intend to produce in the short, medium, and long term. The second step is influenced by the operational capacities dimension of Moore's Public Value Triangle to identify the conditions required to obtain the expected public value. This step aims to recognize the barriers that the procurement policy expects to overcome.

### 3. Research methodology

# 3.1. Research question and objectives

The research addresses the question: How well designed are public procurement policies? According to the research question, the goals of this study consist of

Objective 1: Develop a framework to assess how well-designed public procurement policies are.

**Objective 2:** Show the usefulness and operation of the analytical framework through case studies.

### 3.2. Research design

This study uses a qualitative and normative approach to investigate the research question. This research method is considered appropriate due to the fact that there is no ready-to-use analytical framework in the literature reviewed, so it was necessary to create a framework. Furthermore, as this framework was developed during this thesis, there is no quantitative information on the quality of procurement policy design to conduct quantitative analysis.

The proposed analytical framework guides the research process, structuring the analysis and concluding how well procurement policies are designed. The development of the analytical framework is considered the first step so that, after its application, data for future research begins to be available. The analytical framework is described in detail in Chapter 4 of this study.

To show the usefulness of this framework and its operation, the framework is applied in a recently adopted public procurement policy in Latin America and the Caribbean. The policy aims to increase the participation of small farmers in the public procurement market through preferential schemes. The selection of this policy was based on two reasons: 1) the growing interest among countries and international institutions in using public procurement to promote the integration of small producers in markets and strengthening rural livelihoods, and 2) the limited research on this novel procurement strategy in this region (Miranda, 2018).

The application of the framework in this type of policy is carried out in three countries: Colombia, the Dominican Republic, and Peru. These cases were selected from a sample of high-GDP countries in the Latin American and Caribbean region, using World Bank 2020 GDP data (see Appendix A). The countries were selected based upon the criterion that the preferential treatment policy for small farmers has been recently adopted (from 2019 onwards) and has not yet been evaluated. These cases enrich this study as it tests the framework's functioning within different institutional settings in Latin America and the Caribbean and shows its usefulness.

#### 3.2. Research operationalization

The literature reviewed and presented in Chapter 2 was the main inspiration for developing this analytical framework. For the framework application examples, secondary data served as the main source of information. This includes relevant documents such as laws and regulations, policy documents and assessments, scientific literature, as well as other publicly available written materials and reports. For policy-related research, these sources are considered particularly useful, as policies in this area often take the form of documentation.

The analysis of the case studies consists of two parts. The first part is responsible for describing the scope of the selected policies (Chapter 5). The second part shows the step-by-step application of the framework in the three case studies (Chapter 6).

# 3.3. Validity issues and limitations

The conduct of qualitative and normative research requires incorporating measures that improve its validity. To deal with this issue, the proposed framework includes a methodology that shows the analysis process to promote trust and replicability. However, the analytical framework represents a first approximation to analyzing the quality of the policy design in public procurement and introducing the concept of public value to guide policy design in this area. Further development of the analytical framework will strengthen the policy design in public procurement and support the creation of greater public value.

#### 4. The analytical framework

# 4.1. Setting the stage

How well designed are public procurement policies? Central to this question is a concern about the correct way to design public procurement policies. This study proposes a framework to assess whether procurement policy design is optimal or not. Optimal policy design is understood in this research in terms of enabling public value creation. This work proposes a framework inspired by the public value theory as a normative approach against which procurement policy design can be analyzed. It uses the public value concept as a tool to guide and assess policy design in this area.

Why public value? The public value theory adopts a holistic view. This concept recognizes value beyond the concepts of efficiency and effectiveness and uses a collective perspective. This means that policy design must consider the value for "individual clients (...), as well as *by the collective public* in terms of both social welfare (utilitarian concerns) and social justice (deontological concerns)" (Moore, 2013, p. 221). In this perspective, policymakers consider changes in the rule's direct beneficiaries and public expectations when designing procurement policies that enable public value.

There are several benefits to using the public value theory. It represents a fresh approach to procurement policymaking. Having a broader sense of value, the framework represents a blueprint for policymakers in this area and can be applied in various countries and contexts. It also represents an opportunity to gain credibility with taxpayers regarding procurement reforms. However, it is important to acknowledge that as the concept of public value is based on perceptions and expectations, it should not be seen as a measure that replaces quantitative assessment (Kidd, 2005). Instead, it should be seen as another tool in a toolkit that public procurement policymakers

could use (Kidd, 2005). Given that there is no universal way to identify and measure public value, the framework proposed in this thesis represents the first attempt to pave the road creating an efficient and precise system to evaluate the design of public procurement policies.

This study builds a framework that seeks to assess whether procurement policy design is optimal or, in other words, allows the creation of public value or not. To do so, a Public Value Chain is proposed as a first step. This is inspired by the framework proposed by Snider & Rendon (2008) and Moore (2013). It serves to identify which dimensions of public value the procurement policies intend to produce. Second, the operational capabilities dimension of Moore's Public Value Triangle is used to identify the necessary conditions to obtain the expected public value. This step is intended to identify the barriers the policy expects to overcome and then determine whether the policy design includes provisions to do so.

It is important to clarify that this framework operates under the assumption of wellintentioned governments and policymakers. This first version of the analytical framework also does not include political considerations that can affect the quality of policies. Indeed, it is recognized that governments may introduce procurement policies to gain political support, which can undermine the quality of the policies as their motivation is mainly political and not to create public value. However, this topic is not addressed in this first version of the analytical framework and should be included in future versions.

This study also focuses on the substantive element of policy design under a scenario of limited evidence. The substantive element means the effort to define the policy's objectives and map them. Therefore, this thesis does not intend to address the procedural component involved in policy design, such as the coordination of actors, the power struggle, and negotiation.

# 4.2. Description of the analytical framework

The proposed analytical framework follows four steps, as shown in Figure 1. Each step is described below.



Figure 1. The analytical framework for the evaluation of procurement policy design

# Step 1: Identify public value dimensions using the Public Value Chain

The Public Value Chain of the public procurement policy is the backbone for identifying the dimensions of public value. This value chain contains the input, output, outcome, and impact that the policy is expected to have (Figure 2). This step is intended to move procurement policy design from a narrow perspective (input, output) to a strategic that considers long-term goals (outcome and impact), cross-domain policy interactions, and a multi-stakeholder view.



Figure 2. The Public Value Chain of procurement policies

# Step 2: Identify the conditions that allow the creation of public value

After identifying the dimensions of public value, the next step focuses on identifying the conditions to advance through the milestones of the Public Value Chain. This step seeks to comply with the operational capacity dimension of Moore's Strategic Triangle. To do this, policymakers must recognize the conditions that may enable or be a barrier to achieving the expected result at each milestone. This identification can be based on primary or secondary data and the experience of policymakers in the specific policy area.

### Step 3: Assess whether the policy design enables public value creation using the evaluation tool

The barriers or conditions to go through the milestones identified in the previous stage constitute the criteria for evaluating the quality of the policy design. These criteria serve to assess how well procurement policies are designed. To do this, policymakers assess whether any provision of the legislation or regulation contributes to overcoming the barrier or contains the condition required to achieve the expected outcome.

Considering that this assessment requires the analysis and interpretation of experts to allow for a transparent and comparable application of the framework, this study proposes a three-point scale qualification. This scale helps determine whether the criteria in the legislation or regulation are met. It is inspired by the work done by Fonseca & Gibson (2020) to assess environmental laws in Canada and Brazil. The scale is numbered as follows:

- Not addressed (0): The barrier or condition is not addressed in the legislation or regulation.
- Weak (1): The barrier or condition is addressed but is incomplete or ill-specified.
- Strong (2): The barrier or condition is reasonably addressed.

An evaluation tool is proposed in Table 1 to guide policymakers in applying this step.

| Policy                |                        |            |   |         |
|-----------------------|------------------------|------------|---|---------|
| Public Value<br>Chain | Barriers or conditions | Provisions | Point scale<br>(Not addressed: 0,<br>Weak: 1, Strong:2) | Comment |
| 1. Input              |                        |            |   |         |
| 2. Output             |                        |            |   |         |
| 3. Outcome            |                        |            |   |         |
| 4. Impact             |                        |            |   |         |

 Table 1. The procurement policy design evaluation tool

#### Step 4: Results and recommendations

Once all the criteria have a score using the point scale, two types of results are obtained: general results of the policy design and specific results of each criterion analyzed in the previous step.

The first results have the purpose of evaluating the general design of the policy and if it contributes to allowing the creation of public value. This overview also shows how balanced policy design is across the Public Value Chain milestones (Figure 3).

To get the cumulative score, this study proposes giving the same weight to each of the milestones of the Public Value Chain (25%). This prevents giving more weight to milestones that may have more criteria. In this sense, the total weight of each milestone (25%) is divided by the number of criteria. This result is then multiplied by 1 if the score given in the previous step is 2, by 0.5 if the score is 1, and by 0 if the score is 0. Finally, we add up all the results for each criterion at that milestone. According to this, the policies that are well designed and obtain the highest score in each criterion will have an overall score of 100%, as shown in Figure 3.

If the general score is closer to 100%, this means that the design of the policy is of high quality and will potentially create public value. On the other hand, low scores correspond to policies that are not well designed and that must be adjusted so that they can create public value.



Figure 3. Diagram of the general results of the evaluation of the design of procurement policies

In addition to these general results, the analytical framework also allows for an assessment of each of the criteria identified in step 2. These specific results are vital as they clearly indicate where the policy needs to be improved.

These specific results are presented in the form of a heat map. Areas that require more attention and effort to improve the design are colored red. Dimensions that are best designed and do not require changes are colored green. Areas that are well designed but require changes are colored yellow. In this way, policymakers can easily identify in which areas they should focus their efforts to improve policy design in order to achieve public value effectively.

Table 2. Heat map of the evaluation of the design of procurement policies

|            | Barriers or conditions | Score |
|------------|------------------------|-------|
| 1. Input   |                        |       |
| 2. Output  |                        |       |
| 3. Outcome |                        |       |
| 4. Impact  |                        |       |

#### 5. Overview of the case studies

To show the usefulness of the analytical framework and the operation of the fourth steps, the framework is applied in a recently adopted public procurement policy in three Latin American and Caribbean countries. Nonetheless, before applying the framework, this section presents an overview of the policy.

# 5.1. Policy: preferential mechanisms for small farmers in public procurement

In the fight against hunger and poverty in rural areas of Latin America and the Caribbean, many governments have been promoting small farmers' access to the public procurement market. The interest in this policy lies in the fact that small farmers suffer high rates of poverty that can be overcome with this type of strategy (Cervantes-Zapana et al., 2020). To address this problem, the governments of Latin America and the Caribbean seek to increase the income of this population by including them in the public procurement market. This policy attempts to link the demand for food products from the public sector with the supply from small producers. The fact that governments buy large amounts of food through public procurement to meet the demand of hospitals, schools, and prisons represent an opportunity for small producers to offer their products. The government acts, in this case, as an "anchor buyer" for small farmers, helping them build capacity and create reliable demand. This measure also seeks to develop the local economy and promote production (Miranda, 2018).

Why is it necessary to adopt these policies to increase the participation of small farmers in the public procurement market? The answer is straightforward. In general, small farmers in Latin America and the Caribbean cannot participate in this market without these preferential schemes. Public procurement is heavily regulated. It establishes requirements and procedures to access it that the small farmer cannot meet. In addition, participation in contracting processes implies costs that can be prohibitive for small businesses, preventing them from competing (Schapper et al., 2006).

Small producers in Latin America and the Caribbean are characterized by working informally, relying primarily on household labor, with limited land tenure, access to resources, and income (Cervantes-Zapana et al., 2020). This results in inadequate legal, technical, and financial capacity to access the public procurement market, having a low probability of competing with other food suppliers.

To reduce these barriers, governments have adopted preferential schemes for small farmers. This is a type of discriminatory public procurement that governments have used as a tool to exclude competition and promote secondary policies (Kattel & Lember, 2010). Different mechanisms have been proposed for public food procurement, as shown in Table 3.

| Preferential treatment                  | Description  |
|---|--|
| Reservation schemes                     | Contracting entities reserve a percentage, quota, or contracts of public food purchases for small producers.   |
| Subcontracting conditions               | Contracting entities require foodservice operators to purchase a percentage or quota of the value of food purchases from small producers.  |
| Bid price preference                    | Contracting entities increase the price of the offer of suppliers<br>that do not benefit from the preferential measure or decrease the<br>price of the offer of small producers. |
| Award criteria                          | Contracting entities assign additional points to suppliers who offer to buy from small producers above a minimum required.   |
| Simplification of procurement processes | Contracting entities eliminate requirements that facilitate the participation of small producers in the contracting processes.   |

Table 3. Preferential mechanisms in public food procurement

Note: Information compiled from Miranda (2018)

Governments in Latin America and the Caribbean have been adopting these policies to increase the participation of small farmers in the public procurement market (see Appendix A). They aim to benefit vulnerable populations (small farmers) through procurement. However, the benefits of these policies have not yet been clearly identified (Cervantes-Zapana et al., 2020). Thus, it is suitable to test the analytical framework of these policies to assess whether they are designed to achieve the intended goals.

# 5.2. Public procurement from small farmers in Colombia, the Dominican Republic, and Peru

The three countries selected in this study have recently adopted policies to increase the participation of smallholder farmers in public procurement. These policies differ from each other, especially in preferential treatment.

# Colombia

Colombia has enacted Law No. 2046 of 2020 (regulated by Decree 248 of 2021) to promote the participation of small producers in the public procurement system. The Law includes two preferential mechanisms to benefit small local producers, as shown in Table 4. The preferential scheme aims to have small local producers in the supply chain of the public contractors, which means that the participation of small local producers in the public procurement market is indirect.

| <b>Table 4.</b> Preferential mechanisms for small local farmers in Colomb | bia |
|---|-----|
|---|-----|

| Preferential<br>treatment | Description  |
|---------------------------|--|
| Subcontracting conditions | Contracting entities require foodservice operators to purchase at least 30% of the value of food purchases from small local producers. |
| Award criteria            | Contracting entities assign additional points to suppliers who offer to buy from small local producers above a minimum required.       |

# The Dominican Republic

In the Dominican Republic, the government has enacted Decree No. 168 of 2019 (regulated by Resolution No. PNP-04-2019) to benefit small regional farmers through public procurement. This policy adopts two preferential mechanisms, as shown in Table 5. It establishes that contracting entities can reserve some contracts to acquire food directly from small producers when supply is available. They can design procurement processes in which small agricultural producers are the only bidders allowed to compete. To facilitate their participation, a simplified procurement process has also been developed. It is a prequalification stage in which interested small producers can apply once a year. If they pass this stage, they can participate in several procurement processes during that time. Also, they do not have to present bid submission guarantees.

| Preferential treatment                  | Description   |  |
|---|---|--|
| Reservation schemes                     | Contracting entities can reserve some contracts of public food purchases for small regional producers.                                  |  |
| Simplification of procurement processes | Contracting entities eliminate requirements that facilitate the participation of small regional producers in the contracting processes. |  |

Table 5. Preferential mechanisms for small regional farmers in the Dominican Republic

# Peru

Peru has enacted Law No. 31071 of 2020 to promote public food purchases of products from family farmers. This Law was regulated by Decree No. 012 of 2021. It adopts two preferential mechanisms, as shown in Table 6. They aim to guarantee that contracting entities purchase their food needs for the social programs directly from family farmers. This policy creates a new procurement process for this type of procurement.

# Table 6. Preferential mechanisms for family farmers in Peru

| Preferential treatment                  | Description  |  |
|---|--|--|
| Reservation schemes                     | Contracting entities reserve at least 30% of the value of food purchases for family farmers.   |  |
| Simplification of procurement processes | Contracting entities must purchase agricultural products through COMPRAGRO, which held a new and exclusive contracting process for this type of goods. |  |

#### 6. Application of the framework

This section illustrates the application of the analytical framework in the case studies. These examples are intended to show how the analytical framework works and to guide policymakers on how to apply each of the steps to other procurement policies.

# 6.1. Evaluation of procurement policy design

The fourth step of the analytical framework in the case studies requires analyzing the design of policies, the specific situation of small farmers in the region, and the literature on preferential treatment for small farmers in public procurement. In addition, since the analytical framework adopts a public value perspective to analyze the design of public procurement policies, it is recommended that the assessment includes different viewpoints from various stakeholders affected by the policy. However, to test the analytical framework for the first time, the evaluation focuses on the perspective of the primary beneficiaries of the policy selected: smallholder farmers.

# Step 1: Identify the dimensions of public value using the Public Value Chain

The Public Value Chain of public procurement policies identifies the value intended to be generated. The value dimensions are determined considering the literature on preferential treatments for small farmers in public procurement and the objectives stated in the policies.

The literature on special treatments for small farmers in public procurement has identified three categories of benefits for this type of policy: social, economic, and environmental (Miranda, 2018; Zapana et al., 2020).

The social benefits are associated with improving social capital by stimulating farmers' organizations and human capital by improving their capacities to participate in bidding processes. This policy promotes social inclusion by creating jobs and additional wages and increasing food

security. These social benefits improve living conditions while safeguarding a minimum livelihood.

The economic benefits include inclusion in the market, which increases the income of small farmers due to the more significant number of products sold. This income boosts the economy as it increases the purchasing power of this population. This policy may act as a stabilizer for agricultural products and improve the productivity of small farmers.

The environmental benefits are related to the increase in organic production, the reduction of CO2, and the diversification of crops.

In turn, the policies studied in this thesis have their objectives. Colombia's policy is aimed at increasing market inclusion (economic benefit). In contrast, the Dominican Republic and Peru's policies aim to produce broader effects (economic, social, and environmental benefits), as shown in Table 7.

| Country                   | Objectives  |
|---------------------------|---|
| Colombia                  | Promote the participation of small local farmers in the public food procurement market (article 1)  |
| The Dominican<br>Republic | Contribute to the country's economic development, increases local employment, reduces environmental impacts, and increases the productivity of the agricultural sector (articles 1, 2, and 6) |
| Peru                      | Encourage the consumption of food produced by family farmers, improve their economic situation, and promote a healthier diet (article 1)  |

Table 7. Policy objectives in the case studies

Based on the information mentioned above, the dimensions of the Public Value Chain were identified for the policies under study. The Public Value Chain proposed in this thesis contains the policy's objectives from the perspective of small farmers. It also takes a broader view, including social and economic benefits, as recommended by the literature on the connection between public procurement and public value. Environmental benefits were not prioritized as they do not directly affect the target population.

The value dimensions are organized as shown in Figure 4.



Figure 4. The Public Value Chain of the case studies

The first expected effect of the policy is a greater insertion in the market of public purchases of small farmers. Entry into this market is secondarily expected to translate into increased income for small farmers. Then, it is sought that these higher incomes raise the purchasing power of small farmers, thus improving their quality of life. Finally, after safeguarding better living standards, it is intended that small farmers can invest in improving their productivity.

It is important to recognize that the order of the milestones in the proposed value chain is based on the following premise. It is assumed that the farmers who benefit from these policies have certain living conditions allowing them to produce and access the public procurement market. However, their quality of life can be improved, which will happen once they have a higher income. And once their quality of life improves, these producers will be ready to leap to higher productivity. For this reason, it was decided that the quality-of-life milestone should precede the productivity milestone. However, the order of the milestones may not be sequential.

# Step 2: Identify the conditions that allow the creation of public value

After defining the policy's Public Value Chain and value dimensions, the next step focuses on identifying the barriers that prevent small farmers from achieving those objectives under free market conditions (without preferential treatment). This identification was made possible by reviewing the literature on preferential treatment for small farmers in public procurement and on the current socioeconomic situation of this group in the Latin American and Caribbean region.

These barriers can also be selected through surveys of farmers and experts on the subject. However, due to time and resource constraints, only sources were used for this thesis. Therefore, Table 8 shows the barriers and some solutions found in the literature.

|  | Barrier  | Literature   |
|--|--|--|
| 1. Input: Small<br>farmers can<br>access the<br>public<br>procurement<br>market. | Supply from small farmers and<br>demand from the public sector<br>are not aligned                      | <i>Barrier:</i> Public purchases do not always coincide with harvest seasons or available products (Miranda, 2018). <i>Possible solutions:</i> Public demand must be tailored to include foods that are normally produced by small farmers or have the potential to be produced, taking into account agricultural seasons, zone production, local food habits, and preferences. (Miranda, 2018). Coordination strategies between producers and meal planning from public agencies (Parsons & Barling, 2022). |
|  | Small farmers do not have<br>knowledge about how to<br>participate in the public<br>procurement market | <i>Barrier:</i> Small farmers have limited knowledge and<br>information about the public procurement process,<br>preferential access rules, or requirements for<br>participation (Miranda, 2018).<br><i>Possible solutions:</i> Establish specific centers that<br>provide information or give the information directly to<br>farmers through farmers' organizations, extension<br>services, NGOs, or other organizations that work<br>closely with them (Miranda, 2018).                                    |
|  | Small farmers are not aware of<br>business opportunities in the<br>public procurement market           | <i>Barrier:</i> Small farmers may not be aware of tendering opportunities. Accessing online tools could be a   |

Table 8. Barriers to moving through the Public Value Chain

|  |   | challenge for small farmers when the internet is not<br>used (Miranda, 2018).<br><i>Possible solutions:</i> Tender opportunities must be<br>advertised in local newspapers, on notice boards in<br>public spaces, and local radio stations (Miranda,<br>2018).  |
|--|---|---|
|  | Small farmers do not have the legal capacity to participate in the public procurement market                        | <i>Barrier:</i> Procurement rules require the farmer to register as a formal business or create more than one register procedure (Miranda, 2018). <i>Possible solutions:</i> Simplify and unify business registration procedures. Adopt prequalification procedures. Promote market inclusion through subcontracting plans (Miranda, 2018).                         |
|  | Small farmers do not have the financial and organizational capacity to participate in the public procurement market | <i>Barrier:</i> Small farmers are cash-constrained and have<br>limited or no access to financial services (Mirada,<br>2018).<br><i>Possible solutions:</i> The financial requirements cannot<br>be high. Bid securities may be replaced by bid<br>declarations or waived. (Miranda, 2018)   |
|  | Small farmers do not have<br>certified experience to participate<br>in the public procurement market                | <i>Barrier:</i> Small farmers have little experience in formal markets (Miranda, 2018).<br>Possible solutions: The non-competitive process may be used as an entry point to the public procurement market for small farmers without certified experience (Miranda, 2018).   |
|  | Small farmers are not competitive in price and quality  | <i>Barrier:</i> Small farmers are unable to compete with larger suppliers or do not have the capacity to fulfill large contracts (Miranda, 2018). <i>Possible solutions:</i> Subdivide contracts into lots or adopt non-competitive processes (Miranda, 2018).  |
| 2. Output: Small<br>armers earn<br>ncome | Small farmers face challenges in delivering product   | <i>Barrier:</i> Small farmers do not have the capacity to fulfill large contracts, aggregate commodities, or meet high-quality standards (Miranda, 2018). <i>Possible solutions:</i> Subdivide contracts into lots. Smaller contracts are more related to the capacities of small farmers (Miranda, 2018).  |
|  | Small farmers face challenges in getting paid   | <i>Barrier:</i> Governments' delayed payments lead to income losses that limit farmers' ability to invest in production and discourage them from engaging the public procurement market as they face significant cash constraints (Miranda, 2018). <i>Possible solutions:</i> Pay suppliers in no more than 15 days and adopt penalties for delays (Miranda, 2018). |
|  | Small farmers face challenges in receiving a fair price   | <i>Barrier:</i> Inadequate prices can create more uncertainty among farmers regarding their income derived from public procurement (Miranda, 2018).   |

|   |   | <i>Possible solutions:</i> Price mechanisms need to provide a rate of return to small farmers that covers the fixed and variable costs of production that allow profitability. Reference prices may help to improve pricing (Miranda, 2018).   |
|---|---|--|
|   | Small farmers face challenges in<br>minimizing costs                          | <i>Barrier:</i> High transactions costs, information asymmetries (FAO, 2019).  |
|   | Small farmers face risks that may increase the cost of the contract           | <i>Barrier:</i> Small farmers face risks such as agroclimatic disasters and catastrophic events, the degradation of biodiversity and new forms of citizen insecurity (FAO, 2019).  |
|   | Small farmers cannot satisfy their basic needs                                | <i>Barrier:</i> As of 2017, there were 59 million poor and 27 million extreme poor in rural territories in LAC (FAO, 2019).  |
| 3. Outcome:<br>Small farmers<br>improve life<br>quality | Public services are available in the rural areas                              | <i>Barrier:</i> "Rural territories tend to provide weaker<br>education and health services than urban areas as<br>well as having public bureaucracies with lower<br>management capacities due to the dynamics of<br>centralization" (FAO, 2019).   |
|   | Security is an issue  | <i>Barrier:</i> Insecurity affects rural territories. "The payment of "tolls" and "rents" to enter or remain in certain rural territories, and the presence of illegal and violent organizations are factors that negatively affect the implementation of social and productive policies." (FAO, 2019).  |
|   | Infrastructure is not available   | <i>Barrier:</i> Lack of transportation, storage, irrigation, and processing capacity (Parsons & Barling, 2022). <i>Possible solutions:</i> The public sector may create a distribution center to support small local farmers or hire a logistics company to move commodities from family farmers to the distribution center or other sites (Parsons & Barling, 2022).                      |
| 4. Impact: Small<br>farmers increase<br>productivity    | Small farmers cannot access new<br>markets without preferential<br>treatments | <i>Barrier:</i> Preferential treatments in public procurement<br>can reduce incentives to improve competitiveness<br>and create dependency on government support<br>(Miranda, 2018).<br><i>Possible solutions:</i> Procurement requirements can<br>stimulate changes across suppliers that can impact<br>supply relationships beyond institutional customers<br>(Parsons & Barling, 2022). |
|   | Small farmers do not invest   | <i>Barrier:</i> Lack of knowledge on how to invest, lack of assets that serve as collateral for the financial institutions, limited access to credit, and the weakness of microfinance institutions in the region  |

|             |                                     | (FAO, 2016)<br><i>Possible solutions:</i> Establish a credit system<br>according to the economic conditions of small farmers<br>(i.e., low-interest rate) or provide a guarantee of loan<br>repayment in case of crop failure (FAO, 2016)  |
|-------------|-------------------------------------|--|
| Sma         | all farmers are not competitive     | <i>Barrier:</i> Lack of capacities to delivery products with certain process for consumption, lack of personnel and infrastructure to add value to the products (FAO, 2016).<br><i>Possible solutions:</i> Promote the integration of public policies to support farmers (dealing with access to inputs and credits, technical assistance, post-harvest, and marketing procedures) to facilitate productive inclusion (FAO, 2016). |
| The<br>deve | business ecosystem is not<br>eloped | <i>Barrier:</i> Lack of adequate skills in the farming sector<br>(other producers, retailers, caterers) (Parsons &<br>Barling, 2022).<br><i>Possible solutions:</i> Improve the skills and knowledge<br>of the actors in the food chain (Parsons & Barling,<br>2022).  |

# Step 3: Assess whether the policy design enables public value creation using the evaluation tool

The barriers identified in the previous step are the criteria for assessing the policy design in the case studies. This research evaluates whether any provision of the policies in the three countries contributes to overcoming barriers. This evaluation is based on the investigator's interpretation. However, the evaluation tool includes the reasons that support the qualification of each criterion. Appendix B contains the application of the evaluation tool in the case studies.

# Step 4: Results and recommendations

In sections 6.2. and 6.3., the general and specific results obtained with the application of the evaluation tool are presented, as well as the recommendations to improve the policies selected in the case studies.

# **6.2.** Descriptive results

The results of the application of the analytical framework can be seen in Figure 5 and Table

# 9.



Figure 5. Diagram of the general results of the case studies

The general results show that the policy designed by the Peruvian policymakers obtained the highest overall score (43.75%) of the three policies studied. The policy design of the Dominican Republic obtained 33.125%, and the policy design of Colombia obtained 31.25%.

In all cases, the higher scores were obtained in the first milestone of the Public Value Chain. Policy design in Peru and the Dominican Republic was close to the maximum value in this dimension (25%), with 22.5% and 20.625%, respectively. Colombia received the lowest score (15%).

None of the regulations include measures to ensure that access to the public procurement market leads to a better quality of life for small farmers, the third milestone of the Public Value Chain. Finally, the results show that only Colombia (6.25%) and Peru (6.25%) have developed measures to increase the productivity of smallholder farmers, but they are not significant.

|                         | Barrier  | Colombia | The Dominican<br>Republic | Peru |
|-------------------------|--|----------|---------------------------|------|
|                         | Supply and demand from the<br>public sector are not aligned  |          |                           |      |
| 1. Input:               | Small farmers do not have<br>knowledge about how to<br>participate in the public<br>procurement market |          |                           |      |
| Small<br>farmers can    | Small farmers are not aware of<br>business opportunities   |          |                           |      |
| access the public       | Small farmers do not have legal<br>capacity  |          |                           |      |
| procuremen<br>t market. | Small farmers do not have<br>financial and organizational<br>capacity                                  |          |                           |      |
|                         | Small farmers do not have<br>experience  |          |                           |      |
|                         | Small farmers are not<br>competitive in price and quality  |          |                           |      |
|                         | Small farmers face challenges to deliver the product   |          |                           |      |
| 2. Output:              | Small farmers face challenges to get paid  |          |                           |      |
| Small<br>farmers        | Small farmers face challenges to receive a fair price  |          |                           |      |
| earn<br>income          | Small farmers face challenges to minimize costs  |          |                           |      |
|                         | Small farmers face risks that<br>may increase the cost of the<br>contract                              |          |                           |      |
| 3. Outcome:             | Small farmers cannot satisfy<br>their basic needs  |          |                           |      |
| Small<br>farmers        | Public services are available in the rural areas   |          |                           |      |
| quality                 | Security is an issue<br>Infrastructure is not available  |          |                           |      |
| 4. Impact:              | Small farmers cannot access new<br>markets without preferential<br>treatments                          |          |                           |      |
| farmers<br>increase     | Small farmers do not invest<br>Small farmers are not<br>competitive                                    |          |                           |      |
| productivity            | Business ecosystem is not<br>developed   |          |                           |      |

Table 9. Application of the heat map in the case studies

**Note:** Color green indicates the areas that are well designed and do not require changes. Color yellow indicates the areas that are well designed but require changes. Color red indicates the areas that require more attention and effort to improve the design.

The specific results show the scores for each of the criteria evaluated. These results show that the differences in the quality of policy design between the three countries are concentrated in the first milestone of the Public Value Chain. For example, Colombia does not have provisions for capacity building in public procurement for small farmers. Conversely, Peru has adopted measures in this regard.

However, some common patterns are also observed. All policies focus on overcoming the barriers associated with the requirements to participate in tenders, such as financial capacity and experience. Moreover, the policies received similar values in the criteria analyzed in the other three dimensions of the Public Value Chain. All three countries have made some efforts to ensure that access to the public procurement market reflects an increase in the income of small farmers, although they are not sufficient to achieve the expected results. Finally, the lowest values were assigned to criteria of the third and fourth dimensions of the Public Value Chain.

#### 6.3. Findings and recommendations

The assessment tool results show how well the policies under study were designed to create value for small farmers through public procurement.

From the appraisal, this study found that the policy design in these three cases has mainly a procedural approach (input) that lessens the possibility of creating real value. The design of these policies focuses mainly on eliminating barriers to access to the public procurement market for small farmers without solving structural problems, such as the lack of infrastructure or the lack of skills of small farmers to respond to the public demand. This situation may make the insertion of small farmers in the public procurement market have a limited effect since it may not increase income or improve quality of life and productivity.

This finding also reveals that, although some governments intend to go beyond this shortterm perspective and promote broader objectives (economic, social, and environmental benefits), the policy design is inadequate to move through the Public Value Chain. For instance, the governments of Peru and the Dominican Republic intended not only to increase the participation of small farmers in the public procurement market but also their income. However, this intention does not translate into designing a policy that goes in that direction. In contrast, in Colombia, the policy objective was focused on increasing access to the public procurement market, reflecting their short-term approach to policy design.

Furthermore, this assessment shows that the appropriateness of the design of the policy to reduce barriers to access to the public procurement market differs among countries. Even if the main objective of the policies is to improve the participation of small farmers in public procurement, the probability of this varies across countries.

The Peruvian policy has adopted measures that further reduce the barriers for small farmers since it creates an exclusive bidding process tailored to their conditions. The Dominican Republic also made efforts to simplify and waive some requirements.

Colombia has adopted a different strategy from that of the other two countries. In this case, the conditions to access the public procurement market have not changed for small farmers, but the policy has made it mandatory for large government suppliers to buy directly from small producers. Colombia is thus encouraging the indirect participation of small farmers in the public procurement market. This approach has advantages and disadvantages. On the one hand, it simplifies small farmers' requirements compared to participating directly in the public procurement market. However, this strategy puts policy's success in the hands of a third party (large government suppliers), increasing the possibility of non-compliance and the need for stricter controls and monitoring.

These findings offer several insights to improve the design of the policies under study and unlock the potential of using public procurement to benefit small farmers.

First, governments must take a broader perspective in policy design. Using the Public Value Chain can guide policymakers to think critically about the short-term and long-term effects of the policy. This implies that the design of public procurement must go beyond adopting or changing rules and procedures but rather requires comprehensive policymaking (Li, 2020).

Second, after clearly determining the value dimensions through the Public Value Chain, policymakers may identify the barriers preventing achieving them. This identification is essential to assess the optimal design of the policy since the barriers become the evaluation criteria.

Finally, using an ex-ante evaluation tool for policy design such as the one recommended in this thesis may foster critical thinking and increase accountability. Reflecting on the reasoning behind the design of the policy helps to communicate their means and ends. Furthermore, recording policy design assessments can serve as the benchmark for future evaluations and identify lessons learned.

#### 7. Conclusion

This thesis proposes an analytical framework that aims to move the design of policies in public procurement from a narrow perspective toward the consideration of public value creation as a way to improve the effectiveness of public procurement policies and achieve long-term outcomes. The framework proposed in this thesis includes four steps that guide policymakers to analyze and enhance policy design: i. Identification of public value dimensions, ii. Identification of the conditions that allow public value creation, iii. Assessment of whether the policy design enables public value creation or not, and iv. Results and recommendations summarizing the appropriateness of the policies evaluated.

To show the usefulness of this framework and the operation of the fourth steps, the framework is applied in a public procurement policy recently adopted in three Latin American and Caribbean countries. The policy encompasses preferential treatment for small farmers in public procurement in Colombia, the Dominican Republic, and Peru and was chosen given the increasing interest worldwide in supporting this population through public procurement.

The results of applying the framework in the case studies have shown that the three policies have realized different optimization levels in the policy design. As a result, the current legal and regulatory framework designed in Peru has shown to be superior to its counterpart in Colombia and the Dominican Republic, exhibiting greater opportunities to create public value for small farmers through public procurement. The policy design in Peru further contributes to overcoming access barriers and increasing the benefits of the public procurement market for small farmers.

The analysis has shown that the design of these policies still focuses on solving immediate barriers rather than structural issues. These policies can increase the probability of accessing the public procurement market (input). Still, there is a high risk that this access will not lead to higher income (output), a better quality of life (outcome), or higher productivity (impact). In this sense, these policies seem too narrow to deal with the public value they can create.

The findings of the case studies showed that the analytical framework serves to evaluate the design of these policies and identify the aspects in which the policies must be improved so that they effectively create public value. The application of the framework also revealed that policies are generally designed to solve problems only in the short term. Thus, with the application of this analytical framework, it is possible to draw the attention of governments so that they improve the design of policies by adopting a strategic and long-term vision.

The application of the framework in the case studies also offers implications regarding the potential of using it to enhance the design of other policies in public procurement. The framework contributes to better policy design by clearly identifying both the expected short-term and long-term goals. As a result, the framework invites countries to take a broader perspective in the design of policies in public procurement, shifting the tendency to focus on short-term effects. Furthermore, by adopting the vision of resolving barriers or identifying conditions to move through the Public Value Chain, policymakers can design policies that can go in that direction. It encourages them to analyze how well they are designing their policies to achieve public value and identify the areas that need further improvement.

The analytical framework proposed in this thesis can also be applied to other contexts beyond public procurement. Using this framework could help improve policy design in other areas. For example, the Public Value Chain and the identification of barriers can facilitate the critical reflection on the logic of policy design by explicitly linking goals, barriers, policies, and the expected results. Early detection of defective designs can be done using the framework results. There are some challenges associated with the application of the framework that can be reviewed in further studies. It is necessary to consider the policy process in each country to understand the potential usefulness of the proposed framework. In addition, identifying the milestones of the Public Value Chain and the barriers may be subject to evaluator bias, limiting the validity of the analysis. Early-stage consultations with stakeholders before policy design can solve this issue but require a higher level of motivation and capabilities that may be lacking. Moreover, even if the design appears optimal, it is difficult to predict how the policy can overcome the barriers. Analyzing the value only from the perspective of one stakeholder (small farmers) hinders the possibility of evaluating the overall public value of the policy design.

In conclusion, the proposed analytical framework represents an initial attempt to provide guidance on assessing policy design in public procurement. Further development of the analytical framework will strengthen the policy design in public procurement and support the creation of greater public value.

# 8. Appendices

# Appendix A. Data for the selection of case studies

|                       | GDP 2020<br>(USD million) | National budget<br>2021<br>(USD) | The total value of public<br>contracts awarded in<br>2021<br>(USD) | Estimated share<br>of public<br>spending<br>through<br>procurement | Preferential<br>treatment for<br>smallholder farms in<br>procurement<br>(Number/Year) |
|-----------------------|---------------------------|----------------------------------|--|--|---|
| Brazil                | \$ 1,444,733.26           | \$ 820,899,503,517.03            | \$ 41,522,711,868.27   | 5.1%   | Law 11947/2009  |
| Mexico                | \$ 1,073,915.88           | \$ 305,619,780,559.15            | \$ 19,613,156,976.10   | 6.4%   | Not adopted   |
| Colombia              | \$ 271,437.60             | \$ 79,521,865,184.18             | \$ 9,264,611,920.77  | 11.7%  | Law 2046/2020<br>Decree 248/2021  |
| Chile                 | \$ 252,940.02             | \$ 73,234,000,000.00             | \$ 12,231,896,028.40   | 16.7%  | Commercialization<br>Program/2016   |
| Peru                  | \$ 202,014.36             | \$ 47,044,631,425.94             | \$ 10,883,185,207.43   | 23.1%  | Law 31071/2020<br>Decree 012/2021   |
| Ecuador               | \$ 98,808.01              | \$ 32,080,360,000.00             | \$ 5,320,500,000.00  | 16.6%  | Law of Food<br>Sovereignty/2009   |
| Dominican<br>Republic | \$ 78,844.70              | \$ 17,860,481,923.60             | \$ 1,881,192,934.63  | 10.5%  | Decree 168/2019<br>Resolution No. PNP-<br>04-2019                                     |
| Costa<br>Rica         | \$ 61,846.90              | \$ 17,227,105,053.93             | \$ 753,200,000.00  | 4.4%   | Law 2035/1956   |
| Uruguay               | \$ 53,628.83              | \$ 15,807,442,704.05             | \$ 3,602,105,131.19  | 22.8%  | Law 19292/2014  |
| Panama                | \$ 53,977.04              | \$ 24,192,400,000.00             | \$ 1,974,045,111.39  | 8.2%   | Law 127/2020<br>Not regulated yet   |

|   |   | Colombia   |           |   | The Domi   | nican F   | Republic   | Peru  |           |  |  |
|---|---|--|-----------|---|--|-----------|--|---|-----------|--|--|
|   | Barrier   | Provisions   | Scor<br>e | Comment   | Provisions   | Scor<br>e | Comment  | Provisions  | Scor<br>e | Comment  |  |
| 1. Input:<br>Small<br>farmers<br>can access<br>the public<br>procurem<br>ent<br>market. | Supply and<br>demand<br>from the<br>public<br>sector are<br>not aligned | Adapt the<br>demand to<br>the local<br>offer<br>30% of the<br>resources<br>invested in<br>food must<br>be<br>supplied<br>by small<br>producers<br>Define<br>minimum<br>standards<br>on the<br>technical<br>specificati<br>ons of<br>producer<br>Producer<br>registratio<br>n | 1         | The<br>demand is<br>adapted to<br>local<br>production<br>, but there<br>is no<br>special<br>contractin<br>g process<br>according<br>to the<br>capacity of<br>small<br>producers | Split the<br>bidding<br>process into<br>lots by<br>products<br>with<br>homogeneo<br>us<br>characteristi<br>cs, place of<br>production,<br>storage<br>Call for<br>expression<br>of interest to<br>know the<br>volume and<br>production<br>capacity,<br>seasonality,<br>reference<br>prices<br>Define<br>minimum | 2         | The<br>demand<br>and the<br>contractin<br>g process<br>are<br>adapted to<br>the<br>capacity of<br>small<br>producers | Adapt the<br>demand to<br>the local<br>offer<br>30% of the<br>resources<br>invested in<br>food must<br>be supplied<br>by small<br>producers<br>(Compliance<br>with this<br>percentage<br>is gradual<br>until 2024)<br>Publication<br>of the<br>sowing and<br>harvest<br>calendar<br>Publication<br>of price | 2         | The<br>demand<br>and the<br>contractin<br>g process<br>are<br>adapted to<br>the<br>capacity of<br>small<br>producers |  |

# Appendix B. Application of the evaluation tool in the case studies

|  |  | standards on  |  | information  |  |  |
|--|--|---------------|--|--------------|--|--|
|  |  | the technical |  |              |  |  |
|  |  | specification |  | Simplified   |  |  |
|  |  | s of products |  | selection    |  |  |
|  |  | •             |  | mode:        |  |  |
|  |  | Purchase      |  | minor        |  |  |
|  |  | nlanning      |  | nurchases    |  |  |
|  |  | planning      |  | purchases    |  |  |
|  |  | Entities      |  | Producer     |  |  |
|  |  | must justify  |  | rogistration |  |  |
|  |  | must justify  |  | registration |  |  |
|  |  | why they uo   |  |              |  |  |
|  |  | from areall   |  |              |  |  |
|  |  | from small    |  |              |  |  |
|  |  | producers     |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  | Producer      |  |              |  |  |
|  |  | registration  |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |
|  |  |               |  |              |  |  |

| Small<br>farmers do<br>not have<br>knowledge<br>about how<br>to<br>participate<br>in the<br>public<br>procureme<br>nt market | 0 | No<br>provision | Enrollment<br>days in the<br>registry of<br>State<br>providers<br>Workshops<br>on the use<br>of the<br>transactiona<br>I portal   | 1 | Training<br>topics may<br>be<br>insufficient<br>to fulfill<br>the<br>purpose                | Capacity<br>building<br>programs to<br>encourage<br>participation<br>in public<br>procuremen<br>t  | 2 | The scope<br>of training<br>is wide   |
|--|---|-----------------|---|---|---|--|---|---|
| Small<br>farmers are<br>not aware<br>of business<br>opportuniti<br>es  | 0 | No<br>provision | Trade shows<br>Disseminatio<br>n by local<br>traditional<br>media<br>Use of<br>database to<br>encourage<br>participation<br>Purchase<br>planning<br>Call for<br>expression<br>of interest | 2 | Establishes<br>different<br>mechanis<br>ms to<br>publicize<br>business<br>opportunit<br>ies | Participatory<br>spaces<br>Mass<br>communicat<br>ion of<br>processes<br>Disseminati<br>on and<br>awareness<br>mechanisms<br>Purchase<br>planning | 2 | Establishes<br>different<br>mechanis<br>ms to<br>publicize<br>business<br>opportunit<br>ies |

|  | Small<br>farmers do<br>not have<br>legal<br>capacity | Outsourcin<br>g | 2 | A lower<br>level of<br>formalizati<br>on is<br>required<br>because<br>contractin<br>g is<br>governed<br>by private<br>law | No<br>guarantee of<br>seriousness<br>or<br>compliance | 1 | A<br>minimum<br>level of<br>formalizati<br>on is<br>required<br>which can<br>be a<br>barrier to<br>participate | Transitional<br>provision<br>until 2024:<br>They do not<br>need to be<br>registered<br>with the<br>entity<br>responsible<br>for taxes | 1 | A<br>minimum<br>level of<br>formalizati<br>on is<br>required<br>which can<br>be a<br>barrier to<br>participate |
|--|--|-----------------|---|---|---|---|--|---|---|--|
|--|--|-----------------|---|---|---|---|--|---|---|--|

| time |  | Small<br>farmers do<br>not have<br>financial<br>and<br>organizatio<br>nal<br>capacity | Outsourcin<br>g<br>Payment<br>against<br>delivery | 2 | Lowers the<br>cost of<br>participati<br>ng and<br>financial<br>requireme<br>nts<br>through<br>the supply<br>chain from<br>State<br>suppliers | Prequalificat<br>ion once a<br>year<br>No<br>guarantee of<br>seriousness<br>or<br>compliance<br>Split the<br>bidding<br>process into<br>lots by<br>products<br>with<br>homogeneo<br>us<br>characteristi<br>cs, place of<br>production,<br>storage<br>Public<br>entities<br>must have<br>storage | 2 | Lower cost<br>of<br>participati<br>on and<br>financial<br>requireme<br>nts | Public<br>entities are<br>responsible<br>for storage<br>and<br>distribution<br>Preferential<br>payment<br>Payment of<br>interest in<br>case of<br>default<br>Simplified<br>selection<br>mode:<br>minor<br>purchases | 2 | Lower cost<br>of<br>participati<br>on and<br>financial<br>requireme<br>nts |
|------|--|---|---|---|--|---|---|--|---|---|--|
|------|--|---|---|---|--|---|---|--|---|---|--|

|  | Small<br>farmers do<br>not have<br>experience | Outsourcin<br>g | 2 | Reduces<br>the<br>requireme<br>nt of<br>experience<br>by having<br>to meet<br>the<br>requireme<br>nts of<br>private law | Split the<br>bidding<br>process into<br>lots by<br>products<br>with<br>homogeneo<br>us<br>characteristi<br>cs, place of<br>production,<br>storage | 2 | Decreases<br>the<br>requireme<br>nt | Simplified<br>experience<br>accreditatio<br>n<br>Simplified<br>selection<br>mode:<br>minor<br>purchases | 2 | Decreases<br>the<br>requireme<br>nt |
|--|---|-----------------|---|---|---|---|-------------------------------------|---|---|-------------------------------------|
|--|---|-----------------|---|---|---|---|-------------------------------------|---|---|-------------------------------------|

| Small<br>farmers are<br>not<br>competitiv<br>e in price<br>and quality | Outsourcin | 1 | The<br>selection<br>of the<br>small<br>producer<br>is a<br>discretiona<br>ry decision<br>of the<br>State<br>supplier,<br>which may<br>limit the<br>benefit to<br>the most<br>advanced<br>producers<br>that can<br>offer<br>favorable<br>conditions<br>for<br>suppliers | Competitive<br>processes<br>where only<br>small<br>producers<br>can<br>participate<br>Split the<br>bidding<br>process into<br>lots by<br>products<br>with<br>homogeneo<br>us<br>characteristi<br>cs, place of<br>production,<br>storage<br>Calls limited<br>to certain<br>regions<br>Define<br>minimum<br>standards on<br>the technical<br>specification | 1 | A single<br>selection<br>process is<br>establishe<br>d for small<br>producers<br>that allows<br>them to<br>compete<br>on equal<br>terms.<br>However,<br>the award<br>method is<br>the lowest<br>price,<br>which may<br>limit the<br>award of<br>contracts<br>to the<br>most<br>advanced<br>small<br>producers. | Purchases<br>through the<br>Committee<br>of Public<br>Purchases<br>for Family<br>Farming<br>(COMPRAGR<br>O)<br>Simplified<br>selection<br>mode:<br>minor<br>purchases | 1 | A single<br>selectio<br>process<br>establish<br>d for sm<br>produce<br>that allo<br>them to<br>compete<br>on equa<br>terms.<br>Howeve<br>the awa<br>method<br>discretio<br>ry decid<br>by each<br>public<br>entity |
|--|------------|---|--|--|---|--|---|---|--|
|  |            |   |  | standards on<br>the technical<br>specification<br>s of products  |   | producers.   |   |   |  |



| 2. Output:<br>Small<br>farmers<br>earn<br>income | Small<br>farmers<br>face<br>challenges<br>to deliver<br>the<br>product | Outsourcin<br>g<br>Define<br>minimum<br>standards<br>on the<br>technical<br>specificati<br>ons of<br>products | 1 | State<br>suppliers<br>are going<br>to contract<br>a small<br>producer<br>who can<br>deliver the<br>product,<br>or they are<br>going to<br>facilitate<br>its delivery | Define<br>reasonable<br>delivery<br>times<br>Define<br>minimum<br>standards on<br>the technical<br>specification<br>s of products<br>Split the<br>bidding<br>process into<br>lots by<br>products<br>with<br>homogeneo<br>us<br>characteristi<br>cs, place of<br>production,<br>storage | 2 | Lotificatio<br>n makes it<br>easier for<br>small<br>producers<br>to fulfill<br>the<br>contract | Publication<br>of the<br>sowing and<br>harvest<br>calendar<br>Simplified<br>selection<br>mode:<br>minor<br>purchases | 2 | Minor<br>purchases<br>make it<br>easier for<br>small<br>producers<br>to fulfill<br>the<br>contract |
|--|--|---|---|--|--|---|--|--|---|--|
|  | Small<br>farmers<br>face<br>challenges<br>to get paid                  | Payment<br>against<br>delivery  | 1 | It is<br>uncertain<br>when it<br>can be<br>implement<br>ed   | Reasonable<br>time for<br>payment  | 1 | It is<br>uncertain<br>when it<br>can be<br>implement<br>ed                                     | Preferential<br>payment<br>Payment of<br>interest in<br>case of<br>default   | 1 | It is<br>uncertain<br>when it<br>can be<br>implement<br>ed   |

| Small<br>farmers<br>face<br>challenges<br>to receive a<br>fair price | Supply<br>promise<br>contract<br>Price<br>monitoring | 1 | The price<br>is defined<br>by the<br>State<br>supplier<br>who can<br>offer<br>unfavorabl<br>e<br>conditions<br>for the<br>small<br>producer | Call for<br>expression<br>of interest to<br>know the<br>volume and<br>production<br>capacity,<br>seasonality,<br>reference<br>prices | 1 | They<br>establish<br>mechanis<br>ms to<br>define a<br>price<br>adjusted<br>to the<br>reality of<br>the sector,<br>but they<br>may be<br>insufficient | Publication<br>of price<br>information<br>Calculation<br>of average<br>prices of<br>agricultural<br>foods in<br>wholesale<br>and retail<br>markets | 2 | They<br>establish<br>mechanis<br>ms to<br>define a<br>price<br>adjusted<br>to the<br>reality of<br>the sector                                       |
|--|--|---|---|--|---|--|--|---|---|
| Small<br>farmers<br>face<br>challenges<br>to<br>minimize<br>costs    | Outsourcin<br>g                                      | 1 | The small<br>producer<br>minimizes<br>operating<br>costs, but<br>must<br>finance<br>the<br>increase in<br>costs of<br>the State<br>supplier | Storage by<br>the<br>contracting<br>entity   | 1 | The small<br>producer<br>must<br>assume<br>new costs<br>of<br>contractin<br>g with the<br>State that<br>may put<br>their<br>performan<br>ce at risk  | Storage and<br>distribution<br>by the<br>contracting<br>entity   | 1 | The small<br>producer<br>must<br>assume<br>new costs<br>of<br>contractin<br>g with the<br>State that<br>may put<br>their<br>performan<br>ce at risk |

|   | Small<br>farmers<br>face risks<br>that may<br>increase<br>the cost of<br>the<br>contract | 0 | The small<br>producer<br>assumes<br>new risks.<br>For<br>example,<br>there are<br>no<br>changes in<br>prices due<br>to<br>fluctuation<br>s in input<br>prices | 0 | The small<br>producer<br>assumes<br>new risks.<br>For<br>example,<br>there are<br>no<br>changes in<br>prices due<br>to<br>fluctuation<br>s in input<br>prices | 0 | The small<br>producer<br>assumes<br>new risks.<br>For<br>example,<br>there are<br>no<br>changes in<br>prices due<br>to<br>fluctuation<br>s in input<br>prices. |
|---|--|---|---|---|---|---|--|
|   | Small<br>farmers<br>cannot<br>satisfy their<br>basic needs                               | 0 | No<br>provision   | 0 | No<br>provision   | 0 | No<br>provision  |
| 3.<br>Outcome:<br>Small<br>farmers<br>improve<br>life quality | Public<br>services<br>are<br>available in<br>the rural<br>areas                          | 0 | No<br>provision   | 0 | No<br>provision   | 0 | No<br>provision  |
|   | Security is<br>an issue  | 0 | No<br>provision   | 0 | No<br>provision   | 0 | No<br>provision  |
|   | Infrastruct<br>ure is not<br>available   | 0 | No<br>provision   | 0 | No<br>provision   | 0 | No<br>provision  |

|  | Small<br>farmers<br>cannot<br>access new<br>markets<br>without<br>preferential<br>treatments |   | 0 | No<br>provision  | 0 | No<br>provision |  | 0 | No<br>provision  |
|--|--|---|---|--|---|-----------------|--|---|--|
| 4. Impact:<br>Small<br>farmers<br>increase<br>productivi<br>ty | Small<br>farmers do<br>not invest  | Training<br>programs<br>in<br>financing<br>agricultura<br>l projects<br>Institution<br>al<br>articulatio<br>n | 1 | Measures<br>are<br>establishe<br>d but may<br>be<br>insufficient<br>to achieve<br>the<br>purpose | 0 | No<br>provision | Investment<br>programs in<br>productive<br>projects      | 1 | Measures<br>are<br>establishe<br>d but may<br>be<br>insufficient<br>to achieve<br>the<br>purpose |
|  | Small<br>farmers are<br>not<br>competitiv<br>e   | Programs<br>to improve<br>the<br>capacities<br>of<br>producers  | 1 | Measures<br>are<br>establishe<br>d but may<br>be<br>insufficient<br>to achieve<br>the<br>purpose | 0 | No<br>provision | Programs to<br>improve the<br>capacities of<br>producers | 1 | Measures<br>are<br>establishe<br>d but may<br>be<br>insufficient<br>to achieve<br>the<br>purpose |
|  | Business<br>ecosystem  |   | 0 | No<br>provision  | 0 | No<br>provision |  | 0 | No<br>provision  |

| is not    |  |  |  |  |  |
|-----------|--|--|--|--|--|
| developed |  |  |  |  |  |

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