

Spurring innovation-led growth in LAC through public procurement

XII Annual Conference on Government Procurement in the Americas

Wednesday November 30

Montego Bay, Jamaica

Diego Moñux, SILO

Available at:

<https://publications.iadb.org/handle/11319/7972>



Index

- 1. Objectives of the Report**
2. Overview of LAC country cases
3. Recommendations for LAC countries and IDB

1. Report for the Inter-American Development Bank: Best practices in PPI and applicability to Latin America and Caribbean Countries

Science and Innovation Link Office (SILO) and Manchester Institute of Innovation Research (MloIR) are glad to **advance the knowledge on the role of public procurement as a demand-side policy instrument for stimulating firm innovation in Latin American and Caribbean countries through the elaboration of the Report** “Spurring innovation-led growth in LAC through public procurement” for the IDB



Objectives of the Report:

1

Getting acquainted with the state of the art on the range of innovation-friendly procurement policies that have been implemented in developed economies.



2



Identifying innovation friendly procurement policies implemented in 2 LAC countries and assessing their goals, their specific design, the obstacles they have encountered in the implementation and their effects (when available).

3

Developing **recommendations** on how LAC countries can include public procurement in the innovation policy mix.

Index

1. Objectives of the Report
- 2. Overview of LAC country cases**
3. Recommendations for LAC countries and IDB

2.1. The context is given in LAC countries for the interest in demand side policies to emerge but initial attempts for PPI-PCP remain frail

1. **LAC countries innovation policy has a ongoing and lively debate**, that makes them eager to welcome more effective policies, due to a combination of:
 - Growing need of achieving economic growth that is based on added value, higher productivity and innovation (and thus more resilient to changes of prices in traditional commodities)
 - General deception over the performance of supply side policies: specifically with regards to the effect that they have had in fostering capabilities for and demand of R+D+i in local companies.
2. Growing **consensus in OECD countries** about the need of achieving an **appropriate balance between supply and demand side policies**: 75% of EU member states have demand-side policies on their policy agendas

Widespread interest in demand side policies

- Price Based: Demand Subsidies, Demand tax incentives
- Awareness measures, labels, information campaigns
- Regulation
- **Public Procurement**

But in concrete terms, few countries are taking further action because barriers are particularly high:

In STI leading countries...



- Regulatory complexity
- Limited ability to manage risk (both in the suppliers' and the buyers' side)
- Potential conflict between policy objectives
- Lack of capacity and resource constraints in contracting authorities.

Which can be aggravated in LAC countries



- Level of deinstitutionalization
- Higher risk of corruption in most LAC countries (regulatory issues and coordination mechanisms between buyer and supplier should be treated even more carefully)
- Lower local capabilities for innovation

2.2. But there are 5 reasons that suggest LAC countries should go for a PPI-PCP policy despite these difficulties

1

Allows LAC governments to **pursue their objectives** and in a more **effective manner**

2

Allows the **simultaneous pursuit of many objectives** that may seem contradictory

3

Reduces the mismatch between producers of innovative products and end-users and lessens market uncertainty

4

Enables **technology diffusion**

5

Finds echo and support in **new and consolidating key stakeholders** in LAC countries

2.3. Background in demand side policies and identification, specification & signalling of needs



1 Strategic sectors

Identification of strategic areas and development of tools to foster synergies between academia, entrepreneurs and public sector in such areas have been a common feature of STI and industrial policies in these countries:

- **CORFO's Strategic Programs Initiative** in Chile (which has identified 9 strategic areas)
- **Colombia's *Rutas Competitivas***, a key project of *Programa de Transformación Productiva*
- Brazil's 'Innovation Enterprise Program' which thematically identifies strategic areas of national interest or with demand potential and support the development of those areas in a systemic way

However, **lack of long term commitment and support has been identified** in Colombia and Chile as a weakness that hinders better results in these areas (thus many examples of changes in priorities can be cited).



2 Challenge-oriented R&D+

Due to the concern over excessive focus on horizontal policies that focus on research and which have yet failed to foster local demand for innovation and to channel private investments towards later stages of innovative product development, **mechanisms to generate demand-oriented R&D+I have been established in all three countries** (in different areas):

- **Innpulsa's open innovation** platform for oil and mining sector
- ***Minería de Alta Ley* in Chile**, already released an early demand map with matching/required technologies
- **National Knowledge Platform Program (Brazil)** identifying leading-edge areas and debating technological development proposals



3 Social Innovation

Concerns in these aspects have **wide political support** and are increasingly addressed through programs both at the national and at the local level:

- **Colciencias and Antioquia** with programs aiming at solving key problems faced by communities citizens
- **Chile LABGOB with AULAB and ImpactaSalud** also intending to identify innovative solutions to problems and limitations in the government's service provision

Regardless of their relatively small scale these initiatives can be **valuable to identify preparedness level of PP to formulate their needs in functional terms** and to examine suitability of current contracting figures to acquire the solutions that are developed, among others (as has already happened in Colombia)

2.4. First attempts in Innovation Procurement (PPI-PCP)

CHILE

- ✓ CPCDC* recommends implementing, in the long run, coherent and strategic demand side policies through an **“innovation procurement strategy”** and a **legal framework that fosters innovation** and the establishment of standards and norms
- ✓ **PPI-PCP policy is currently under construction under the leadership of MINECO’s innovation division** with support of an inter-ministerial committee and has the participation of Chilecompra
- ✓ **Laboratorio de Gobierno** has launched two open innovation pilots for the government’s services: Impacta Salud y AULAB serve as a basis for establishing capabilities in the identification of challenges at the public level and the selection of best projects based on a specific need. They also open a very valuable space for the government to become a first user of innovative technologies.
- ✓ **Innovation in public procurement is simultaneously underway with the leadership of Chilecompra**

BRAZIL

- ✓ There has been **no notable leader for PPI-PCP but rather a series of initiatives in several sectors**. Each with their own approach on PPI-PCP

National Champions (two examples):

- **Petrobras** procurement of a leading-edge stationary product unit ‘P-51’ which might have focused too much on local content instead of innovation.
- **National Institute for Space Research (INPE) China–Brazil Earth Resources Satellite (CBERS) program**. INPE exercised its functions of driving innovation from both supply and demand sides, with a clear need to be addressed, and hence improved significantly in its capabilities of understanding the nature of the innovation process and perform as a lead user. a successful example illustrating how developing countries could work together to catch up with technological frontiers in strategic sectors
- ✓ Most PPI processes that have taken place in Brazil are related to **innovation with an incremental nature, i.e. ‘adaptive PPI’ rather than ‘developmental PPI’**.

COLOMBIA

- ✓ **Leadership of PPI-PCP has been centralized in Colombia Compra Eficiente (CCE)**.
- ✓ CCE has already designed a **PPI policy** which includes interventions in the areas of long term vision and political commitment, legal frameworks, governance and planning and execution support.
- ✓ The official launching and implementation of this policy has been determined to be subject the **lessons drawn from a series of workshops as a well as a set of pilots of PPI-PCP** whose implementation is still in a very early phase and, given the difficulties they have already encountered it even makes it difficult to be sure that they might move to the next one.

*Comisión Presidencial “Ciencia para el desarrollo de Chile”

Index

1. Objectives of the Report
2. Overview of LAC country cases
- 3. Recommendations for LAC countries and IDB**

3. Recommendations for LAC countries

Although there is no single road to success, there are some common features in processes of successful implementation of PPI-PCP...

Where to start? LAC countries have hard decisions to make based on their own specific context.



Five recommendation areas



1. Shared vision of PPI-PCP value and suitability



Part 1



- PPI-PCP implementation is hard even in countries with exceptional capabilities for STI and/or highly developed PP systems: sustained political commitment has been a common feature in successful implementation of PPI-PCP
- Inclusion of wider societal objectives in PP (innovation or any other) might require countries to have gone over earlier stages of compliance with regular PP procedures

Part 2



- Concerns over corruption were critical in limiting advances in PPI-PCP (even with CPB on board): high corruption indexes may even be a full deterrent for PPI-PCP before that is corrected
- Both a vision of what PPI is and why it is promising is still lacking: this undermines the capability of leaders to engage key stakeholders

1

Why encourage it and how suited is the country to do so: Start with a realistic assessment of objectives and capabilities:

- 1) a shared vision of what PPI-PCP is and the reasons that make it worthwhile
- 2) a systematic analysis of the country's initial capabilities and the specific roadmap that must be designed ad hoc for each country.

2

Sustained political commitment and long-term vision.

The institutionalization of PPI-PCP policies require long cycles that well overcome a single political term. PPI-PCP needs continuity in the political commitment which can be embodied in laws, parliament mandates, government plans or multi-annual commitments to PPI-PCP investment - regardless of the political leaders that are in power.

2. Political Leadership and Key Stakeholders



Part 1



Leader -ship	Pros	Cons
Centralized/ CPB	<ul style="list-style-type: none"> + security for procurers + influence over legislative framework Stablished communication channels with providers and procurers + Likelihood of having received a high level mandate to promote PPI-PCP 	<ul style="list-style-type: none"> Horizontal approach - Commitment to fostering innovation or conflicting objectives - purchasing power (except FA)
Scattered/ Sectorial	<ul style="list-style-type: none"> Inner motivation given: - less need for sectorial-specific incentives + purchasing power and better knowledge promising pilots + projects follow closely the sector's logic: better chance of being rapidly developed 	<ul style="list-style-type: none"> Lack of centralized policy might blur the final objectives of PPI-PCP Less likely to be resilient(other PP policies might serve their missional purposes better.)

Part 2



Key stakeholders:

- In LAC countries SOEs pose several advantages such as a wider perception efficiency and value-for-money as well as better understanding and closeness with the productive sector.
- Industry federations and branch organizations can play in overcoming the distrust of the private sector in the public market: strong political standing, representing interests of several companies simultaneously (fair competition), strong players in R&D activities

3

Build a strong leadership based on inter-institutional alliances:

leadership that overcomes political cycles is more likely to occur if programs and policies around PPI-PCP (rather than just projects and pilots) are shared between different agencies of the government (+ expertise centers and helpdesks for PP)

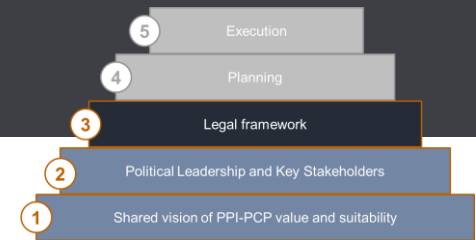
4

Build over existing capabilities and strengths in the institutional level:

Choosing the right path and the right partners to start with can determine the overall success of a PPI-PCP strategy.

- Prescribers: CPBs pose significant advantages (experience in value-for-money in PP and might reduce uncertainty for procurers)
- Potential procurers: evidence points to the SOEs

3. Legal framework



Part 1



Although PPI-PCP is not a specific type of contract the truth is that specially designed legal frameworks have had a positive impact over PPI-PCP uptake (for instance, EU directives and their consequent transposition have had a considerable impact over uptake of PPI-PCP)

Part 2



- There are specific elements within many LAC countries' legal framework that allow for PPI-PCP
- Positive nature of legal framework in LAC countries and concerns over corruption have contributed to the perception that a PPI-PCP-specific legal framework is required.
- There is general atmosphere of change in PP legal frameworks in LAC countries but restrictions to introduce a specific PP framework for PPI-PCP might be restricted for the policy leader

5

Advance with the current legal framework but consider transformation in the long run:

1. Exhaust the possibilities offered by the current framework rather than wait to have one specific: invest in improving PP practitioners' knowledge of these figures and make them user-friendly.
2. The development of a specific framework, either to explicitly allow for traditional PPI-PCP key elements or to design more effective but increasingly complex partnerships to develop such projects, has been a determinant in the dissemination of PPI-PCP in leading countries: it is worthwhile in the long run

4. Planning (1/2)



Part 1



Good international practice points to **choosing sectors** that have strategic value for the country in question as well as high technological content. Also to identify sectors with public buyers that can be engaged or are already committed to PPI - CPC and managers capable of leading these first efforts.

Areas	Pros	Cons
Sectors with traditionally higher R&D demand	More likely to foster "new to the world" innovation Better knowledge of sector-specific STI processes and agents	May be ineffective in fostering innovation from a broader spectrum of suppliers in areas that require secrecy (e.g. defense) Legal issues and resistance to technologies that change status quo (for instance in health) More likely to have high costs + only long run impacts
Strategic Sectors	Available instruments for coordination Hub for policy discussion and redesign Other complementary capabilities established or under development	Failed experiences in the past Innovation might not be a central objective: other policies might be more adequate
Social innovation	Wide political validation Has areas that require "new to the world" innovation with both high and low R&D content	Might contravene traditional conceptions of Innovation, posing challenges for definitions and measurement (innovative component)
National Initiatives	Usually the hobbyhorse of the high political level Instruments for coordination already under development Hub for policy discussion and redesign and government agencies compete to gain visibility	Innovation might not be a central objective and thus other policies might have more notoriety Political commitment for the projects might be very dependent on political cycles

Part 2



Kick starting PPI-PCP: When deciding to go for the pilots first, the obstacles and successes that the executing agencies undergo can provide feedback to the agency that leads the policy design. This trial and error has proven to be beneficial in some countries, but there's the risk of labelling PPI-PCP as a "difficult practice" by some agents. This might hinder further efforts in the future.

6

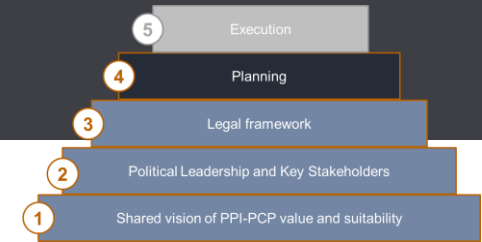
Consider the cost of launching pilots before framing the conditions for success and if there is high risk:

Piloting different PPI-PCP approaches yet at a very *small* scale could be a good starting point for LAC countries to explore the relative appropriateness and effectiveness of various possibilities, and to establish what routes could be the most suitable given their capabilities.

7

Sectorial focus – between strategy and opportunism: sector choice should be shared by key agents of the new PPI-PCP policy and should move between strategy and opportunism.

4. Planning (2/2)



Part 1



Good international practice points to **choosing sectors** that have strategic value for the country in question as well as high technological content. Also to identify sectors with public buyers that can be engaged or are already committed to PPI - CPC and managers capable of leading these first efforts.

Areas	Pros	Cons
Sectors with traditionally higher R&D demand	More likely to foster "new to the world" innovation Better knowledge of sector-specific STI processes and agents	May be ineffective in fostering innovation from a broader spectrum of suppliers in areas that require secrecy (e.g. defense) Legal issues and resistance to technologies that change status quo (for instance in health) More likely to have high costs + only long run impacts
Strategic Sectors	Available instruments for coordination Hub for policy discussion and redesign Other complementary capabilities established or under development	Failed experiences in the past Innovation might not be a central objective: other policies might be more adequate
Social innovation	Wide political validation Has areas that require "new to the world" innovation with both high and low R&D content	Might contravene traditional conceptions of Innovation, posing challenges for definitions and measurement (innovative component)
National Initiatives	Usually the hobbyhorse of the high political level Instruments for coordination already under development Hub for policy discussion and redesign and government agencies compete to gain visibility	Innovation might not be a central objective and thus other policies might have more notoriety Political commitment for the projects might be very dependent on political cycles

Part 2



Kick starting PPI-PCP: When deciding to go for the pilots first, the obstacles and successes that the executing agencies undergo can provide feedback to the agency that leads the policy design. this trial and error has proven to be beneficial in some countries, but there's the risk of labelling PPI-PCP as a "difficult practice" by some agents. This might hinder further efforts in the future.

8

Do not set the bar too high: "new to the country" instead of "new to the world" (hard to develop domestically in short run), but always tackling important problems (with political validation)

9

Develop a suitable evaluation system:
the evaluation system should allow for the monitoring of intermediate steps and milestones (encouraging stakeholders).

5. Execution (1/2): networking mechanisms

Part 1



- Agent articulation instruments and enabling anticipation of demand are essential conditions for the success of PPI-PCP projects: tools that enable this include training workshops -for both entrepreneurs and for procurers-, official guides for public procurers, forums for public-private dialogue, tools for developing technological supply and forward commitment procurement..
- Distrust of the private sector with respect to public procurers as intelligent buyers and their perception of PP as a very slow and complicated procedure deter the most innovative companies to pursue the public market.

Part 2



- Flow of information between procurer and provider is not only insufficient but structural conditions provide incentives for this situation to persist. Despite the fact that LAC countries have advanced considerably in the digitalization of information for public auctions, information may still have a strong “audit-oversight” stigma for procurers.
- Low capabilities for early demand planning and lack adequate mechanisms for demand articulation: early fostering of these this capabilities might even help in generating endogenous interest of procurers in projects that they identify as necessary or could also help providers in identifying technologies that have potential for the public sector.



10

Strengthen the role of the private sector:

The private is key in raising government awareness and in proactively delivering proposals for PPI-PCP projects. LAC countries lack trust between the public and private sectors in the procurement area and networks of R&D intensive business. Cluster support tools, innovation networks and public-private partnerships for technology development are recommended. Initially focus these instruments in sectors that are natural providers of the government and include in their agenda the PPI-PCP.

11

Kick start tools to provide training and to help articulating and anticipating demand:

All of these can be promoted by the public sector through incentives. However, it is also advisable to find ways to enable their promotion by private organizations as this contributes to capacity building in key enterprises (those that are potentially interested in PPI-PCP) while inducing interest among potential public purchasers.

5. Execution (2/2): networking mechanisms

Part 1



- Financing schemes for PPI-PCP have emerged to encourage providers and procurers to develop new capabilities that are needed, to reduce the risk in which both suppliers and procurers incur and, in general, to induce public demand for R&D and innovation (mandatory expenditure hasn't been successful)

- Funds for activities that are meant to consolidate the capabilities for PPI-PCP, such as those that provide interaction spaces for public procurers and private providers, specific training for this purpose, etc.
- Funds for PCP that are executed both for demand induction (in the form of matching grants) and for supplier's support in early stages of the tender
- Funds also available for PPI both for the demand and the supply side but these cover a lower percentage

Part 2



Some LAC countries have a lingering perception that the solutions found through this process are “more expensive” (this is in turn related to the lack of analysis over the whole life cycle of public procurement). It is even more imperative to develop financial incentives in the three areas mentioned above but finding available resources to do so is a challenging.

- Supporting activities: CBPs have experience in managing platforms, helpdesks and training.
- PCP: in most LAC there are STI-agencies that have had the traditional mission of funding R&D in early stages. However, this funding has not necessarily been directed towards a particular need of the public sector.
- PPI: programs in place for catalytic PPI and increased availability of funds in the regional level.



12

Develop “plug and play” financing schemes: additional financing is necessary at least for early stages of PPI-PCP implementation. Financing sources:

- government R&D agencies can contribute to kick-start PCP and might be more inclined to do so if they get financial incentives from multilateral banks.
- a promising option for fostering PPI is to redirect sectorial and regional STI funds towards these projects.

It is also important to go for financing schemes that are easier to implement and that are more attractive to the private provider. SBIR/SBRI schemes are unquestionably promising for PCP implementation while Spain's INNODEMANDA style programs can be a faster track to support PPI.

Suggested areas for IDB action in PPI implementation in LAC countries

- 1. Awareness and capability building:** Foster debate around the topic of PPI in close collaboration with the Inter-American Network on Government Procurement and the Organization of American States (OAS) and disseminate the possibilities of PPI among fiduciary procurement specialists in each IDB country office.
- 2. Review of the criteria in Bank procurement policies:** Use the existing freedom in the definition of selection criteria during the negotiation of transactions and proactively include pro-innovation criteria as much as possible (in the Bank's two procurement policies: consulting and public works). It is also advisable that the IDB recommend their inclusion in any project that can logically attain them.
- 3. Support for instruments incorporating demand side in the STI policy mix countries:** The IDB Division of Innovation and Competitiveness can encourage ministries and innovation agencies to design the instruments suggested in the Report (and actively contribute to this process of design). This should start with a realistic assessment of capabilities and betting on plug and play schemes. It is also imperative to encourage successful implementation of the first pilots, as these can later be showcased.
- 4. Strengthening and promoting increased use of national public procurement systems in IDB-financed operations:** The Strategy for Strengthening and Use of Country Systems (GN-2538) is a policy that can be considered an indirect measure of PPI promotion once the three steps mentioned above have been implemented: PPI will then be spread in IDB projects as well as in locally financed public procurement. The IDB should also concentrate on supporting pilots to be subsequently showcased by focusing on countries where the national public procurement systems allow an easy introduction of innovation-friendly procedures and criteria.



Science & Innovation Link Office

Información adicional

Diego Moñux Chércoles

Executive Partner

Tel: + 34 629 282 402

diego.monux@silocompany.com