TECHNOLOGY FACILITATION MECHANISM

SUSTAINABLE DEVELOPMENT GOALS

Current Approaches to STI Policy Making in the Context of SDGs

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Innovation Calls in Latin America: the immediate STI policy instruments response to Covid-19

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What are the ministries/agencies in charge of Science, Technology and Innovation policy doing to help fight the Covid-19?

19 Latin American countries reviewed

Science, Technology and Innovation ministries or agencies

Between 8-15 April 2020

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Table 2
Covid-19 Innovation Calls by selected countries

	Country	General / Specific Call(s)	Time to apply (days)	Application open or closed (until April 15)	Total budget available (US $)
1	Argentina	General	10	Closed	950,000
2	Bolivia				
3	Brazil	General Specific	22 9	Open Open	9,420,000 940,000
4	Colombia	General	4	Closed	6,660,000
5	Costa Rica	General	n / a	Open	1,250,000
6	Cuba				
7	Chile	Specific Specific	11 n / a	Closed n / a	950,000 950,000
8	Ecuador				
9	El Salvador				
10	Guatemala	General General	n / a 20	Closed Closed	n / a n / a
11	Honduras	Specific	8	Closed	n / a
12	Mexico	General	13	Open	n / a
13	Nicaragua				
14	Panama	General	8	Closed	2,000,000
15	Paraguay	General Specific	17 31	Open Open	n / a n / a
16	Peru	General	5	Closed	1,483,000
17	Dominican Republic	General	n / a	Open	n / a
18	Uruguay	Specific Specific Specific	8 9 11	Closed Closed Closed	139,000 139,000 n / a
19	Venezuela				

Source: own elaboration based on information from the institutions responsible, collected between 8 and 15 April 2020. n / a = not available.

Innovation Calls

The **main initiatives, and in several cases the only ones**, that these institutions are carrying out are calls (contests) for institutions, researchers or companies to present projects to combat Covid-19.

Researchers, institutions and companies prepare and present **their projects, which are evaluated and financially supported** according to the mechanism established by each institution. The available resources are limited, so in general they operate in the form of a **project competition**.

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General vrs. Specific Calls

COLOMBIA
“MinCienciatón”

Call to present projects that contribute to the solution of current health problems related to the COVID-19 pandemic

It finances projects to accelerate proposals from scientists, researchers and innovators to stop COVID-19.

5 thematic lines:
Public health,
Diagnostic Systems,
Prevention and Treatment Strategies,
Equipment and Devices , and
Monitoring Systems.

CHILE
"Covid-19 Innovation Challenge".

Contest that seeks to respond to the needs of protective elements for health personnel (PPE) who care for COVID-19 patients in the country, accelerating the implementation of solutions based on science and technology.

Generate fast implementation **solutions to the local demand for personal protection elements to face COVID19**, such as masks, face shields, protective suits or other initiatives.

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General vrs. Specific Calls

Table 3
General versus specific calls

	#	Countries	Budget (US $)
Number of countries with calls of general scope	10	Argentina, Brazil, Colombia, Costa Rica, Guatemala, Mexico, Panama, Paraguay, Peru and the Dominican Republic.	21,763,000 (does not consider Mexico, Paraguay and the Dominican Republic)
Number of countries with specific calls	5	Protection elements: Brazil, Chile, Honduras, Paraguay Mechanical respirators: Chile, Honduras, Uruguay Diagnostic kits: Uruguay Information to prevent spread: Uruguay	1,890,000 (Brazil and Chile) 1,089,000 (Chile and Uruguay) 139,000 n / a
Total countries considered	13		24,881,000 (only countries with available information)

Source: own elaboration based on information from the institutions responsible, collected between 8 and 15 April 2020. n / a = not available.

In 10 countries these calls have a general scope. That is, the topics to be supported are broad and include the diagnosis, control, prevention, treatment and monitoring of the disease, being able to receive and support projects in any of these areas.

- In general**, these calls of consider both R&D projects**, such as the development of vaccines and medicines for the treatment of the disease**, as well as technological development project**s that solve the shortcomings in the availability of tests , protection elements and mechanical respirators (as in the specific calls of some countries).

Five countries have opted for calls limited to specific topics. Chile, Honduras and Uruguay launched only specific calls and Brazil and Paraguay have both general and specific calls. These specific calls seek to solve problems or bottlenecks, such as the lack of mechanical fans, protection elements (masks) and diagnostic tests.

- **These calls are closer to technological development** and it seems that they involve a more practical approach to solve the problems of availability of equipment.
- A good example of the latter is the call by CORFO in Chile to provide solutions for personal protection, such as masks, face shields, etc. As part of the antecedents of the call, a report from the National Institute of Intellectual Property (INAPI) was delivered with the patents available for these elements. **The signal in this case seems clear: the basic research is already done and now the challenge is how to move quickly to production.**

Budget

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Source: own elaboration based on information from the institutions responsible, collected between 8 and 15 April 2020. n / a = not available.

The total budget available for the calls that have made this information public is **almost 25 million dollars** in total and a simple estimate of the countries not considered could bring this number to just **over 30 million dollars for the 13 countries.** Among the countries that present information, Brazil and Colombia are the ones that would be contributing the largest resources with 10.4 and 6.7 million dollars, respectively.

Considering the type of call**), the largest resources are allocated to calls of general scope with 21.8 million dollars** and the specific ones would receive 3.2 million. The amount that each project could receive varies

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Time and urgency

An element common to all calls is the urgency of the deadlines, both in the time available to present the proposals and in the expected immediacy of their results. Eight of the 13 countries have calls that have already closed their applications, which were open for 9.4 days on average. The five countries that still have open calls will have them for a total of 18.4 days on average.

Table 4
Application time in closed and open calls

	#	Countries	Average time to apply (days)
Number of countries with closed calls	8	Argentina, Colombia, Chile, Guatemala, Honduras, Panama, Peru and Uruguay.	9.4
Number of countries with open calls	5	Brazil, Costa Rica, Mexico, Paraguay and the Dominican Republic	18.4
Total countries considered	13		12.4

Source: own elaboration based on information from the institutions responsible, collected between 8 and 15 April 2020. n / a = not available.

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Reflections and open questions

Quick response

Limited toolbox:
- *when you have a hammer everything is a nail*

Decreased fear to directionality:
- Challenges / mission oriented approach
- Latin America – tendency to horizontal/neutral interventions

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Given the funds available by each country, the research and development capacities, and the urgency for results and the magnitude of the challenge, is this type of competition the most appropriate mechanism?

- The resources assigned to the calls are limited and are distributed among the multiple approved projects, which ultimately makes the amount per project relatively low.

  In calls such as that of Colombia, which is among those with the largest budget with more than 6.7 million dollars, this will be distributed among five thematic areas and in each of them five projects were chosen.

  In specific calls, which are more focused and consider, for example, the provision of key supplies such as masks, face shields, but also more complex equipment such as mechanical fans, the available budgets are lower than in general calls.

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- Of course, there is a rationale behind a contest, but one could question if having several research teams competing in the search for the same result is the best mechanism.
    - Wouldn't it be more convenient to add all these efforts , both intellectual and financial, rather than having different teams competing?
        - In Chile, for example, there were at least 15 research teams in the quest to produce the first mechanical ventilator made in Chile, even before the specific call was launched to support this type of project.
    - Could the formation of a research consortium, a coordinated national project, be forced (not just encourage)?

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Thank you!

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