

# STATE CAPACITIES IN CLIMATE CHANGE ADAPTATION IN LATIN AMERICA

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## KEY POINTS

- ✓ Although there is a good level of professional expertise on climate change in the public sector related to the Environment, it is necessary to increase recruitment, develop specialized areas in other related institutions, and strengthen organization and coordination to deal with the climatic consequences of each country.

## Executive summary

In relation to professional capacities, the ministries of Environment of Latin American countries have trained professionals specialized in climate change. However, there tend not to be enough people and there are few stable jobs. On the other hand, it is necessary to have professionals and more qualified areas in the other institutions related to climate change and in subnational organizations (mainly, municipal/departmental level), in order to be able to address the commitments of adaptation to climate change.

Regarding institutional capacities of the Latin American States, there is a positive vision on the institutional framework developed to deal with climate change, and in this sense, the main challenge is to strengthen coordination among institutions.

In this context, eight recommendations are presented to consider in the implementation of climate policies.

## Resumen ejecutivo

A nivel de capacidades profesionales, los ministerios de Medio Ambiente de países latinoamericanos tienen profesionales capacitados y especializados en cambio climático. Sin embargo, no suelen ser suficientes personas y existen pocas plazas estables de trabajo. Por otra parte, se torna necesario que existan profesionales y áreas más capacitadas en las demás instituciones relacionadas al cambio climático y en los organismos subnacionales (principalmente, a nivel municipal/departmental), para poder abordar los compromisos de adaptación al cambio climático.

En cuanto a capacidades institucionales de los Estados latinoamericanos, existe una visión positiva sobre la institucionalidad desarrollada para hacer frente al cambio climático y, en ese sentido, el principal desafío está en el fortalecimiento de la coordinación entre instituciones.

En este contexto, se presentan ocho recomendaciones para considerar en la implementación de las políticas climáticas.

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## Introduction

Latin America's history in dealing with the impacts of climate change has been quite dissimilar, especially regarding adaptation. Some countries started decades ago, while others still present an emerging institutional framework concerning the issue, but there is extensive evidence of significant progress.

In order to further analyze the state capacities that have led to these improvements, interviews were conducted with twelve key informants from six Latin American countries (Argentina, Brazil, Chile, Costa Rica, Paraguay and Uruguay), as well as a bibliography which was the foundation for the following analysis.

State capacities are essential for the work and development of initiatives of climate change adaptation, and can be understood as "the faculties and abilities of a Government to generate rational public policy processes under conditions of autonomy. Rational public policy processes are the capacity to have the institutional, organizational and human resources required to carry out their functions" (1). It is suggested to distinguish between professional capacities (such as human resources), which refer to the level of specialization and training of civil servants, as well as how many people are required to carry out the assigned tasks. On the other hand, the institutional capacities (such as institutional and organizational resources) that refer to the governance, organizational structure and legal framework that provide support to the work.

According to Bertranou, cited by Ricardo (2), state capacities cannot be analyzed abstractly, but rather in the context of the work and purpose of the agency under study. In this case what is being assessed is not one single agency, but the framework of the public policy regarding adaptation to climate change at a Latin American level.

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## Challenges

Overall, and beyond government changes, Latin America has been showing steady progress in terms of climate matters in the last years. Almost all of the countries studied are developing an institutional and regulatory framework with components aimed at adaptation to climate change. Some ministries are focused on the environment; offices or specialized departments with skilled and qualified professionals; some countries have created spaces for inter-institutional exchange, where civil society and academia often participate: and almost all of them have plans and policies to face the phenomenon.

However, not always does the above turn out as expected. On the one hand, at an institutional level there are significant shortcomings in the coordination mechanisms, as can be observed in the following cases taken from the Knowledge Gap reports of the different countries in the framework of the LatinoAdapta project:

"[Regarding State Capacity] the articulation and coordination problems between the different government levels and areas add even more complexity to the processes of co-creation, adoption and use of knowledge in public policy about climate change adaptation" (as in the case of Argentina) (3).

"Coordination and communication problems are identified among divisions of the same [government] level. There is a lack of knowledge about governance related to climate change" (as in the case of Chile) (4).

“Lack of coordination or institutional coordination will result in duplication of expenses and resources” (as in the case of Costa Rica) (5).

On the other hand, the available human resources are faced with a major challenge in order to meet adaptation needs.

“The lack of preparedness of human resources limits the progress in adaptation strategies. There is a huge infrastructure and human resources deficit regarding the enforcement authority to carry out assessments” (as in the case of Paraguay) (6).

“... 46 % stated that the government agencies responsible for preparing and/or implementing adaptation measures lack the sufficient or skilled human resources needed to analyze and assess the available information” (as in the case of Costa Rica) (5).

“The main difficulties [regarding appropriation and use of knowledge] pointed out by the respondents have to do with the information not being integrated but segmented, the mechanisms for knowledge transfer and the human resources assigned to this subject in the government agencies that develop actions are insufficient, and the level of geographical disaggregation of the information is not appropriate” (as in the case of Uruguay) (7).

“... there is a large percentage of respondents who consider that it is “very relevant” that there is insufficient or lack of capacity of human resources to analyze and evaluate available information” (as in the case of Chile) (4).

Due to the exploratory nature of this paper —since there is no specific information about State capacities regarding adaptation to climate change—, the diagnosis is mainly related to the results of the national reports developed in the framework of the LatinoAdapta project, together with the answers from the interviews. Based on that, four main constraints have been identified:

→ **Lack of permanent staff.** All respondents mentioned the importance of having a greater number of staff involved in the subject in order to address the existing needs. There are many precarious workers in climate change offices: although there are some plant positions, there is a big number of professionals hired for specific projects, which at the end of their term do not continue to work for the government. The interviewees are concerned about the high turnover, since it involves high costs and can lead to a loss of continuity in the processes and loss of knowledge and experience (8). This problem is related to the low budget available for recruitment in this field.

→ **Lack of adaptation training tools.** All the respondents pointed out that in general there is lack of support to improve staff capacities in adaptation and climate change. On the one hand, there are no permanent training and specialization mechanisms for specific climate change matters. This refers to State instruments that foster the training of their professionals, through which staff are encouraged to learn and further understand the issues, either through the funding of postgraduate courses or generating courses within the State (through their own platforms). On the other hand, there are few formal specialization programs associated to adaptation issues (such as integrated coastal management, management of protected areas, sustainable urban planning, among others). However, there are some informal training courses to which civil servants can apply. All the countries under study have training platforms for civil servants (9) but these are focused mainly on other issues, and occasionally we find some courses that are somehow related to adaptation. Some examples of this can be seen in Tables 1 and 2.

→ **Weak capacities at sub-national level.** Despite not having specific information in relation to sub national capacities regarding climate change in Latin America, the people interviewed stated that at national level the capacities are notoriously lower, both institutional and professional. Although there are larger municipalities/departments/cantons with good capacities (especially in metropolises), most of them are smaller and have fewer resources. Concerning adaptation or climate change, it was mentioned that there is often not a specialized area, and there are no professional experts that focus on this. In general, the literature also exposes precarious employment in local governments which affects capacities: low salaries, high staff turnover (due to changes in administration), poorly prepared professionals, deficient infrastructure (10-12).

→ **Poor Coordination.** According to the respondents, one of the main challenges is the coordination between the different sectors, which is extremely difficult when ministries do not have a trained and competent focal point. This becomes worse when the people in charge of monitoring climate change issues have to also manage other matters, which reduces their possibilities of handling the issues appropriately. This analysis matches the LatinoAdapta diagnosis reports, and highlights the lack of cooperation among institutions and work and information fragmentation (3, 9, 13) that also affects coordination.

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## Recommendations for state capacity building

Great progress can be achieved by climate agencies and there can be political will to move forward on adaptation mechanisms, but if there is not enough professional capacity or coordination between those involved, any effort to create policies will be limited and the advances will be slower than expected.

The following recommendations are made to strengthen state capacities and thus achieve the adaptation goals of the different countries.

### 1. Formalize the recruitment of climate change personnel

Ensure greater stability of work teams in order to keep knowledge and experience within the State. To achieve this, the number of staff must be increased (and therefore, increase the budget), considering the requirements, commitments and functions. It is also important to have a professional team specifically focused on climate change adaptation matters, and highlight this issue as the alternative for dealing with the effects that are already being experienced in the territories.

### 2. Strengthen civil servant training on adaptation

Adaptation is a cross-cutting issue in many areas of the government, not only related to the environment, which makes it increasingly more important that staff from diverse sectors (public infrastructure, urban and rural planning, housing, energy, transport, health, etc.) internalize the concepts and include them in their daily tasks. In this way, they will generate actions and products that take into account trends and forecasts related to the climate variability and its effects.

Following are four training proposals. Tables 1 and 2 show some cases of State training.

**a. Increase the number of training courses on climate change.** This requires a close relationship with the academia and specialists to create courses and postgraduate courses that foster the development of professional training initiatives on adaptation to climate change in different areas. These courses could be part of the training systems of each country with no need to develop anything new. It is also recommended to encourage the development of informal training, such as short courses, workshops, seminars and other events that can provide specific knowledge to staff. Some examples that currently exist are workshops held by municipality networks facing climate change in Argentina and Chile (RAMCC and REDMUNICC, respectively), courses by the Latin American Social Sciences Institutes (FLASCO in Spanish) or by United Nations agencies (ECLACL, UNDP, FAO, etc.) as well as events organized by public bodies in charge of climate change.

**b. Promote training in these areas.** It is important to keep professionals trained and updated on trends and knowledge related to climate change and adaptation alternatives. To that end, a formal system of incentive and promotion of training should be created: staff should be encouraged to register and participate actively, with funding, time to attend classes, and associated to a career. Moreover, distance learning courses or e-learning should be prioritized as it allows access from different places in every country.

**c. Strengthen capacities at a sub national level.** It is necessary to have a specific area within national planning and organization on climate change, focused on the development of municipal capacities, since the lowest levels of governance tend to have less access to resources. It is important to consider the relevance and applicability of resources, and not to lose sight of more basic issues such as availability of computers with internet access and available time of staff (due to the amount of issues they deal with).

**d. Provide training to decision-makers.** Decision-makers must manage terms correctly and be able to analyze information, especially in the context of climate change adaptation which is multidisciplinary in nature, and therefore requires a broader assessment than that of the specific sector.

Table I

**SUBDERE Academy – Chile (14)**



Academy aimed at preparing and improving human capital at municipal and regional levels. Accredited courses, diplomas and seminars. The topics covered are diverse, including some related to adaptation to climate change (e.g.: Municipal Environmental Management and Waste Management).

For more information: [www.academia.subdere.gov.cl/](http://www.academia.subdere.gov.cl/)

Table II



#### Capacities Training Course – Brazil (15)

Training course for civil servants on integrated urban management public policies, focused on urban planning in municipalities. Also provides training for civil society.

For more information: [www.capacidades.gov.br](http://www.capacidades.gov.br)

### 3. Develop Climate Change areas in the different ministries

Each ministry should establish an area exclusively responsible for integrating climate change into its sector. This mission is directly related to the inter-institutional work on the subject, and therefore those responsible for this must be able to work in coordination with the other ministries.

### 4. Allocate resources to sub national levels for the recruitment of people or teams trained in climate change adaptation

The impacts of climate change directly affect the territory, and it is essential to consider the expected consequences. Therefore, municipalities need to be integrated at country level in climate change adaptation strategies. This approach should provide them with specific powers and responsibilities, together with required resources. It must essentially provide them with human resources, and at least one professional that is directly responsible for the subject and who ideally addresses it in a cross-cutting manner with other areas of work.

### 5. Strengthen coordination mechanisms

Due to the interdisciplinary nature of climate change, organization and coordination of the different areas involved is essential. Therefore, it is important to take into consideration this aspect when selecting the professionals who will be responsible for climate change in each government body. Often “consultancy” positions are filled based on political factors. However, given the technical and scientific nature of the subject, it is important that those in charge are good at handling issues, ideally with expertise, and without neglecting other knowledge and abilities that contribute to the development of public policies.

On the other hand, institutionalizing the process of involvement of the different public actors (and even other sectors, such as the private sector, civil society and academia) is recommended. This means: formally establishing the way in which climate change matters will be addressed, focused on how to achieve an appropriate adaptation. Table 3 shows a successful Uruguayan case in the coordination of institutions related to climate change.

Table III



**National Response System to Climate Change and Variability (SNRCC) – Uruguay**

In operation since 2009, it is a coordination body of public institutions (national and sub national) and private institutions to jointly plan and develop actions for the prevention of climate risks and face mitigation and adaptation to climate change. This system has been a reference within the region and has been adopted by several countries.

For more information: <http://www.mvotma.gub.uy/snrcc-inicio>

## 6. Foster the creation of networks and working partnerships

There is a need to work synergistically to address adaptation from its multiple angles. This synergy must focus on a joint effort of public institutions (national and sub national) with academia, private companies and civil society. These collaboration and cooperation instances bring up valuable experiences and knowledge that help in decision-making and developing work. Furthermore, these networks and associations can focus their efforts in strengthening the group's capacities, with courses, workshops, seminars, etc. One successful case is the Argentine Network of Municipalities against Climate Change (16), which brings together over 190 municipalities, and encourages resource mobilization and coordination between municipalities as well as with other institutions. As a result, this fosters the capacities of the institutions as a group. Another interesting case is the Single Registry of Municipal Associations of Chile (17) implemented by the State through the Sub-secretariat for Regional and Administrative Development, to promote association between municipalities, with benefits such as special funds for registered associations.

## 7. Revaluing professional experience

At times the public structure can be extremely rigid as to what is possible and what is not regarding the work planned for the year. Nevertheless, within the plans there is greater flexibility in how to achieve the expected product. The creation of spaces for innovation and creativity for new ideas on how to overcome the challenges of adaptation is therefore suggested. Although the concept of innovation is usually associated with the use of technologies and economic issues, there is also an interesting area for innovation in public policies (18). An example of this would be to promote an organizational culture within the department or area of climate change, focused on seeking innovative solutions to current and forecasted problems of climate change. This could also encourage young specialists and creative people to join state bodies as they could become factors of change.

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