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South-South Ideas

South-South Cooperation, an opportunity to fight against climate change and reduce inequalities

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List of Acronyms

ACTO	Amazon Cooperation Treaty Organization
AECID	Spanish Agency for International Development Cooperation
AFD	Agence Francaise de Développement
ALBA	Alianza Bolivariana para los Pueblos de América
BMZ	German Cooperation
CAF	Development Bank of Latin America
CAN	Andean Community of Nations
CCF	China-CELAC Forum
CDM	Clean Development Mechanism
CELAC	Community of Latin American and Caribbean States
CO2	Carbon dioxide
COICA	Coordinator of the Indigenous Organizations of the Amazon Basin
CSO(s)	Civil society organization(s)
CTB	Belgian Technical Cooperation
CTF	Clean Technology Fund
ECDC	Economic Cooperation among Development Countries
ECLAC	Economic Commission for Latin America and the Caribbean
FCPF	Forest Carbon Partnership Facility
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIZ	German Cooperation
GruS	Grupo de Socios Para el Desarrollo de Bolivia
HIPC	Heavily Indebted Poor Countries
IADB	Inter-American Development Bank
IMF	International Monetary Fund
INE	National Statistical Institute of Honduras
IPCC	Intergovernmental Panel on Climate Change
KOICA	Korea International Cooperation Agency
MDG	Millennium Development Goals
MDP	Ministry of Development Planning (Bolivia)
MFAHM	Ministry of Foreign Affairs and Human Mobility (Ecuador)
NCCP	National Climate Change Programme
NDCs	National Determined Contributions
NGO(s)	Non-governmental organization(s)
OAS	Organization of American States
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
PDES	Economic and Social Development Plan of Bolivia
PRECIS	Providing Regional Climates for Impact Studies
REDD	Reducing the Emissions from Deforestation and Forest Degradation
SDG(s)	Sustainable Development Goal(s)
SECI	National System of International Non-reimbursable Cooperation (Ecuador)

SEGIB	Ibero-American General Secretariat
SEPLAN	Technical Secretary for Planning and External Cooperation (Honduras)
SETECI	Technical Secretariat for International Cooperation (Ecuador)
SICA	Central American Integration System
SRECI	Secretary of Foreign Affairs and International Cooperation (Honduras)
SREP	Scaling-Up Renewable Energy Programme
SSC	South-South Cooperation
TCDC	Technical Cooperation
TCP	Tratado de Comercio de los Pueblos
UN	United Nations
UNASUR	Unión de Naciones Suramericanas
UNDP	United Nations Development Programme
UNEP	United Nations Environment Progamme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNOSSC	United Nations Office for South-South Cooperation
USAID	U.S. Agency for Development
US$	United States Dollar
VIPFE	Vice-Ministry of Public Investment and External Finance (Bolivia)
WWF	World Wide Fund for Nature

Executive summary

Climate change is a global negative externality and nowadays it is considered as one of the biggest challenges on Earth. The scale of the efforts and coordination needed to alleviate climate change's negative impacts are considerable. In this context, South-South Cooperation (SSC) presents an opportunity for supporting capacity development in the fight against climate change.

This study seeks to analyse and compare SSC in national initiatives to address climate change in three countries of Latin America: Bolivia, Ecuador and Honduras. The three case studies apply a qualitative methodology and they are based on the data collection and analysis of primary and secondary sources of information. Subsequently, a comparative analysis of the three country case studies examines: existing international cooperation in the country, the legal and institutional framework for climate change and SSC, existing climate change policies and instruments, SSC climate change programmes or initiatives over the past decade, and mapping of relevant stakeholders.

As revealed by the case studies, Bolivia, Ecuador and Honduras show similarities regarding their participation, opportunities and challenges in SSC and climate change. In recent years, relevant actions to deal with climate change and to strengthen SSC have been implemented. However, significant challenges remain in the three countries to effectively articulate cooperation in climate change and SSC.

In the last decade, several reforms took place in the three countries to strengthen SSC normative and institutional frameworks, to promote the use of SSC and to strengthen the role of these countries as SSC providers. Nevertheless, various obstacles still prevent the correct and effective implementation of SSC in these countries. Among the most common barriers, three that can be mentioned are shortcomings regarding the information and dissemination of SSC catalogues, budgetary restrictions, and lack of articulation among stakeholders.

The most visible stakeholders in the SSC scheme are the institutions from the public sector since they manage and oversee the non-reimbursable cooperation and participate in the implementation of SSC initiatives. Other stakeholders, such as civil society organizations and academic institutions, also participate in SSC initiatives but in informal ways, as there is a lack of institutionalized processes to include these stakeholders.

Moreover, the limitations for the implementation of SSC initiatives in climate change are aggravated since there is not an agency that articulates both SSC and cooperation in climate change. Besides, there is not an exclusive category of climate change for the classification of initiatives in the catalogues of initiatives or the official databases, making it difficult to identify them.

The research suggests that SSC in climate change in Latin America is under construction and still faces considerable challenges for its empowerment. The study presents policy recommendations for each of the countries analysed to overcome the identified shortcomings. In general, it recommends the following: i) improve the articulation among stakeholders, ii) improve the registration of SSC initiatives in climate change through the creation of a specific category of climate change in the official databases , iii) improve SSC catalogues through the collection of information not only at national level, but also at local level, iv) strengthen formal negotiation mechanisms between governments, v) look for agreements that allow countries to obtain financial resources through SSC, and vi) study the good practices of North-South cooperation in relation to climate change, and adapt them to the context of SSC.

1. Introduction

Climate change is one of the greatest challenges that humanity is facing today and one of the factors that can systematically aggravate inequalities. Its significance has given birth to disciplines such as the sociology of climate change, or the economics of climate change through which social scientists study, among other things, the impact of climate change in exacerbating existing inequalities.

One of the authors who has worked with climate change, and particularly its relation to inequalities, is the renowned German sociologist Ulrich Beck. Beck points out that climate change globalizes and radicalizes social inequality, both between rich and poor people, and between the core and the periphery. And, at the same time, it dissolves these differences in the face of a common threat to humanity (Beck, 2010).

International organizations, such as the United Nations, also analyse this linkage. The World Economic and Social Survey 2016 by the United Nations Department of Economic and Social Affairs, points out that climate change and inequality are two of the most important challenges that the international community is facing, as they respond to a vicious cycle: multidimensional inequalities lead to increased exposure and vulnerability of the disadvantaged groups to climate hazards (UN/DESA, 2016).

Latin American countries have made important progress regarding public policy to tackle climate change by ratifying the Paris Agreement, and issuing their Nationally Determined Contributions (NDCs) document

Latin America is the second most unequal region in the world (UNDP, 2019), and the effects of climate hazards will exacerbate this inequality. Latin American countries have made important progress regarding public policy to tackle climate change by ratifying the Paris Agreement, and issuing their Nationally Determined Contributions (NDCs) document, which embodies efforts by each country to reduce national emissions and adapt them to the impacts of climate change. But not all countries have made this progress. There is still a lack of political will, limited and inadequate instruments to ensure law enforcement, as well as limited participation of non-governmental organizations to improve climate governance (Konrad Adenauer Foundation, 2016). Besides, the private sector, as a central actor in actions against climate change, must generate clear and sustained commitments for mitigation and adaptation to climate change in consensus with government policies and with the most affected communities.

The scale of the coordinated efforts needed to alleviate climate change's negative impacts is considerable. South-South Cooperation (SSC) could be an important mechanism for supporting capacity development in the fight against climate change. Yet there is limited evidence and research on SSC in Latin America in terms of climate change initiatives and their contributions.

Considering this background, this research attempts to analyse and compare SSC in national initiatives to address climate change in Ecuador, Bolivia and Honduras and the role played by CSOs in this context. In recent years, important actions to deal with climate change have been implemented in these settings. However, great challenges remain in the three countries to achieve efficient adaptation and mitigation measures for climate change and reduce socioeconomic inequalities, which is an opportunity for SSC.

In addition, the study contributes to the analysis of the existing state capacities for climate change and SSC management in the three countries. State capacities are understood as the ability of the State to formulate public policy objectives and to meet them. Grindle (1997) identifies four dimensions of state capacities: 1) technical capacities, understood as the ability to administer policies and analyse public policy options, based on specific knowledge linked to the purposes of state organization; 2) administrative capacities, that refer to the ability of states to provide goods and services; 3) institutional capacities, understood as the ability of states to establish and enforce the rules that govern political and economic interactions and that are based on existing legal mechanisms, and; 4) political capacities, that refer to the ability of states to take into account the demands of society and their ability to influence other actors to achieve a goal (Bertranou, 2015).

Several authors have taken this classification as a basis and proposed a different configuration. To simplify the analysis of state capacities, Alonso considers that technical and administrative capacities can be conceptually unified and that institutional and political capacities are interwoven (Alonso, 2007). For the purposes of this research, state capacities will be analysed in terms of the State's management of SSC and climate change through the technical-administrative and political-institutional dimensions in the three countries.

This document is organized as follows: first, an analysis of the context of climate change, international cooperation and the role of CSOs in Latin America is presented. The second section consists of the presentation of the methodology used for the country case studies. The Bolivian, Ecuadorian and Honduran case studies are then presented, followed by a comparative analysis between the countries. Finally, the general conclusions of the study and the policy recommendations for each of the three countries are presented. As a supplementary document, the research includes an annex that provides elements on how such a study could have its methodology adapted to be applicable in other Latin American and Caribbean contexts.

2. Background

Climate change in Latin America

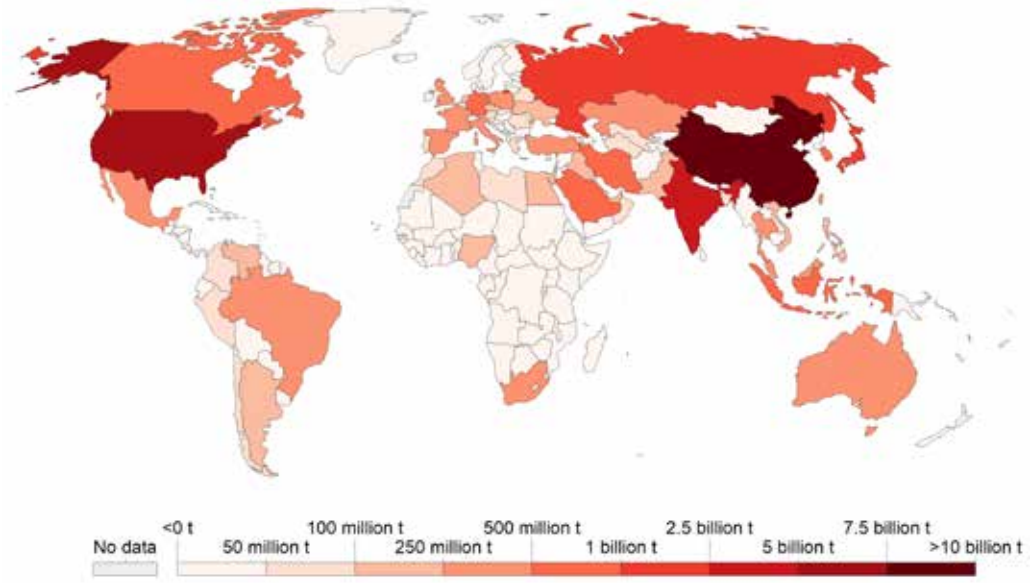
Climate change is a global negative externality (Stern, 2007), and nowadays, it is considered as one of the biggest challenges on Earth (UN & ECLAC, 2015). Although climate has been changing from the beginning of the Earth's history (Rahman, 2012), there is evidence and a generalized consensus among scientists that human activities have driven most of the climate change that is currently being experienced. The human activities that are directly related to climate change are those involving the burning of fossil fuels, deforestation and the use of certain chemicals (National Research Council, 2012; Lackner, Chen, & Suzuki, 2017). These activities, which involve emissions of greenhouse gases, have raised global temperatures and sea levels, changed precipitation patterns and diminished the amount of snow and ice, among others (UN & ECLAC, 2015).

Worldwide, in 2014, the primary sources of emissions were attributable to energy production (71 percent), agriculture (11 percent), changes in land use and forestry activities (7 percent), industrial processes (6 percent), waste (3 percent), and bunker fuel (2 percent). Nonetheless, the pattern in Latin America and the Caribbean is different. The emission structure is cleaner, but it contains a larger proportion of emissions due to changes in land use. The main sources of emissions in the region, in that same period, were the energy production (46 percent), agriculture (23 percent), and changes in land use and forestry (19 percent). The rest of the emissions come from industrial processes, waste and bunker fuel (ECLAC, 2018).

Although within the region there are relevant global emitters such as Brazil and Mexico, which figure in the top 15 greenhouse gases emitters, contributing 2.3 percent and 1.5 percent of the global emissions respectively (World Resource Institute, 2020), Latin America, as a region, has not significantly contributed to climate change. According to the cumulative CO2 emissions over the period from 1751 to 2017, Latin America and the Caribbean represented less than 5% of the global CO2 emissions (Ritchie & Roser, 2019)[1]. Besides, as shown by Figure 1 and 2, when the total emissions are compared to per capita emissions, the region does not to figure as the most relevant CO2 emitter, as is the case of the United States, Canada, Australia, Saudi Arabia and United Arab Emirates.

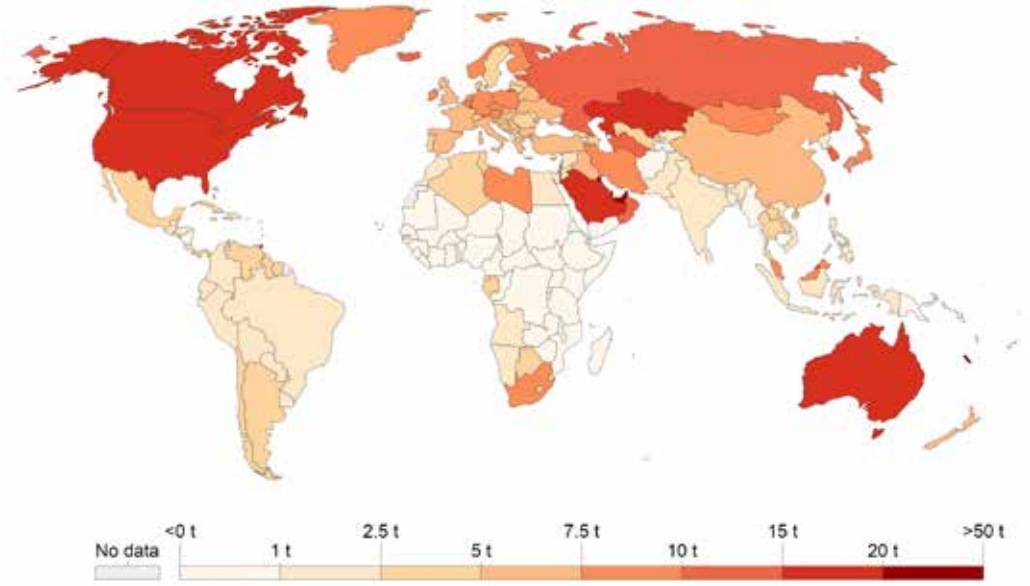
[1] Based on data from the Global Carbon Project (GCP) and Carbon Dioxide Analysis Center (CDIAC)

Figure 1. *Annual CO_2 emissions by country, 2018*



Source: Global Carbon Project; Carbon Dioxide Information Analysis Center in Our World in Data: OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/

Figure 2. *Annual per capita CO_2 emissions by country, 2018*



Source: OWID based on CDIAC; Global Carbon Project; Gapminder & UN in Our World in Data: https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions/

In despite of this, the region is particularly vulnerable to the effects of climate change. Inherent characteristics of the region, such as its diverse geography, economic activities that depend on climate conditions (e.g. agriculture, cattle farming, fishing, and tourism), economic dependence on natural resource extraction, social-economic composition, inequality and high biodiversity are some of the factors that contribute to its vulnerability (UN & ECLAC, 2015; ECLAC, 2017; 2018).

Climate change could cost Latin America around 1.5 percent to 5 percent of its Gross Domestic Product (GDP) per year

According to the Economic Commission for Latin America and the Caribbean (ECLAC, 2014), climate change could cost Latin America around 1.5 percent to 5 percent of its Gross Domestic Product (GDP) per year. Some relevant expected impacts of climate change for the region are related to agriculture (decrease in food production and quality, price increases, dependence on imports), water (decreased availability of water for human consumption and agricultural purposes, floods), biodiversity (change of land use, forest reduction, loss of biodiversity and ecosystem services), health (changes in diseases for humans, animals and crops), tourism (loss of infrastructure and environmental services, increase in temperature and sea level), and poverty (reduction of income of vulnerable groups, increased inequality). Besides, negative impacts are expected on important geographic areas such as the Andean glaciers and the Amazon region, which will also have impacts on the population (UNFCCC, 2007; UN & ECLAC, 2015). All of these will affect the livelihoods of communities, putting food security at risk, increasing health risks and increasing poverty and inequality (Alianza Clima y Desarrollo & Overseas Development Institute, 2014).

However, the region can adapt to the effects of climate change at an annual cost of 0.5 percent of its GDP (ECLAC, 2014). Due to the high inequality experienced in the region, the socio-economic impacts could be aggravated for women, children and the elderly (Alianza Clima y Desarrollo & Overseas Development Institute, 2014). Thus it is imperative that the region implements actions to tackle climate change and protect the most vulnerable groups.

Adaptation and mitigation

There are two main strategies to cope with climate change: mitigation and adaptation. On the one hand, mitigation actions seek to limit greenhouse gas emissions and improve their absorption, for instance, by protecting the forests. On the other hand, adaptation focuses on adjusting the natural and human systems to reduce their vulnerability and reduce the negative effects of climate change by allowing the systems to cope with its actual and future effects (UNEP, 2001; Olmos, 2001; ECLAC, 2017).

Due to the urgent need to tackle climate action, different countries from Latin America have established ambitious commitments in terms of both mitigation and adaptation. For instance, in 2015, Mexico was the first developing country that released a national climate plan, where it committed to reducing 22 percent of greenhouse gas emissions by 2030 (Overseas Development Institute and Heinrich Böll Stiftung, 2019; UNEP, 2015) and all the countries in the region have submitted their Nationally Determined Contributions[2]. Moreover, in the Climate Action Summit that took place in New York in September 2019 (UN, 2019), the countries mentioned a wide diversity of initiatives and commitments, for instance:

- Colombia: committed to planting 180 million trees by 2022, practising sustainable cattle farming and providing incentives for electric mobility.
- Ecuador: committed to advancing in the process of reducing the emissions caused by deforestation.
- Peru: created a new initiative together with other 41 countries against air pollution.
- Bolivia: committed to creating a restoration plan for the Bolivian Amazon, recovering aquifers and biodiversity and increasing the capacity to adapt and overcome the country's water vulnerability by tripling the water reservoirs by 2030.
- Chile: the country has managed, with the help of the United Nations, to have 30 nations commit to neutralizing their carbon emissions by 2050.

[2] See the NDC Registry for the latest submission date: https://www4.unfccc.int/sites/NDCStaging/Pages/LatestSubmissions.aspx

Additionally, Latin America has implemented a set of public policies for climate change. Adaptation policies have focused on water resources, agriculture, biodiversity, energy and tourism. Meanwhile, mitigation strategies have been related to energy, agriculture, transport, forestry and waste. Two relevant mitigation policies have been those related to the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Forest Degradation (REDD). Both mechanisms have contributed to the reduction of greenhouse gases; the CDM by promoting changes in the energy matrix, while REDD has reduced emissions from deforestation (ECLAC, 2017). The latter has been a fundamental mechanism since Latin America has the second highest rate of deforestation worldwide, after Africa. (CEPAL, 2014b).

Unfortunately, despite the advances in legislation, public policies and commitments, previous analysis has demonstrated various shortcomings in the actual implementation of the regulations and initiatives in the region. Some frequent problems are the lack of articulation of climate policies with the legislation in other areas leading to opposing objectives and lack of priority of climate policies. Besides, the initiatives often respond to context-driven situations or to individual initiatives that do not have sustainability over time, or the policies are not implemented due to lack of resources. All of these factors affect the effectiveness and potential impacts that the climate policies could have (ECLAC and European Union, 2015; Spinkin and Rojas, 2016).

Climate change and inequality

Climate change will have worldwide impacts; nonetheless, the effects will not be evenly distributed among regions and countries. At the same time, climate change will also have asymmetrical effects within countries, affecting individuals in distinct ways and to a varying extent. These different impacts will be marked by people's socio-economic status, age and gender, among other factors (UN & ECLAC, 2015; ECLAC, 2017; Islam & Winkel, 2017).

Available evidence shows that poverty and inequality will increase due to climate change. Estimates suggest that developing countries will bear around 75 to 80 percent of the costs of climate change due to them being the disadvantaged groups: for instance, poor people and women would be the most vulnerable to its adverse effects (World Bank, 2010).

According to Islam and Winkel (2017), there are three types of inequalities that affect people. These inequalities are defined as inequalities due to demographic characteristics, economic and political factors. The demographic factors refer to an individual's characteristics in terms of gender, age, religion, ethnicity and race. The economic inequalities refer to the amount and quality of income and assets that people hold. Political inequalities refer to participation in public decision-making and access to public resources. Since inequality has various determinants and does not depend on just one dimension, the concept can be referred to social inequality, indicating that it is a multidimensional concept.

Social inequality will intensify the effects of climate change on the disadvantaged groups through three major channels. The channels refer to the increased exposure to climate hazards that vulnerable groups suffer, which results in a rise of susceptibility to damage and a decreased possibility of adapting and coping with the effects of climate change. The combination of the channels results in a vicious cycle, where climate change deepens world inequality (Islam & Winkel, 2017).

In this context, people living in poverty, as well as women, represent two highly vulnerable groups. On the one hand, poor people have limited sources of income, are sensitive to food price rises, have a lower education level, depend on agricultural activities and have limited access to public goods (World Bank, 2016; Human Rights Council (2019); ECLAC, 2017). Furthermore, since poor people tend to settle in cheaper and riskier areas and are more likely to live in less resistant housing, they often face greater exposure to the adverse effects of climate change. Besides, they hold less and lower-quality economic resources and assets, so when affected, they lose more than higher-income households, in proportional terms. The magnitude of the losses and the lack of access to safety nets prevents them from recovering rapidly from the losses. As a result, poor people are disproportionately affected by climate change (World Bank, 2016).

Poor people are disproportionately affected by climate change

Climate change can exacerbate gender inequality. Women represent 50 percent of the developing world's poor people (United Nations Statistics Division, 2015), and more than 40 percent of the worldwide workforce in agriculture (UNEP, 2011); nonetheless, women suffer from various limitations that make them highly vulnerable to climate change. According to USAID (n.d.), the asymmetrical impact on women is due to differences in their traditional roles, societal expectations and livelihood styles. On average, women are poorer and have lower levels of education compared to men, they have less access to credit and limited control over their resources, do a greater amount of household work and caregiving activities, and have a greater dependence on natural resources. Besides, women are less involved in decision-making processes, both at political level and within their households, and suffer from power structures and unequal social and cultural norms which, in some contexts, hinder their ability to quickly make decisions and adapt to the effects of climate change (UNEP, 2011; UNDP, 2016).

Climate change and inequality in Latin America

Latin America is vulnerable to climate change and faces a dual inequality (ECLAC, 2017). Despite Latin America's low contribution in terms of emissions, climate change has a significant impact in the region, which is more intense in some areas of the territory (IPCC, 2014a; Stern, 2013, 2007 in ECLAC, 2014), and it has more effect on some groups of people due to the high level of inequality in the region. According to the Development Bank of Latin America (2014) the impacts of climate change will not be equally experienced within the region and its countries due to different levels of vulnerability. The scale and severity of the effects are influenced by the diverse climatic, geographic, social, economic and political factors, which in turn affect the level of vulnerability of the countries. The Climate Change Vulnerability Index ranks countries and cities based on their vulnerability, which is estimated according to the countries' exposure, sensitivity and capacity to adapt to climate change. The most vulnerable countries in the region are Haiti, Guatemala, El Salvador and Honduras[3]. The study shows that half the population resides in countries with high or extreme climate vulnerability risks and that poverty, inequality and high urbanization rates are significant contributors to population sensitivity.

According to Williamson (2015), Latin America has been the most unequal region in the world, during the past decade. However, this inequality does not merely refer to income inequality, but also inequality in consumption, land tenure, health and political power, among others (Ferreira & Walton, 2005). Due to the inequality experienced in most of the region's countries, climate change will aggravate the effects for vulnerable groups. The high levels of inequality and vulnerability also pose extra challenges and obstacles when implementing policies and programmes for mitigation and adaptation to climate

[3] The complete ranking can be found in Development Bank of Latin America (2014): https://scioteca.caf.com/bitstream/handle/123456789/509/caf-vulnerability-index-climate-change.pdf

change. Santelices Spikin & Rojas Hernández (2016) mention that despite the various attempts of the countries to create policies for coping with climate change, many of them have turned out to be unfeasible due to poverty and marginality. Because of the region's vulnerabilities and weak institutions, climate change may increase poverty and inequality.

International cooperation for climate change in Latin America

International cooperation

International cooperation refers to all the actions carried out by countries and organizations to achieve common objectives at national and international levels (Chiani et al., 2009). In this regard, international cooperation for development is defined as the actions that promote development for lower-income countries or developing countries (OECD et al., 2019). Thus, it has focused on areas such as education, human rights, environment and equality, among others.

The types of international cooperation vary according to the stakeholders that are involved. The three dominant types of cooperation are North-South, South-South and triangular cooperation. First, North-South cooperation, sometimes referred to as traditional cooperation, is conceived as assistance from industrialized countries to developing countries. This type of cooperation includes Official Development Assistance (ODA)[4], which is financial and technical assistance from governments of industrialized countries to developing countries.

Second, SSC[5] refers to the exchanges that occur between two or more countries from the South. According to the United Nations Office for South-South Cooperation (UNOSSC)[6], SSC is:

> a broad framework of collaboration between the countries of the South in political, economic, social, cultural, environmental and technical fields. With the participation of two or more developing countries, it can take place on a bilateral, regional basis, within regions or between regions. Developing countries share knowledge, skills, experiences and resources to achieve their development goals through joint efforts.

This type of cooperation involves a wide range of flexible modalities, including knowledge exchange, technology transfer, investment, trade, and financial and humanitarian assistance. Besides, it is characterized by its principles of solidarity among countries in the south, respect for national sovereignty, mutual benefit, equality, mutual accountability and transparency, non-interference and non-conditionality (UNDP, 2016).

Third, triangular cooperation involves 'southern-driven partnerships between two or more developing countries, supported by an industrialized country or multilateral organization, to implement development cooperation programmes and projects' (UNDP, 2016: 10).

SSC and triangular cooperation are conceived as two types of cooperation that complement traditional cooperation. Despite the differences regarding their origins, stakeholders and modalities, all of them aim to increase the well-being of people in developing countries (OECD, 2011).

[4] ODA includes grants, soft loans and technical assistance which may be provided bilaterally through a multilateral agency. The eligible countries for receiving ODA are all the low- and middle-income countries defined in the DAC list of recipients from OECD.

[5] This research will characterize the three types of cooperation in the region but will focus on South-South Cooperation.

[6] Retrieved from: https://www.unsouthsouth.org/about/about-sstc/

International cooperation in Latin America

Latin America and the Caribbean have received around 7 percent of the total ODA, while other regions such as Africa and Asia have each received around 30 to 40 percent of the funds

The region has not been a priority in the distribution of international funds. In the last decade, Latin America and the Caribbean have received around 7 percent of the total ODA (World Bank, 2019), while other regions such as Africa and Asia have each received around 30 to 40 percent of the funds (OECD, 2018). The low priority given to the region is because of two main reasons. The first is due to changes in the global development agenda. With the Millennium Development Goals (MDG), the priority became the eradication of poverty and hunger, yet Latin America considerably advanced in these objectives while other regions were delaying global achievement of those goals (Tezanos & Cueva, 2010). The second reason is that ODA allocation has prioritized low-income countries over middle-income countries (CEPAL, 2011). All countries in the region, except for Haiti, are either lower- or upper- middle income or high-income economies[7].

In the last decade, the major donor nations have been United States, Spain, United Kingdom, France, Germany and Japan, while the multilateral organizations that have contributed the most are the Inter-American Development Bank (IADB) and the United Nations System. During the 2012-2015 period, the countries that received the greatest amount of funds through international cooperation were Haiti, Colombia, Nicaragua, Bolivia, Honduras, Guatemala and El Salvador. The international cooperation is focused on poverty, institutional strengthening, crime, drug trafficking and emergency assistance for low-income economies. It also takes into consideration climate change, property rights and energy for middle- and high-income countries (RedAmérica, 2016).

However, it is expected that funds will significantly decrease over the next few years. By 2030, many Latin American countries will be excluded from the ODA list, as many of them will become high-income countries (SEGIB, 2018a). In this context, triangular coperation and SSC will acquire an even more relevant role, not only by complementing traditional cooperation but also as potential alternatives.

In this context, SSC and emerging donors can play a crucial role in the region. On the one hand, aid from emerging economies to developing countries has increased over time and has set different rules to those of traditional cooperation. Countries such as United Arab Emirates, Saudi Arabia, Korea, Venezuela, India, Kuwait and Brazil, have become relevant cooperation partners, with China leading the group (Woods, 2008). For all countries, the Chinese presence in Latin America has enormous importance, as the country has become a primary commercial partner for the region, as well as significantly increasing its level of aid.

In 2014, the Forum of China and the Community of Latin American and Caribbean States, known as the China-CELAC Forum (CCF), was established to promote the development of the Comprehensive Cooperative Partnership between China and Latin America and the Caribbean. This partnership was characterized by equality, mutual benefit and shared development. The countries that are part of CCF are the thirty-three member countries of CELAC. From the CCF, China has announced a financing package for the Latin American and Caribbean region, as well as measures to assist the CELAC in intensifying human resources development and capacity building (Ministry of Foreign Affairs of China, 2016).

[7] See the complete DAC list of recipients from OECD in: http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-List-of-ODA-Recipients-for-reporting-2018-and-2019-flows.pdf

At the second meeting of Ministers of Foreign Affairs of the CCF and the authorities of China, it was agreed to adopt the CELAC and China Joint Plan of Action for Cooperation in priority areas such as: i) politics and security, ii) infrastructure and transport, iii) trade, investment and finance, iv) agriculture, v) industry, science and technology, vi) cooperation on the environment, vii) cultural exchange and viii) cooperation in other areas. Regarding the cooperation in the environmental area, they agreed to make the necessary efforts for the effective implementation of the Paris Agreement adopted under the UNFCCC, considering the context of sustainable development and efforts to eradicate poverty (CHINA-CELAC, 2018). Regarding SSC and climate change, the parties underlined the necessity to include the adoption of actions for strengthening the capabilities for mitigation and adaptation actions in order to increase resilience to the adverse effects of climate change.

Estimates show that Chinese aid in the region grew from 5 percent to 20 percent from the mid 1950s to 2016. Of all the financial flows received by Latin America from China, less than 30 percent are ODA-like funds. The rest of the funds come from other official financial funds such as loans and export credits (Maggiorelli, 2019). Despite the Chinese aid principles of mutual respect for sovereignty and territorial integrity, non-aggression, non-interference in internal affairs, equality and mutual benefit and peaceful coexistence, Castro (2013) argues that China has strategic objectives as traditional donors. Chinese goals rely on assuring own economic security as well as contributing to the recipient country development. Consequently, the economic dimension plays a key role in the Chinese external policy, and the aid is tightly linked to investment projects. In fact, through cooperation, China also gained access to natural and energy resources (Castro, 2013), which is reflected in the loans that have been granted to the region (2006-2016) in the areas of infrastructure, mining and energy (Maggiorelli, 2019).

Besides the opportunities arising from the aid and financing provided by emerging donors, there are also drawbacks. For instance, there is a lack of transparency regarding the amounts and conditions from the financial flows. Moreover, there have been some tied requirements to hire companies from the emerging economies, and disputes over observance and compliance of the global standards to protect the environment and human rights (Castro, 2013; Woods, 2018). These limitations may prevent the recipient countries from achieving some of their development goals.

On the other hand, according to SEGIB (2018a) and the European Parliament (2019), Latin American countries have been pioneers in bilateral and regional South-South Cooperation and in triangular cooperation, because the region has been involved from their beginnings and has different regional and sub-regional integration mechanisms[8]. Both South-South and triangular cooperation have played an important role in the region. During the 2006-2015 period, there have been 6.404 South-South actions, programmes and projects and 969 triangular cooperation initiatives with more than 100 developing countries around the world, which have benefited all the countries involved. These initiatives have focused on health, government, agriculture, social policies, education and environment, among others. Regarding the Sustainable Development Goals, about a third of the initiatives implemented in the 2013-2015 period contributed to attaining Sustainable Development Goals 2 (zero hunger) and 3 (good health and well-being for all) (SEGIB, 2018a).

[8] For instance, the Community of Latin American and Caribbean States (CELAC), the Union of South American Nations (UNASUR), the Southern Common Market (MERCOSUR), the Cooperation Technical Group of the Pacific Alliance; the Mesoamerica Integration and Development Project, European Parliament (2019).

International cooperation for climate change

Since 1992, the United Nations Framework Convention on Climate Change (UNFCCC) has been the primary framework for international cooperation related to climate change. This Convention has led to later agreements such as the Kyoto Protocol (1997) and the Paris Agreement (2015).

Industrialized countries should provide financial assistance to developing nations and further assist developing countries that are particularly vulnerable to the effects of climate change

The Convention stated in its commitments that industrialized countries should provide financial assistance to developing nations and further assist developing countries that are particularly vulnerable to the effects of climate change (UN General Assembly, 1992). The Paris Agreement not only reaffirms these obligations of industrialized countries but also encourages voluntary contributions from other parties. In this framework, several funds have been created to assist developing countries in the implementation of mitigation and adaptation measures. These funds include the Global Environmental Facility Trust Fund[9], the Green Climate Fund[10], the Special Climate Change Fund[11], the Least Developed Countries Fund[12] and the Adaptation Fund[13] (UNFCCC, n.d.).

Most of the climate financing has arisen from public sources, including multilateral organizations, aid agencies and governments. Other private sources such as philanthropy, NGOs and corporate actors, have also contributed; but, to a lesser extent (ParlAmericas, n.d.). Nonetheless, international cooperation for climate change is not limited to financial assistance. Technical assistance and technology development and transfer, through South-South and triangular cooperation, have also played an important role.

There is increasing recognition of the potential that South-South and triangular cooperation can have on accelerating climate action. The Technology Executive Committee of the Paris Agreement has included both South-South and triangular cooperation in its work plan, and the United Nations principles adopted an Action Plan on South-South Climate Cooperation[14]. Besides, according to UNFCCC and UNOSSC (2018), there are successful case studies of South-South and triangular cooperation in technology development and transfer for adaptation and mitigation activities, peer-to-peer learning, and capacity building. The SSC in climate change is favourable for agriculture, disaster risk reduction, energy, forestry, transport, water, and waste management. Furthermore, the technologies created in developing countries are likely to be more appropriate and cost-effective for other developing countries (UNFCCC and UNOSSC, 2018).

Several developing countries have adopted and integrated SSC policies, programmes, and national plans, as well as setting up SSC funds. For example, there has been SSC on climate technologies between Cuba and the Caribbean Islands, Samoa and China, and India, Indonesia and South Africa (UNFCCC and UNOSSC, 2018). Similarly, in 2014 China announced a $3.1 billion fund for SSC on climate change (UNDP, 2017).

[9] It was established at the 1992 Rio Earth Summit to help tackle the most pressing environmental projects. It is an operating facility from the financial mechanism of the UNFCCC. It has provided $20 billion and mobilized a further $107 billion to finance more than 4700 projects in 170 countries: https://www.thegef.org/about-us

[10] It was established in 2010 by the UNFCCC and is the world´s largest fund dedicated to helping developing countries reduce their greenhouse gas emissions and enhance their ability to adapt to climate change. It has a crucial role in supporting the Paris Agreement goal of keeping the average global temperature increase below 2°C: https://www.greenclimate.fund/about

[11] It was established in 2001 and complements the Least Developed Countries Fund. This fund is managed by the Global Environmental Facility and is open to all vulnerable developing countries. This fund focuses on adaptation but it also funds technology transfer, economic diversification, and mitigation in: energy, transport, industry, agriculture, forestry and waste: https://www.thegef.org/topics/special-climate-change-fund-sccf

[12] It was established in 2001 to help the least developed countries' work under the UNFCCC, including the implementation of national adaptation programmes, among others. It is managed by the Global Environmental Facility: https://www.un.org/ldcportal/least-developed-countries-fund-ldcf/

[13] It was established in 2001 to finance adaptation projects in developing country parties that were particularly vulnerable to the effects of climate change. Although it was established under the Kyoto Protocol, now it is mandated to serve the Paris Agreement: https://unfccc.int/Adaptation-Fund

[14] United Nations Action Plan on South-South Climate Cooperation (2017-2021): https://www.unsouthsouth.org/south-south-cooperation-action-plan-for-climate-change-engagement-strategy-2017-2021/

International cooperation for climate change in Latin America

International cooperation for climate change in Latin America derives from multilateral climate funds, bilateral cooperation and South-South and triangular cooperation. Latin America stands out globally for the priority assigned to climate change financing. During 2010-2012, Latin America climate financing represented 25 percent of total ODA, which is higher than the world average (16 percent). In that period, the most relevant ODA donors in terms of climate financing were France, Germany, Japan and Norway. Meanwhile, the main multilateral banks providing financing for climate change were the World Bank, European Investment Bank, European Bank for Reconstruction and Development, and Asian Development Bank (European Commission, 2015).

Moreover, in the 2003 – 2018 period, Latin America received $3.7 billion as climate finance from multilateral climate funds. Almost 75 percent of this funding came from the Clean Technology Fund[15], Amazon Fund[16], Green Climate Fund and the Global Environment Facility. In the meantime, the Amazon Fund and the Global Environment Facility approved more than 50 percent of the projects that were implemented during the period. Table 1 describes the approved funds (millions of $), the contribution of each fund to the total amount received (percent), and the number of projects approved (Overseas Development Institute and Heinrich Böll Stiftung, 2019).

Table 1. *Approved funds for climate (2003-2018)*

Fund	Millions of $	Number of projects approved	Contribution
Clean Technology Fund (CTF)	947	29	25.6%
Amazon Fund	717	102	19.4%
Green Climate Fund	656	17	17.8%
Global Environment Facility (GEF)	440	105	11.9%
Forest Investment Programme	243	15	6.6%
Forest Carbon Partnership Facility (FCPF)	144	26	3.9%
Adaptation Fund	135	37	3.7%
Pilot Programme for Climate Resilience	112	5	3.0%
Scaling-Up Renewable Energy Programme (SREP)	61	10	1.7%
Special Climate Change Fund	46	10	1.2%
UN-REFF Programme	43	10	1.2%
Biocarbon Fund	36	2	1.0%
Adaptation for Smallholder Agriculture Programme	32	5	0.9%
Global Energy Efficiency and Renewable Energy Fund	31	2	0.8%
Partnership for Market Readiness	26	15	0.7%
MDG Achievement Fund	24	7	0.6%
Total	3693	397	100.0%

Source: Overseas Development Institute and Heinrich Böll Stiftung, 2019

Climate finance is highly concentrated in the region, both in terms of recipients and supported activities. During the 2003-2018 period, Brazil and Mexico received about 50 percent of all climate finance in the region, followed far behind by Colombia, Chile and Argentina. Similarly, 82 percent of the funding supported mitigation activities, especially energy and REDD+[17], 13 percent supported adaptation activities and the remaining funding had a plural focus (Overseas Development Institute and Heinrich

[15] Provides resources to scale up low carbon technologies in developing countries. More than 75% of the funds have been allocated to renewable energy, energy efficiency and clean transport: https://www.climateinvestmentfunds.org/topics/clean-technologies

[16] This is a REDD+ mechanism created to prevent deforestation and promote preservation and sustainable use of the Brazilian Amazon: http://www.amazonfund.gov.br/en/home/

[17] Reducing Emissions from Deforestation and Forest Degradation (REDD+).

Böll Stiftung, 2019). Similarly, climate finance received through multilateral banks has also been highly concentrated. For instance, in 2013, just 16 percent of the finance was allocated to adaptation actions while 84 percent was for mitigation activities (European Commission, 2015).

Regarding South-South bilateral cooperation, the SEGIB (2019) states that, in 2017, 8.1 percent of the initiatives were allocated to strengthening capacities in the environmental sector[18]. Of these initiatives, 90 percent were related to nature preservation and 10 percent to disaster management. Regarding the SDGs, to which the initiatives potentially contribute, the SEGIB (2019) states that 4 percent of all the initiatives could be aligned to SDG 13 on climate action, 2 percent to SGD 14 on life below water, and 4 percent to SDG 15 on life on land. A variety of South-South and triangular cooperation initiatives on climate change are mentioned in Table 2[19].

Table 2. *South-South and triangular cooperation initiatives on climate change*

Type	Countries	Year	Thematic Area
South-South Cooperation	Argentina and Uruguay	2014-2016	Responses of agricultural systems to extreme variations in climate and possibilities for adaptation.
	Mexico and Chile	Not specified	Transfer of knowledge and technology for grape cultivation focused on mitigation and adaptation activities.
			Promote the use of bicycles to reduce transport pollution.
			Technical exchanges about institutions regarding forests and climate change.
	Colombia and El Salvador	Not specified	Design of projects with low carbon consumption applied to the solid waste sector.
	Costa Rica and Mexico	2015-2018	Evaluation of the role of black carbon in the agricultural and transport sectors.
	Mexico and Uruguay	2014-2016	Development of scientific capacities for taking care of the marine ecosystems.
Triangular Cooperation	Costa Rica, Honduras, and Spain	2016	Transfer of the Blue Ecological Flag programme from Costa Rica to Honduras. This programme is an initiative to protect the environment by empowering civil society.
	Mexico, Bolivia, and Germany	2012-2016	Treatment of waste water for irrigation purposes.

Source: SEGIB 2017, SEGIB 2018b

Various Latin American countries have assigned a high priority to climate action through North-South cooperation. According to the European Commission (2015), during 2010-2012, 25 percent of the ODA received by Latin America was allocated to climate change, which was higher than the world average. In the same period, the ODA received by Brazil for climate action accounted for more than 50 percent of the total assistance received by the country (European Commission, 2015). Nevertheless, this is not the case for South-South and triangular cooperation. In 2016, just 16 percent of the total initiatives were dedicated to the environment (SEGIB, 2018b). Nevertheless, there are numerous cases of successful projects and exchanges of experience among different

[18] The annual reports on SSC from the SEGIB represent the most comprehensive source of information for SSC initiatives in the region. Nevertheless, it faces a shortcoming when analyzing climate change actions, since there is not a specific category for this area. Because of this, we refer to the "environment" category, which includes actions to tackle climate change.

[19] These initiatives are described in the 2017, 2018 and 2019 SEGIB SSC reports, regarding climate change.

countries in the region. These cases corroborate the potential that SSC has to accelerate climate action.

Civil society organizations and their linkage with climate change and SSC

Civil society organizations (CSOs) have had a relevant role in coping with climate change in many countries and could have different potential roles in SSC. According to the World Bank (2007), CSOs refer to:

a wide array of non-governmental and not-for-profit organizations that have a presence in public life and express the interests and values of their members or others, based on ethical, cultural, political, scientific, religious or philanthropic considerations … this definition refers to the sphere outside the family, the state, and the market.

CSOs include non-governmental organizations, social movements, faith-based organizations, grass-roots organizations, labor unions, professional federations and charitable organizations, among others. In this sense, civil society is a sector outside the public and private sphere; nonetheless, it work closely with them, as well as with the international sphere and local communities. Because of this, CSOs can serve as a bridge among a variety of stakeholders and help create effective nexuses among them.

CSOs and climate change

CSOs have a relevant role in coping with climate change. Effective adaptation and mitigation measures depend on the actions and efforts of a wide range of actors that belong to all sectors in society, including the public and private sectors, as well as civil society (White et al., 2010). CSOs have valuable and unique experiences and connections with other sectors which contribute to climate action.

There are a wide variety of areas in which CSOs can contribute. The World Resources Institute (n.d.), has identified five areas in which civil society can participate. These areas are improving populations' access to climate information, giving voice to the most vulnerable, promoting accountability to ensure proper participation of different stakeholders, promoting inclusive approaches to risk reduction and actively participating in the coordination of institutions. Moreover, other roles that have been identified for CSOs are raising awareness about the importance of climate action in local communities, promoting the integration of climate change in planning processes, aligning policies and programmes with communities' needs, establishing advisory and monitoring processes (IATI, 2018; White et al., 2010).

In Latin America, there have been important movements and initiatives from civil society towards the protection of the environment. CSOs have actively participated in various processes, including signature collection, protests, public audits, judicial processes, as well as presenting research documents to authorities, providing useful information to citizens and creating spaces for debate (Marín Aranguren & Millares Abella, 2017).

Civil society and SSC

In Latin America, the role and contribution of CSOs within SSC appears to be minimal or undocumented. There is a lack of information about the initiatives in which CSOs have participated, and it is difficult to form conclusions about their relationship with SSC.

Ayllón (2014) suggests that CSOs' relevance has not been recognized in SSC, as has been the case in North-South Cooperation. So far, the participation of CSOs has been low and concentrated; most organizations have participated as recipients, but not as suppliers. CSOs have not been included as potential suppliers of SSC in public lists, but only as potential recipients. In the SEGIB report, 'political participation and support for

civil society' is established as a category of action within SSC; nevertheless, in 2018 there were just six projects in this area (SEGIB, 2018b).

A plausible explanation for CSOs' low participation is that initially, SSC was conceived as technical cooperation; thus, the main actors were public officials and technical staff (Ayllón, 2014; SEGIB, 2018a). Nonetheless, nowadays, there is also cooperation among other actors; for instance, civil society organizations and universities, but their initiatives have not been registered (SEGIB, 2018a). Other factors that limit their participation are resistance from the states to include CSOs in the cooperation and lack of financing opportunities for these organizations (Ayllón, 2014).

However, analysis of various case studies has proved that CSOs can play different roles and add value to SSC initiatives. Potential roles for CSOs in SSC could be: act as recipients and executors of initiatives, carry out the monitoring and social control processes, and influence cooperation and political agendas to promote values of transparency and human rights (Ayllón, 2014).

3. Country case studies methodology

This study seeks to analyse and compare SSC in national initiatives to address climate change in three countries in Latin America, and to explain the role played by CSOs.

Bolivia and Honduras have extreme vulnerability, while Ecuador has high vulnerability to the Climate Change

The study has been conducted in Ecuador, Bolivia and Honduras, countries that are particularly vulnerable to climate change impacts. In fact, according to the Climate Change Vulnerability Index calculated by the Development Bank of Latin America (CAF), Bolivia and Honduras have extreme vulnerability, while Ecuador has high vulnerability (CAF, 2014). Furthermore, according to the data from CEPALSTAT, a statistical portal, these countries have similar patterns of inequality. The Gini coefficient of the three countries in 2018 fluctuated between 0.44 and 0.48. As for the level of income, measured by Gross National Income per capita, according to the World Bank country classification by income level, in 2020 Bolivia and Honduras belong to the group of lower-middle income economies and Ecuador to the group of upper-middle income economies.

Bolivia, Ecuador and Honduras have advanced legal frameworks on environmental and climate change issues, have signed international agreements related to climate change and have participated together in some negotiating groups of the Conferences of the Parties to the UNFCCC, such as the Like-Minded Developing Countries (Bolivia and Ecuador) or the Coalition for Rainforest Nations (Ecuador and Honduras).

Regarding SSC, the three countries fundamentally fulfil the role of SSC recipients. However, great challenges remain in the three countries to institutionalize SSC and, as this study will show, the case of SSC in climate change is not an exception.

The three country case studies apply a qualitative methodology and they are based on the following sources of information:

- Secondary information collected from publications, websites and other inputs previously developed by third parties.
- Secondary information requested from the sector Ministries or from the entities responsible for climate change and international cooperation
- Primary information from interviews with public officials and other experts in the subject
- Primary information from focus groups with CSOs

The appendix includes the list of stakeholders interviewed and the CSOs that participated in each focus group.

For the preparation of the case study and to facilitate the comparative analysis, each research centre completed the same data collection matrices (from primary and secondary sources), which included analysis of the international cooperation already existing in the country, the legal framework regarding climate change and SSC, the institutional framework of how climate change and SSC are managed, the existing climate change policies and instruments, the SSC climate change programmes or initiatives in the last decade and the mapping of relevant stakeholders. Each case study concludes with an analysis of the challenges and opportunities of SSC in climate change, and with a brief analysis of existing state capacities in SSC and climate change.

These matrices served as input for the development of the case studies and for the comparative analysis between countries. The comparative analysis was divided into three sections: analysis of the SSC legislation and institutional framework, analysis of the stakeholders in SSC initiatives and the climate change initiatives in SSC in each of the countries. To this end, tables and graphs were included to enable a comparison of the variables between countries in each of these sections.

4. Bolivia case study

Bolivia has shown an improvement, from being ranked 118th in 2008 to 107th in 2019

Bolivia is a developing country that has reached high levels of growth in the last decade (2008-2018), growing on average by 4.32 percent per year and accumulating a growth rate of 59 percent.

The good macroeconomic environment that Bolivia experienced explains its growth, especially due to the favourable external conditions (Chumacero, 2019). According to the Global Competitiveness Index, which measures national competitiveness by calculating the level of productivity as the combination of institutions, policies, and competitiveness factors, Bolivia has shown an improvement, from being ranked 118th in 2008 to 107th in 2019 (Schwab, 2019). Also, the United Nations Development Programme (UNDP) placed Bolivia in 2019, for the first time, in the group of 'high human development,' ranked 114 out of 189 countries.

Despite this progress, Bolivia is particularly vulnerable to climate change impacts due to six fundamental reasons: i) it is one of the poorest countries in Latin America and suffers from one of the worst patterns of inequality, ii) it is the country in South America with the highest percentage of indigenous people living in poverty with higher propensity to suffer the effects of climate change because their principal income is related to agricultural activity, iii) it is one of the most bio-diverse countries in the world, iv) it is a country with high levels of deforestation which adds to its vulnerability to flooding, v) it is one of the countries most affected by natural disasters in recent years, and vi) it has about 20 percent of the world's tropical glaciers (Oxfam, 2009).

Bolivia will witness an increase in temperature of at least of 3.4oC to 5.1oC by 2100 and there will be precipitation reductions at the Southern Altiplano and precipitation increases in the northern lowlands. These combinations imply droughts and floods. The economic loss associated with climate change in the 2010 - 2100 period falls within the range between 2.87 percent and 4.75 percent of GDP for a scenario which contemplates a growing population and regionalized economic development. In contrast, in a scenario which contemplates less population growth and moderate economic development, the economic losses are in the range between 2.18 percent and 1.32 percent of GDP[20]. Although Bolivia has made efforts since 2009 to reduce CO2 in sectors such as energy and transport and through mitigation actions related to energy efficiency, the change in the energy matrix and the use of natural renewable resources have not made any significant impacts (IADB-CEPAL, 2014).

Bolivia's fossil CO2 emissions continued to increase, reaching 20.46 Mt in 2017. There was an increase of 133 percent in CO2 emissions in the construction sector and an increase of 127 percent in the transport sector in the 2005-2017 period (Muntean et al., 2018). Despite efforts made by allocating almost three quarters of the budget to the transport sector in projects such as the construction of the 'Ferroviaria Oriental' railway, the construction of the La Paz-El Alto cable car system and the gas vehicle conversion programme to tackle climate change, more actions are still required to reduce emissions.

[20] Scenarios from the PRECIS (Providing Regional Climates for Impact Studies) regional climate modelling system

Possibly the lack of significant effect of these projects is due to their design, which is not related specifically to a climate change policy (GFLAC, 2015).

Financial aid has meant a new perspective for low-middle income countries such as Bolivia since 2005

International cooperation has become a source of financing for developing countries to meet these challenges. Financial aid has meant a new perspective for low-middle income countries such as Bolivia since 2005. It means that the view of "aid" has evolved to "development effectiveness". For instance, an association between countries with similar characteristics has given a new meaning to international cooperation since the Second National Communication to the United Nations Framework Convention on Climate Change (MMA, 2010). Bolivia, and some other countries from the Global South, hold a position regarding climate change that is based on the concept of 'climate debt', in which industrialized countries have a debt towards developing countries to face climate change with direct and no-conditions financing, and without violating the sovereignty of the States by transferring monetary resources, effective technology and capacity building.

A feature that makes Bolivia a country with weak institutions is the fact that decisions are taken based on the political scenario, and that they all depend on who is governing. In the last quarter of 2019, Bolivia experienced social unrest due to a failed government election which led to the positioning of a transitional government after the resignation of President Evo Morales, together with his cabinet of ministers. The effects had consequences on the process to accomplish the objectives of the development model because the institutional structure changed with the new authorities. For instance, in terms of international affairs, Bolivia broke relations, though not totally, with countries that had been its allies during the last 14 years, such as Cuba and Venezuela. Bolivia also decided not to be a member of the *Alianza Bolivariana para los Pueblos de América – Tratado de Comercio de los Pueblos* (ALBA-TCP), and the Unión de Naciones Suramericanas (UNASUR).

Bolivia faces a new electoral process in 2020, and the perspective regarding its development model presents uncertainty because the continuity of the current policies depends on the democratically elected government. The results of a new electoral process may impact on social, economic and political priorities as all parties have different ideologies.

Bolivia has faced different milestones throughout its existence from political instability to hyperinflation, events that impacted on how Bolivia has conducted its development plans.

Bolivia has faced different milestones throughout its existence from political instability to hyperinflation, events that impacted on how Bolivia has conducted its development plans. Kehoe et al. (2019) recognized periods of economic development in modern Bolivia. From 1960 to 1977, Bolivia enjoyed favourable economic conditions because of the high prices of of mining and oil commodities, which are the most important sectors of the country. This scenario allowed the country to access foreign credit. After that period, between 1977 and 1986, Bolivia faced one of the worst economic crises in its history, characterized by hyperinflation, unemployment, worsening of living conditions, as well as a severe political and social crisis.

The recovery and slow growth started in 1986 and lasted until 1998, where a restructuring process emerged based on two main objectives: to stabilize the economy and to implement structural reforms. In this period, the relationship between the State and international cooperation was based on the conditionalities that donors imposed for the reprogramming of the external debt, generally focused on the setting of macroeconomic and fiscal goals for economic stabilization, as well as the implementation of structural reforms. In 1996, the International Monetary Fund and the World Bank created the Heavily Indebted Poor Countries (HIPC) initiative to reduce the debt of countries characterized by poverty. The relief mechanism consisted of the debt-service relief resources being allocated to social development and poverty reduction. The programme was implemented in 1998, and the social development agenda of Bolivia was dominated

by the international cooperation line. The attempts to articulate efficacy with national strategies would come many years later with the Paris Declaration in 2005. The Paris Declaration may be considered as a milestone in formalizing and refocusing efforts to develop an international action plan to improve development aid effectiveness.

Although this initiative was effective in the early years, the adverse external shocks that began in 1999 offset the beneficial results of the HIPC I. Starting in 2001, a new strategy was implemented, and it was called the Bolivian Strategy for Poverty Reduction. This strategy was possible because of the HIPC II initiative, which consisted in the reduction of multilateral debt; and, again, international cooperation played a key role in supporting the social and economic projects and programmes of Bolivia. In the period before 2006, the relationship between the State and international cooperation was characterized by financial support to alleviate persistent fiscal problems in the country. On the other hand, the support included conditionalities on the part of the donors, who took part in the development agenda of the national government.

International cooperation in Bolivia

Since 2006, Bolivia has experienced a change in the dynamics of international cooperation and development funding. There was restructuring between the State and international cooperation regarding normative issues, social and economic transformations and public policy orientations. Thus, the relationship between the State and international cooperation also presented new challenges about resource mobilization for development. The National Development Plan 2006 stated the transformation of international relations to end external interference and gave Bolivia the capacity to decide about its own development. In 2009, Bolivia adopted a new Plurinational State Constitution, that emphasizes principles of respect for national sovereignty, national ownership and independence, equality, non-conditionality and non-interference in domestic affairs (Paz, 2016).

The Paris Declaration recognized 'that development will be successful and sustained, and aid fully effective, only where the partner country takes the lead in determining the goals and priorities of its development and sets the agenda for how they are to be achieved' (OECD, 2011). In 2006, international cooperation actors created the Grupo de Socios Para el Desarrollo de Bolivia (GruS) under the principles of harmonization and alignment with a principal goal to support, within the framework of the Paris Declaration, the leadership of the Bolivian government in the coordination and harmonization of international cooperation, to improve its effectiveness and guidelines (GruS, 2017). The GruS comprises 23 bilateral, intergovernmental and multilateral organizations present in Bolivia[21]. At present, GruS addresses its activities according to the 2016-2020 Partnership Framework with the country and the World Bank Group, the pillars of which are: promotion of broad-based and inclusive growth, support for fiscal and environmental sustainability and resilience to climate change and economic shocks. The main consequence of these changes is that cooperation is not only a means of aid any more, but a tool for development. The State regained its leadership to drive its development agenda meaning that it is capable of deciding about its path to reach goals towards greater levels of welfare without conditionalities from outside.

[21] Korea International Cooperation Agency (KOICA), Development Bank of Latin America (CAF), Inter-American Development Bank (IADB), World Bank, Belgian Technical Cooperation (CTB), Canada Embassy, Colombian Embassy, Germany Embassy, Costa Rica Embassy, Denmark Embassy, Spanish Agency for International Development Cooperation (AECID), International Monetary Fund (IMF), FONPLATA Development Bank, France Embassy, Great Britain Embassy, Italian Agency for Development Cooperation, Japan Embassy, United Nations, Organization of American States (OAS), Switzerland Embassy, Sweden Embassy and European Union Delegation

The legal and institutional framework that emerged from the changes between the State and the international cooperation governance allowed different types of cooperation to be reconsidered for them to be more aligned with the new goals for development. Thus, Technical Cooperation (TCDC) and Economic Cooperation (ECDC) between developing countries, known as SSC, have gained prominence in Bolivia because they facilitate communication and relations between countries with similar needs and common perspectives (Ministry of Development Planning, 2012).

According to the guidelines for the management of technical cooperation between developing countries, TCDC is a multidimensional process whose scope can be bilateral or multilateral, and its character can be subregional or interregional. Governments organize themselves and promote the participation of private organizations for this purpose. Thus, the TCDC is a reciprocal form of cooperation through which technical and scientific information, experiences or technological knowledge are exchanged[22]. On the other hand, ECDC often requires financial support to execute concrete actions or initiatives aiming at improving trade, investment and addressing other economic issues. Triangular Cooperation is where cooperation among developing countries involves developed countries or international organizations. In such cases, there is also a financial donor, a technical partner, and a beneficiary.

Although there were advances before 2010, Bolivia did not have an institutional framework for SSC. Before 2010, when countries in the region used to ask the Ministry of Foreign Affairs for information about TCDC, the procedure was informal. Bolivia's Ministry of Foreign Affairs used to invite Vice-Ministry of Public Investment and External Finance (VIPFE) officials to participate and reply to the concerns of neighbouring countries. However, without an institutional framework, the coordination between both entities was deficient.

In 2010, the VIPFE Financing Negotiation Unit was created and started to systematize all the information regarding SSC, including projects of the Community of Latin American and Caribbean States (CELAC) and Andean Community of Nations (CAN), becoming the counterpart of the Ministry of Foreign Affairs. CELAC, launched in 2011, is a representative mechanism for political consultation, cooperation and integration of Latin American and the Caribbean States whose objective is to guarantee the unity and integration of the region. Some recent examples of an action plan that emerged from this space are CELAC and China Joint Plan of Action for Cooperation on Priority Areas (2019-2020)[23] and the commitment to guarantee Food and Nutrition Security through a strategy to eradicate hunger and poverty in the Member States[24].

According to the analysis carried out by Malacalza (2019), regarding the reasons that have led to the rise of China's development cooperation in Latin America, in the case of Bolivia, the author stated that the support provided by China was heavily concentrated in mining projects located in indigenous areas, in a context of social vulnerabilities and high poverty rates. According to the analysed data, the financial support of China was to improve Bolivia's deficient infrastructure, which before the investment in this sector was a factor that used to challenge the mobilization of natural resources to the market. There is no significant evidence about projects or programmes related to SSC and climate change.

On the other hand, the CAN was launched with the name of Andean Pact in 1969. It is an international organization whose members are Bolivia, Ecuador, Colombia and Peru. Following the guidelines derived from the Paris Declaration (2005) and the Accra Agenda

[22] There are different modalities of cooperation such as short courses training, internships and workshop seminars, diagnoses or studies in areas of interest by implementing expert missions, business cooperation missions, exchange of experiences, exchange of information or exchange of specialists.

[23] http://www.itamaraty.gov.br/images/2ForoCelacChina/Joint-Action-Plan-II-CELAC-China-Forum-FV-22-01-18.pdf

[24] http://s017.sela.org/media/2758482/plan-san-celac-2025.pdf

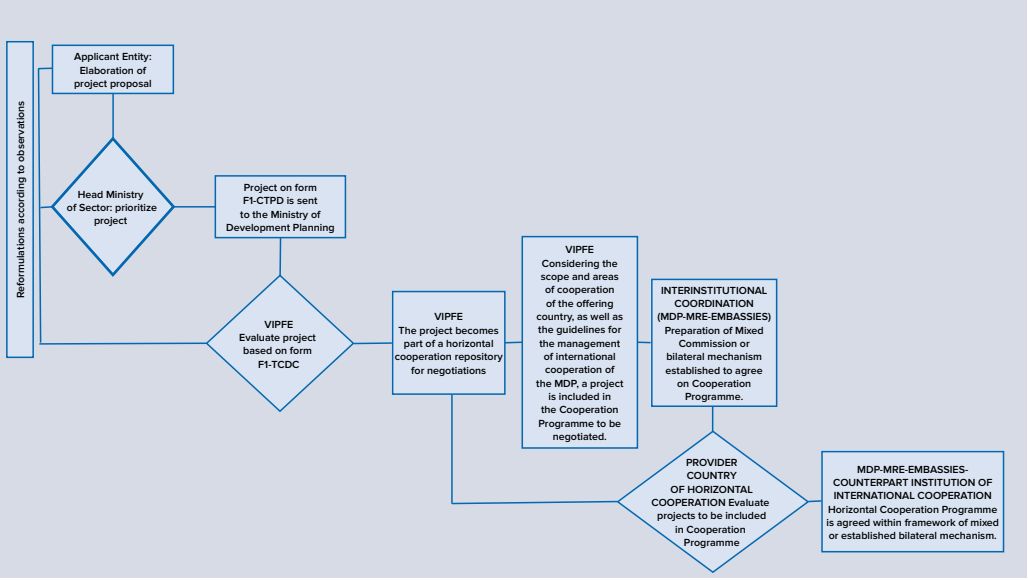
for Action (2008), the General Secretariat of the Andean Community incorporated the topic of international development cooperation as an element to promote the integration process. Two international cooperation projects have been executed since then: i) Participatory Regional Integration Project in the Andean Community – INPANDES with the support of the European Union, and ii) the Project framed in the Non-Refundable Technical Cooperation Agreement financed by the Development Bank for Latin America (CAF) to update the Andean telecommunications regulation.

Later, Bi-Ministerial Resolution No. 003 was promulgated in 2012, which stated the specific guidelines of SSC. The objective of the resolution was to establish guidelines for the management and coordination of the demand and supply of international horizontal technical cooperation, in order to support this cooperation in more integrated and better-articulated interventions and where the impact over development could be maximized through capacity building (Ministry of Development Planning, 2012). The modalities of horizontal Technical Cooperation are i) staff training, ii) diagnostics or studies, and iii) exchange of experiences. Technical cooperation requests must be formulated considering modalities that allow the execution of comprehensive projects, the complementarity of prioritized programmes, expected aggregated value, resource availability of counterpart, sustainability and time frame for project execution.

Procedure for managing a horizontal cooperation project

Figure 3 shows how technical cooperation works between developing countries.

Figure 3. *Technical Cooperation Management Procedure between Developing Countries (TCDC)*



Source: Adaptation from the Ministry of Development Planning (2012)

Each TCDC project must be referred to the Ministry of Development Planning (MDP) by the corresponding Ministry Head of the Sector, which must perform the respective prioritization. Once the MDP receives a project proposal for technical cooperation, the VIPFE assesses the project according to the strategic guidelines for the period of international cooperation. The chosen projects must meet the established requirements and must be framed within the scope of TCDC to be included in the project bank for future negotiations.

The chosen projects must meet the established requirements and must be framed within the scope of TCDC to be included in the project bank for future negotiations.

The principal actors of TCDC are the Ministry of Foreign Affairs and the MDP; both are in charge of coordinating and selecting a set of projects which will be presented to a mixed commission conformed by ministry representatives from different horizontal cooperation countries and representatives of Chancelleries as well. A representative of the VIPFE leads a preliminary phase by organizing inter-institutional coordination meetings with both national entities and international counterparts. Afterwards, a Bilateral Mixed Commission elaborates and agrees on a Technical Cooperation Programme to be carried out in a certain time. However, there may be exceptions where the international cooperation counterpart of the provider country refers to a proposal in the form of presentation and agreement only. All projects that enter into technical cooperation programming become a State commitment.

According to the former authority of the Ministry of Environment and Water, the legal and institutional frameworks of the TCDC are insufficient due to the new challenges entailed by the relationship between receptors and providers of SSC. One of the drawbacks is that conventional technical cooperation features do not meet with the SSC demands. The design of basic instruments referred to as guidelines for the management procedure between developing countries does not allow visualizing relevant thematic fields for the parties. This means that the low involvement of the sectors – sectoral ministries and institutions — as well as the low possibility of influencing the agendas and programming of cooperation issues are clear limitations. Regarding the positive attributes of the TCDC, the Chief of the Financing Negotiation Unit of the MDP states that Bi-Ministerial Resolution No. 003 has worked well in terms of institutionalization. Based on the cooperation offer sent by neighbouring countries, sectors of the State prepare and present their projects to the VIPFE to be evaluated according to the priorities of the State and the government plan. The Ministry of Environment and Water is the most participative to date.

Furthermore, the strategic guidelines[25] within the framework of the National Development Plan defined by the MDP are: i) reduce inequalities, eradicate any type of exclusion and promote the full exercise of fundamental rights, ii) transform the development pattern and implement the plural economy, iii) transform the State and guarantee participation and social control over public management and iv) implement within the framework of the autonomous process, the development of participatory processes and allow the exercise of autonomous territorial entities (Ministry of Development Planning, 2012). Bolivia's Economic and Social Development Plan 2016-2020 (PDES) gives continuity to policies and strategies initiated in the National Development Plan towards what is known as Living Well (Law No. 786, 2016). Within the framework of the Patriotic Agenda 2025 (Law No. 650, 2015), the PDES establishes the general guidelines for the integral development of the country with the horizon of the Living Well paradigm to provide the general framework for public, private and community actions.

The PDES is organized into goals and results to be achieved by 2020 corresponding to a pillar of the Patriotic Agenda. Regarding SSC, the PDES recognizes integration with sovereignty. Under this aim, Bolivia states six goals that aim to achieve and strengthen mechanisms for integral development and integration between states within the framework of sovereignty of people without imperial hegemonies through regional mechanisms[26]. All the actions that emerge from these goals are there to be developed under the leadership of the Ministry of Foreign Affairs and the diplomatic missions.

[25] The strategic guidelines for the management of international cooperation of the MDP are under the normative and legal framework of Supreme Decree No. 29722 promulgated in 2007, which approves the National Development Plan, and Supreme Decree No. 29894 promulgated in 2009, which states the responsibilities of the MDP and VIPFE.

[26] Including UNASUR, CELAC, MERCOSUR, ALADI, ALBA-TCP and CAN.

Moreover, all pillars are aligned with the idea of integrated development for Living Well and underline its continuity to consolidate the results achieved with its previous guidelines.

The projects and programmes related to SSC carried out by Bolivia from 2016 to 2020 in accordance with its strategic guidelines are described in detail in Table 3[27]. Bolivia has relationships with Argentina, Brazil, Colombia, El Salvador, Mexico, Peru and Uruguay. The sectors benefited by the cooperation are: agriculture, industry, justice, hydrocarbons, health, national defence, citizen security, water resources, environment, mining, science and technology, other services and social policies, education, basic sanitation, tourism, energy and transport.

Table 3. *Programmes and projects of Bolivia within the SSC framework*

Partner country	Number of projects	Modality	Sectors	Date of Subscription
Argentina	16	Expenses are covered by *Argentine Fund for International Cooperation*	Agriculture, industry, multisector, justice, hydrocarbons, health	September 2016
Brazil	13	Expenses are covered by Brazilian Cooperation Agency	Agriculture, public order and citizen security, national defence, culture, health, industry, water resources, public order and citizen security.	February 2016
Colombia	5	Expenses are shared between the two countries	Agriculture and environment, mining and environment, environment, other services and social policies, science and technology.	August 2019
El Salvador	7	Expenses are shared between the two countries – in some projects triangular cooperation with the participation of Duchy of Luxembourg and Spanish Agency for International Development Cooperation (AECID).	Education, basic sanitation, tourism, national defence, industry and justice.	September 2016
Mexico	7	All expenses are financed by Mexican Agency for International Development Cooperation.	Industry, agriculture, industry, justice and tourism.	April 2018
Peru	7	Expenses are shared between the two countries.	Environment, agriculture and basic sanitation.	August 2017
Uruguay	5	Expenses are shared between the two countries.	Agriculture, energy, transport and basic sanitation.	October 2018

Source: VIPFE (2020)

Based on experiences and practices carried out by national public entities in recent years, within the framework of TCDC, the MDP has elaborated a Catalogue of Technical Cooperation known as Ayni[28] to promote Bolivia's participation as a provider country in horizontal technical cooperation (Ministry of Development Planning, 2019). This initiative allows Bolivia to position itself as a provider in the region by sharing successful experiences of government policies and programmes that achieved high performance in their implementation. However, there are some limitations because this catalogue only collects information at national level, and there are also diverse projects at subnational

[27] This information was provided by the VIPFE. This information is about the exchange experiences in programmes and projects with different countries at the time this study was developed (2020).

[28] Word in Quechua that means reciprocal cooperation and solidarity. Ayni is a way of life of Andean people which manifests itself in social relationships based on mutual aid and reciprocity.

level. Another limitation is the absence of more concrete operational instances to increase its full implementation. For instance, the excellent use of this catalogue depends on having clarity in the procedures to be followed, a structured system to guarantee its quality and effectiveness, the responsibilities of public bodies and, fundamentally, the financing of these initiatives under SSC.

Considering the role of Bolivia as recipient and provider, the scope of the projects depends directly on the opportunities offered by the cooperating countries as well as the budget that countries assign to this type of cooperation. A key feature to highlight related to Bolivia's role *as* recipient/provider is the principal actors that intervene such as Ministry of Foreign Affairs and the MDP — through the VIPFE — who are in charge of selecting the set of technical cooperation projects. Therefore, the institutional coordination deserves great attention in order to agree on a coordinated definition of the country position in the different levels of organization such us meetings, working groups, mixed commissions, diplomatic missions and international summits on international cooperation and SSC. Thus, the project portfolio is defined based on the country's priorities under a coordinating committee that decides, considering offers and demands from the other countries involved, the subject of an available budget.

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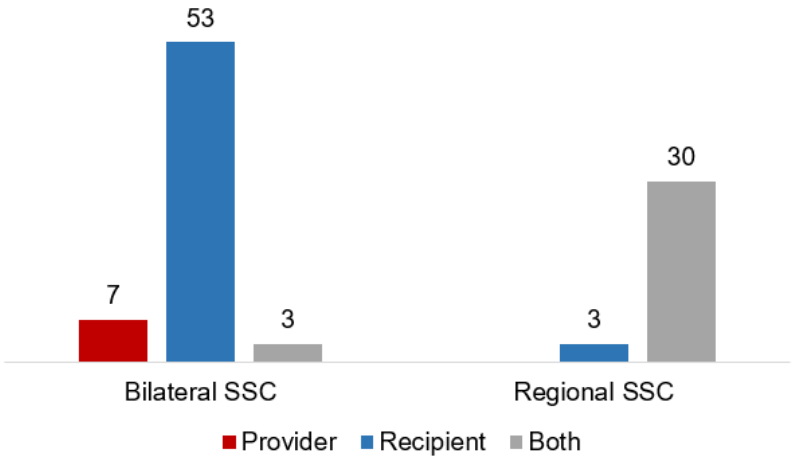
Thus, the number of projects in the portfolio depends on the number of activities requested by regional countries that participate as recipients or providers. The portfolio then reveals the most relevant areas or sectors for countries. Also, it reveals which sectors are the most developed in the case of providers, and which sectors are the least developed in the case of recipients. The portfolio of projects hides those sectors in which countries present less experience or countries consider those sectors the least relevant or the least developed. The impact of an activity or project does not depend on the size of the investment made. The intensity of impact must be evaluated by the level of accomplishment of key objectives and by the improvements perceived by the recipient country.

According to the 2019 SEGIB report, Bolivia participated in 125 SSC actions, projects and programmes in 2017. In 50.4 percent of the cases, the initiatives were implemented under the bilateral modality, 23.2 percent under regional modality and 26.4 percent through triangular cooperation. Bolivia participated as a recipient in 68 percent of the initiatives, as provider in 6.4 percent, and with a dual role in 26.4 percent. The strengthened capacities are mainly in health, agriculture, disaster management and industry. The SSC focused on contributing to achieving primarily SDGs 16 (Peace, justice and strong institutions), 11 (Sustainable cities and communities) and 3 (Good health and well-being). Argentina, Colombia and Peru are identified as the principal partners of Bolivia in SSC. Graphs 1 to 3 show the SSC in Bolivia, the main sector where it focuses and its main partners.

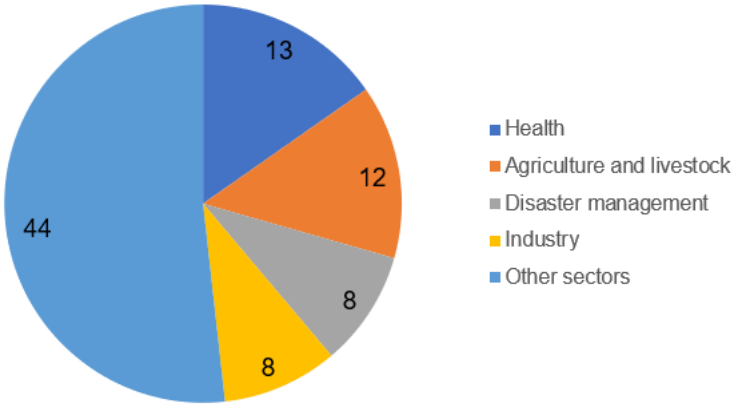
Graph 1. *SSC in Bolivia by role, 2017*



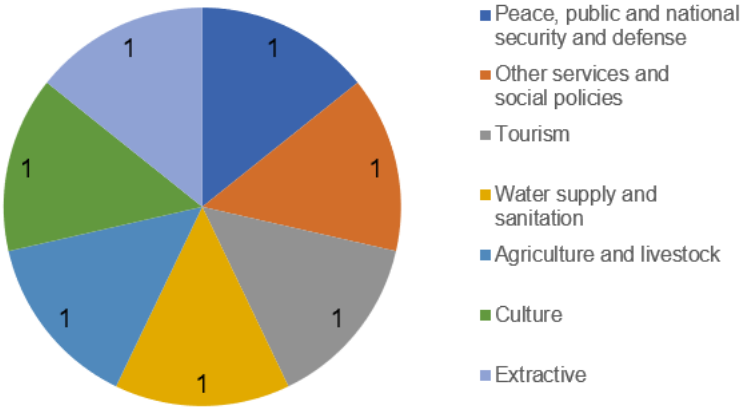
Source: SEGIB, 2019

Graph 2. *SSC in Bolivia: strengthen capacities, 2017*

a. Recipient

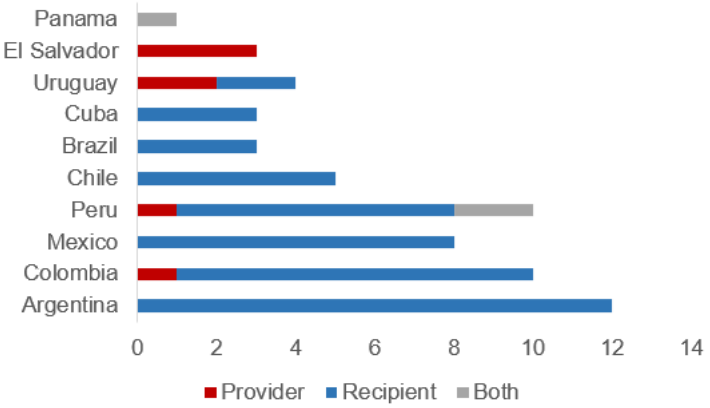


b. Provider



Source: SEGIB, 2019

Graph 3. *Bolivia main bilateral cooperation partners, 2017*



Source: SEGIB, 2019

CSO Participation

Principal actors in SSC are the MDP and the Ministry of Foreign Affairs. CSOs are not directly included in the normative and legal framework. However, depending on the entities and the project, CSOs may be included or excluded. For instance, when the project has a gender dimension, CSO participation is imperative because of their extensive knowledge of the subject.

The focus group made up of different Bolivian CSOs provided evidence about their perspective of how SSC works. The role of CSOs in SSC depends on which country becomes a counterpart of Bolivia's institutions when a project is executed. For instance, when the country partner belongs to the African region, Bolivia generally is a provider[29].

Moreover, when the country partner belongs to Latin America, the CSOs of Bolivia play the role of recipient. CSOs agree that Bolivia has a low level of positioning in the Latin America region in the SSC framework.

Regarding the legal framework of Bolivia for international cooperation, it is highly bureaucratic from CSOs' point of view. There are experiences where institutions lost donations because of the State's slow procedures, which affected their deadlines. The absence of a specific regulatory framework for SSC for CSOs makes its implementation informal and flexible.

CSO representatives identify that SSC is less complex than traditional cooperation, because it becomes a peer conversation to achieve capacity-building; therefore, it works better at regional and local level. However, as there is no coordination between national level and CSOs, all the information and knowledge created from SSC is lost, and they cannot take advantage of the possible synergies derived from the participation of different actors.

The experiences of SSC that are effective between Bolivia's CSOs and neighbouring countries are those related to exchanges of knowledge through workshops, practices, seminars and capacity-building. They recognize that a mechanism to achieve connection with partners of CSOs from other countries is the visibility of the institution; thus, platforms play a key role for SSC.

The effectiveness of SSC depends on its scope; for instance, climate change experiences are successful if there is a third country that finances the technical cooperation between developing countries (triangular cooperation).

[29] This argument is based on the activities and experiences of the institutions that participated in the focus group. They stated their perceptions about the interaction they had with African institutions who contact them through virtual media.

Collaboration and role played by key stakeholders

Given the structure and how SSC is implemented at national level, collaboration only works if there is an interest from the counterparts and Ministries of Bolivia. Institutionally, SSC is a tool centralized by the MDP, the Ministry of Foreign Affairs and the Vice-Ministry for Public Investment and External Financing. The articulation seems inflexible and weak between other sectors. Participation of CSOs within the normative and institutional framework is null. The focus group, according to its experiences in different seminars, revealed that actions by the Ministry of Foreign Affairs are very isolated and their scope is reduced to technical cooperation without any great impact at other levels.

In the national level scheme of SSC, and according to the definition of UNOSSC, government actors are not the only ones that play a role in constituting SSC but also CSOs, academic institutions, and networks. Research centres of public universities play an important role in exchanging knowledge and building capacities with other partners from regional countries to improve practices. For instance, the Institute of Agricultural Research and Natural Resources of the *Universidad Mayor de San Andres* has technical strengths that reinforce exchange of experiences through horizontal cooperation, because their researchers consider that it is simpler to understand the context between neighbours and build capacities.

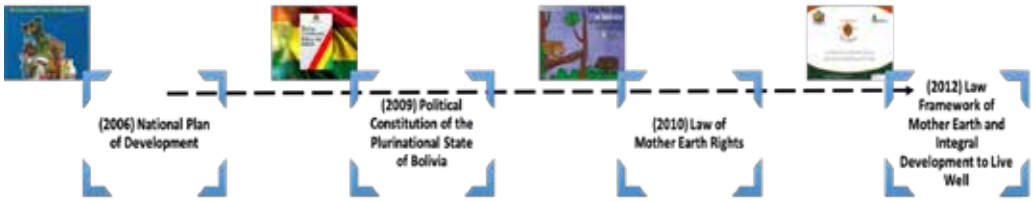
In contrast, North-South cooperation experiences reveal, in different projects, that funders try to impose their technical knowledge without exploring the context among other factors that make projects fail.

Identification and prioritization of climate change SSC programmes

Flores (2011) considers that poverty, lack of economic resources and capacities and the fragility of Bolivia's soils make the country very vulnerable to the impacts of climate change. Bolivia signed the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and the National Congress ratified it through Decree-Law No. 1576 in 1994. In 1995, the National Climate Change Programme (NCCP) was created to implement the Convention in Bolivia. The Kyoto Protocol was ratified in 1999 by Law 1988. The NCCP has been a low-profile institution and its scope has been limited in implementing mitigation and adaptation plans in policies and sectoral plans in Bolivia since its creation. Although the National Development Plan in 2006 stated the continuity of incentives for the development of carbon markets and participation in the CDM, Bolivia has presented a position against mechanisms of carbon markets, offsets and transfers, because developed countries are the main source of pollution and, instead of reducing their emissions, they finance mitigation projects in developing countries. In 2009, the Bolivian government closed the Clean Development Office that was in charge of implementing this kind of offset projects.

A new Political Constitution of the Plurinational State of Bolivia was promulgated in 2009, in which wider criteria in environmental issues were implemented. A year later, in 2010, the Law of the Rights of Mother Earth took effect by aiming to recognize the rights of Mother Earth, as well as the obligations and duties of the Plurinational State and society to guarantee respect for those rights. In 2012, Bolivia promulgated the Framework Law on Mother Earth and Integral Development to Live Well where is stated that 'all plans and programmes for reducing greenhouse gas emissions will focus on the non-commercialization of the environmental functions of the components of Mother Earth, so they will not include financing mechanisms associated with carbon markets' (Law No. 300, 2012, Art. 32). Figure 4 shows the timeline of national laws on climate change.

Figure 4. *Timeline of National Law on Climate Change*



Source: Adaptation from Flores (2011) and Grupo de Financiamiento Climático LAC (2015)

The former authorities of the Vice-Ministry of Environment, Biodiversity, Climate Change and Forest Management and Development and the Executive Director of the Plurinational Authority of Mother Earth recognize that Bolivia does not have SSC programmes on climate change. However, there are advances and good intentions between regional partners to cooperate, mainly on water issues. Although there are no specific SSC projects or programmes, they identify that triangular cooperation is more common in this kind of area. Nonetheless, industrialized countries still look for offsetting developing countries to reduce pollution, by transferring financial aid to the states that are acting according to the international protocols on climate change.

Integration seems to be an important part of SSC. Therefore, although there are no programmes directly linked with SSC and climate change at national level, there are Binational Cabinets and Border Committees between regional partners that allow the establishment of joint agendas about SSC and inequality. Binational Cabinets promote mutual benefit actions and allow preparation of programmes and projects of common interest in which public and private sectors of both countries participate. For instance, the Fifth Binational Cabinet between Peru and Bolivia is based on four thematic axes: environment and cross-border hydrological resources; security and defence; economic development and social policies; infrastructure for integration and development. The binational cabinet is a formula that Bolivia and Peru have applied since 2015 when the presidents of both countries met. Border Committees are binational coordination mechanisms oriented to promote cooperation, integration and development of the border region between countries. An example of this is the committee between Bolivia and Brazil in 2011 to promote tourism.

Binational Cabinets promote mutual benefit actions and allow preparation of programmes and projects of common interest in which public and private sectors of both countries participate

Many integration schemes where the exchange of experiences improves the capacities of the countries involved may be considered SSC, but stakeholders do not consider them as real international cooperation.

Climate Change Initiatives

Experts note that NDCs are the main instrument regarding climate change in Bolivia. Bolivia's contribution takes into account that the new climate agreement must be developed based on the vision of the people and social organizations. This was revealed in the conclusions of World People's Conference on Climate Change in 2015, rejecting, in turn, the vision of transnational corporations, paving the way for a solution to the climate crisis from another alternative to the current view. According to the Conference, Bolivia should be focused on mitigation actions considering three sectors: i) change of land use and forests, ii) electricity and iii) solid waste. Thus, the CSOs also conclude that equity vision, climate justice and vulnerability are factors that must be included within NDCs. Regarding vulnerabilities and poverty, the CSOs stated that it is necessary to change the energetic and productive matrix to protect people who are more exposed to climate change impacts.

The most relevant initiative regarding cooperation and climate change is the Amazon Cooperation Treaty Organization (ACTO), which is an intergovernmental organization that consists of eight Member States, including Bolivia. Its principal goal is to encourage the sustainable development and social inclusion of the region. The Permanent Secretariat of the ACTO (PS/ACTO) was established in 2002 to provide a platform for political dialogue and regional cooperation. The PS/ACTO is one of the most experienced integration mechanisms and its members have worked together to overcome dependence on external financing for the operation of the PS and for the development of the Organization's strategic projects (ACTO, 2011). See Box 1 for more information about the project.

Box 1. *Amazon Cooperation Treaty Organization - ACTO*

ACTO Regional Project "Monitoring Forest Cover in the Amazon Region"

ACTO promotes cooperation among the Amazon countries. Within this target, an emblematic initiative is the regional Project *'Monitoring Forest Cover in the Amazon Region'*, which promotes dialogue, interchange of knowledge, and the development of capabilities and technology transfer among the Member States. Although Brazil is the most advanced country in these issues, this integration has allowed cooperation among them.

The project goals are oriented to contribute to forest management on issues related to deforestation, land occupation, changes in land use and sustainable forest management. Its strategic partners are the Ministries of Foreign Affairs and Environment of the Member States (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela), donors such as the Brazilian Cooperation Agency, International Tropical Timber Organization, German Cooperation (BMZ/GIZ) and Dutch Cooperation, Amazonian Fund of the National Bank for Economic and Social Development of Brazil, and technical support from the National Institute for Space Research. The project started around 2010 and its implementation was estimated to finalize in 2017. The financial resources, non-refundable aid, were approximately $2 million.

The Monitoring Project was implemented in two phases. The first one began in 2011 under the name 'Monitoring Deforestation, Logging and Land Use Change in the Pan Amazonian Forest', the principal components of which were: i) national plans for forest monitoring, ii) implementation of national monitoring systems, and iii) exchange project and consultation forum. The second phase has the same name as the project begun in 2013. The actions that are currently under way are: i) strengthening observation rooms, ii) implementation of national plans for monitoring forest cover, iii) monitoring technology training, iv) support for regional cooperation in combating illegal deforestation, and v) project monitoring, tracking and supervision.

Bolivia has experienced benefits from the Monitoring Project since it has meant progress in implementing its own Forest Information System, which is a useful tool for understanding deforestation trends, and thus building management processes based on information. Besides, in coordination with the partner countries, it is possible to promote regional actions based on evidence. Secondly, the integral management of forests is important since aspects of climate change can be managed by proposing alternative mechanisms to overcome the marketing approaches of environmental functions.

Source: Amazon Cooperation Treaty Organization (2017) Regional cooperation for monitoring deforestation in the Amazon rainforest. Retrieved from http://www.otca-oficial.info

A feature of the ACTO, which can be considered an advantage, is that the integration is around a biome rather than geopolitical regions. Climate change is established on the agenda of the ACTO to identify alternatives for strengthening regional cooperation. The principal achievement is the integration and consolidation of similar intentions.

The existence of a specific SSC project, programme or initiative concerning climate change could not be identified. There are several efforts to increase capacities through conventions on different topics (e.g. chemical substances, wetlands), but they are unlikely to become projects.

Fragmentation in the region may be one restriction on the exchange of technical assistance. Some factors deepen fragmentation in climate change, such as unfair competition between countries and cooperation agencies. Because climate change has recently arisen as a relevant issue, the available resources are highly demanded by different public and private actors.

Regarding the reduction of inequalities and its link with climate change, it really depends on the country's willingness. CSOs state that one pillar of cooperation for development should be reduction of inequalities. All the projects that are implemented in the international cooperation framework include analysis of inequalities and other factors such as multidimensional poverty and gender. An obstacle identified by CSOs is related to funding; there are networks and intentions between CSOs of different countries to tackle inequalities programmes but not enough financial support. Some CSOs take advantage of webinars to promote exchanges about experience of inequalities, but there is no greater action.

Climate funding in Bolivia

Formally, mobilization of resources depends on which sector is executing a project or initiative. There are no experiences related to climate change and SSC together. However, there is evidence of experiences in triangular cooperation where a third partner, usually from Europe, finances initiatives related to improving resilience capacities between two southern countries; for instance, the project called *A long-term partnership to support agricultural sustainability and adaptation to climate change* carried out by Mexico, Germany and Bolivia.

There are a wide variety of projects financed by Euroclima, where neighbouring countries are involved in sharing knowledge and practices. The projects are carried out by NGOs established in the chosen country, and cooperate with technical issues. For instance, a project carried out by *SwissContact* in Bolivia called *Resilient Family Farming*, in which countries such as Peru and Bolivia are involved, for improving the adaptive capacity of farmers, the application and dissemination of good practices of climate-smart agriculture, and the articulation of differentiated markets linked to Andean food and agriculture systems based on potatoes.

Regarding multilateral funding, around $113.5 million have been approved from 2010 to 2017 in seven different projects. Four of them were pilot programmes for climate resilience, whose goal was adaptation, and almost 90 percent of the amount approved in that period was assigned to these programmes. The amount approved by the GCF was $0.30 million, and the MDP was in charge of implementing it. The Adaptation for Smallholder Agriculture Programme in 2013 was granted $10 million. Finally, the UN-REDD Programme was granted $1.12 million to improve strategies and plans, and regulations within the forestry sector by supporting capacity-building at national and local level (Climate Funds Update, 2019)

The obstacles to finding data on climate funding for our case study coincide with the Country Report on Funding for Climate Change (GFLAC, 2015). This report identifies barriers for the analysis of climate change funding, such as confusing or unavailable information, difficulties in managing information from primary sources, lack of institutional information systems for climate funding, and lack of coordination between different levels of government for sharing information. However, the Climate Finance Group of Latin America and the Caribbean (2015) systematized funding information for Latin American countries, including Bolivia, based on a methodology for the 2010-2014 period.

The analysis was based on 82 projects and, after calculating their international funding flows, the amount was $318 million from 2010 to 2014. Most of the funding took the form of donations (50 percent), although the lending represented just under half the funding (43 percent), while technical cooperation and lending/donation represented only 6 percent. The funding received by adaptation represented 82 percent of the total amount, followed by adaptation/mitigation (13 percent), while mitigation and cross-cutting activities reached only 5 percent of the total amount.

Considering the national funding, less than 1 percent of the total public budget was allocated to climate change in 2015 – nearly $258 million. The transport sector received the highest percentage of these resources (75 percent), the agricultural sector was granted with 18.8 percent, and the forest sector received 2.9 percent. The following sectors concentrated 3 percent of the rest in order of importance: environment (1 percent), energy (1 percent), water and sanitation (0.5 percent), waste (0.1 percent), and natural disasters (0.01 percent). The budget analysis by type of activity revealed that adaptation was the least favoured activity since it only represented 1 percent of the total budget in 2015. There were mixed activities of mitigation and adaptation that represented 21 percent. Mitigation activity took up more than three quarters of the budget allocated to climate funding (78 percent).

Challenges and opportunities of South-South Cooperation on climate change in Bolivia

State capacities in South-South Cooperation and climate change

The National Development Model of Bolivia, implemented since 2006, is consistent with the normative and economic structure that was developed in recent years related to international cooperation. Its position concerning international cooperation lies in the logic of SSC definition. However, it is important to recognize the difference between existence, evidence and achievements within the framework of SSC and climate change.

The methodology developed for this study gives us information that the existence of a legal and institutional framework is not absent. There is a framework regarding SSC issues and also there is a framework for addressing climate changes issues, although they are not unified in specific guidelines. Although climate change is not the central subject of any specific SSC initiative, due to its cross-cutting nature, it has been addressed within the framework of some of the technical cooperation initiatives through SSC. Moreover, despite the existence of a legal framework, it is important to evaluate its efficiency. As interviewees stated, it seems that all responsibility lies with the MDP, and the process is slow because of bureaucracy. For instance, in the field of climate change, the Ministry of Water and Environment is the most qualified body to decide on the criteria of projects to be implemented; however, according to Bi-Ministerial Resolution No. 003 the responsibility is assumed by the MDP and the Ministry of Foreign Affairs. Although the Ministry of Water and Environment decides which projects and programmes should be implemented based on technical and social studies, the Ministry of Foreign Affairs is the body that establishes a position, which may not necessarily be based on a specific plan.

Another feature worth noting are the capacities that each actor at each level has and should have. Negotiating skills are relevant when the discussion with a partner country is established, but technical knowledge and experience skills are also essential. According to our study, both skills are not present all the time, and that makes it difficult to achieve successful results or even implement and finish a project.

Regarding the political factor, Bolivia is a country where decisions are based on a political dimension, and they all depend on who is governing. The existence of the Framework Law of Mother Earth and Integral Development to Live Well contributed to the development model of Bolivia, and all started from the Indigenous Government that took over in 2006. Although it is not possible to assert the actions that other governments would have made, there is a possibility that decisions would have been aligned with a development model based on markets. We underline that when there is a change of government, the positions and policies change as well. For instance, an initiative identified in the framework of SSC in our study was the Platform of Indigenous Peoples on Knowledge

of Climate Change,[30] the objective of which is to strengthen traditional knowledge. Prior to the resignation of the former government, which was in charge of Bolivia for almost 14 years (2006-2019), the action plan for the platform was negotiated at the UNFCCC. However, after the transitional government assumed the presidency, its administration decided not to take a position at the Conference of Parties to the UNFCCC, which took place in Spain at the end of 2019, and the progress made in the project was halted.

Considering the evidence and achievements made by the implementation of the projects, given the existence of initiatives and the legal framework, there is no evidence of a case of a climate change project developed in the framework of SSC that was executed and evaluated based on its impacts and outcomes. The interviews supported the fact that there are good intentions, and there has been progress in planning and proposing initiatives, but that SSC occurs mainly in the field of technical cooperation limited to the exchange of visits, mostly by technicians and specialists.

Climate change is a cross-cutting issue of concern to government entities; however, there is a lack of specific actions related to cooperation to tackle this issue. The heterogeneity of the institutions and actors in charge of climate change issues in different countries is the first drawback. Thus, climate change is an issue in the process of permanent negotiation among the international community and the areas of relationship to the mechanisms linked to this negotiation are highly conditioned internationally.

In this context, Table 4 shows an analysis of Bolivian technical-administrative and political-institutional state capacities in the field of SSC and climate change.

[30] This initiative is in its initial stages according one of our interviewees.

Table 4. *Analysis of Bolivian state capacities*

Capacity	South-South Cooperation	Climate Change	South-South Cooperation and Climate Change
Technical - Administrative	The responsible actors present negotiation skills given their functions, but they depend on the technical skills of the head of sector to take a decision. This dependence makes projects run slowly. There is technical coordination through responsible levels to promote SSC. However, only a selected set of projects is visible and benefited. The selection does not have clear technical criteria, and they are selected based on country priorities and restricted by a budget.	The Vice-Ministry of Environment, Biodiversity, Climate Change and Forest Management and Development, and the Plurinational Authority of Mother Earth are in charge of Climate Change issues. However, all SSC projects are first managed by the MDP and the Ministry of Foreign Affairs. There were advances in negotiation to show Bolivia's position on climate justice in different world summits, but there is no action plan yet.	There is no body that unifies both SSC and Climate Change. Given its nature climate change is a cross-cutting issue in many projects. However, there is no action plan according to the normative framework and no clear position about it.
Political - Institutional	There is a normative framework to manage SSC projects and programmes. Also, there is a definition of responsibilities, but the process is not decentralized, each project must go through the MDP-VIPFE and the Ministry of Foreign Affairs. International cooperation depends on political stability. Before 2006, international cooperation worked based on financial needs to cover fiscal problems due to different economic crises in Bolivia. After 2006, the development plan considered cooperation not only as an aid, but as an opportunity to grow under Bolivia's own conditions. Political stability characterized this period and this explains the progress in some SSC projects and programmes. When the government changed (2019) so did the public officials in charge of institutional coordination and projects that were not compatible with the new strategic guideline or ideology.	Mother Earth Rights discourse is at the heart of environmental policies and the existing legal framework. The mechanisms and vision that Bolivia has regarding the environment is a feature that differentiates it from other countries. Due to the relationship of the government with different indigenous groups, a new vision was established but in practice there were no results.	From this vision, Bolivia wants to be a provider country, although no plan has yet been consolidated. There is no evidence of a project at national level that follows the scheme of SSC to be implemented on climate change as a successful case

Source: Interviews and focus group (2020)

Results

Although international cooperation has experienced restructuring in the case of Bolivia, there is no overwhelming evidence of its impacts on structural changes. There are important advances in terms of normative and institutional framework brought about at national level for SSC. However, the lack of coordination with subnational levels and the inclusion of CSOs weakens and limits the impacts and potential benefits derived from SSC.

According to the CSOs interviewed, the demand and supply scheme that centralizes the national level under the coordination of the VIPFE does not work properly, because resources and opportunities are being wasted due to lack of information, dissemination and systematization of needs and skills of government levels, including CSOs. Likewise, the political factor is identified as an obstacle in SSC implementation in the region. There are particular government agendas and priorities that are not necessarily compatible with the country's needs. Political interest does not favour the development and evolution of SSC. This is the reason why CSO initiatives have more success in SSC experiences. CSOs focus on accomplishing goals related to satisfying society's welfare than to linking

their own interests with the programmes. Although CSOs are not formally included in the normative framework, there are no limitations on them participating in SSC; therefore, the lack of regulation, instead of being a problem, is an advantage. CSOs find that the bureaucratic processes of international cooperation make it challenging to apply to donations or to participate with international peers in technical exchange experiences. On the other hand, they take advantage of networks and platforms to position themselves as specialists in their area to make their skills visible and share them with other peer CSOs from neighbouring countries.

Regarding climate change, there are few projects executed through SSC, and the evidence shows that the process for generating output takes time. The example considered in the case of Bolivia is ACTO, which has some achievements because of the horizontal cooperation between countries sharing a biome.

Another essential variable to take into account in the analysis of SSC is funding. Experiences related to the exchange of knowledge can be casual, and there is no need to worry about financial resources. However, financial resources are necessary when the projects scale up among southern countries that are usually financed by northern countries, and the relationship becomes triangular cooperation. Finally, it is difficult to analyse information about funding because of the lack of systematization and centralization of data since there is no coordination between different levels of government.

Main challenges and obstacles

The main challenge for SSC in Bolivia is the creation of a specific fund for the development of a portfolio of projects and its centralization at national level

The main challenge for SSC in Bolivia is the creation of a specific fund for the development of a portfolio of projects and its centralization at national level; this could avoid the organizations incurring double costs (e.g. flight tickets and time outside the workplace) by providing or requesting a cooperation initiative.

SSC does not count on the levels of monetary support that triangular cooperation does. Therefore, the scope of triangular cooperation is more extensive. This is why many projects born as South-South bilateral cooperation become triangular. Another challenge is to reach subnational governments. The VIPFE disseminates information about SSC opportunities among subnational governments, and the Municipal Government of La Paz currently benefits the most from this type of cooperation. Thus, municipalities have to be integrated into the SSC to receive its benefits.

Although the VIPFE provides a legal framework, it only provides procedures and says nothing about the nature of SSC and the mechanisms and incentives for taking advantage of it. There is no knowledge management policy, and that is why it is not possible to talk about sharing experiences or transferring knowledge. Bolivia has many experiences and good practices to share, but it does not have a strategy to do so. Although there is a catalogue of experiences for disseminating them, it is not adequately distributed, and only a few actors know about its existence.

Key success factors and lessons learned

This research shows that success factors that will impact climate change and reduction of inequalities come from institutionalizing initiatives, not as bilateral countries but as regional countries. To make climate change and reduction of inequalities initiatives sustainable, it is imperative to create organizations that do not depend entirely on external funding because this becomes a constraint on the programmes. Although the inclusion of CSOs is important within the institutional and normative framework, it must be considered that complex processes discourage initiatives instead of incentivizing them. Therefore, it must be relevant to the discussion with different stakeholders to make

a framework that works well in terms of SSC, considering the experiences of triangular cooperation and international cooperation per se.

It is important to centralize both data and experiences from international cooperation, classifying different kinds of it, such as bilateral cooperation, SSC and triangular cooperation to monitor and to learn from those experiences in order to improve or create indicators that measure achievement according to the development plan of the countries.

Likewise, climate change must be considered in a consensus of regional policies and actions, and not in isolation, because there is a waste of resources or unsuccessful implementations, where some countries benefit at the expense of others.

5. Ecuador case study

Ecuador, like many other countries is already suffering the consequences of climate change, evidence suggests that under current trends, the temperature will have increased by about 2°C in the country by the end of the century (Ministry of the Environment, 2019).

On other hand, it is also struggling with the increased intensity of climate related phenomena, such as El Niño and La Niña, which are evidenced in more extensive periods of heavy rain and longer dry seasons, causing significant economic, social and financial losses (Ministry of the Environment, 2019). National efforts to fight against the effects of climate change and reduce emissions recognize the importance of involving different stakeholders and sectors. However, national policy also acknowledges that without financial aid from international and regional actors the actions to increase resilience to climate change and reduce Greenhouse Gas Emission will be limited, giving South- South Cooperation a new relevance and scope of cooperation.

National efforts to fight against the effects of climate change and reduce emissions recognize the importance of involving different stakeholders and sectors

The country has made important improvements within its policy instruments and regulatory mechanisms to include climate change as part of its foreign policy. For instance, the national planning recognizes the challenge of promoting sustainable development in a country with diverse ecosystems, which also respects the rights of nature[31] (Ministry of Environment, 2019). The country has 59 natural protected areas. Among them are the Galapagos Islands and the Sangay National Park, which were declared World Natural Heritage by UNESCO in 1978 and 1983, and five other sites are on the Tentative List (UNESCO). The Galapagos Islands are a sensitive ecosystem that is acknowledged as world heritage due to the capacity of adaptation of the natural species that live within it (UNESCO). However, for over ten years this and other protected areas had experienced the effects of climate change, such as increase in temperatures, ocean acidification and rising sea levels (El Universo, 2009).

Ecuador adopted the 2030 Agenda for Sustainable Development as a state policy through Executive Decree No. 371 in April 2018. Also, the country signed the Paris Agreement in July 2016, ratified by Executive Decree No. 98 of 27 July 2017. Recently, Ecuador published its Nationally Determined Contribution (NDC) document for 2020-2025 in March 2019. The general objective of the country's NDCs is to implement policies, actions and efforts that promote the reduction of greenhouse gases and increase resilience in the prioritized sectors identified in the National Climate Change Strategy. In April 2020, the country is working on the NDC implementation plan, which will include strategic lines, key actors and possible actions.

Despite all the commitments, efforts and progress made, the need for international cooperation is evident, *'... a low carbon future will require international cooperation on an unprecedented scale to succeed ...'* (UNCCC, 2018). However, since 2010, Ecuador has surpassed the income limits set by the World Bank, becoming a high-middle income country. This means a continuous reduction of the international cooperation received from the ODA (Ministry of International Affairs and Human Mobility, 2020). In this context, SSC is vital for achieving the challenges set by the NDCs and other local and national planning for climate change action, because most of the international financial aid could be reduced in the next few years.

[31] The Ecuadorian National Constitution acknowledges the rights of nature, or Pachamama, in Chapter Seven, the Rights of Nature, articles 71-74.

Ecuadorian foreign policy is aiming to become an example in SSC, recognizing the strategic role of this initiative for continuous learning, and the exchange of experiences with countries that face similar problems (Ministry of Foreign Affairs and Human Mobility, 2020). Nevertheless, the present 'graduation' scenario, set by the reduction of international financial aid, requires a more effective, efficient and sustainable impact of SSC in the reduction of inequalities derived from the technological and income gaps.

International cooperation in Ecuador

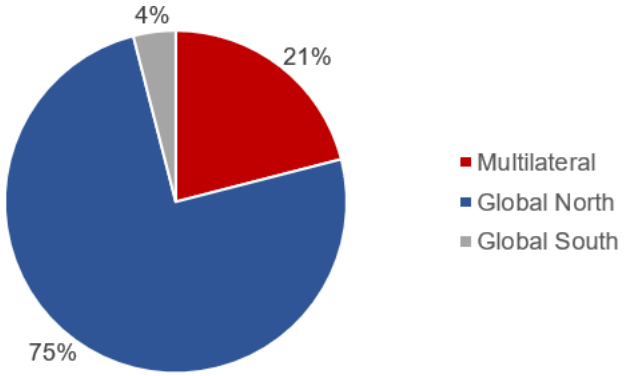
Ecuador's current foreign affairs policy recognizes the importance of international cooperation for the country and the need for better alignment of non-reimbursable international cooperation with national policies and plans. As a consequence, few reforms have been put in place in the last three years. Currently, the Ministry of Foreign Affairs and Human Mobility (MFAHM) is the governing institution for the non-reimbursable international cooperation policy, involving at the same time other public entities as well as non-governmental organizations as shown in Figure 5.

Figure 5. *Institutions of the National System of International Non-reimbursable Cooperation*

Source: Ministry of Foreign Affairs and Human Mobility (2019)

International cooperation is characterized by a more intense alliance with countries of the Global North, followed by agreements signed with multilateral organizations such as the Inter-American Development Bank, the Development Bank of Latin America, the World Bank, among others. According to the MFAHM official database, in 2019, only 4 percent of overall international cooperation was SSC (Graph 4), with a total of 14 agreements being signed, ten of which were with Panama.

Graph 4. *International cooperation by regional classification*



Source: Ministry of Foreign Affairs and Human Mobility (2020)

The functioning of the National System of International Non-Reimbursable Cooperation (SECI)

On 13 October 2016, by Executive Decree No. 1202, the Technical Secretariat for International Cooperation (SETECI) was abolished as part of a series of institutional arrangements to strengthen the role of international cooperation in the country. The Ministry of International Affairs and Human Mobility (MFAHM), was designated as the responsible entity for the regulation, planning, control and management of the SECI, which was originally created to guarantee that all non-reimbursable cooperation projects are aligned with national plans and policies (MFAHM). The Ministry coordinates the execution of non-reimbursable international cooperation, including official and unofficial cooperation, as well as the central and decentralized execution levels.

Institutional Framework

The Ministry also implemented a new institutional framework. The *Undersecretariat of International Cooperation* was created in May 2017 in order to secure the correct execution of non-reimbursable cooperation projects. Within the Undersecretariat, three Directoratess were created, including i) the Directorate of Management, Information and International Cooperation Policy, which regulates and implements policies for the SECI and manages information systems as well as coordinating with subnational governments; ii) the Directorate of Multilateral and Bi-Regional Cooperation is in charge of regional, bilateral and multilateral programmes as well as SSC; iii) the Department of Non-Governmental International Cooperation regulates and oversees agreements with international NGOs.

It is the responsibility of the Undersecretariat of International Cooperation of the MFAHM to evaluate, plan and manage all the joint actions that are signed through Joint Committees between countries. This kind of cooperation is called official cooperation and is registered by the MFAHM. On the other hand, other Ministries, local governments and universities, among others, can manage their international cooperation (Official Registration Supplement No. 306, 2010), which is classified as non-official cooperation, which would also include cooperation among private organizations and civil society groups. In Ecuador, there is no record of this type of cooperation.

Alignment with international agendas and local plans

Ecuador formally adopted the 2030 Agenda as state policy through Executive Decree No. 371. There are several ongoing efforts to link the 2030 Agenda with national and local planning, such as the National Development Plan 2017-2021, which is now closely linked

to the SECI as explained in a report titled Policies and Strategies for Non-reimbursable International Cooperation 2017-2021.

The National Development Plan is the maximum instrument of public policy for the government action, and it includes several elements that are compatible and responsive to the 2030 Agenda for the development of the priorities that the country has defined. This makes explicit the fight against poverty, reducing inequality gaps and boosting economic growth in the framework of environmental sustainability. This allows organization, in a coordinated and coherent way, of the national and international development agenda, facilitating the alignment of international cooperation with the country's priorities (MFAHM, 2019)

The SECI follows the prioritized development pillars of the National Development Plan 2017-2021, which include the axes of territorial equity and environmental sustainability. Each one of them contains intersectoral policies, goals and indicators; as well as Emblematic Interventions that will guide the action of public policies to achieve established national objectives. In this context, the MFAHM is aligning all programmes to the respective national and subnational planning instruments, as shown in Figure 6.

Figure 6. *National planning instruments and the SECI*

Source: MFAHM (2019)

Alignment with environmental sustainability and climate change

The *Policies and Strategies for Non-reimbursable International Cooperation 2017-2021* report highlights climate change as one of the major challenges for humanity, and suggests that its environmental dimension should not be considered alone. Rather, it should also include its political, social and economic dimension. This report also suggests the importance of considering the environmental sustainability dimension in the actions planned in international non-reimbursable cooperation projects by including an integrated approach that considers human development and sustainable use of natural resources.

Ecuador has put in place several policy instruments and legal mechanisms related to climate change. The Constitution of Ecuador recognizes the protection of nature (article 389) and the fight against climate change (article 414). Other substantive public policies for climate change management include the National Environmental Policy, the Executive Decree that declares as a State policy the adaptation and mitigation of climate change

(2009), the National Climate Change Strategy (2012), and the Executive Decrees related to the creation, constitutionf, and operation of the Inter-Institutional Committee on Climate Change - CICC (2009, 2010, 2017). Moreover, Ecuador adopted the 2030 Agenda for Sustainable Development as a State policy through Executive Decree No. 371 in April 2018. Ecuador signed the Paris Agreement in July 2016 and this was ratified by Executive Decree No. 98 of 27 July 2017.

South-South Cooperation in Ecuador

The MFAHM recognizes SSC as an opportunity to multiply the South-South nexus and diversify its international agreements. Also, Ecuador has a dual role as a provider and recipient of SSC initiatives. The country can outline its experiences and capacities on public policies and initiatives in a regional context (MREMH, 2019). Ecuador also recognizes SSC as an opportunity to strengthen regional integration.

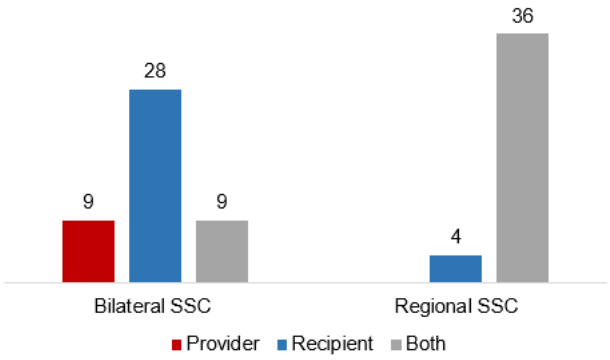
Ecuador has recently promoted SSC policy. One of the goals of the current external affairs policy is to project the country as a provider of SSC initiatives, especially in Latin America and the Caribbean. The Ministry recognized that the country has successful and innovative policies and practices that have been documented and made available to other countries. In this context, an Online SSC Catalogue has been generated as a permanent space to learn and share knowledge and experiences with other countries. Although, this catalogue can be viewed online, it does not include yet any documented experience[32]. The only information available is the categorization of experiences in the following sectors:

- Environment and Habitat
- Economic
- Infrastructure and non-renewable resources
- Security
- Production
- Social
- Foreign Affairs and Promotion

According to the SEGIB (2019), Ecuador had 110 SSC initiatives, 41.8 percent in the modality of bilateral SSC, 21.8 percent as triangular cooperation and 36.3 percent as regional SSC. As shown in Graphs 5 to 7, Ecuador shows more projects in disaster management and agriculture as a recipient and strengthening of institutions as a provider. SSC is available in the environmental sector, through the disaster management sector; however, the interviews with the environment and the MFAHM authorities both identified that there may be overlaps in the cooperation regarding environmental issues given that there are direct channels of cooperation by the sectoral authorities or with other NGOs and local governments that may not be reported.

[32] At the time of this report, the website of the SSC Catalogue did not contain any documented experience http://app.cancilleria.gob.ec/catalogo_css/frontEnd/principal.php

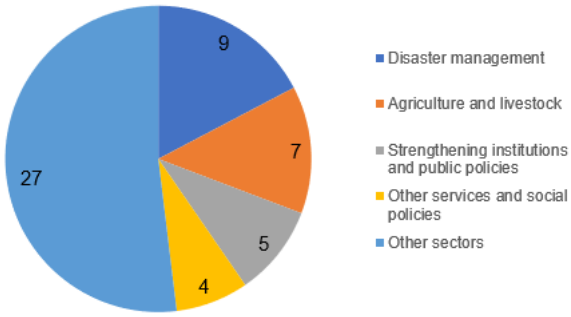
Graph 5. *SSC in Ecuador by role, 2017*



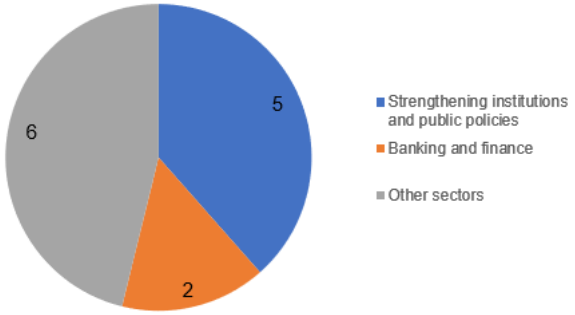
Source: SEGIB, 2019

Graph 6. *Ecuador SSC: strengthen capacities, 2017*

a. Recipient

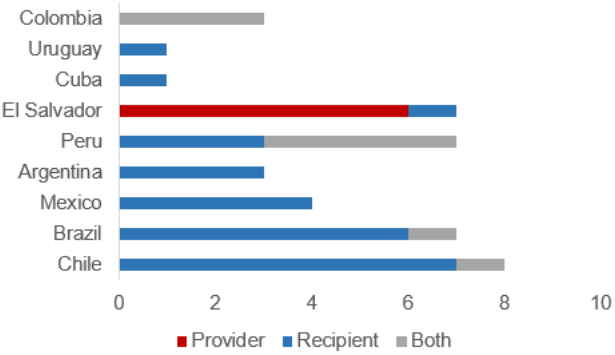


b. Provider



Source: SEGIB, 2019

Graph 7. *Ecuador SSC: main bilateral cooperation partners*



Source: SEGIB, 2019

Identification of climate change SSC programmes

International cooperation in Ecuador is defined in the National Development Plan 2017-2021. The planning states that all cooperation must be aligned with the objectives and principles determined by the national planning priorities (Secretariat of National Planning, 2017: 39). In the case of international cooperation, this refers to research, technology, and innovation transfers (Secretariat of National Planning, 2017:106).

International cooperation should follow national planning at all levels. The national policy states that the objectives of the collaboration can follow the priorities set by the different planning levels. Therefore, national planning and legislation acknowledge decentralized cooperation management, which means that local governments or other national entities can determine the priority set for their international cooperation (MFAHM, 2019f:53). The national sectors for the national policy for non-reimbursable cooperation and the National Cooperation Agenda are human rights, gender, environmental sustainability and participation, capacity-building and under the principles of good living, sovereignty, ethnic exchange, complementarity, effectiveness, alignment, appropriation, results orientation, among the most important (MFAHM, 2019f; Secretariat of Technical of International Cooperation, 2015).

The National Development Plan also underlines the importance of SSC, describing the potential of this type of collaboration in fostering relationships among peers with similar realities (Secretariat of National Planning, 2017:105). Furthermore, the planning insists on the impact of furthering the integration process with Latin American and Caribbean countries, as a way of cultivating territorial integrity and a path towards defending the sovereignty of the State (Secretariat of National Planning, 2017:106).

In 2019, Ecuador submitted its first National Determined Contributions (NDCs) in compliance with the Paris Agreement (UNFCCC, 2020). The document establishes the goal for a reduction in greenhouse gas emissions by 11.9 percent by 2025, acknowledging that if the national efforts have international support, the mitigation goal could increase to a 16 percent reduction in greenhouse gas emissions9. Regarding the adaptation goals, the NDCs determine that the purpose of bilateral cooperation or international funds should aim to generate innovative mechanisms to reduce the vulnerability of population, livelihoods and ecosystems (Ministry of the Environment, 2019). Also, the National Plan, in its policy 1.11 sets actions for the reduction of climate risk through a change in behaviour and risk management (Secretariat of National Planning, 2017:57).

The NDCs determine that the purpose of bilateral cooperation or international funds should aim to generate innovative mechanisms to reduce the vulnerability of population, livelihoods and ecosystems

However, measuring the impact of international cooperation, and the SSC actions on climate change is not an easy task. The official cooperation led by the MFAHM does not classify any agreement as a climate change initiative. Therefore, even though Ecuador has had several cooperation projects and programmes that could have had an impact on climate change, they have slipped under the radar. The analysis of SSC in Ecuador, from 2013 to 2019, shows that 234 official agreements had been signed between Ecuador and other countries of the global south (MFAHM, 2020a; MFAHM, 2020b). From those, 9.5 percent could have had the potential to reduce greenhouse gas emissions or for adaptation to climate change[33]. For example, in 2016, Brazil and Ecuador signed an agreement for the programme 'Amazonia without fire', which aimed to reduce the use of fire in agricultural practices (MFAHM, 2020a). Another example is the programme for Industrial Sustainable Development between Ecuador and Chile in 2017, which addresses the creation of cleaner production practices for the national food industry (MFAHM, 2020a).

[33] The definitions of the IPCC were used for this study, which define adaptation to all human intervention that may reduce the effects of climate change and mitigation of all human intervention that reduces greenhouse gas emissions (IPCC 2014). Greenhouse Gas emissions (GHG) means 'gaseous constituents of the atmosphere, both natural and anthropogenic, which absorb and re-emit infrared radiation' (United Nations, 1992, p.4).

Both examples show the impact of SSC on climate change, despite not being recorded as such.

Table 5 shows the initiatives to combat climate change that were identified from the information provided by the MFAHM.

Table 5. *Ecuador SSC initiatives for climate change action*

Project	Countries
Organic Agriculture Development and Soil Analysis	Argentina - Ecuador
Binational exchange project for agro-productive experiences and agricultural political incidence, through cooperation for the construction of agricultural policies.	Colombia – Ecuador
Strengthening agricultural competitiveness by expanding analytical capacity for monitoring inputs such as fertilizers and chemical pesticides	Colombia – Ecuador
Project for Sustainable Industrial Development and the Implementation of a Cleaner Production Centre	Chile – Ecuador
Support regarding the Land Use Law	Chile – Ecuador
Technical Cooperation to support the sustainable development of the commercial forestry sector between Chile and Ecuador. The project focused on the areas affected by the 2016 earthquake.	Chile – Ecuador
Soil recovery and conservation of Cangahua (parish)	Chile – Ecuador
Study of microplastics in water, soil and stomachs of fish in Ecuador	Chile – Ecuador
Development of a prospective scenario for the entry of geothermal energy and production matrix in Ecuador	Chile – Ecuador
Application of risk management in development and territorial planning	Chile – Ecuador
Training workshops on collaborative marine debris research for countries of the Pacific coast of Latin America	Chile – Ecuador
Design of a low-temperature geothermal system, for heat removal in buildings, in cities with humid and tropical climates	Chile – Ecuador
Technical strengthening in soil management and conservation after the breaking of volcanic tuffs in Pichincha and Chimborazo provinces	Mexico – Ecuador
Development and strengthening of the dairy chain in Ecuador	Argentina – Ecuador
National project for the integral development of agribusiness chains	Argentina – Ecuador
Technological development and dissemination of good livestock practices	Argentina – Ecuador
Cooperation in the water resources sector between the Ministry of Environment and Water of Bolivia and the Water Secretariat of Ecuador.	Bolivia – Ecuador
Knowledge transfer and training for the Ministry of Urban Development and Housing, for construction management and urban planning implementation. The project focused on areas affected by the 2016 earthquake.	Brazil-Ecuador
'Amazonía sin fuego' [Amazon without fire] in the Ecuadorian highlands and coast. The objective is to reduce the wildfires in the coast and highlands through alternative practices to the use of fire.	Brazil-Ecuador
Support for forest restoration and hydrological monitoring in basins with influence in large reservoirs in Ecuador	Brazil – Ecuador
Strengthening for the hydrological network. The project enhanced knowledge of forest restoration for the Water Secretariat's technicians.	Brazil - Ecuador
Multisectoral project for post-earthquake reconstruction and rehabilitation	Chile – Ecuador
Quality Specification of Contractual Natural Gas in Bolivia	Bolivia – Ecuador
Cuba Marcec support and reconstruction mission for the areas affected by Hurricane Sandy	Ecuador – Cuba
Support for the integral management of Water Resources in the Ecuadorian Water Basins (the project was suspended because of the lack of reagent resources)	Mexico – Ecuador
Renewable Energies consolidation and strengthening in Ecuador. Shared experiences regarding the design, planning, implementation and monitoring processes of the Rural solar electrification project in Mexico	Mexico – Ecuador

Project	Countries
Mixed Technical Committee of Water Resources between Ecuador and Cuba. Bilateral cooperation on water resources to guarantee sustainable development of management and protection resources.	Cuba – Ecuador
Agreement signed between the Water Secretariat (Ecuador) and the Ministry of Science, Technology and Environment (Cuba). Cooperation in areas related to scientific and technological development and innovation in water resources.	Cuba – Ecuador
Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes Project (2008-2014) (founded by GEF). It is aimed at strengthening the resilience of local ecosystems and economies against the impacts of tropical Andes glacier retreat through the implementation of pilot activities that show the costs and benefits of adaptation on selected watersheds.	Ecuador - Peru – Bolivia
Support for forest restoration and hydrological monitoring in basins with influence in large reservoirs in Ecuador (Brazil - Water Secretariat of Ecuador).	Brazil – Ecuador
Strengthening for the hydrological network. The project enhanced knowledge of forest restoration for the Water Secretariat's technicians.	Brazil – Ecuador
Development of Agro-productive Processes for Biofuels between the Technical International Cooperation Secretariat (Ecuador) and the Brazilian Government	Brazil – Ecuador
Eco-Tourism Development Products. Project with responsibility for natural resources, environment and local culture.	Ecuador - Dominican Republic
National Centre for Genetic Improvement for small dairy farmers	Argentina – Ecuador

Source: MFAHM (2020), MIHAM (2020), MIHAM (2018)

On the other hand, currently, there are no official records of non-official cooperation on climate change or any other type of non-official cooperation. Therefore, there is no way of measuring how many of the cooperation efforts in Ecuador are focused on action on climate change. Even more, when talking about the efforts of civil society, as the interviews and focus group revealed, there is no link between national government and civil society, and nobody records the actions led by the latter.

The conceptual division between 'official' and 'non-official' cooperation has created an imaginary dividing line between the stakeholders. The ministries interviewed identified civil society groups mainly as beneficiaries of South-South agreements signed by the national governments. Furthermore, the ministries stated that the inclusion of civil society in official agreements has not been possible because of the lack of proposals that are within the national legal framework or national planning. Meanwhile, civil society claimed that its involvement has always depended on the willingness of the authorities in office to work and listen to other stakeholders.

SSC is about the advantage of similar countries working together to find standard solutions for similar challenges

SSC is about the advantage of similar countries working together to find standard solutions for similar challenges (UNOSSC, 2020). Hence, it is a path to create a mechanism to reduce the development gap through mutual benefit and solidarity among the less advantaged countries of the world (Gray & Gills, 2016). This statement has taken on new importance under the effects of climate change because the expansion of the global economy has had a more profound impact on developing nations (Gray & Gills, 2016). Furthermore, because the Paris Agreement states the relevance of financial aid and international cooperation in the catching up of the least developed nations (UN, 2015). The ministries interviewed and the civil society focus group participants mentioned that even though the exchange of experiences provides access to knowledge, the implementation of projects or programmes requires financing for technological resources and staff that normally are outside the scope of SSC, therefore, limiting the impact of SSC in these matters.

The concept of SSC also embodies the use of this tool by states, organizations, academics and civil society, among others (UN DESA, 2020). However, none of the civil society groups in the focus groups identify regional cooperation or cooperation with other countries as SSC. Nonetheless, there is evidence that they may have a more considerable impact on the

reduction of inequalities. For instance, projects such as 'Cuencas Sagradas' or the 'Alliance for our Amazonia', led by civil society groups from Peru, Ecuador, Brazil and Colombia had given the group members leverage power and access to a platform of shared experiences, therefore sometimes having a more sustainable impact than the ones led by the national government. Regarding the advantages of acting as a civil society, the focus group expressed that the interest of the regional groups does not depend on the national policy approach. Thus, it is steadier, depending less on changes to the national political agenda.

The project 'Cuencas Sagradas' involves nine non-governmental organizations (Cuencas Sagradas, 2020), including COICA, an organization that is made up of indigenous organizations from Peru, Ecuador, Bolivia, Colombia and Brazil (COICA, 2020). Even though the initiative has funding from the north, making it a triangular alliance, it is focused on the preservation of the basins of rivers that go through Ecuador and Peru (Cuencas Sagradas, 2020).

Collaboration and role played by key stakeholders

As described in previous sections, the management of non-reimbursable cooperation is performed mainly between public entities and international cooperation agencies or international NGOs. However, other stakeholders play a key role in implementing international cooperation initiatives. The MFAHM recognizes the role of the private sector in the complete cycle of international non-reimbursable cooperation in the country, mainly acknowledging the role of academia, the private sector and civil society.

The role of civil society

The MFAHM recognizes a role for CSOs mainly in the execution and co-execution of international cooperation projects in compliance with national development priorities and regulations. However, a revision of a list of SSC projects related to climate change topics provided by the MFAHM did not show any involvement of CSOs in the cooperation cycle.

The focus group exercise also suggested that there is a gap and a disarticulation between the efforts that civil society is making to implement SSC projects and those that the government is also implementing. For instance, the lack of interest of government entities in including civil society and grass-roots groups that have borne witness to the implementation of reforestation projects in the Amazon region, despite the historic involvement of some of these groups in these topics and geographical areas.

During the focus group, the participant organizations identified two levels of involvement of civil society in international cooperation projects. The first is related to the role of such organizations as consultants or co-executing partners, and the second is more related to the actual participation of civil society in the design of programmes and policies. The group of organizations agreed that the second is the most relevant role, but it is completely non-existent. This view is also shared by the Ministry, since it has recognized that there is a lack of institutionalized processes for the inclusion of civil society in the design, implementation and monitoring of international cooperation projects.

The MFAHM only has a record of one civil society initiative that escalated to official cooperation, which is the 'madres canguro' (kangaroo mothers) programme, which is a civil society initiative in Colombia that is internationally acknowledged as good practice. Because of its international 'good name', the government of Colombia recorded this initiative in its National Offer Catalogue, for the international dissemination of this civil society programme. From 2017 to 2019, the Governments of Ecuador and Colombia signed an agreement to share experiences and implement the 'madre canguro' method in Ecuadorian hospitals (MFAHM, 2020b). The national governments pay the travel expenses of the people who travel for training and lectures.

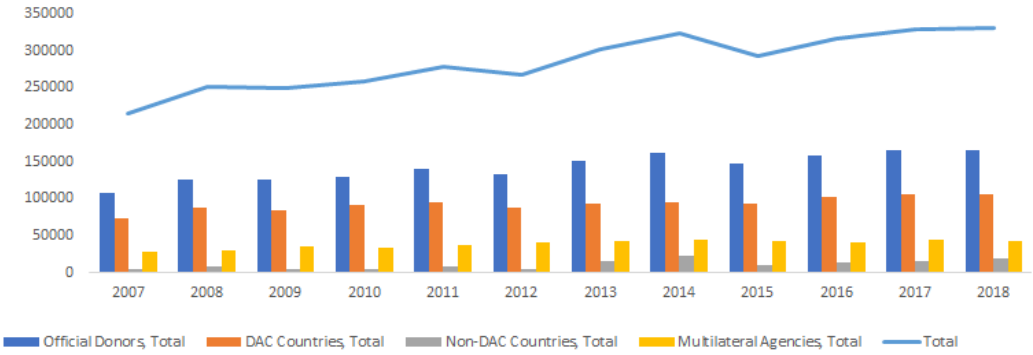
Ecuador had also received attention for some good practices, but it was limited to national programmes, such as the national ecotourism strategy of the Ministry of Tourism.

Climate funding in Ecuador

Climate funding as a mechanism to ensure long term sustainability in SSC in Ecuador

In 2010, Ecuador became a high middle-income country, since its national income surpassed the range of middle-low income set by the World Bank, thus beginning the so-called 'graduation process'[34] (MFAHM, 2019f). Due to the new status of Ecuador, since 2010, aid from the ODA started fluctuating until 2014, when there was the last peak (OECD, 2020). This can be seen in the continuous reduction of the participation of the ODA aid in gross capital formation, shown in the chart below. However, because of the earthquake in 2016, the reduction of financial aid, which was expected to take effectseize by 2016, is currently expected to finish by 2021 (Montesdeoca, 2020).

Graph 8. *ODA transfers to Ecuador*



Source: World Bank, 2020

Although Ecuador has increased its national income, it still deals with considerable inequity and vulnerability levels and has not been able to change its productivity structure (MFAHM, 2019f). There are several criticisms of the current manner of classifying countries only by their income; moreover, in the context of the Sustainable Development Goals, which are multi-faceted, the way of determining international cooperation becomes questionable (CEPAL, 2012). In this scenario, the SSC role becomes increasingly important.

SSC is concentrated in the exchange of knowledge and experiences that have been valuable for the construction of law, normative processes and in the building of capacities regarding climate change (Espinoza, 2020). However, implementing the NDCs requires financing, and nowadays there is not a plan or office that coordinates the efforts to get financial aid for SSC, which is evident in the lack of information about past financing aid for climate change action. Despite the existence of an area of environment and climate change within the MFAHM, the area searches exclusively for official agreements, therefore, excluding the non-official agreements from which the Ministry of Environment had benefited in the past. To improve the available information about all the scales of international cooperation on climate change, the Regulations for the Organic Law of Environment were approved in 2019; they decree the creation of a climate change repository of information, where all the information about the existing financial sources at national and international level should be held (Official Registration Supplement No.507, 2019).

[34] Graduation refers to the process through which a country that has surpassed a certain national income stops receiving financial flows from ODA

Ecuador has taken every learning opportunity of its peers, which has been of great help in the construction of the national laws on environmental matters, and in the NDCs

According to the Ministry of Environment, there has been cooperation with other countries of the global South that, in some cases, included financial aid, especially with Brazil and China and, in the international cooperation manage by the Ministry, which in the case of specific cooperation agreements it is not clear if it is coordinated with the Ministry of Foreign Affairs and Human Mobility. Nonetheless, most of the SSC remains in programmes for building capacities, which, without financial assistance, would fail to fulfil its purpose (Espinoza, 2020). Furthermore, Ecuador has taken every learning opportunity of its peers, which has been of great help in the construction of the national laws on environmental matters, and in the NDCs (Espinoza, 2020). However, now that it is time to act, SSC has not been successful in filling the financial gaps. One reason is because most of the financiers are located in Asia, and investment interests are focused on extractive industries or the building of infrastructure. And, secondly, the countries in the region are going through fiscal adjustments (Espinoza, 2020). In the last ten years, Ecuador has tightened its nexus with China, and this country has become a key player in international cooperation and investment in the country, especially in big public infrastructure projects but also as a commercial destination in the international trade in Ecuadorian products[35], although the cooperation has not been extended to climate change cooperation. Thus, most of the efforts had turned to international aid, such as the green climate fund, or multilateral agencies that are creating financial products for climate change.

Today, most of the financial aid for climate change comes from accredited entities of the GCF, such as the Agence Francaise de Development (AFD), World Wide Fund for Nature (WWF), CAF, among others. Currently, the GCF is financing three projects with an overall cost of $324.4 million. The projects are aimed at the reduction of greenhouse gas emissions, through control or alternatives to deforestation, and the creation of climate funds (GCF, 2020).

The MFAHM recognizes the potential of SSC for climate change financing. However, as they stated, the geographical location of Ecuador prevents the country from accessing it. Countries such as India and China have become prominent financers in SSC, especially with African countries (Montesdeoca, 2020). Conversely, most of the South-South agreements in Ecuador are made with other Latin American and Caribbean countries, and most of them since 2018 have entered into austerity policies, hence reducing the possibility of financial sustainability, which has even affected ongoing programmes (Montesdeoca, 2020).

On the other hand, civil society has promoted different programmes in the region of Latin America, without even recognizing them as SSC. The people who attended the focus group struggled to see the actions between the civil society of different countries as SSC, because most of the time, they do not have the support of the national governments. However, civil society has not only taken advantage of the shared experiences of similar countries, but it has managed to work in defence of shared territories with the same problems.

Challenges and opportunities of South-South cooperation on climate change in Ecuador

State capacities in South-South cooperation and climate change

The Ecuador case study shows the capabilities of the central government for managing climate change and SSC in the country. Although progress has been made in the issuance of regulations that normalize the operation of these fields of action, in the implementation of public policies and in the creation of an institutional framework for the execution of these public policies, it is evident that there is a disarticulation at different levels among the public actors that handle both climate change and the SSC in the country.

[35] For more details see Herrera-Vinelli, Lorena & Bonilla, Mateo. (2018).

On the one hand, although both the Ministry of Environment and Water and the MFAHM are part of the Inter-Institutional Committee on Climate Change - CICC, which should serve as an official space for articulating climate change actions, it has not been possible to coordinate actions to generate SSC initiatives on climate change in the country.

On the other hand, the disarticulation of the MFAHM with the rest of the sectoral ministries and local governments, which can manage their international cooperation without the need to go through the MFAHM, generates an information gap and duplication of public efforts.

This disarticulation prevents the creation of joint SSC initiatives on climate change that could greatly benefit the country, mainly through capacity building and the exchange of knowledge and good practices. In this context, Table 6 shows an analysis of Ecuadorian technical-administrative and political-institutional state capacities in SSC and climate change.

Table 6. *Analysis of Ecuadorian state capacities*

Capacity	South-South Cooperation	Climate change	South-South Cooperation and Climate Change
Technical - Administrative	With National Decree No. 1202 of 2016, the SETECI was eliminated; therefore, the technical capacities of this Secretariat were moved to the MFAHM. Now, SSC is under the coordination of the Department of International, Bi-Multilateral and South-South cooperation, within the Vice-Ministry of Foreign Affairs, of the MFAHM. Nonetheless, in this transition, some areas were reduced, and some other staff were made redundant in the austerity context. In this process, some information and technical capacities and procedures were lost. There is little evidence or documents produced about these changes.	The national policy on climate change is the responsibility of the Sub-Secretariat of Climate Change of the Ministry of Environment and Water. The Secretariat has the Directorate of Adaptation and Mitigation, which have developed the Strategy for Climate Change, and the intended Nationally Determined Contributions-NDC. The Ministry leads the Inter-Institutional Committee on Climate Change – CICC, which aims to articulate all the climate change actions. The MFAHM is also part of this committee.	Climate change affairs within the MFAHM are under the Department of Environment and Sustainable Development. However, evidence suggests that the agenda of the technical area leading the SSC has not yet been involved in the climate change policy. Despite the creation of the CICC, the South-South Catalogue does not include a climate change category. Based on the interviews and documents, most of the international cooperation and SSC on climate change has been coordinated by the Ministry of Environment, categorized as non-official, inter-ministerial agreements.
Political - Institutional	The National Constitution has several articles that encourage and recommend the consolidation of supranational organizations and agreements with other countries in Latin America and the Caribbean. Ecuador is part of the Andean Committee of Holders of International Cooperation Organizations of the Andean Community (CATOCI). The National Planning 2017-2021, sets international cooperation as a priority. Moreover, the SSC is seen as important for the favourable accomplishment of the National Development Goals and Sustainable Development Goals.	In Ecuador, the regulatory framework for climate change is determined by the Organic Code of Environment and its regulation in their fourth book of climate change. Ecuador is part of the United Nations Framework Convention on Climate Change, and a signing country in the Kyoto Protocol and Paris Agreement The National Strategy for Climate Change establishes the policy and goals for the country on this matter. The NDC are aligned with the national strategy, as are the adaptation and mitigation strategies.	There is no specific regulation that applies to SSC for climate change action. However, the Regulation for the Organic Code of Environment states the creation of CICC, to research the resources needed to fulfil the climate change goals set by the National Strategy. Climate Change and SSC are determined as priorities within the national policy. Despite the existing regulation and the functioning of the CICC, Climate Change is not cross-cutting in the coordination of SSC.

Source: Official documents, interviews and focus group

Results

The lack of official information, policies aimed to foster agreements for climate change, and the disarticulation of actors make it impossible to have a clear picture of all efforts that are working towards mitigation or adaptation initiatives. First of all, the national cooperation catalogue does not include a climate change sector; and, secondly, there is no register of any type of non- official cooperation. Thus, the agreements signed either by Ministries or local governments with other stakeholders in the region are not recorded at all. Therefore, government offices do not always know the efforts made by others regarding climate change actions.

The review of the agreements signed between Ecuador and other countries of the Global South was collected from diverse sources and showed the existence of SSC initiatives in the Global South that are not reported in the MFAHM or any other official database.

The review of the agreements signed between Ecuador and other countries of the Global South was collected from diverse sources, including newspapers and press releases, and showed the existence of SSC initiatives in the Global South that are not reported in the MFAHM or any other official database. For example, the Initiative of the Silk Road and Maritime Silk Road led by China, added Ecuador in 2018 to the participating countries. Another example is the agreement for the adaptation project to the Impact of Rapid Glacier Retreat in the Tropical Andes signed between Ecuador, Bolivia and Peru in 2013. These initiatives were led by the Ministry of Productivity and the Ministry of the Environment. Both examples have the potential to contribute to mitigation or adaptation programmes. However, none of them is in the Cooperation registry of the MFAHM because none of them were made through the MFAHM. The missing registration of the cooperation with China is a particular cause for concern because it is one of the few countries in the South that offers financing opportunities. However, when asked by the MFAHM, they did not know of any cooperation agreement signed in recent years with China or India.

The disconnection among actors is worse in civil society. Both the MFAHM and the Ministry of Environment recognized that civil society has not been involved in any cooperation programme. The Ministry of Environment knows that civil society has an essential role in the creation of innovative initiatives for climate change and that sometimes it has called on the authorities asking for support, which has been given, if in line with the national policy (Espinoza,2020). However, none of them had a clear perspective of how the local civil society could contribute to the official and other national cooperation agreements, beyond their link with the rest of the population.

As happens within the official SSC, the climate change initiatives that are carried out from civil society are not visible due to their lack of registration. According to the focus group, several organizations might be working on similar projects, and with the scarce resources in the sector would benefit significantly from knowing about the others. Also, it was said that civil society had become a reactive force against the major threats and legislation posing a potential hazard for the environment or indigenous communities. For example, the Yasunidos movement was the one in charge of the initiative that led to the referendum that sought to prevent mining in the Quimsacocha region (El Universo, 2019). The same group has been fighting for a referendum against oil extraction in the Yasuni National Park (Yasunidos, 2020). The general comment within the focus group was that real actions for climate change require transformative processes, which take time, and would therefore benefit from alliances and more multi-actor-based actions.

Finally, the lack of coordination among the civil society and the local or national government is seen for the social groups as the result of the continuous changes in the political priorities of the country. Therefore, the solutions are recognizing it as the essential task of civil society, trying to be always aware of the violation of human and nature rights, and becoming the voice of complaint and the path to knowledge. This

role has been clarified by the cooperation between countries in Latin America and has allowed civil society to make better informed and science-based claims.

Challenges and opportunities

SSC has been a practice for over 65 years in Ecuador. Throughout these years, all the involved stakeholders have learned and improved their ways of collaborating. Not only in the uses of SSC, but also because it has achieved higher levels of institutionalization, gaining opportunities to work with more sectors and new stakeholders (MFAHM, 2019f).

The learning process has allowed them to create projects that involved not only civil society but also indigenous groups, communities and local governments

For civil society, the learning process has allowed them to create projects that involved not only civil society but also indigenous groups, communities and local governments. Therefore, changing occasional cooperation for stronger intervention networks. On the other hand, the increased victories in environmental lawsuits have given the initiatives for climate change action a strategy and a surer way to attract interest and funds such as the Inter-American Development Bank (IADB).

In the context of the Paris Agreement and the previous Kyoto Protocol, Ecuador has benefited from the collaboration and shared experiences within the region. Capacity-building was key in the creation of the legal framework and the NDCs; hence, there is evidence that the national government was able to seize the opportunity created by the international and regional context. Nonetheless, financing the implementation of all the climate change actions appears to be the biggest challenge ahead. There is no doubt about the improvement in the management of SSC in terms of efficiency and effectiveness (MFAHM, 2019f:17). However, the question remains as to whether it will suffice when it becomes the only kind of non-reimbursable collaboration for the country.

On the other hand, there is a clear need to strengthen the information systems of the SSC projects in Ecuador. During the research process, including the interviews and focus group, the need for better categorization of SSC initiatives was highlighted, as well for having up-to-date online platforms such as the SSC Catalogue. Also, it was found that SSC projects are not well aligned with international agendas or with climate change dimensions. As a consequence, many of the SSC initiatives are currently included as part of the environmental sector. However, they are not clearly stated as climate change projects, and the lack of information imposes difficulties for their analysis.

The SSC initiatives have been mainly recognized between public entities from countries in the Global South. However, contrary to what Ecuador's international cooperation policy states, the evidence suggests that civil society is actively involved in SSC projects without the need for articulation with public entities. Two significant consequences of this issue were identified. First, the lack of articulation platforms between civil society and the government. Second, the efforts led by civil society are not considered as SSC initiatives that lead to their valuation and registration in the national system of international non-reimbursable cooperation.

Finally, there is a wide range of opportunities to consolidate a better policy for SSC initiatives on international climate change cooperation. Ecuador has already implemented SSC projects on climate change, but they have not been counted as such. The role played by non-governmental entities has been key in identifying projects on climate change cooperation carried out with other Latin American countries. Currently, Ecuador is also implementing its first NDCs, and it is also on the way to consolidating its first National Strategy for Climate Financing, where SSC should play an important role.

6. Honduras case study

Honduras is listed by the Global Climate Risk Index 2019, together with Myanmar, as the countries most affected by external climate events between 1998 and 2017.

In the same period, a loss of $557 million is estimated for Honduras as direct effects, equivalent to 1.85 percent of GDP and an annual death rate from climate events of 4,125 people per one hundred thousand inhabitants[36].

Despite these previous data, the Honduran State's efforts to adapt to climate change adequately and gradually have been insufficient. Indicators such as the 2014 Adaptive Capacity Index, developed by the Development Bank of Latin America, placed Honduras at an extreme risk level concerning its adaptive capacity, a similar situation is demonstrated with the Global Adaptation Index of the University of Notre Dame, Paris that rated Honduras, in 2014, with high vulnerability and low preparation, placing it 127th out of 180 in the ranking.

In Honduras, the agricultural sector accounts for about 80 percent of the workforce and it has been the main or the only source of income for households in the rural area.

In Honduras, the agricultural sector accounts for about 80 percent of the workforce, according to data from the National Statistical Institute (INE). In many cases, it has been the main or the only source of income for households in the rural area. Therefore, as more people depend on income from the agricultural sector, the effects of climate change on crops and households will become more acute.

The study of Climate Variability and Climate Change in Honduras prepared in 2010[37] by the United Nations Development Programme (UNDP) shows different climate scenarios at national level. Among them, the scenarios that stand out are the following:

a. By 2020, the decrease in rainwater precipitation will be 6 percent and an increase in the average annual temperature by 0.8°C is projected, affecting more severely the departments located in the west and south of the country.

b. By 2050, the decrease in precipitation will be between 20 percent and 25 percent, at its height between July and August, especially in the departments located in the western half of Honduras.

c. By 2090, the decrease in precipitation will be between 30 percent and 40 percent, especially in July and August and the temperature may increase by more than 4°C in most of Honduras, following an increase in the atmospheric pressure of almost a hectopascal generating a blockage that will not allow tropical rain-generating phenomena to develop properly.

In addition, according to the INE, 6 out of 10 people in Honduras live in poverty and 4 out of 7 in extreme poverty[38]. This proves that it is a highly poor society with little environmental education, contributing to the country's climate change and environmental vulnerability.

[36] The Global Climate Risk Index is developed by a non-governmental organization based in Germany called Germanwatch. The Global Climate Risk Index reflects the direct impacts generated by extreme weather events through an annual analysis that determines the level of exposure and vulnerability that countries should understand as a warning to be prepared for more frequent or severe weather events in the future; however, they should not be confused as a complete system of climate vulnerability since it does not take into account important aspects such as: rising sea levels, glacier retreat or more acidic and warmer seas.

[37] At the time of this publication, there was no public document with more recent information.

[38] For more information, see: https://www.ine.gob.hn/V3/imag-doc/2019/09/cifras-de-pais-2018.pdf

A similar conclusion is reached by the Human Development Index developed by the UNDP, where the country ranks among the three countries with lowest development in Latin America, alongside Haiti and Guyana, noting that Honduran society has not reached fundamental achievements in human development issues, making Honduran society increasingly vulnerable to adverse climate change effects.

International Cooperation in Honduras

The international cooperation captured by Honduras rose considerably in the 1980s. Thanks to financial support and non-reimbursable transfers, the country was able to alleviate economic crises in the early 1980s.

The devastating effects of Hurricane Mitch, which took place in November 1998, left heavy economic, productive and human losses, which allowed Honduras to access the HIPC in order to implement reconstruction of infrastructure projects, institutional reforms, strengthening of the rule of law and the establishment of the National Strategy for Poverty Reduction. This strategy aimed to reduce poverty levels to 40 percent by 2015, through a debt conversion plan that allowed the country to invest at least $177.8 million annually across the country's 18 departments through goals aimed at achieving sustainable country development. These goals are:

1. Achieve coverage of at least 70 percent in access to primary and secondary education
2. Modernize the country's workforce
3. Reduce the infant mortality rate in children under the age of 5 by at least half
4. Reduce the incidence of malnutrition in children under the age of 5
5. Reduce maternal mortality
6. Achieve 80 percent coverage of electricity supply
7. Access to safe drinking water for 95 percent of the population
8. Reduce the country's environmental vulnerability.

Today, the country has four large cooperation groups to address multiple issues prioritized by Honduran governments and the cooperating community:

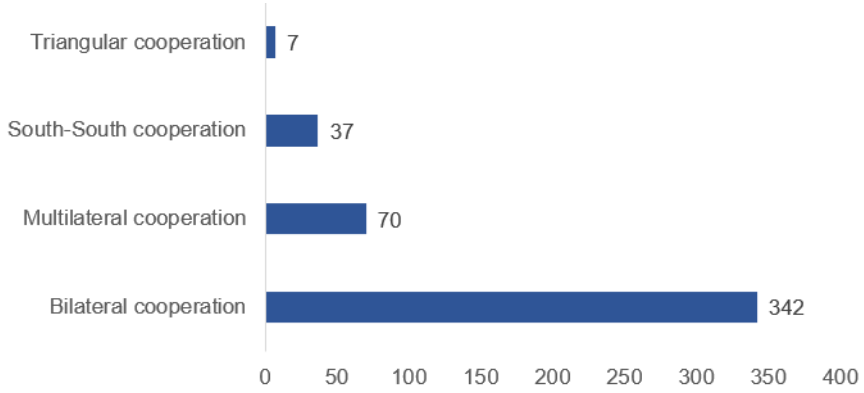
1. Triangular Cooperation
2. South-South Cooperation
3. Multilateral Cooperation
4. Bilateral Cooperation

According to official data, bilateral cooperation is the most significant for the country, as well as organized civil society with the implementation of 342 projects at national level with partner countries such as Switzerland, United States, Japan, Germany, Spain, Canada, Republic of Korea, among others.

Regarding relations with the People's Republic of China, the country is limited to trade relations that have grown over time. By the end of 2018, China represented the third largest supplier of inputs and processing goods to the national economy.

South-South and Triangular Cooperation are currently the least present in the country; both international cooperation initiatives add up to 44 projects (Graph 9), which are mainly focused on institutional strengthening and the exchange of good practices between productive sectors in the region.

Graph 9. *Number of cooperation projects in Honduras 2017 and 2018*



Source: Secretariat of Foreign Affairs and Cooperation and the Ibero-American General Secretariat.

In the National Policy on Cooperation for Development, a policy was approved and issued in December 2019; Honduras aims to enhance the development of SSC by presenting it as a key player in international cooperation in the country. After years of acting as a net recipient of SSC, the country also intends to position itself as a provider of SSC, by becoming a proactive player in international development cooperation. Under this objective, over the past ten years, Honduras has driven a series of reforms framed by the international agreements that the country has signed on efficiency, fairness and transparency. The reforms are summarized in Table 7.

Table 7. *Legal reforms on international cooperation in Honduras*

Year	Reform
2013	Adoption of Decree No. No. 266-2013: Law to Optimize Public Administration.
2014	Adoption of Executive Decree PCM. 001-2014: transfer everything concerning the management of International Cooperation to the Secretariat of Foreign Affairs and International Cooperation.
2017	Approval of Executive Decree PCM 070-2017: Make the Undersecretariat for Foreign Affairs as responsible for the management of Non-Reimbursable Cooperation.
2019	Adoption of Executive Decree PCM 080-2018: approve the National Policy of Cooperation for Sustainable Development whose main objective is the efficiency of aid received by cooperating countries.

Source: Diario Oficial La Gaceta, 2013-2018

Honduras has been part of International Resolutions and Declarations on Cooperation for Development in various High-Level International Forums, such as the Sustainable Development Goals implemented through the 2030 Agenda, and has ratified international agreements such as the Paris Agreement on Climate Change, and the United Nations Conference on Environment and Development held in Rio de Janeiro, Brazil, which integrates provisions related to practical cooperation between member countries. As a result of these efforts, new policies are linked to current national and international challenges in environment, climate change and sustainable development, and this reaffirms the need to strengthen the country in its dual role, as provider and recipient, of SSC and Triangular Cooperation.

A concrete institutional result was the creation of the Undersecretariat for South-South and Triangular Cooperation in 2017, which is attached to the Directorate of Foreign Affairs and International Cooperation. It aimed to become the body responsible for implementing foreign policy tools that promote sustainable development through long- and medium-term planning and development. In the three years since its creation, it has coordinated and consolidated cooperation efforts with countries such as Chile and Peru, mainly in environmental and social sectors.

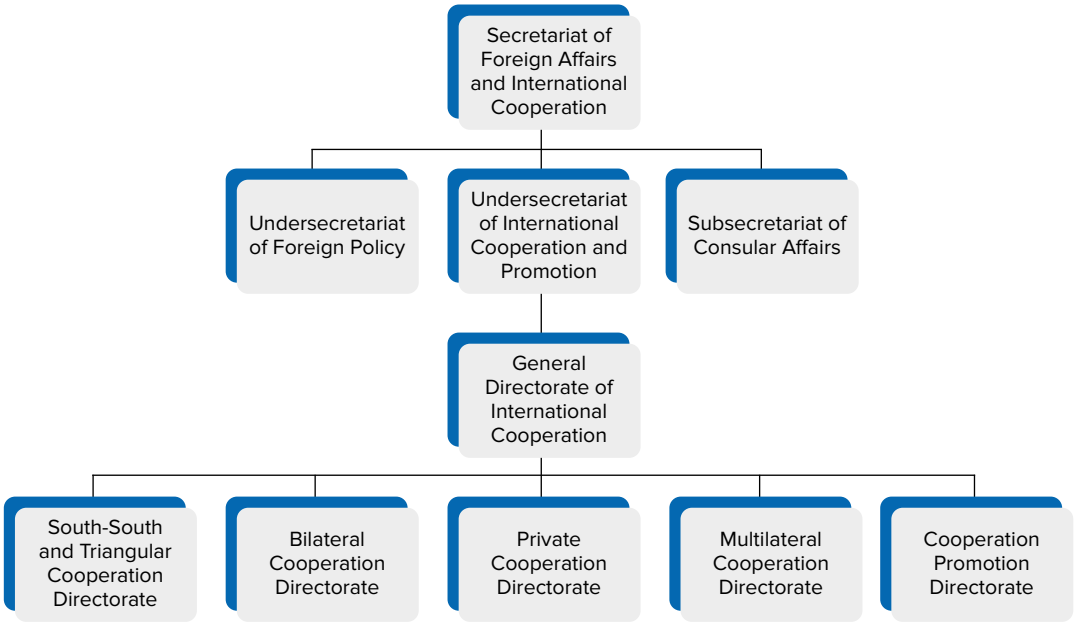
The functioning of SSC in Honduras

In 2010, under the Country Vision and Mission Plan 2010-2038, the Planning Secretary created the South-South Cooperation Programme in Honduras under four main objectives: (i) supporting, through quality and efficiency provision, valid and proven solutions for other countries with common problems; (ii) promoting the institutional strengthening of Honduran institutions and the training of their human resources; (iii) establishing new associations and partnerships with other countries to promote progress in the joint achievement of the Millennium Goals; (iv) promoting the projection of Honduras abroad as a democratic, supportive and leader state, which promotes the principles of effectiveness of aid and regional integration. This plan prioritizes eight sectors:

1. Agricultural Development and Research
2. Health System
3. Education
4. Community and Rural Development
5. Non-Formal Education
6. Governance
7. Citizen Security
8. Development Planning and Competitiveness

As a result of Honduras' international commitments and national planning policies, the organizational chart of the Secretariat of Foreign Affairs and International Cooperation (SRECI) is currently composed of three Undersecretariats, including one general directorate and five sub-directorates, structured as shown in Figure 7:

Figure 7. *Organizational Structure of the Secretariat of Foreign Affairs and International Cooperation*



Source: SRECI

The institutional and technical capacities identified by the country are reflected in the South-South Cooperation Catalogue called 'Compartiendo Honduras 2018[39]', an instrument articulating Honduras' offer of SSC, consisting of 32 proposals within five sectors.

1. Social and Economic Development
2. Productive and Agricultural
3. Health System
4. Education System
5. Migration

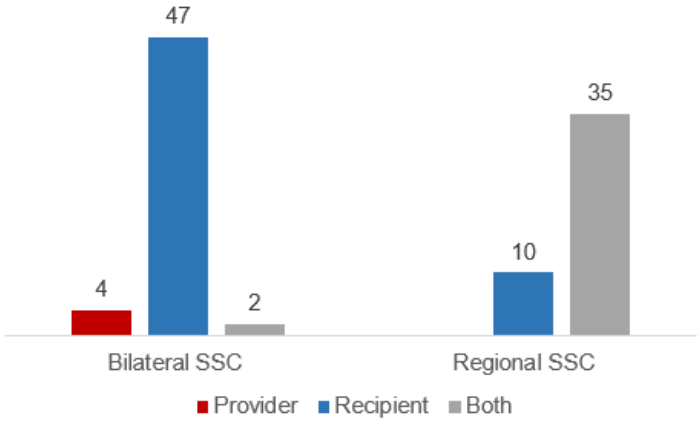
Moreover, in 2019 the government launched the National Policy of Cooperation for Sustainable Development, which includes some actions to promote SSC:

1. Increase the number of South-South and triangular cooperation projects in which Honduras is a development partner.
2. Develop, socialize and implement the SSC Programme.
3. Create an SSC and Triangular Cooperation Fund in Honduras.

The Secretariat of Foreign Affairs and International Cooperation, within the framework of the National Policy for Cooperation for Sustainable Development established, in 2020, the creation of a Honduran South-South and Triangular Cooperation Fund so that the country can fully implement its SSC policy; however, the approval of the 2020 National Budget does not provide the necessary budgetary allocations to meet this commitment. This has contributed to unsatisfactory results despite having the policies and institutions necessary to develop SSC in the country.

This is highlighted in the 2019 SEGIB report, as it shows that of the 98 initiatives that Honduras had in 2017 through the modalities of bilateral and regional SSC, 58 percent were as recipient and 38 percent as recipient and provider.

Graph 10. *SSC in Honduras by role, 2017*



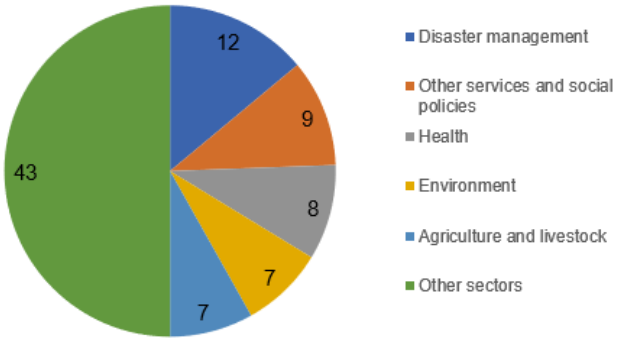
Source: SEGIB, 2019

Of all the initiatives in which Honduras participated as a recipient in 2017, including triangular cooperation, 14 percent concerned disaster management, 10.5 percent services and social policies, and 9 percent health. However, 50 percent are under the category 'other sectors' which does not allow a full view of strengthened capabilities. Graph 11 shows the capacities that Honduras strengthened as both recipient and provider.

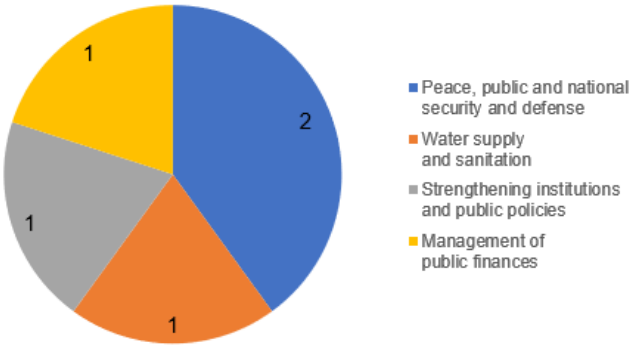
[39] Catalogue of SSC "Compartiendo Honduras 2018": http://www.sre.gob.hn/Programa%20Sur%20-%20Sur/Catalogo%20de%20Cooperacion%20SurSur%20de%20Honduras.pdf

Graph 11. *Honduras SSC: strengthen capacities, 2017*

a. Recipient



b. Provider

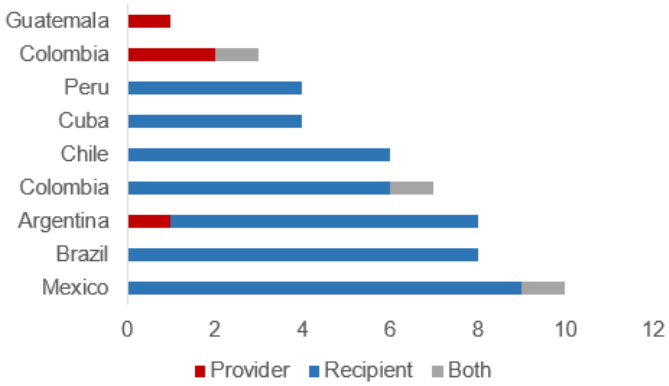


Source: SEGIB, 2019

According to the Ibero-American Report on South-South Cooperation (2017), Honduras, excluding in-kind contributions, received $68,190.52 in economic contributions during the period 2009-2016, mainly from Ibero-American Cooperation. The main institutions involved in the initiatives were: Secretariat of Education; Technical Secretariat for Planning and External Cooperation (SEPLAN); Honduran Philharmonic Orchestra; Secretariat of Foreign Affairs and International Cooperation; Technical Secretariat for Planning and Cooperation; Suyapa Educational Television.

Among the countries that Honduras has projects with, as SSC partners, Mexico, Brazil, Argentina and Colombia stand out. Mexico is the largest SSC provider for Honduras. Meanwhile, Honduras acts as a provider partner for Guatemala, Colombia and Argentina. Graph 12 shows Honduras' bilateral partners.

Graph 12. *Honduras SSC: main bilateral partners, 2017*



Source: SEGIB, 2019

Among the South-South and triangular cooperation projects and actions between Mexico and Honduras, the sectors of exchange and strengthening of techniques implemented by national institutions stand out, mainly with the Institute of Forest Conservation and the Secretariat of Agriculture and Livestock. Of the six bilateral SSC projects, the two with the end date of 2021 aim to contribute to the reduction of diseases in livestock and to be able to provide technical and scientific tools to micro and small producers engaged in fisheries. As for the triangular cooperation project between Germany, Mexico and Honduras, this included the consolidation of a business platform with environmental components between Honduras and Guatemala, as shown in Table 8.

Regarding SSC between Colombia and Honduras, the Secretariat for Foreign Affairs and International Cooperation does not have detailed information; however, the information collected in the report on SSC in Ibero-America 2018 details that there are at least 6 South-South and/or triangular cooperation projects between the countries.

Table 8. *SSC Mexico-Honduras projects*

Title	Donor Agency	Type of cooperation	Sector	Completion Date
Strengthening and Institutional Development of the ICF in Sustainable Forest Management and Conservation Affairs, Phase II.	Mexican Agency for International Cooperation for Development	Bilateral	Multisectoral	15 June 2018
Strengthening the Technical Capacities of the Brucellosis and Bovine Tuberculosis Control and Eradication Programme and Bovine Traceability.	Mexican Agency for International Cooperation for Development	Bilateral	Health and Agriculture System	9 May 2021
Strengthening the Technical Capabilities of staff of the Phytosanitary Diagnostic Laboratories and the Pest and Disease Risk Analysis Unit	Mexican Agency for International Cooperation for Development	Bilateral	Other social infrastructure and agriculture services	10 November 2017
Strengthening the Polygraphy Unit of the Honduras Security Secretariat	Mexican Agency for International Cooperation for Development	Bilateral	Government and Civil Society	8 November 2017
Strengthening the technical capacities of staff assigned to the generation and transfer of DICTA technologies.	Mexican Agency for International Cooperation for Development	Bilateral	Multisectoral	16 June 2018
Mexico-Honduras Cooperation in the exchange of technical-scientific applications for Health in aquatic species, their products and by-products.	Mexican Agency for International Cooperation for Development	Bilateral	Fishing	9 May 2021
Consolidation of the business model of the ANTAD.biz Platform and its Environmental Component in Guatemala and Honduras	Mexican Agency for International Cooperation for Development, German Cooperation (GIZ)	Triangular	Other Services and Social Infrastructures	29 February 2020

Source: Secretariat of Foreign Affairs and International Cooperation

However, it should be mentioned that through the structure of cooperation policies, SSC in Honduras has focused mainly on the institutional strengthening of the government to exchange experiences and technical support between national institutions and private enterprises, but excluding CSOs, social movements, and grass-roots communities from that exchange of knowledge between countries, and the potential to implement appropriate public policies and address the structural problems of poverty, insecurity and adaptation to climate change.

Climate funding in Honduras

The principles of the Honduran SSC are the exchange of knowledge, experiences and successful solutions that can be used and adapted by regional partners, according to the context of each country. Honduras' bilateral SSC ties have strengthened with South American countries, such as Brazil, Argentina and Chile. At the same time, in the northern triangle, it maintains a dynamic relationship with Mexico and the rest of the Central American countries.

The Secretariat of Foreign Affairs and International Cooperation, in its Cooperation Management Portal, highlights the programmes shown in Table 9[40], in which Honduras is a recipient of cooperation in the area of the environment.

Table 9. *SSC Projects with an environmental focusin Honduras*

Country	Project
Argentina	Strengthening state officials in the use of the Inter-American System of Human Rights
Brazil	Best Practices in Sustainable Forest Management
Colombia	Strengthening the National System of Protected Areas of Honduras through the transfer of methodological tools in the components of Ecotourism, Voluntary Park Rangers, Environmental Education and the joint construction of planning with ethnic groups
Chile	Rural Extension in Forest Production Areas and Development of Productive Chains for Small and Medium Forest Producers and other areas of interest
Costa Rica	Support for Implementation of Blue Flags in Honduras
Mexico	Strengthening the technical capabilities of staff of the Phytosanitary Diagnostic Laboratories and the Pest and Disease Risk Analysis Unit
Peru	Establishment of a Lempa Region Centre for Technology Innovation

Source: Developed by the Secretariat for Foreign Affairs and International Cooperation

In addition, the Ibero-American Report on South-South Bilateral Cooperation underlines the strengthening of forest policy in Honduras, through SSC with countries such as Mexico and Chile. The collaboration with Mexico between 2015 and 2018 focused mainly on strengthening technical and institutional capacities for controlling the plague of the Gorgojo pine-stripping weevil and its phytosanitary treatment. Following the consequences of the Gorgojo plague, which affected more than 600 hectares, it was declared a forest emergency and risk zone.

The same report highlights the collaboration with Chile, which took place between 2015 and 2016 on sustainable forest production, through associations of small and medium-sized forest producers to allow recovery of the degraded forest areas, and to arouse public and private interest in the sustainability of the forestry business.

Climate Change Financing in Honduras

Honduras' high rates of vulnerability provide an opportunity for the flow of funding to undertake a strategy to adapt to climate change. There are around 15 funding actors for Honduras, distributed among international cooperation agencies and banks, bilateral cooperation and NGOs. However, SSC is not among the financial or technical benchmarks on climate change in the country.

According to data from the General Secretariat for Government Coordination, there is a trust entitled 'Investment Trust for the Reactivation of the Agro Sector', where two climate-related programmes are implemented. However, it is not known for sure whether they are with public funds or international transfers:

[40] The information reflected in the table corresponds to the Honduras Bulletin of International Cooperation 2018 provided by the Secretariat of Foreign Affairs and International Cooperation, so it is impossible to determine all the programmes that the country has. More information, see: https://es.scribd.com/document/419444987/3-de-Cooperacion-Internacional-v9

a. **Climate Resilience Pilot Programme:** implemented between December 2017 and July 2019, and developed by the Secretariat of Natural Resources, Environment and Mines, whose objectives are: (i) strengthen the management of meteorological knowledge of water resources and climate data to inform decision-making; (ii) water resource management through strengthening governance; (iii) promote climate-resilient agriculture and sustainable food security.

b. **Water Harvests Project, access to irrigation for inland people:** Implemented between 2017 and 2019, the project aimed to build water reservoirs for producing families from three municipalities located in the dry corridor, for the purpose of adaptation to Climate Change in Urban Areas, in the Forestry area and one aimed at Food Safety.

Honduras has received climate funds since 2006. The first transfer was through the GEF for $2 million. From that time to 2019, the country received a total of $120 million with 76 percent allocated to climate change mitigation, and the remaining 25 percent for adaptation to climate change as shown in Table 10.

Table 10. *Green funds received by Honduras, Millions of $*

Year	Fund	Sector	Theme	Amount of Funding Approved
2006	Global Environment Facility (GEF)	Energy Generation, Distribution and Efficiency	Mitigation	2.35
2010	Adaptation Fund	Water Supply & Sanitation	Adaptation	5.62
2011	Special Climate Change Fund	Agriculture	Adaptation	3
2012	Scaling Up Renewable Energy Programme (SREP)	Energy generation, distribution and efficiency	Mitigation	0.02
2013	Scaling Up Renewable Energy Programme (SREP)	Energy policy	Mitigation	2.44
2014	Forest Carbon Partnership Facility - Readiness Fund (FCPF-RF)	Forestry	Mitigation	3.8
	Global Environment Facility (GEF5)	Industry & Multiple Sector	Mitigation & Multiple Foci	2.08
	Scaling Up Renewable Energy Programme (SREP)	Energy generation, renewable sources	Mitigation	5.5
	Clean Technology Fund (CTF)	Energy generation and supply	Mitigation	20
2015	Scaling Up Renewable Energy Programme (SREP)	Energy generation, renewable sources	Mitigation	21
	UN-REDD Programme	Forestry	Mitigation	3.61
2017	Adaptation Fund	General environment protection	Adaptation	4.38
	Scaling Up Renewable Energy Programme (SREP)	Energy generation, renewable sources	Mitigation	13.55
2018	Adaptation Fund		Adaptation	0.02
	Green Climate Fund (GCF)	General environment protection	Adaptation	15.5
	Scaling Up Renewable Energy Programme (SREP)	Multisector, Energy generation, distribution and efficiency	Mitigation	10.83
	Forest Carbon Partnership Facility - Readiness Fund (FCPF-RF)	Forestry	Mitigation	6.07

Source: Climate Funds Update

A key finding of the research relates to national financial resources to address the effects of climate change. An analysis of the Republic's Budget for 2019 by the Ministry of Finance shows that the total budget of the Republic of Honduras for 2019 was allocated through different public institutions to support climate change projects, amounting to $2.4 billion and representing 22.7 percent of the approved budget for 2019. The allocation of resources was distributed as follows: 34 percent for Mitigation, 34 percent

for Management of climate-related disasters, and 21 percent for Adaptation, through the sectors represented in Table 11.[41]

Table 11. *National Budget on climate Change, Millions of $*

Sector	2018	2019	Variation
Agriculture and Food Security	81.8	82.9	1.1
Forest, Environment and Biodiversity	30.1	35.3	5.3
Education and Research	844.2	748.5	-95.7
Energy	1,020.80	1,092.10	71.3
Risk Management	40.2	39.5	-0.8
Territorial Planning, Infrastructure and Housing	7.7	20.8	13.1
Water Resources	26.4	23.9	-2.7
Human Health	433.4	440.9	7.5
Tourism and Marine-Coastal Sector	0.8	0.8	-0.03

Source: Secretariat of Finance, Honduras

Of the $2.4 billion identified by the Ministry of Finance in the General Budget of the Republic, 93 percent is publicly funded, and the remaining 7 percent is from external sources. However, the details of programmes and projects related to climate change disaster management are not known, preventing verification of their implementation and the actual impact of funds.

With regard to resources from the bilateral or regional SCC, the Secretariat for Foreign Affairs and International Cooperation presents somewhat ambiguous information. Within the data research and collection, we have identified $60,400 corresponding to a bilateral project that is developed between Chile and Honduras on extractive industries. Assuming that SSC projects in the country are carried out under a type of cooperation scheme, the Secretariat for Foreign Affairs and International Cooperation does not provide any information either on the approximate amount of implementation of the initiative or project.

Challenges and opportunities of South-South Cooperation on climate change in Honduras

State capacities in South-South Cooperation and climate change

The case study allows us to verify the institutional reconfiguration of the country over the last 10 years, in order to adapt it to a changing international reality as a result of globalization, not only economic, but also social and political. But it also allows us to verify whether the results of this new country institutionalism on international cooperation and climate change issues have brought positive results for the country or if they are only institutional reforms.

In this sense, politically and institutionally, the country has made significant progress in implementing climate policies, environmental policies and a recent policy of international cooperation for sustainable development. In turn, an inter-agency committee on climate change and subcommittees for coordination in environmental and climate adaptation and mitigation actions have been established in climate and environmental areas. In terms of international cooperation, the country has the South-South and Triangular Cooperation Directorate responsible for implementing and executing everything related to that specific area.

[41] Average annual exchange rate of the Central Bank of Honduras equivalent to 24.6801.

Administratively, the country has been able to access Green Funds and other international resources since 2006, through a special office attached to the Presidency of the Republic or through resources from the General Budget to implement climate and environmental policies, as well as the mitigation and adaptation actions required by the country. As for SSC, the reality dictates otherwise, because it does not have sufficient funds to execute the catalogue and programme of Honduras' SSC, preventing the implementation of more concrete actions in the area.

In terms of reducing inequality, although the country has implemented SSC projects and actions in the last 10 years to contribute to improving the quality of life of Hondurans, mainly indigenous peoples, the projects and actions have been reduced to the exchange of experiences between indigenous peoples and countries of the Americas. This cooperation scheme has not been seen by the policymakers as the possibility of exchanging good practices in the reduction of persistent phenomena such as poverty and inequality.

Climate change is presented as one of the main threats to the country in the coming years and as the main reason for internal displacement along with insecurity

Climate change is presented as one of the main threats to the country in the coming years and as the main reason for internal displacement along with insecurity. Until concrete actions are taken in this case, Honduras will continue to be seen as a vulnerable country, hence the importance that SSC can play in offering experiences, good practices and concrete actions to link climate change, inequality and poverty through cooperation projects between members.

The public or private actors directly involved in executing the policies to cope with climate change in the country and implementing the SSC instruments are significantly different and there are no tools to articulate efforts among actors; therefore, SSC is not seen as an effective cooperation scheme to implement good practices and learn from other actors with similar problems regarding climate change. In addition, the multilateral cooperation agenda on climate change through technical and financial support is strongly positioned in the country, leaving limited spaces to develop SSC schemes in this sector.

In this context, Table 12 shows an analysis of Honduran technical-administrative and political-institutional state capacities in SSC and climate change.

Table 12. *Analysis of Honduran state capacities*

Capacity	South-South Cooperation	Climate change	South-South Cooperation and Climate Change
Technical - Administrative	The South-South and Triangular Cooperation Directorate (part of the Secretariat for Foreign Affairs and Cooperation) is responsible for managing, designing and updating the SSC and Triangular catalogues; promoting strategy in the search for new partners and seeking the necessary funds to promote Honduras' South-South Cooperation programme.	The Presidential Office for Climate Change manages and executes funds from credit agencies, international cooperation and other sources of financing in the field of climate change. Within the framework of the Climate Agenda, a Technical Inter-Agency Committee on Climate Change and subcommittees were created for adequate sectoral coordination and implementation of complementary actions to adapt, mitigate and manage the adverse effects of climate change.	Although both SSC and climate change are priority issues for the country, they do not have a joint technical entity so it is impossible to visualize actions on SSC and climate change. The link and responsibilities between the Presidential Office for Climate Change and the Secretariat for Foreign Affairs and Cooperation are not clear in the management of SSC in climate change
Political - Institutional	Today the Secretariat for Foreign Affairs and Cooperation gives space to different types of cooperation as SSC. In December 2019, the National Policy of Cooperation for Sustainable Development was approved and aims to align Cooperation for Sustainable Development with the national priorities reflected in the various planning instruments.	The Climate Agenda defines the actions to achieve an effective and efficient implementation of mitigation and adaptation measures and technologies. The Inter-Agency Panel for Climate Change is coordinated by the Secretariat of Natural Resources and Environment; the Technical Inter-Agency Committee on Climate Change was established by the National Directorate for Climate Change, the General Directorate for Hybrid Resources and the General Directorate of Biodiversity, which coordinate actions aimed at formulating and implementing national policies for climate change mitigation and adaptation.	Honduras has policies on climate change and cooperation thathave been recently created. The management of international cooperation and climate change have separate structures and do not have articulating instruments. Nowadays, climate change and cooperation policies are mutually exclusive.

Source: Official documents and interviews with decision makers

Results

Honduras is a highly vulnerable country to the effects of climate change. Effects that threaten food production increase the risk of catastrophic flooding or prolonged droughts in much of the national territory and increase the forced displacement of people within the country; however, adaptation to, and mitigation or management of climate change remains an unresolved issue by national authorities.

Given the existence of a National Policy for Cooperation for Sustainable Development, where SSC is of paramount importance in the implementation of political and institutional instruments in the country, it can be presented as an effective alternative in issues of adaptation to, and mitigation and management of climate change through the exchange of experiences with the country's main partners.

Honduras has a Climate Agenda and an Environmental Agenda responsible for governing the country's environmental and climate change policy. However, it does not have a binding public investment programme between Honduran institutions and sectors to mitigate the effects of climate change.

In addition to the public investment plan or programme needed to mitigate the effects of climate change, there must also be an inclusion of civil society as a social seer and, also, a link to the international agreements signed by Honduras on transparency such as the Open Government Alliance and the recent Open State Declaration.

To cope with the effects of climate change, public and private resources should be allocated to address drought emergencies and short-term flooding. However, there is no Honduran political party that includes the theme of climate change in its government proposals.

It is challenging to find the coherence between budget allocation and climate change when there is no detail on the part of the institutions that incorporate, within their operational plans, the implementation of programmes of actions related to adverse climate effects.

The country has created a series of policies focused on climate change mitigation and adaptation for environmental issues

The country has created a series of policies focused on climate change mitigation and adaptation for environmental issues, reformulating international cooperation policy to enable climate financing and address adverse effects of climate developments; however, so far the country does not have the necessary policy tools to implement its plans properly, and there is no evidence that cooperation, environmental and climate policies are in full synergy.

The National Policy for Cooperation for Sustainable Development aims to be the gear that spins environmental and climate policies to reduce the country's vulnerability rates; however, they do not see SSC as a real alternative to address the problems caused by global warming. An example of this can be found in the formation of the Honduran South-South and Triangular Cooperation Fund, regarding which, at the time of writing this document, no Honduran institution had stipulated anything within its Annual Operational Plans related to the functioning of the fund.

Honduras has the Strategy and Catalogue on SSC; however, its action plan has not included Organized Civil Society as a relevant actor in the exchange of knowledge and experiences in topics of interest to the country. Similarly, climate change cooperation between developing countries does not appear to be fully visualized in Honduran SSC actions.

Honduras has signed international agreements on transparency and access to information, and also has a Cooperation Management Platform attached to SRECI; however, access to climate finance and international cooperation information, in general, remains limited on many occasions. Non-accessible information is available by type of cooperation, category or origin. In the area of SSC, the country has no disaggregated information accessible to the public by institutions, companies or organizations benefited or the total amount of resources received or invested in SSC projects and actions.

In terms of financing climate change policies, from the $2.5 billion identified by the Secretariat of Finance in the General Budget, 98 percent corresponds to current expenditure and the remaining 2 percent to investment related to adaptation to, and mitigation, and management of climate change, which would make the policies formulated in this area unfeasible.

It can be inferred that, to date, available financial or technical cooperation funds to promote significant changes in Honduras are more focused on contributing to the rule of law, institutional strengthening and the exchange of good production practices, setting aside issues such as climate change, poverty, agriculture, food and nutrition, security and corruption, which are the main problems affecting the economic and social well-being of Honduran households.

One way to promote SSC in Honduras lies in collaboration between actors with similar problems; this would improve implementation and monitoring of projects and actions, increasing the probability of achieving success.

Although Honduras currently has 98 SSC projects, most of them are aimed at the country's institutional strengthening through the exchange of experiences, techniques and lessons learned among related actors. SSC on climate change does not appear to be a suitable option for the country's cooperation schemes.

South-South and Triangular Cooperation in Honduras is in full development, which gives an important opportunity for the Secretariat of Foreign Affairs and International Cooperation to place it among the relevant cooperation actors in the country and to develop sectors that are marginalized such as: climate change, corruption or the food and nutrition security of the most vulnerable households.

7. Comparative analysis

As revealed by the case studies of Bolivia, Ecuador and Honduras, the three countries show similarities regarding their participation, opportunities and challenges in SSC and climate change.

This chapter will focus on comparing the legal and institutional frameworks for SSC and climate change in the three countries, how the stakeholders get involved in these cooperation schemes, and also the initiatives that have been identified in SSC and climate change along with their data limitations.

SSC legislation and institutional framework

As Table 13 shows, Bolivia has a specific resolution for SSC, which provides the guidelines for its management and coordination. Honduras has a specific Undersecretariat for SSC that is in charge of promoting sustainable development through SSC schemes, and Ecuador has a Directorate for International Bi-multilateral Cooperation and SSC that assures the correct execution of the initiatives. Although these are the only specific resolutions and directions in charge of SSC within the three countries, the legal and institutional frameworks to manage SSC are well defined in the broader legislation.

Table 13. *Legal and institutional reforms and framework*

	Legal	Institutional
Bolivia	2012: Bi-Ministerial Resolution No. 003 stating specific guidelines for SSC.	2010: The VIPFE Financing Negotiation Unit was created and started to systematize all the information regarding SSC; the MDP and Ministry of Foreign Affairs coordinate and select the projects.
Ecuador	2016: The SETECI was abolished, and the MFAHM was designated as the entity responsible for the SECI. The Public Planning and Finance Code oversees all international cooperation and states that cooperation must be governed by national planning.	2017: The Undersecretariat of International Cooperation in the MFAHM was created to secure the correct execution of non-reimbursable cooperation projects. The Undersecretariat contains the Directorate for International Bi-multilateral Cooperation and SSC.
Honduras	2020: Creation of the South-South and Triangular Cooperation Fund to implement the strategies and initiatives. SSC is included in the National Policy of Cooperation for Sustainable Development approved in 2019.	2019: the SSC and Triangular Directorate formally enters into operations in the Ministry of Foreign Affairs.

Source: Case studies

Within this framework, the three countries are underlining the role of SSC and promoting its use. In this sense, the reforms have aimed to strengthen the role of the three countries as providers, by creating SSC catalogues that compile their supply of programmes and projects. However, the catalogues present limitations in terms of the information compiled and its dissemination. In addition to the shortcomings found in the catalogues, two other factors have led to unsatisfactory results in the execution of SSC. First, the three countries suffer budgetary restrictions that do not allow them to implement their catalogues fully, and that restricts the countries with which they carry out exchanges. Second, there is a lack of articulation of the public sector, which manages the SSC, with other stakeholders such as civil society, academia, and even with other governmental instances or levels.

As a result, the obstacles that are limiting the implementation of SSC programmes and initiatives in Bolivia, Ecuador and Honduras, have been summarized in three areas:

- Shortcomings within SSC catalogues
- Budgetary restrictions
- Lack of articulation among stakeholders

These and other limitations specific to each country that have been identified, are shown in Table 14.

Table 14. *Factors hampering the implementation of SSC in Bolivia, Ecuador and Honduras*

	Bolivia	Ecuador	Honduras
Shortcomings within the SSC catalogues	There is a catalogue of Technical Cooperation (Ayni catalogue) to promote Bolivia's participation as a provider. However, it only collects information at national level, and it is not adequately distributed; only a few stakeholders know about it.	The catalogue determines the official SSC system. This catalogue is created by the MFAHM based on the successful initiatives; however, the process does not consider the ministries' needs or national priorities. Besides, the online catalogue, available from 2018, does not have any documented experiences so far.	There is a SSC catalogue (Compartiendo Honduras 2018), which articulates Honduras's SSC and prioritizes eight sectors; however, national priorities such as reducing poverty and fighting corruption are excluded. Besides, CSOs and academia cannot participate or create new programmes for the catalogue
Budgetary restrictions	The main challenge of SSC in Bolivia is the creation of a specific fund for the development of a projects portfolio and its centralization at national level.	The SSC is focused solely on non-reimbursable cooperation; thus, the only SSC actions that take place are the ones that do not require any financing, except for the technical personnel per diems. This, in addition, presents a limitation on looking for cooperation with countries in other regions due to the higher costs this would involve.	A Honduran South-South and Triangular Cooperation Fund was created in 2020. Nonetheless, the approval of the 2020 National Budget does not provide the necessary budgetary allocations, contributing to unsatisfactory results.
Articulation with other stakeholders	SSC is a tool centralized by the MDP. There is a lack of coordination with civil society and other sectors, causing all the information and knowledge created by other stakeholders to be lost and preventing the different actors from taking advantage from potential synergies among them.	Lack of coordination among civil society, universities, local governments and ministries (central government) since they can manage their own international cooperation without the need to go through the MFAHM. The MFAHM does not register this non-official cooperation, it only registers official cooperation that comes from bilateral Joint Committees	Public entities are the main SSC stakeholders, but there is a lack of coordination with other actors such as civil society and academia. For example, the CSOs have been actively involved with organizations from the Northern Triangle (Honduras, Guatemala and El Salvador), but there are no synergies with the public sector.
General limitations of the legal and institutional frameworks	Bi-ministerial Resolution 003 has worked well in terms of institutionalization. However, the legal and institutional frameworks are insufficient and bureaucratic. Due to long and inefficient processes, CSOs have missed funding opportunities and prefer to participate in initiatives informally.	The continuous changes of authorities and technical personnel leads to loss of information and lack of complete records regarding SSC initiatives.	Lack of policy tools to link different national policies limits the operational synergy between institutions and national policies, often acting as totally isolated policies and schemes; this restricts the effectiveness of national strategies, and in this case of the SSC.

Source: Case studies

All of these factors prevent a correct and effective implementation of SSC programmes and hinder the potential impact that SSC could have on the countries' development. The incomplete registration of initiatives is underestimating the efforts made by stakeholders outside the public sector because the catalogues and databases from the Ministries of Foreign Affairs are not compiling all the existing initiatives. Thus, the projects carried by local governments, CSOs and academia are not being registered; for this reason, all those valuable experiences are being lost due to lack of registration. This directly

relates to the lack of articulation among different stakeholders as the unfamiliarity with initiatives that are taking place in different areas leads to a lack of coordination and a lack of prioritization of the relevant issues at national level.

Stakeholders in SSC initiatives

Within the legal and institutional framework presented in the previous section, the principal stakeholders are public institutions. The public sector figures as the most visible and relevant stakeholder in the SSC scheme, since it is in charge of managing non-reimbursable cooperation by prioritizing, evaluating and selecting the projects. Besides, the public sector also participates in the SSC initiatives by exchanging good practices, knowledge and experiences with governments from other countries. Most of the SSC programmes are related to the exchange of experiences, institutional strengthening and technical support, which occurs mainly between public institutions, excluding other actors.

There is a lack of institutionalized processes to include other stakeholders, aside from the public sector, because there is no legal framework that includes them. Despite this, CSOs and universities have participated in SSC actions. The participation of academia and CSOs often takes place informally, and it is not considered or recorded as official cooperation in the national catalogues or other governmental platforms. When carrying out the research and interviewing different actors, it was identified that international arrangements and cooperation among educational institutions or CSOs are not even considered as SSC initiatives by the project's implementers themselves.

As highlighted in the previous section, there are various shortcomings regarding the systematization of SSC initiatives that are not performed by the public sector. This lack of information poses a challenge for identifying all the roles and actions that organized civil society and academia have taken, as well as underestimating the actual impact and contribution they have achieved through SSC initiatives.

However, from the experiences that could be identified and compiled, the CSOs' role has focused on the participation or co-execution of international cooperation projects with organizations from other countries. Besides, academia has also participated in SSC projects, especially by providing scientific evidence through rigorous research. In this sense, the participation of CSOs and academia in SSC projects has been limited to being recipients, co-executors or information generators. There are no identified experiences where they participated in the evaluation or design of the initiatives. Table 15 summarizes the main roles of the public institutions, civil society and academia.

Table 15. *Stakeholder's role in SSC by type of actor*

Country	Type of actor	Role
Bolivia	Public institutions	Prioritize, select and evaluate projects according to the strategic guidelines. Participate in technical cooperation projects.
	Civil Society	Provide and systematize data, technical support and research findings and evidence. Participate in cooperation projects with CSO from other countries.
	Academia	Provide evidence by doing research.
Ecuador	Public institutions	Management of non-reimbursable cooperation. Participate in technical cooperation projects.
	Civil Society	Implementation of effective models and approaches to support the most marginalized communities. Leadership in the long-term sustainable development discussion and incorporation of dialogue for the articulation and integration of the region's negotiations.
		Participate in cooperation projects with CSOs from other countries.
	Academia	Execution and co-execution of resources, generation of information, research and analysis.
Honduras	Public institutions	Management of non-reimbursable cooperation.
		Implementation and participation in technical cooperation projects.
	Civil Society	CSOs have actively participated in SSC projects with organizations from the North Triangle but there is no registry of this cooperation.
	Academia	Exchange of practices, techniques, and knowledge for the execution of the country SSC catalogue. Contribute by providing scientific evidence of country problems and solutions.

Source: country case studies

Stakeholders in SSC on climate change

The role of stakeholders in SSC initiatives for climate change is more limited and isolated than before. Any official cooperation initiatives in climate change have been identified in any of the three countries by the Ministries of Foreign Affairs as they do not have a specific category for climate change and there is no body that articulates both SSC and climate change. Nevertheless, projects in other sectoral areas are likely contributing to coping with climate change.[42] In this context, it is not possible to determine a specific role of the public sector in SSC on climate change; thus, the stakeholders that have a more visible role are the CSOs and academia, as shown in Table 16.

In this case, the CSOs and universities also get involved in SSC initiatives in informal ways, by directly contacting organizations from other countries and making agreements to work on the same projects together. In this sense, the participation of the CSOs or universities is determined by the contact network and visibility that the organizations have abroad.

[42] For example, in the case of Ecuador, the researcher could identify initiatives that despite not being listed as 'climate change' initiatives, contribute to the mitigation of adaptation of climate change (these are shown in Table 5).

Table 16. *Stakeholder's role in SSC climate change initiatives by type of actor*

Country	Type of actor	Role
Bolivia	Public sector institutions	Designs and implements the national climate change policy and SSC guidelines, but the lack of a body that articulates both SSC and climate change makes it difficult to determine the specific public sector role in SSC on climate change.
	Civil society	Informal exchanges with other CSOs.
	Academia	Informal exchanges between universities.
Ecuador	Public institutions	Designs and implements the national climate change policy and SSC guidelines, but the lack of a body that articulates both SSC and climate change makes it difficult to determine the specific public sector role in SSC on climate change.
		The Ministry of Environment manages its own cooperation in climate change.[45]
	Civil society	Informal exchanges with other CSOs. Unify the vision of the actors to protect the Amazonia river basins. Generate and disseminate information.
	Academia	No experiences have been identified from academia in SSC and climate change.
Honduras	Public institutions	Designs and implements the national climate change policy and SSC guidelines, but the lack of a body that articulates both SSC and climate change make it difficult to determine the specific public sector role in SSC on climate change.
		Coordinate and implement cooperation policies in Honduras.
	Civil society	Informal exchanges with other CSOs.
	Academia	Exchange of scientific experiences, techniques, and knowledge according to the SSC catalogue of Honduras.

Source: country case studies

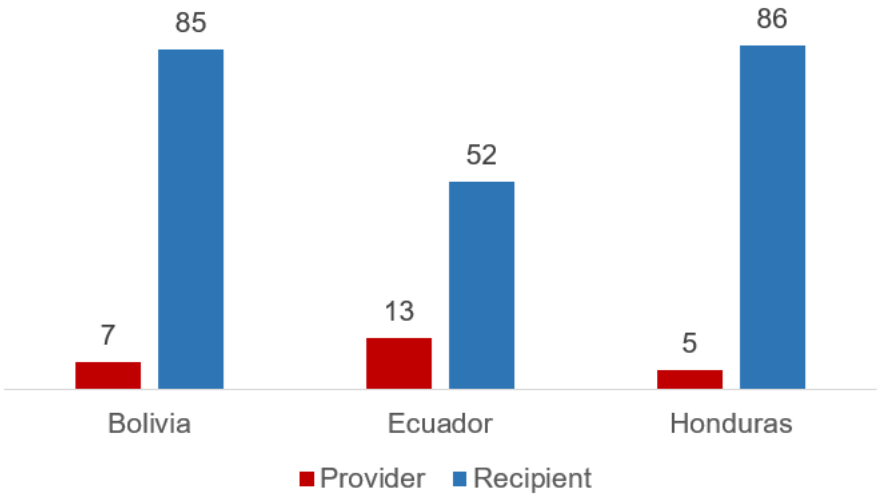
SSC climate change initiatives

Identifying experiences in SSC and climate change was a challenge, starting from the fact that neither the national catalogues nor the SEGIB SSC reports, which represent the most comprehensive available data sources, include a specific category for climate change initiatives. In the case of the SEGIB reports, the SSC initiatives for climate change are included in the category of environment (SEGIB, 2019)[44]. However, few SSC initiatives on climate change could be identified by formal requests for information to the Ministries or by reviewing press releases and news for Ecuador and Honduras. No SSC initiatives in climate change were identified in Bolivia, except for triangular cooperation.

[43] In the case of Ecuador, the Ministry of Environment can manage its own cooperation on climate change; nevertheless, it is not possible to track the projects and programmes that the Ministry has implemented because its cooperation is listed as non-official cooperation, and the MFAHM does not record it. Besides, due to the change of authorities in the Ministry of Environment, there is no historical record of the initiatives. The Ministry of Environment actively used the SSC to develop the normative body for climate change. However, it has not been used to implement it due to lack of financial resources.

[44] The SEGIB reports classify the initiatives according to their area of action. The area of environment includes: i) Environment: 'Policy development and support to institutions involved in environmental protection, sustainable management of natural resources, waste treatment, pollution reduction, fight against climate change and biodiversity conservation, among others'; ii) 'Disaster management: support to all operational interventions carried out throughout the disaster management process, including prevention, preparation, mitigation, emergency assistance, rehabilitation and reconstruction'.

Graph 13. *Number of SSC actions and projects in Bolivia, Ecuador and Honduras, 2017*



Source: SSC SEGIB report, 2019

According to the SEGIB (2019), in 2017 Bolivia, Ecuador and Honduras implemented 125, 110, and 128 initiatives in all sectors, including bilateral SSC, triangular cooperation and regional SSC, respectively. In these actions, the three countries mainly played the role of recipients, as noted in Graph 13.

The SSC initiatives implemented in 2017, are mainly aligned to SDGs 3, 9, 11 and 16; Ecuador is the only country that has SSC actions that are contributing to coping with climate change (SDG 13) as it is shown in Table 17.

Table 17. *Alignment of SSC initiatives with SDGs, 2017*

Bolivia	SDG 16: Peace, justice and strong institutions SDG 11: Sustainable cities and communities SDG 3: Good health and well-being
Ecuador	SDG 16: Peace, justice and strong institutions SDG 13: Climate action SDG 11: Sustainable cities and communities
Honduras	SDG 16: Peace, justice and strong institutions SDG 9: Industry, innovation and infrastructure SDG 3: Good health and well-being

Source: country case studies

Furthermore, as the case studies indicated, the initiatives where the countries acted as recipients contributed to the strengthening of capacities in areas such as health, agriculture and livestock, disaster management, industry, social policies, institutions and public policy, among others.

This information provides a rough view of how SSC initiatives are taking place in the countries; however, since the data is too concentrated in the other sectors category and the report does not present detailed information from the programmes, it is not possible to determine which initiatives are contributing to coping with climate change.

When detailed information about the programmes is available, it is possible to analyse and identify some climate change initiatives. However, this process also has shortcomings. While projects related to the reduction of greenhouse gas emissions can be easily identified as projects contributing to coping with climate change, it becomes more difficult to identify projects that contribute to adaptation to climate change. In this case, any actions promoting the community's adaptation and resilience to climate change

would count; thus, the relationship is not that straightforward, and some projects could go unnoticed.

Few initiatives in climate change and SSC were identified through press releases and formal requests for information. Although these sources provided more detailed information than consolidated reports such as the SEGIB SSC report, there are still limitations in the information, especially regarding the periods of time and available funding.

In general, most of the initiatives were bilateral cooperation and occurred through the technical support modality. The main sectoral areas were water resources, forestry and agriculture and livestock, while less frequent areas were renewable energy, land use, cleaner production and eco-tourism, among others.

Besides, regarding the time frame and funding, the available information is minimal, almost none of the projects specify this information. However, it is worth noting from the available data, that initiative time frames vary from 2 to 4 years and the only projects that included financial information were two triangular cooperation initiatives from Bolivia and another triangular cooperation initiative from Ecuador.

8. Conclusions

SSC in Latin America is under construction and still faces great challenges for its empowerment.

The case studies from Bolivia, Ecuador and Honduras have revealed that in the field of climate change, SSC is scarce and difficult to identify, as shown by the SEGIB 2019 SSC report. In these countries, North-South cooperation prevails at a general level and specifically in the area of climate change, through climate funds.

However, Latin America could take advantage of the problem of climate change to foster SSC, since climate change does not respect country borders and many sectors affected by climate change, such as natural heritage or water heritage, must be managed with a landscape approach, i.e. to address between various stakeholders the increasingly complex and widespread environmental, social and political challenges that transcend traditional management boundaries.

This approach should be evident, for example, among the nine countries in South America that have a part of the Amazon rainforest in their territory. For the management of the world's largest tropical rainforest, synergies must be found through shared interests to build solutions on multiple scales, and SSC may be the ideal mechanism to achieve this. Around 60 percent of the Amazon rainforest is located in Brazil. Furthermore, Brazil is the third country offering SSC in South America and has a strong international cooperation agency that receives its funds to finance cooperation (Brazilian Cooperation Agency). Countries of the Amazon basin should strengthen their relationships with Brazil and seek SSC initiatives or projects for the management of this world treasure.

In addition, Latin America and the Caribbean should start looking at other rising powers in the Global South that are outside the region and working on climate change like the BRICS. For example, although commercial, economic and political links between China and Latin America and the Caribbean have been strengthened in recent years, collaboration between China and the region on the theme of climate change is to be further enhanced based on the existing gaps and opportunities.

In terms of the functioning of the SSC in the countries analysed, even though there are well defined legal frameworks and institutional arrangements for both SSC and climate change in the three countries, there are further shortcomings and challenges in the implementation of SSC and climate change. The case studies show that the lack of registration of the cooperation carried out by the ministries, the local governments, CSOs or academia causes the experiences, good practices and lessons learned by these stakeholders to be lost. Information is also lost due to the lack of an information system that brings together the international cooperation initiatives carried out.

Insufficient coordination among the national entities, and the rest of stakeholders limits the effectiveness of the cooperation and creates a gap between the public efforts and those made by civil society and universities in relation to the implementation of SSC initiatives. It is highly likely that many efforts are being duplicated among the stakeholders and that if the actors and actions were articulated, greater impacts could be achieved. Better articulation among the public sector, academia and civil society would also foster more alignment with the national priorities and developing plans.

CSOs can play an important role in SSC, mainly on the issue of climate change, since it is a topic of great interest to civil society and social movements. Regarding the private sector, the case studies show that there is no evidence that the private sector has an active role in SSC on climate change in the region, although it should play a fundamental role in combating the effects of climate change and contributing to their mitigation.

The limitations for the implementation of SSC climate change initiatives are aggravated, since there is no body that articulates both SSC and cooperation on climate change, in any of the three countries. Furthermore, the catalogues of initiatives, as well as the databases from the ministries, are underrepresenting the actions taken to cope with climate change because there is not an exclusive category of climate change for the classification of initiatives, making it difficult to identify them.

Another major problem for SSC in these countries is the lack of a budget for SSC activities. However, SSC does not initially need huge resources, since short-term and low-cost actions can be promoted, such as the exchange of experiences or capacity-building, where SSC has a significant versatility.

The conjunction between SSC and climate change can also become a powerful tool to fight the inequalities that climate change generates both between rich and poor people, and between the centre and the periphery so that it can reinforce the negotiating capacity of the countries of the South with the Northern countries, in order to address and solve common problems related to climate change.

9. Policy recommendations

General policy recommendations for Bolivia, Ecuador and Honduras

- Improve the articulation between actors, in order to create or unify SSC information systems at national and local levels that will allow all stakeholders to record their cooperation activities and to exchange information about cooperation, facilitating the co-design of complementary interventions with impact and avoiding duplication of effort. Also, this system would allow monitoring and evaluation of cooperation. This could be led by the public institutions of international cooperation or an independent observatory.
- Generate spaces for multi-stakeholder articulation where all actors such as the public and private sectors, CSOs and academia are present, in order to join efforts and avoid duplication of activities.
- Improve the registration and systematization of SSC initiatives on climate change through the creation of a specific category of climate change in the records of the Ministries of Foreign Affairs; or, in the case of Iberoamerica, in the SEGIB's annual reports. Another alternative is to indicate the alignment of each initiative to the SDGs, through which it will be possible to identify if any initiative is aligned with SDG 13 - Climate Action.
- Improve SSC catalogues through the collection of information not only at national level but also at local level. In addition, it is necessary to keep the catalogues permanently updated, for which the Ministries of Foreign Affairs must define the appropriate mechanisms. Additionally, the mechanisms for the diffusion of catalogues should be strengthened to facilitate access to and consultation of the information.
- Strengthen formal negotiation mechanisms between governments, such as the Joint Committees, through involvement in these spaces of other development actors with a multi-stakeholder approach, which will allow more participatory and effective SSC coordination.
- Search within SSC for agreements that allow countries to obtain financial resources and those not limited only to the exchange of experiences. For this, approaches should be generated to large SSC rising powers such as BRICS, maintaining the SSC principles of horizontality and equity.
- Study the good practices of North-South cooperation in relation to climate change and adapt them to the context of SSC.

Specific policy recommendations for Bolivia

- Generate awareness in the Ministry of Development Planning of the importance that SSC can have for a country like Bolivia and strengthen its institutional arrangements for promoting it. This is a type of cooperation that does not need large financial resources, and that can generate significant impacts, mainly on capacity-building.
- Strengthen the institutionalism of the SSC to prevent it from depending on the changes that take place due to factors such as political instability.
- Make visible the unofficial cooperation that has been established between local authorities and indigenous people from different countries to benefit their common interests.
- Learn from the lessons that cooperative actions and networking between civil society and academia have passed on for the official SSC.
- Make visible the results and impacts of initiatives carried out by civil society and academia regarding SSC.
- Improve the formulation of goals related to SSC in projects in order to prioritize inequality and climate change as main components.

Specific policy recommendations for Ecuador

- Improve the MFAHM mechanisms for gathering the needs of the sectoral ministries in terms of SSC, in order to find SSC initiatives that are adapted to national needs.
- Have a digital platform that collects the official cooperation that passes through the MFAHM, and the cooperation that is managed directly from the sectoral ministries and the local governments.
- Strengthen the South-South Cooperation Fund created with UNDP, through favourable institutional arrangements, in order to raise financial resources for the operation of the fund.
- Generate synergies through SSC in the field of climate change with neighbouring countries with which sustainability and development challenges are shared, through the management of a landscape approach.
- Generate a public and private financial architecture that allows identification of financing needs for the fight against climate change. A first step has already been taken with the NDCs, which identify which sectors need more investment. All public institutions must be aligned with the national policy on climate change and articulated among themselves to seek financing, either through traditional mechanisms or through SSC.

Specific policy recommendations for Honduras

- Articulate better the actions of the public sector, even if there have been important reforms in terms of SSC in recent years. It is necessary to establish transparent governance mechanisms specifying which institution oversees directing the coordination of actions between the different cooperation schemes.
- Create an inter-institutional committee on SSC and climate change, in order to coordinate specific efforts in this area. Build on the strengths of academia and civil society, and involve them in official SSC mechanisms.
- Expand the current actions of SSC beyond institutional strengthening, towards concrete actions that contribute to the big challenges facing the country such as climate change.
- Strengthen cooperation with emerging countries through broader SSC schemes in areas such as: academic, commercial, economic and investment; contributing to the formation of a society with better social and economic opportunities.
- Decentralize the monitoring and decision-making of SSC so that private sector and civil society organizations can report their SSC actions and projects
- The private sector should extend SSC schemes to technology exchange, industry diversification, good practices and product improvement, international market analysis, etc.
- Private and public universities should create a strengthening mechanism through SSC schemes to create scientific research, analysis, academic curriculum updates and technology exchange with universities in the region and emerging countries in order to position the academic presence of the region and the country.

10. Methodological considerations

The methodological considerations proposed in this section are intended to offer references for future research in SSC and climate change in other countries from the region.

For comparative purposes, future studies may consider choosing two or three countries according to their relevance in climate change issues to use as case studies. It is recommended that the research centres for each case study are based on each country; in this way it is possible to carry out primary data collection. Assign a coordination role to a research centres so that they coordinate the other research centres as well as developing the background and comparative analysis.

Steps for carrying out the research:

1. Define a conceptual framework for international cooperation, SSC, climate change and CSOs.
2. Carry out stakeholder mapping to understand the main parties that are involved in climate change and SSC in each country. Consider the public sector, academia and civil society.
3. Define a detailed structure for the case studies. All centres should follow this structure; however, if additional and relevant information is encountered, it can be included.
    a. Include a section to analyse the context and functioning of SSC: explain the legal and institutional frameworks. Identify if there are any differences between official and non-official cooperation and identify information gaps and how to address them.
    b. Analyse the state's capacities in four dimensions: technical, administrative, institutional and political capacities.
4. Carry out the research by using primary and secondary data sources. For the primary data sources, define qualitative data collection methodologies and instruments. For instance, use:
    a. Interviews with experts on SSC and climate change. Interview technical personnel from the Ministry of Foreign Affairs, Ministry of Finance and Ministry of Environment, among others.
    b. Focus groups with organized civil society groups that work on climate change issues.

    Besides, use secondary data sources, such as reports and databases. The main data sources that should be explored are:
    a. Institutional reports from: SEGIB, UNOSSC and other United Nations agencies, Climate Funds Update
    b. Academic articles and papers
    c. Databases through official requirements for information to the Ministries of Foreign Affairs, Finance or Environment.
5. Systematize all the collected information in matrixes to use them for the case studies and the comparative analysis. Examples of the matrixes are:

Institutional and legal framework

Category	Country Constitution Document	National Laws (by sector or topic)	Ministerial or sectoral regulations and guidelines	International Treaties, Agreements or other international laws signed by the country	Sectoral policy documents or similar
International Cooperation					
South-South Cooperation					
Cooperation on Environmental Issues					
Cooperation on Climate Change					
South-South Cooperation on Climate Change					

Stakeholder mapping

Topic or programme	Stakeholders involved	Type of actor or stakeholder (civil society, university, public sector agencies)	Roles by type of actor involved	If any civil society group or organization was involved, is there any explanation?
South-South Cooperation				
Cooperation on Climate Change				
Specific Programme: South-South Cooperation on Climate Change				
Specific Programme: South-South Cooperation on Climate Change				

SSC and climate change initiatives

Name of the Initiative	Stakeholders involved: name and type of organizations (public, private, civil society and universities)	Channelling mechanism (direct bilateral, indirect bilateral, multilateral) - Identify country or agency	Instrumentalization (programmes, projects, scholarships, grants, technical support, etc.).	Alignment with the national sectoral policy	Period and amounts	Cooperation mechanism (knowledge, skills, resources, experiences) and nature (species or financial)	Includes or mentions issues of inequality, for example a social or beneficiary analysis

6. For the comparative analysis, use the information presented in the case studies and systematized by the matrixes. Identify all dimensions where the countries demonstrate common advantages and disadvantages. Look for good practices and lessons learned to use them for the recommendations.
7. Perform brainstorming work sessions with all the researchers involved to identify recommendations for each country.

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