

THE POTENTIAL OF GREEN JOBS IN LAC:

a territorial approach in
the context of just transition



Una alianza de:



Presentation



This policy brief is part of a series of three documents produced by [Alianza Latinoamérica Sostenible](#) (ALAS), based on the systematization and monitoring of eight community experiences during the year 2023 in Colombia, Chile and Mexico. These projects were supported by ALAS, thanks to funding from the Ford Foundation, with the specific objective of exploring **sustainable recovery**¹ processes in the face of the crisis generated by COVID-19. Special emphasis was placed on aspects that help build resilience.² The findings reported in these policy briefs seek to provide feedback for policies, programs or strategies **to promote just transition**³ and resilience in the face of the multiple crises confronting humanity, such as climate, biodiversity and health crises, at the local scale and, in particular, within the communities of Latin America. To this end, these documents address three topics: indigenous people, women and green jobs.

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- 1 Recovery strategy that promotes measures that reflect the interdependence of economy, health and society with the environment to increase social inclusion and well-being of people, especially the most vulnerable.
 - 2 Resilience is understood as the “conditions that enable people to anticipate and respond to change, minimize the consequences of crises, recover, and seize new opportunities. It is not simply a matter of having the necessary resources at hand to do so, but also the willingness and ability to turn those resources into effective adaptive action” ([Cinner et.al., 2018](#))
 - 3 Just transition is that transition aimed at decarbonization, ensuring that the changes that this implies and that generate negative effects on vulnerable populations are addressed in such a way that these groups are compensated and supported and no one is left behind. In addition, it is sought that the opportunities offered by the transition, can be seized and maximized for these populations.

01

Introduction



The pandemic caused by COVID-19 struck the world of work in Latin America and the Caribbean (LAC), generating significant job losses. Therefore, since 2020, the Alianza Latinoamérica Sostenible (ALAS) has developed several analyses on how to generate a sustainable recovery of economies, identifying in 2022 the importance of promoting green jobs that promote a just transition, strengthening community resilience and decent work.⁴ Thus, this document explores how green jobs have been consolidated in LAC since 2022,⁵ with emphasis on Chile and Colombia, through government policies or country strategies.

In turn, the document arises from the experience with organizations and communities that were shocked by the pandemic and whose rural condition was an aggravating factor of the effects caused by this crisis, but that nevertheless developed strategies to recover sustainably and increase their resilience through community projects accompanied by ALAS. Thus, the findings of three projects located in rural communities in two countries of the region and

4 According to the [ILO](#), decent jobs meet the criteria of providing a fair income, security in the workplace, social protection for families, and opportunities for all.

5 In August 2022, the policy document "[Mujeres, empleos verdes y pueblos indígenas: construyendo el camino para una recuperación justa y resiliente en América Latina](#)" ("Women, Green Jobs and Indigenous Peoples: Building the Road to a Just and Resilient Recovery in Latin America") was published, documenting the impact of the pandemic on the world of work, with special emphasis on the importance of promoting green jobs in LAC because of the region's potential to generate them in the framework of a just transition and to achieve climate goals.

implemented from January to July 2023 are presented and analyzed. In the case of Chile, one project was implemented by a group of six women from different rural localities of the borough of La Serena, Coquimbo Region, is taken as a reference. The project sought to improve the productive capacities of an agroecology bioinputs business and the development of informative workshops for teaching these practices. In the case of Colombia, two projects were considered that took place in the Amazon region, particularly in San José del Guaviare, both were implemented by community-based organizations seeking to strengthen their livelihoods through bioeconomy⁶



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and nature-based solution (NbS)⁷. In particular, they were developed by a group of tourism service providers that sought to promote Amazonian gastronomy to improve the offer of sustainable nature tourism in the department; and a group of young people who want to raise awareness about the generational change in the countryside and the conservation of the Amazon through beekeeping.

Following the implementation of these projects, several considerations have led to the formulation of recommendations that emphasize relevant aspects for the construction of public policies that foster resilience in rural communities and green jobs as the driving force for a just transition.

6 Bioeconomy is an area of the economy that makes sustainable use of biodiversity and biomass. For more details, visit the [ILO document on bioeconomy and green jobs](#).

7 NbS are strategies, projects, plans or actions that seek to protect, sustainably use and benefit from nature and ecosystem services as a response to problems faced by societies. For more details, visit [IUCN](#).



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02

The challenge of informality in Latin America and the Caribbean



According to data from the International Labor Organization (ILO), before the COVID-19 pandemic in LAC there were approximately 140 million people working informally.⁸ This situation worsened due to the crisis generated by the virus, not only for this population group, but also for the formally employed population. According to ECLAC, approximately 25 million people became unemployed, thus increasing unemployment rates in 2020.⁹

While the number of employed people in the region has increased, 58% of the total number of jobs lost to the pandemic were recovered in 2021. This was achieved because of informal jobs which accounted for 40% to 80% of the net increase between 2020 and 2022.

8 Informality implies that whoever carries out an occupation does not have labor guarantees or a written agreement or contract with an employer.

9 Throughout the text, reference is made to “employed persons” as those who generate income either in the context of formality or informality. On the other hand, “unemployed persons” are those who do not generate income from work or employment.

[As the 2022 Labor Outlook](#) warns, by the end of 2020, informal jobs contributed 90% of the total job recovery in nine countries in the region; however, by the third quarter of 2022 their contribution was only 60%. This is positive for the labor market as it denotes greater dynamism in formal employment. Despite this, total employment has not returned to pre-pandemic levels and the contribution of informal work continues to be higher than that observed in 2019 and previous years. The importance of formalizing work lies in the labor guarantees between employers and workers, which means a first step to increase people's

working conditions. Likewise, formalization makes it possible to enrich the collection of associated information, in order to improve decision making at the government and company level.

In this context, strategies to promote sustainable sectors that generate formal employment are essential to increase green jobs in the region. In LAC, initiatives such as [Colombia's National Green Business Plan 2022-2030](#), the [Roadmap for a Circular Chile by 2040](#) and [Paraguay's National Employment Plan 2022-2026](#), which includes the National Vocational Training



LAC countries have the potential to create approximately 15 million green jobs by 2030 in sectors such as energy, forestry, transportation and ecosystem restoration.



Strategy and seeks to strengthen green jobs, stand out.

Green sectors and businesses as a driver of green jobs in LAC

The effects of climate change and the global organizations behind research and dissemination put us in a complex scenario in which we cannot turn back, one in which we must act quickly, and this must be done under governance models and establishing differential commitments between those who pollute the most and those who pollute the least. However, the pressure in countries vulnerable to the effects of these changes- such as LAC - is high, as the impacts are already evident and the capacities for attention and adaptation are limited.

LAC is one of the most vulnerable regions to climate change effects; therefore, the trend of increasing climate commitments in several countries in the region. Without this level of ambition, it would be impossible to achieve the goals of the Paris Agreement and to avoid losing our natural wealth to the pressures generated by the international market. The challenge as a region is significant,



What are green jobs and why are they important?

A sustainable economic model could provide us with a healthy environment and a suitable living environment, but also with the possibility of finding more and better jobs since our jobs are closely related to nature.

However, in order to maintain a habitable planet, sustainable economies that reduce environmental degradation and allow for the inclusion of all people in social and economic dynamics. In this scenario, since 2009 the ILO has been committed to promoting green jobs, which contribute to conserving or restoring nature while at the same time being considered decent. These can be created in sectors whose processes are environmentally friendly or that generate green end products.

In Colombia, the National Administrative Department of Statistics (DANE) distinguishes between environmental jobs and green jobs. The former refer to jobs that reduce pressure on natural resources but do not have a focus on labor quality; on the other hand, green jobs meet both criteria: they reduce pressure on natural resources while being "decent", which implies that the exercise of economic labor is dignified and generates a favorable environment for the well-being of the worker.



Currently, the drive for green growth has materialized through the development of productive sectors implementing sustainable practices, mainly in agriculture and energy, but the high rate of informality does not yet allow green jobs to be established in Colombian territories.

due to the dependence on extractive fossil fuel; however, it is necessary for Latin American societies to move towards sustainable and fair economies where development in line with climate objectives prevails.

Decarbonization should not be seen as a cost but as an opportunity for development. In LAC countries there is the potential to generate approximately [15 million](#) green jobs by 2030 in sectors such as energy, forestry, transportation and ecosystem restoration. In particular, in Colombia the bioeconomy sector could generate up to [2.5 million jobs](#) - including environmental and green jobs - by 2030, while in Chile, according to its roadmap, it is estimated that a circular economy alone would provide [up to 100,000 green jobs](#) by the same year.

Although in the countries of the region the majority of the population does not work in adequate working conditions and does not generate sufficient income to effectively cover their social security, among other criteria that must be met to have jobs qualified as decent, green businesses currently contribute to the economy of households, mainly in rural areas, since they are businesses that offer goods and services that generate positive environmental impacts and also incorporate good practices that contribute to environmental conservation and territorial development.



Driving to green jobs in the region: the case of Colombia

Colombia has been one of the countries in the region that has made the most progress in legislative matters regarding the recognition of green jobs as a strategy for the conservation of natural capital and the management of climate change. In 2018, a Green Growth public policy was developed based on which DANE is entrusted with the quantification of green jobs. In turn, in 2019, the Pacto por los Empleos Verdes y la Transición Justa was signed between the Ministry of Labor and the ILO, which seeks to promote the implementation of green jobs and facilitate the adaptation of the productive sector to green growth in Colombia.

Currently, the drive for green growth has materialized through the development of productive sectors that implement sustainable practices, mainly in agriculture and energy, but the high rate of informality still does not allow green jobs to be established in Colombian territories. Thus, in 2021, almost 13 million people in the country (56.7% of the total number of employed persons) were in informality, while only 81,386¹⁰ of the jobs were classified as green jobs out of a total of 106,347 environmental jobs, which indicates a very low proportion for this type of jobs within the total number of employed persons in Colombia.

Increasing green jobs in the region requires committed governments through multi-stakeholder policies and plans that lead to their materialization, as well as an increase in investments in sectors that have the potential to generate them. However, economic inequality in Latin American societies results in informal working conditions for more than half of the population. Therefore, green jobs can be boosted in LAC by stimulating

entrepreneurs and green businesses. In the latter case, the importance of small producers and micro and small businesses as potential creators of green jobs is highlighted.

¹⁰ Since 2021, the economic accounts of environmental activities have not been updated, so there is no concrete data for green jobs for the current year 2023.

03

Green jobs beyond COVID-19



Post-Covid recovery and macroeconomic scenario

The post-pandemic economic recovery process did not offer a new path to more sustainable and resilient economies in the region. Less than 8.1% of spending on economic rescue packages went towards green initiatives. In turn, the challenges of just transition and adaptation to the effects of climate change are still present in Latin American economies, which maintain a low-productivity structure, with weakened social protection systems and institutions, and with development models that are intensive in the exploitation of natural resources that are not environmentally sustainable.

During 2022, LAC countries had lower economic growth than in 2021, which is explained by the end of the rebound effect or normalization of economic activity within the framework of the post-Covid recovery and by more restrictive monetary and fiscal policies, i.e., 3.8% compared to 6.7%. However, for the labor world, figures such as the unemployment rate stand out, which went from 9.3% in 2021 to 7.0% in 2022, while informal employment showed a slight reduction in 2022, reaching 48.8%.



In 2022, the labor participation rate reached 62.6%, one percentage point above the 2021 rate of 61.6%, and it is estimated that by the end of 2023 the employment rate will have grown between 1.0% and 1.9%. In turn, in 2022 there was a slight increase in the participation of women (1.7%) compared to that of men (0.3%) compared to 2021, reaching rates of 51.8% and 74.4%, respectively.

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Before the pandemic, economic indicators showed low growth and stagnation of the regional economy, and although by the end of 2022 the region returned to economic levels similar to pre-pandemic, there are still structural problems in the labor market such as the gender gap and employment formality,¹¹ which may be exacerbated by new crises.

Green Jobs Opportunities in LAC: A Sectoral View

The potential to generate more than 15 million new green jobs by 2030 under a net-zero emissions scenario is still present. The sectors with the greatest opportunities to generate green jobs in the region are [agriculture](#), [energy](#)

11 [In 2022](#), the gap in the participation rate between men and women was 22.6%; in LAC, 48 out of every 100 women of working age are not participating in the labor market. The informality rate in LAC was 48.7% in 2022 (48.8% in 2021).

and manufacturing;¹² however, activities such as [waste recycling and construction](#) can also play an important role. Transversally to these sectors and activities, there are areas of the economy that aim to reduce pressure on natural resources, also contributing to reduce Greenhouse Gas (GHG) emissions, and making production processes more efficient in terms of the use of materials and energy, as is the case of the bioeconomy and the circular economy.

12 According to the ILO, the percentage of employment in Latin America in 2021 in the agriculture, fishing and mining sector was [14.2%](#), while that of the manufacturing industry was [12.5%](#). The sectors related to energy production and consumption employed [7.2%](#) of the Latin American population. The energy sector is key to the just transition due to the boost given to renewable energies. Within this field, solar photovoltaic energy generates about [34%](#) of jobs worldwide, followed by the use of biofuels with [19%](#) and hydroelectric energy [18.7%](#). LAC has made significant progress in renewable energies, which account for 33% of its supply, compared to 13% worldwide. Among the representatives of the region, [Brazil](#) is in the group of the ten countries that generate the most jobs in the area of renewable energies, and several governments such as Chile, Colombia, Brazil and Costa Rica are promoting the green hydrogen industry.

The bioeconomy encompasses productive fields that have to do with the use of biodiversity and represent other opportunities for generating employment. LAC has eight of the 17 megadiverse countries on the planet, making it one of the regions with the greatest potential for the development of the bioeconomy. Within the sectors that make up the bioeconomy, agriculture and tourism occupied around 39% of the population in 2021. This area includes nature-based solutions (NbS), the implementation of agroecological and silvicultural practices in the agricultural industry, the strengthening of ecotourism, and efforts to conserve biodiversity. Thus, the OECD estimates that the green transition can generate a net increase in employment of 10.5% by 2030.





Green jobs and climate change

Climate change is a reality that the entire world must face. The 33 LAC countries have ratified the Paris Agreement and have incorporated it into their political agendas. With the support of the ILO and the Partnership for Action on Green Economy (PAGE), several countries in the region have advanced with the incorporation of the issues of just transition and green jobs in their medium- and long-term planning instruments. It is worth mentioning that this planning includes the need to quantify the impact of the transition on the economy and employment generation.

Most of the countries do not yet have the tools to quantify this impact, which affects the correct decision-making on these topics. However, several countries have made progress in terms of just transition and green jobs in the context of climate change, which are presented below:

- **Argentina:** In its updated Nationally Determined Contribution (NDC) this country incorporates just transition as a cross-cutting axis to the fulfillment of national climate objectives, raising the importance of decent work and sustainable jobs. It also highlights the need to protect the most vulnerable groups, as well as workers. Regarding green jobs, different actors have strengthened their knowledge and capacities through the ILO green jobs course and the development of a strategy for promoting green jobs in conjunction with PAGE in 2022. In March 2023, the government launched the Green Jobs Program that incorporates ILO technical definitions and institutionalizes such agenda. However, the development of statistics to monitor the status and distribution of green jobs remains as a challenge.
- **Chile:** In its updated NDC of 2020, the country incorporated a pillar on just transition where it proposed to develop a Strategy for Just Transition that protects vulnerable populations during the decarbonization process in the energy sector; this Strategy was

published in 2021 and seeks, as a first step, to support the withdrawal plan for coal-fired power plants. In 2022, in the framework of COP27, Chile submitted a reinforcement to its NDC where it introduced the concept of Socioecological Just Transition,¹³ together with the updating of its climate policies (Climate Change Law and the Long-Term Climate Strategy 2050). In 2023, a bill was introduced in the Chilean Congress to regulate the process of socioecological just transition to carbon neutrality.

- **Colombia:** Within the updated NDC it was proposed that during 2023 the government would draw up a Just Workforce Transition Strategy led by the Ministry of Labor, with support from the Ministry of Environment. This Strategy seeks to improve the quality of life along with the social and economic inclusion of the Colombian population. It will be developed through tripartite dialogue with citizen participation and will be aligned with the Long-Term Strategy for Carbon Neutrality (E2050) and the Colombian Low Carbon Development Strategy.
- **Costa Rica:** In its updated NDC strengthens the axis of just transition through the creation of a specific governance scheme for this issue, the creation of the National Green Jobs Policy and a mechanism to quantify them. Additionally, this country is committed to climate and financial action and empowerment by proposing to train workers in job skills and green infrastructure by 2024 in order to increase the number of green jobs in the country.
- **Mexico:** Included indicators for measuring green jobs within the Environment and Natural Resources Sectoral Program in the National Development Plan 2013-2018, from which it produced a methodology for calculating green jobs for the forestry and agricultural sectors based on its NDC. In turn, it introduced the concept into legislation and ministerial programs. In its updated NDC, this government also includes the term just and sovereign transition to carbon neutrality.
- **Brazil:** This country is among the top ten global producers of renewable energy and has been increasing the capacity of solar and wind technologies, also betting on green hydrogen. It is also among the top producers of biofuels and has a high potential for biogas and biomethane generation. Despite its great potential for renewable energy production and its proximity to the creation of green jobs in the energy sector, it still needs to propose clear goals within its climate planning instruments along with increasing its ambition.

Other countries that are including the notion of just transition within their NDCs: Antigua and Barbuda, Trinidad and Tobago, Dominican Republic.

04

Post-pandemic just transition in two countries in the region: Green Sectors in Colombia and Chile



Bioeconomy to boost sustainable livelihoods in Colombia

Significant progress has been made in Colombia for the creation and quantification of green jobs. The publication of the Green Growth Policy in 2018 marked a milestone in setting the country's goals at the level of bioeconomy, circular economy, green business, agroecology and sustainable energy sector. The objective of this policy is to diversify the Colombian economy based on the sustainable use of natural resources. Additionally, strategies were proposed to reduce the gap between labor demand and supply in fields with green potential and for the quantification of green jobs by the DANE.

One of the areas of great relevance for the country, given its high biodiversity, is the bioeconomy. In 2021, sectors with bioeconomic potential generated 28.9% of total national employment and the goal for 2030 was to generate 2.5 million jobs and contribute 10% of GDP. This field encompasses various sectors such as agriculture, tourism, commerce, industry, health, energy, among others, and seeks to make sustainable use of biodiversity and biomass, bringing value-added products and services into the country's commercial chains. In addition, it contributes to

climate change adaptation strategies through the possibility of obtaining an economic benefit while implementing NbS-related measures.

Bioeconomy became more relevant in Colombia through the [Bioeconomy Mission](#), which established the parameters and strategies to position this area as an economic alternative to use sustainably the country's natural resources, enabling more economic and employment opportunities for the Colombian territory inhabitants.

Sustainable nature tourism belongs to the [area of bioeconomy](#) that makes use of biodiversity and ecosystem services. In 2019, the tourism sector occupied [3%](#) of the economically active population in Colombia and generated 5,284 jobs, of which, [57.3%](#) were occupied by women. This is a sector that has been growing significantly globally and nationally. In Colombia, domestic spending on tourism grew [56.6%](#) from 2021 to 2022, from [25.7 trillion pesos to 40.2 trillion pesos](#). After the Peace Agreement,¹⁴ new tourist destinations have opened up which previously could not be explored due to the armed conflict, and it has ascended on political agendas as a mechanism for the

conservation of ecosystems while generating economic income in the communities.

In 2021, the [National Sustainable Tourism Policy](#) was launched, which seeks to “strengthen the sustainability of the tourism value chain” by ensuring the conservation and responsible use of natural resources while making the country more competitive through the creation of added value and differentiation with other tourism destinations.

At the social level, the policy seeks to generate a positive impact on communities through job creation, increased local well-being, and the preservation of heritage, cultures, and ancestral customs.

On the other hand, beekeeping is an intermediate activity between the bioeconomy areas of biodiversity, ecosystem services and sustainable agricultural production. Beekeeping production has had an average [annual growth of 5%](#) in the country over the last decade, which implies a growing activity that has the potential to create green businesses that can generate employment. For 2019, [9,000 jobs](#) created and honey production of [41.48 billion pesos in honey](#) (USD \$10,300 million) were reported.

Given the importance of beekeeping for the sustainable use of ecosystems and climate change adaptation, as well as for the economy of small, medium and large producers, [Law 2193](#)

14 During the 2014-2018 quadrennium, Colombia made important contributions to peace building through the dialogues in Havana (Cuba). These negotiations sought to find solutions to the violence that for decades impacted Colombian territories and families. During this period, a Peace Agreement was signed that opened the door to unexplored natural territories and turned them into destinations with high potential for sustainable development.

was launched in January 2022 to encourage and develop this sector in Colombia. This activity is best represented in the departments of Meta, Antioquia, Sucre and Córdoba. Thus, the Amazon shows potential for growth, not only in beekeeping but also in meliponiculture. For this region it is of utmost importance to implement strategies that ensure the conservation of ecosystems that generate economic income for its inhabitants, since it is the [zone with the highest deforestation in the country](#), mainly in the departments that border it in north and west, such as Meta, Putumayo and Guaviare.

Peace and sustainable development in Guaviare: Corcpresturg and its commitment to nature tourism strengthening Amazonian gastronomy

Tourism and other economic alternatives have arisen as economic options in several regions of Colombia after the armed conflict passed, including the Amazon and, in particular, the department of Guaviare. This territory began to be heavily populated in the 1960s and, due to the armed conflict, had not really been used for this activity until the early 2010s.



In this context, settlers, peasants and *Guaviarenses* in general, began a process of substituting illicit crops and today live from ecotourism in farms that are precious for locals and foreigners because of their natural and cultural richness. However, the process of strengthening tourist activities in the region was halted due to the COVID-19 pandemic, and income was limited due to mobility restrictions and quarantines. This situation impacted families due to food shortages, aggravated by the inability to locally produce what is consumed.

For the Secretariat of Tourism and Culture of Guaviare, today the panorama in the region is different than it was at the time of the armed conflict, and with the objective of economically reactivating and halting deforestation in the

department, it launched in 2022 a second¹⁵ Departmental Tourism Plan called [“Discovering the Jaguar’s maloca”](#) that seeks to recover, conserve and efficiently manage natural resources with an environmental and community focus.

The Community Corporation of touristic-services providers from La Lindosa Mountain and the Guaviare Department (Corcpresturg), integrated of 18 associates, is located in one of the areas with the greatest potential for sustainable tourism

¹⁵ The first tourism plan was formulated in 2008 and was valid until 2020. This plan succeeded in establishing strategies and actions to strengthen the tourist sector; however, due to the armed conflict, there was a low organizational capacity of the communities and high stigmatization of the area due to insecurity and lack of knowledge of its natural richness.



The objective of their community project was to increase

sales and incomes for each associate by improving the tourist experience by acquiring kitchen equipment and training in Amazonian gastronomy.



in the region because of its natural and cultural attractions. Its philosophy is to integrate three fundamental aspects into the tourism product: transportation, accommodation, and gastronomy. Each of these components is designed to enhance the visitor's connection with the territory. What they call "gastronomic experience of tourism products" led them to the Alianza Latinoamérica Sostenible, since, like many tourism services providers and other sectors, were affected by the pandemic in their purpose to strengthen their technical and material capacity.

The objective of their community project was to increase sales and income for each of the associates by improving the tourist experience through the acquisition of cooking equipment and training in Amazonian gastronomy. Through the activities carried out, each of the benefited associates recognized the potential of their enterprise, the importance of continuing the territory conservation to increase the interest of visitors seeking a connection with nature. In the exchange with other associates and other organizations, Corcpresturg identified the importance of continuing training as a strategy to build capacities in the organizations and communities, and they understand that establishing alliances is a fundamental step to strengthen the social and commercial structure of the tourist sector.

Corcpresturg members are part of the [green businesses program](#) promoted by the National Green Business Plan, which seeks to promote



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sustainable development in the Amazon region by setting up, among other things, a digital platform to make green sectors visible, link institutions and encourage entrepreneurs to showcase their products. This is essential, since at present, the income from the tourist sector does not allow the formalization of these businesses, which continue to be familiar businesses. According to the reflections of each of the people who were part of the process, it is necessary to promote financial, administrative and technical strengthening of the organizations prior to having the capacity to generate green jobs.

Beekeeping as a strategy of the bioeconomy that conserves and produces in the Colombian Amazon

The department of Guaviare, an intermediate zone between the Colombian Amazon and the

Eastern Plains, is one of the most deforested territories in the country. The Multiactive Youths Cooperative from Guaviare (COMGUAVIARE) is located there. This is an organization of young people located in San José del Guaviare, whose slogan is “to produce by conserving and conserve by producing”, with which they seek to implement livelihoods that offer work and economic opportunities to their associates based on the sustainable use of non-timber forest products in the Amazon. This cooperative arose from the need to offer economic alternatives to young people in order to maintain local development and generational replacement, avoiding the migration of the younger population to urban areas.

Among the different economic options that COMGUAVIARE has facilitated to its associates is the use of the moriche fruit to produce flour and oil, from which other products such as cookies

or ice cream are generated; the development of a nursery for the propagation of native plant material used for reforestation; and the promotion of beekeeping as a means of conservation and economic use of forest resources. These activities are carried out in an integrated manner with a focus on building capacities in the respective technical areas, as well as in land planning so that, besides production, local biodiversity is conserved and sustainably used.

COMGUAVIARE has been strengthening beekeeping in the territory through the installation of apiaries on the farms of its associates, who benefit from a percentage of the profits. To date, the Cooperative has installed apiaries with 10 hives on 10 farms, ensuring that the forest is protected

through reforestation, conservation agreements with the beneficiaries, and environmental education activities on the importance of conserving the territory and its biodiversity among the inhabitants and neighboring educational institutions. The objective of their community project was the construction of an infrastructure for the proper collection of honey and materials needed for the activity, a fundamental process for accessing a registry to place their products in local and national markets.

Comguaviare intends to continue increasing the number of apiaries, compensating by planting melliferous flora and, providing installed capacity that can offer life means to the rural communities of Guaviare, to show that it is possible to live



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from the land and create economic activities and income by betting on conservation.

The communities of Guaviare, although they may be vulnerable to crises such as those caused by the coronavirus pandemic or those that may arise due to climate change and the loss of biodiversity, are working to strengthen themselves, become resilient to changes and protect their valuable territory, which also benefits us as a country and as global societies. Their experiences are a source of inspiration for other communities throughout the country and raise awareness of the importance of supporting them economically and technically.

Conserving and improving ecosystem functions through agroecology in Chile

One of the challenges that LAC faces with respect to the effects of climate change is the vulnerability of agri-food systems. In recent years, the integration of systemic paradigms for the productive management of agriculture has been discussed. **Agroecology** seeks to incorporate ecological concepts and principles into this process, thus enabling sustainable management and building resilience in agricultural ecosystems by introducing more biodiversity. Agroecology seeks to combine the traditional knowledge of peasant family agriculture (“AFC” by its Spanish

acronym), while integrating the socio-political dimension, advocating for social justice and the transformation of the industrial food system.

In Chile, agroecological practices are being promoted by the Ministry of Agriculture. The Agricultural Research Institute (INIA)¹⁶ has the [INIA Agroecology Network](#), which carries out research and innovation in the agricultural sector through transdisciplinary work. For example, between 2015 and 2021 the [“Programa producción agroecológica y orgánica para pequeños y medianos productores de la Región de Los Ríos” \(Agroecological and organic production for small and medium sized producers from Los Ríos Region Program\)](#) was developed, which included a series of workshops to teach the principles and techniques of agroecological production to small farmers in the region; INIA noted that 60% of the beneficiaries reported an increase in their profitability due the incorporation of these practices.

Another agency that has incorporated agroecology into its lines of work is the Agriculture Development National Institute (INDAP)¹⁷, the main institution for the development of small farmers and peasants in the country. [In 2022](#) it had 171,522 users served

through its programs; its strategic lines of action in 2022 included “Sustainability and Resilience” and “Climate Change and water crisis”. INDAP has promoted agroecology among its employees and users through instruments such as the [“Manual de Producción Agroecológica”](#) of 2016. In 2023, the institution launched the [“Transición a la Agricultura Sostenible” -TAS- Program](#), which, through specialized technical advice and economic incentives, seeks to provide users with tools to carry out a productive transformation process incorporating more sustainable practices and management, such as agroecology. Finally, the Ministry of Agriculture is promoting these areas through a [Diploma in Agroecology](#), aimed at professionals from the Ministry and its services, and open in an initial basic module for students and teachers from forestry and livestock technical schools and high schools.

Agroecology and women entrepreneurs in La Serena

A concrete example of the promotion of agroecology from institutions such as INDAP for the development of green businesses is the case of the Associative Company Ayni SPA, which is made up of a group of six women from different rural localities in the borough of La Serena, Coquimbo Region in Chile.

Ayni started as an agroecological group in 2019 thanks to the [Local Development Program \(PRODESAL\)](#) developed by INDAP in

16 Research, development and innovation institution linked to Chile's Ministry of Agriculture.

17 Its objective is “to promote the economic, social and technological development of small farmers and peasants, in order to contribute to increase their entrepreneurial, organizational and commercial capacity, their integration into the rural development process and at the same time optimize the use of productive resources”.

collaboration with the municipality of La Serena. Through the technical advice of a professional from the Program, the Ayni group acquired the necessary tools to produce bioinputs used in agroecological management such as compost, humus, bokashi, potassium soap, sulfocalcic broth and activated microorganisms.

[This type of bioinputs](#) provides productive advantages such as increased fertility, nutrient retention, and increased infiltration and water retention capacity of the soil. The bioinputs produced by Ayni are mainly sold to other local INDAP users.

In 2021, Ayni entered the [Economic Associativity Program \(PAE\)](#) of the same institution, which seeks to develop and strengthen rural associative enterprises and pre-associative groups in order to improve their business conditions. Thus, with the support of Ecodaya Consultant, they were

able to form their business as a Joint Stock Company (SPA) and formalize their activity. Ayni has participated in various fairs organized by municipalities and public institutions to publicize its products and make visible the importance of agroecological practices for a more sustainable and resilient management.

The Ayni group is an example of the articulation between public institutions, both from the agricultural sector and the local administration, for the promotion of initiatives that advance towards transformations in the mode of production of small-scale agriculture in the face of climate change. The Coquimbo Region is [highly vulnerable](#) to its effects: there has been a critical decrease in rainfall since 2018, which has led to a reduction in river flows and, consequently, in the water level of the reservoirs present in the region's basins. In July 2023, the [Ministry of Public Works again declared the region a water scarcity](#)





The Ayni group produces bioinputs used in agroecological management. Through this type of bioinputs, productive advantages are obtained, such as increased fertility, nutrient retention and an increase in the infiltration and water retention capacity of the soil.



zone. Given the economic and sociocultural importance of agriculture and livestock farming for the inhabitants of La Serena and the region, building resilience to climate change has become a necessity. Thus, the promotion of agroecology becomes a valuable alternative, which is being promoted by Ayni's work.

However, Ayni's experience also reveals the challenges in transforming these jobs into green jobs. Although their work is providing income to their executors and, at the same time, their product contributes to the improvement of agrarian ecosystems, there are regulatory

difficulties certifying their products; in Chile there is a certification for organic agricultural products, but not for agroecological bioinputs. In turn, the country does not have an institutionalized concept of green jobs that would allow them to identify their work as such. This lack makes it difficult to create programs to promote these initiatives, while recognizing the impact they are having on the adoption of agroecology at the national level. It is important to show experiences such as that of Ayni as an example of territorial articulation of different actors for the development of initiatives for change that help to generate resilience capacities in the face of future crises.

05

Reflections and Recommendations



Green jobs and public policy

Although the concept of green jobs has gained ground in the different legislations and programs of the LAC countries, there are several challenges to adopt and to promote this concept following the ILO guidelines. As described above, there are important gaps in the labor market in LAC in terms of employment, such as the level of informality. Green jobs are an integral part of decent jobs indicators;¹⁸ if these indicators are not sufficiently met, the proportion of green jobs will be lower.

An example of this was the exercise performed by the Chilean Ministry of Environment in 2020 that [measured the number of green jobs in the country](#). When considering the decent jobs indicators, the average number of green jobs was nine times lower, given the demands of including these criteria. This does not mean that these indicators should not be considered, nor

¹⁸ See footnote 4 of the document.

that the decent jobs agenda should not be promoted. Rather, it stands out as a challenge that must be overcome by decision-makers for adopting the concept of green jobs and its concrete promotion within the framework of just transition. Thus, a series of recommendations emerge to promote them:

- 1. To define green jobs at the public policy level in the countries:** Although several countries have already integrated it politically in Roadmaps and Development Plans, to institutionalize the concept in the context of each country - following the guidelines of international organizations - may help to better operationalize, measure and promote it, especially for the environmental jobs where the dimension of decent work is not integrated. Thus, it is necessary to clarify what is “green” within these jobs through typologies or criteria defined by public administration bodies.
- 2. Generate data on green jobs in the different economic sectors of the countries:** One of the main gaps is the lack of statistical information on green jobs (quantity, gender distribution, key sectors in each economy). Although Colombia has made progress in this area but has not been updated in the last two years, most LAC countries do not have these statistics, which are essential for quantifying green jobs, determining strategic sectors and directing resources towards them.
- 3. To promote green jobs both in sectors producing green goods and services and in those that contribute to more environmentally friendly production processes:** In particular, it is essential to create green jobs in sectors such as ecosystem restoration and nature-based solutions (NbS), [which can boost the decent work agenda in rural](#) and isolated sectors.
- 4. To create instruments that recognize the creation of green jobs in certain sectors:** It is essential to reveal the economic and environmental benefits of these jobs, in order to make visible the importance of this type of labors for the achievement of the sustainable development goals and just transition. Thus, tax incentives can be created to multiply the generation of such jobs when certain criteria are met. The instruments must be sensitive to the diversity of green jobs within countries’ economies.
- 5. Design public policies with an intersectional approach to promote green jobs.** Population groups such as young people are fundamental for the promotion of this type of employment, since they are the growing labor force and the basis for the present and future economic security of communities; likewise, women participate in green sectors with a high potential for job creation such as agriculture, manufacturing industry, lodging activities and food services,



Identifying the most vulnerable populations that can contribute to sustainable development would increase the effectiveness of policies for their social protection and employment generation.



among others. Thus, identifying the most vulnerable populations that can contribute to sustainable development would increase the effectiveness of policies for their [social protection and employment generation](#).

Access to financial resources and capacity building in rural organizations

Access to financial resources to support community initiatives has on several occasions been directed to productive sectors that do not necessarily meet the local needs of the

inhabitants, nor do they consider their capacity to and manage the projects. Sectors such as energy or agriculture, under modern practices, have historically received greater support, because agroecological and/or sustainable practices have only recently begun to be implemented with greater force. However, in order to foster green jobs in highly informal sectors and in a wide range of economic activities that make direct use of natural resources, it is necessary to strengthen their sustainable approach. To this end, two factors must be targeted: expanding the sectors and practices to be financed and strengthening the technical and social capacities of community organizations to propose, manage

and administrate projects. Accordingly, the following recommendations are proposed:

- 1. Broaden the spectrum of sectors and activities that receive technical and financial support from local and international institutions, as well as the duration of such support:** As mentioned above, the bioeconomy encompasses a wide range of activities and sectors such as agriculture, tourism, energy, among others, but seeks to make sustainable use of biological resources and the products transformed from them. This implies that the portfolio of supported activities, both technically and financially, is broadened. For example, within the agricultural sector, support for agroecological and forestry activities could be increased, not only in rural but also in urban areas.
- 2. Use project financing as an instrument to ensure project sustainability and decent jobs:** Project financing, under clear criteria that ensure sustainability and decent working conditions, can be a selection mechanism supporting the sustainable growth of productive sectors generating green jobs, thus strengthening decent jobs. The different lines of financing for green production or business can be strengthened by increasing the amounts or number of projects to be financed and including labor welfare criteria as a first

step for the implementation of green jobs in LAC countries.

- 3. Strengthen capacities to create, manage and administer projects in the communities, with a focus on sustainability and decent work:** Although sometimes there are opportunities to access financial resources from national or local governments, or from international cooperation to support projects, many times communities cannot access them due to lack of technical and social capacities when creating proposals or because they do not have the required experience. This leads to failure to execute available resources or are directed to less suitable institutions or organizations. This situation represents an opportunity for organizations supporting initiatives to contribute to strengthening the capacities of communities for creating and managing projects, setting up the pillars of sustainability and decent work in a cross-cutting manner.

Strengthening Local Economies to Boost Green Jobs

The pandemic crisis brought to light the weakness of value chains in territorial economic and productive sectors, especially in rural communities in LAC. Due to the social confinement caused by quarantines and

limited transportation, they were unable to commercialize their goods and services. This situation highlights the need to strengthen local production and promote the extension of the life cycle of products through the circular economy in the economic sectors of rural areas to ensure income and minimum conditions of access to food and essential goods. Thus, the following recommendations are made:

1. Opening and strengthening commercial spaces that make known the supply of goods and services available in rural communities:

The participation of government entities for economic development and of producer and service provider organizations in commercial showcases, fairs, business rounds and meetings within and outside the territory is essential to expand opportunities and strengthen the sectors, since the products, goods and services are made known beyond the localities where producers and suppliers of these products and services live. Facilitating these spaces, and also encouraging the participation of organizations, can strengthen trade chains both within and outside the territories.

2. Formalizing businesses and generating associations by facilitating and socializing the processes:

The institutional framework must facilitate channels for rural organizations to formalize and publicize their businesses, with the support of the public

sector in the processes involved in their creation and visibility. This formalization allows for income generation and the creation of jobs with greater equity and social benefits. Likewise, organizations that access this formalization have greater opportunities to generate associations contributing to forming community ties and more organized economic activities that strengthen the green sectors.

3. To carry out programs and projects that promote analysis and research on the bioeconomic potential of the territories, which should be coordinated through governments and other institutions at the subnational level:

If resources are increased to develop programs in specific regions and communities, linked to capacity building, value chains in the sector could be consolidated by leaving installed capacity in the territories and accurate information on this potential and the areas in which organizations can specialize. An example is the document [“La Bioeconomía y los empleos verdes en Colombia”](#), which analyzes the activities identified as having the greatest potential in the areas of biodiversity, biomass, biofuels and biotechnology, determining how many jobs are potentially green today and how many more can be provided by the sector. Subnational institutions have a fundamental role in the implementation and

articulation of these programs since they have the capacity to connect national and international initiatives with the territories.

Articulate Two-Way initiatives

Historically, communities and organizations have been expected to be the ones to fully apply laws, decrees, instruments and methodologies developed by government institutions to regulate and generate the proper functioning of societies. However, it is essential that the initiatives that promote a change in the economies towards climate change management and the reduction of poverty or informality be agreed upon by the institutions and the communities. For their part, public institutions have the experience and technical knowledge to develop projects, while the communities in the territories have the practical knowledge and live the reality of the social, economic and environmental dynamics of each country and its territories. Thus, the concept of green jobs, which is fundamental in the context of climate change and biodiversity loss, cannot be applied or even understood in communities with high rates of informality or little knowledge of sustainability. To bring national and international aspirations to rural areas, there

must be participation and information sharing from institutions to communities and vice versa. To promote green jobs in rural communities, the following recommendations are suggested:

1. Invest in and promote the formalization of green jobs:

Although there are programs such as the Green Businesses in Colombia, which promote sustainable economic activities and make the current supply of goods and services visible, these businesses do not necessarily generate green jobs, mainly because they do not meet decent work criteria. In view of this, it is proposed to direct resources and incentives to formalize this type of jobs within the value chain, which would enhance the interest of grassroots organizations in implementing green jobs, since they would have economic relief by linking employees with the social security payments provided by law.



Involving community-based organizations in the construction and identification of local economic potential will make it possible to socialize and transfer relevant concepts from the institutional framework to the communities.

2. Develop roadmaps and development plans for green growth with a territorial perspective and with participation of community-based organizations:

The inhabitants of the territories, those who develop productive activities and those who generate businesses in rural areas are largely aware of the land and product capaci-

ties that these areas have to offer. Therefore, involving community-based organizations in the construction and identification of local economic potential not only has an impact on the preparation of plans based on reality, but will also make it possible to socialize and transfer relevant concepts

from the institutions to the communities. In this way, subnational institutions can serve as articulators between governments and communities and work jointly with these community organizations to integrate their visions into short-, medium- and long-term development plans.

Useful texts



EXTRACTO
HÚMICO



Economic Commission for Latin America and the Caribbean [ECLAC] and International Labour Organization [ILO] (2023). “*Hacia la creación de mejor empleo en la pospandemia*”, *Coyuntura Laboral en América Latina y el Caribe*, No. 28. Available at [link](#).

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International Labour Organization [ILO] (2016). *Policy guidelines for a just transition to environmentally sustainable economies and societies for all*. Available at [link](#).

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Saget, Catherine, Vogt-Schilb, Adrien and Luu, Trang (2020). *Jobs in a Net-Zero Emissions Future in Latin America and the Caribbean*. Available at [link](#).

About this document:

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Una alianza de:

