

Project Title: Can Green Growth Be Inclusive?

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Research Organizations involved in the study:

Latin American School of Social Sciences (FLACSO)- Argentina

Location of Study: Argentina, Bolivia, Brazil, Colombia, Mexico, Peru, Puerto Rico

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1. EXECUTIVE SUMMARY

The main goal of this project is to contribute to the unveiling of the tensions between green growth (GG), inclusiveness, and natural resource based growth (from now on also referred to as the triad) in Latin America. This topic is scarcely discussed and even less understood in Latin America. Because of this, another main goal of this project is to make this issue more prevalent in public policy. From there we can make public policy recommendations for alternative strategies and give examples of successful models of GG.

This project is divided into three phases of research. The first phase is the mapping of relevant actors at the national and regional levels in the countries that were selected for case studies. These case studies include research into background papers that explore different models of green growth. The second phase of this project is the analysis of the different challenges that GG poses to different development models. There is a variety of challenges but we focus on distributional tradeoffs. Five different countries are analyzed to flesh this out (Argentina, Brazil, Colombia, Ecuador and Peru) together with a comparative study of Brazil, Chile, and Mexico. The third phase of this project highlights successful GG policies and regional value chains in the country case studies. On this basis we can recommend public policies that can most likely be extrapolated to other value chains or sectors.

2. RESEARCH PROBLEM

There is a growing tension between “the triad” due to the developing strain between GG and inclusiveness as well as incentives for natural resource based growth. But the topic is still scarcely discussed and much less understood in terms of its dynamics, tensions, and parallels in Latin America. Switching to a green economy requires a productive and technical structural change. But, this shift in the economy allows for new technological, trade, and investment flows and can also, depending on the circumstances, widen the development gap among and within the countries of Latin America. It is important that the research and discussions surrounding GG be realistic and feasible for developing countries to adopt provided that the international pressures to adopt these GG strategies do not harm the country’s efforts to be inclusive nor their efforts to sustain growth at reasonable rates.

This theoretical discussion around GG has evolved greatly throughout the first and second phases of the project. Authors have discussed alternative interpretations of what inclusive GG (IGG) entails as well as its ramifications. In the second phase, case studies examined the topic on a national and sectorial basis as opposed to the more general scenarios of phase one.

This debate over GG and the economy is a relatively new one. The conceptual shift was triggered by the 2008 global crisis and the notion that environmental protection can trigger economic growth and poverty reduction. But, what remains unclear is the exact meaning of GG due to the wide range of topics it encompasses. In general terms it is described as economic growth (GDP) that goes hand in hand with significant environmental and social improvements (Jacobs, 2012).

In addition to this conceptual discussion of GG, case studies have been examined in order to extract relevant lessons for each region as well as future scenarios of GG and the links between GG, social inclusion and gender equity.

This research progressed to focus on the direct impact of natural resources on macroeconomic and environmental dimensions, and the lack of environmental stability in modern capitalism. In order to overcome this pattern, the last phase of the project focused on value chains in the region in order to analyze risks and opportunities for greening selected sectors. And thus recommend policies based on the environmental, economic, and social impacts of different green value chain strategies. Because of this we have evolved from a more general and conceptual phase one, to a second phase that evaluated GG on a national and sectorial basis, to a third phase which analyzed green strategies within regional value chains.

3. PROGRESS TOWARDS MILESTONES

Milestones of the project are the following:

1. To dig out and unveil the tensions that exist between green growth, inclusion and natural resource-based growth at the macro level in order to contribute to regional knowledge production on this triad.
2. To identify challenges and opportunities for implementing inclusive GG strategies in current development patterns of selected Latin American countries. To identify and provide sectorial lessons in order to build strategic policy recommendations for GG.
3. To build capacity on GG with the aim of raising awareness of the issue among specific groups of actors (policymakers, private sector, civil society, and academics). Given the sparse state of this debate in the region we expect to generate a non-partisan space to encourage GG discussion in policy circles while promoting the progressive incorporation of young researchers.

Each of these goals is related to outputs and outcomes that were described in the original project. Some of them were reviewed to better achieve the milestones mentioned above. Outputs from the project are described below:

Table 1: Outputs

Output	Detail
A regional database of key actors	A regional database of key players (policymakers, journalists, civil society networks, academics, etc.) in Argentina, Brazil, Costa Rica, Ecuador, Mexico, and Peru where 249 actors were identified (70 NGOs; 78 Companies; 86 Public Sector; and 15 International Institutions) that have been used to build a regional database
Four background papers	Four background papers on models of inclusive GG and their lessons for the region were carried out: Lessons From

	Emerging countries (José Luis Samaniego, Edmundo Claro y Valeria Torres); Lessons From Developed Countries (Isabel Studer); Inclusive Green Growth Scenarios for Latin America (Pedro da Motta Veiga y Sandra Polonia Rios), and Inclusive Green Growth and Gender (Vivianne Ventura-Dias)
Six country case studies	Six country case studies with the inputs of the main findings of the background papers were carried out: Argentina, Bolivia, Brazil, Colombia, and Peru, and a comparative case study of Brazil, Chile and Mexico.
Publication of one book	A book ¹ that includes three background papers and six country case studies was launched electronically and in print during LATN's regional meeting organized in Peru in November 2014.
Five case studies on greening value chains	Studies cover the following value chains: Dairy products in Argentina, Aircrafts and wood Sector in Brazil, Solar energy in Puerto Rico, Automotive Sector in México, and Quinoa in Peru. We are finishing the edition of those papers in order to publish them.
Eleven additional working papers	Eleven Working Papers on related topics (5 of them are part of the Young Research Series – regional award)
Six additional Brief Papers	Six Policy Briefs on related topics (three of them are part of the Young Researcher Series)
Three Regional Meetings	Three Regional Meetings (Argentina, Mexico and Peru) to discuss, plan and coordinate knowledge production and an action plan for policy influence.
Fourteen Multisectoral Dialogues in six countries	Fourteen multisectoral dialogues were carried out (three in Argentina, three in México, three in Peru, two in Bolivia, two in Brazil and one in Costa Rica). In spite of the novelty of the topic and the skepticism in the region regarding the green growth discussion, the project has obtained visibility, encouraged the GG discussion in these countries and expanded alliances.
Two Awards for best thesis	A regional award as well as a national Award (Peru) to the best M.A. theses addressing IGG topics in Latin America was organized. The best five won the prize and were published in the Young Researcher Series.
Online Courses	We are also launching two training courses in Bolivia, oriented to private and public sector, as well as civil society. These courses are a result of LATN's first dialogue in La Paz (June 2014), where several institutions asked for capacity building on the topics discussed in the project. Training courses will be developed in both presence-based and online modalities.
Capacity Building on Biotrade Master course	Collaboration with the MA Program on Biotrade and Sustainable Development at the Pontificia Universidad Católica del Perú. LATN researchers are actively collaborating with the MA program on Biotrade and Sustainable

¹ See <http://flacso.org.ar/noticias/los-desafios-del-crecimiento-sustentable-con-inclusion-en-america-latina/>

	Development (PUCP, Peru). Edmundo Claro, Pedro da Motta Veiga, Cintia Quiliconi, and Isabel Studer are teaching different modules focused on topics related to GG in this program.
Young Researchers Series	We have launched a Young Researchers Paper and Brief Series on IGG topics. So far, we have already published five policy briefs , and six working papers on IGG issues .
Doctoral School	We also kept collaborating yearly with the Doctoral School of Latin American, European and Comparative Regionalism that takes place at the Andean University Simon Bolivar in Quito, Ecuador. LATN offers tuition support to Latin American doctoral students every year.
Blog, Facebook, Youtube and website	A blog was launched in mid-2013. Since then, we have published 77 entries by researchers as well as interviews that took place in national dialogues and newspaper articles. ² Since the blog was launched, it received more than fifteen hundred visits (an average of 60 visits per month). A renewed website was launched in mid-2013 and receives an average of one thousand visits per month mostly Argentina, Brazil, Peru and other Latin American countries. ³ On Facebook ⁴ , we have 820 followers and we have 240 posts so far. In addition, a channel on Youtube ⁵ was created to post interviews carried out during Policy Dialogues and we have uploaded 24 interviews so far.
Interaction with mass communication media groups in key countries	Researchers and key partners have published twelve notes and op. ed. in different media channels, and the project was mentioned in media in five articles. ⁶
Alliances with three other regional networks and one key partner	We have deepened the strategic partnership with the IADB, in order to strengthen LATN project coordination and complementarities. We keep collaborating with Cambio Democrático Foundation, and its network of facilitators Partners for Democratic Change International, (PDCI) in order to enrich interaction and participation of stakeholders in policy dialogues. We have also co-organized the International Studies Association (ISA)-FLACSO joint Conference, in which LATN participated under the Environmental Studies section with the organization of a panel to present, discuss and disseminate research findings. As a result LATN participated in the creation of a Network of Latin American scholars and experts on international studies named REDILEI.
Concrete achievements on	Thanks to the knowledge produced, the policy dialogues, the regional meetings, as well as the networking activities, we

² See <https://latnverde.wordpress.com/>

³ See <http://www.redlatn.org/>

⁴ See Facebook/Red Latinoamericana de Políticas Comercial

⁵ See https://www.youtube.com/channel/UCMx_Nqr_M6pbY277mdHDKww

⁶ See <http://www.latn.org.ar/medios/>

Policy	<p>have been participating in five crucial activities bringing together the public and private sector. First, we are part of a task force to implement the Law of Mother Earth, led by the Plurinational Authority of Mother Earth in Bolivia. Second, we are participating in the “#101 Solutions”, which is a Platform to provide 2015 presidential candidates with policy recommendations in order to contribute to the inclusion of the environmental topic in their governmental planning in Argentina. Third, we are participating in a task force to implement the Biodiversity Law in Brazil. Fourth, we have participated in the regional debate where subnational states discussed the impacts of COP 20 in Peru. Fifth, we are carrying out discussions with public and private sector in order to give recommendations on the energy reform in Mexico, and its position in the COP 21 in Paris.</p>
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4. SYNTHESIS OF RESEARCH ACTIVITIES AND RESULTS

The main research activities and results from each phase of the project are described below, according to each specific objective.

Objective 1. To dig out and unveil the tensions that exist between green growth, inclusion and natural resource-based growth at the macro level in order to contribute to regional knowledge production on this triad.

The first research activity carried out to address this objective was the Inception Workshop, held in Buenos Aires in November 2012. The main aspects of project implementation and Terms of Reference for the background papers were discussed.

The four background papers analyzed GG models, links between GG, social inclusion, and gender equity and GG scenarios given current development patterns. These papers highlighted the issue of identifying broad lessons for a large region such as Latin America. The conclusions suggest that in general successful strategies are sectoral and depend on initial resource distribution.

The main research findings are described below:

Green Growth in Emerging Countries

Recently, many countries have made efforts to achieve GG. But, only a few have introduced strategies that comprise encompassing governmental policies on GG. The most relevant policies by selected developing countries are the following:

Brazil: This country is looking to green its growth process through the use of green industries as well as different programs to green up their economy. The energy sector is already clean in comparison to other countries in the region since 46% of its energy consumption comes from renewable resources.

China: China has embraced an encompassing GG strategy due to the high cost of environmental degradation. China also strives to become a world leader in greening production. The country is also planning to replace 15% of its energy demand with renewable resources in the future.

Mexico: As the sixth biggest producer of oil, Mexico's electrical and transport sectors are heavily dependent on carbon. Because of this, a few programs have been put into place to diminish the consumption of oil in the country but the issue still remains a challenge.

South Africa: South Africa's electricity system is 92% based on carbon and *per capita* emissions are double the world average, but 25% of its population has no access to electricity. Although South Africa does not have an encompassing GG growth strategy, there are pointers in governmental plans such as the National Strategy for Sustainable Development.

Green Growth in Australia and Germany

Public policy is the central element for the transition to GG in these countries. In Australia, water is controlled by the government by defining rights through local legislation and managing them with a variety of licenses and planning agreements. The government determines the available amount and has the right to regulate access and use of water, rivers, and groundwater.

Germany is known as the largest consumer of energy in Europe due to the significance of its industrial sector in the economy. This makes the country very vulnerable to the oil price volatility so there has been a boost to renewable energy sources. Although we can take positive lessons on IGG from developed countries, these lessons don't always translate to Latin American countries since they face very different challenges in terms of greening their economy.

Green growth and gender considerations

Ventura Dias argues that a gender perspective and the care economy are not properly reflected in the current literature on green economy and green growth. She expects that greater awareness and the adoption of GG with social and gender equity will lead to a shift to values such as caring, attentiveness, responsibility, nurturance, and compassion that are traditionally associated with women.

All in all these background papers help to unveil the tensions in both developed and developing countries as they start a transition to IGG. Most countries are dependent on nonrenewable resources but the difference in developing countries is that pressing social and economic problems take a priority over environmental issues. Even though some argue that implementing IGG would help to face economic, environmental and social problems not all regional policy makers are convinced. The documents also highlight the relevance of public policy in the transition to IGG whether it creates subsidies for the promotion of green sectors or regulatory frameworks that will help to create favorable green scenarios.

Objective 2. To identify challenges and opportunities for implementing inclusive GG strategies in current development patterns of selected Latin American countries. To provide and identify sectorial green lessons in the region to build strategic policy recommendations for GG.

This objective was addressed through six country case studies selected from a call for papers (Argentina, Bolivia, Brazil, Colombia, Peru, and a comparative study analyzing Brazil, Chile and Mexico). Papers were discussed in the regional meeting held in México City in October 2013.

This meeting was preceded by a Green Business Summit that took place October 7-9 October 2013 in which LATN was also partner. The discussion of LATN research was part of an academic forum called “Think Green” organized by the TEC of Monterrey in which research on sustainable development and green growth was presented in 11 different sessions. LATN sponsored the opening lunch of the forum in which Víctor Lichtinger, former Mexican Secretary of Environment and Natural Resources, was the key note speaker. In addition Edmundo Claro and Isabel Studer were part of the inaugural session of the forum and presented two LATN background papers, which are part of the first phase of the project. The participants addressed current Mexican challenges in terms of environmental public policy; strategies of emerging countries (Brazil, China, Mexico and South Africa) on green and inclusive growth and; lessons from developed countries together with implications for Latin America.

Country case studies were discussed in two subsequent panels. The first one addressed the cases of Bolivia and Colombia. The Bolivian case addressed the challenges for IGG in agriculture, energy and mining while the Colombian case analyzed the challenges for greening housing, agriculture and innovative sectors such as eco-tourism and bio-trade. The second panel on country case studies discussed Argentina, Brazil and the comparative study of Brazil, Chile and Mexico. Brazil addressed wind energy, protected areas and biofuels while Argentina analyzed water and sanitation, mining and energy. The comparative study highlighted the need to count on new indicators for intensive sectors on CO2 emissions.

Findings can be summarized as follows:

Argentina

Argentinean strategies for achieving IGG lack thorough consideration of economic, environmental and social aspects. The recognition of the need to address IGG is still very incipient in public policy and also in civil society at large. This case study selected the cases of water and sanitation, energy and mining. The main challenges for the future for these sectors are the water and energy rate restructuring and the reform of the subsidies system applied to these two sectors. In addition, the pressure of mining sector on water resources sets an important challenge to IGG.

As to the first sector, water and sanitation, the indicators of access to water and sanitation showed important improvements. However, such improvement is not sufficiently green or inclusive. Progress is in part due to generous subsidies; but this is a weak instrument as it is highly dependent on public spending itself subject to macroeconomic cycles that can undermine companies in adverse times. At the same

time, this type of financing increases the risk that funds will be allocated according to political interests instead of targeting provinces or municipalities that need those services the most. In addition, this scheme offers few incentives for business to take into account the quality of services and discourages users to conserve water.

Regarding the energy sector, similar to other Latin American countries, the energy matrix in Argentina strongly depends on the burning of hydrocarbons. These fuels are mainly used to generate electricity which turns this sector into the main source of GHG emissions. The gap between electricity and gas rates and real costs is one of the main factors that work against sustainable development in the sector. The distortion caused by increasing energy subsidies over the decade has encouraged the misuse of economic and environmental resources and hence hindering energy efficiency.

Finally, the mining sector shows high potential for development allowing the reduction of inequality among provinces. Nonetheless, mining is an activity with a direct impact on the environment and social inclusion. In this sense, policies should focus on closely supervising these activities and guaranteeing that the activity is in compliance with environmental standards. In addition, this sector should also hold a pro-active dialogue with civil society, academic institutions and other relevant actors at the local and national levels as they are key to integrate mining into the national development strategy.

To sum up, the lack of market rates and the increasing subsidies for water and energy services have provoked intense distortions in terms of sustainable development. In this context, recomposing rates and rationalizing subsidies are key measures to start greening the development strategy. In the case of mining sector the government should focus on controlling its environmental and social impact guaranteeing compliance with tighter environmental standards. Strong national regulatory frameworks are needed in this sector. In sum, to encourage IGG an integral development vision is required. This study offers policy recommendations that are a starting point to kick off the process more solidly.

Bolivia

In Bolivia the concept of IGG is frequently conflated with the concept of Green Economy coined by UNEP and subsequently rejected by governmental and nongovernmental actors. The argument is that it is a mechanism of green protectionism to block development in the South, and to promote the “mercantilization” of natural resources. Yet Bolivia stands out because the frame for environmental and social public policies has changed as from 2006 when a new development plan was launched comprising social and economic goals. The public and private sectors are meant to work together to achieve a more inclusive economy, with increasing relevance of cooperatives to favor inclusion. Concepts such as “buen vivir” are essential in this mindset, connected with a protection of land, the respect of the indigenous peoples and their traditional knowledge.

Three sectors were selected in Bolivia: agriculture, energy and mining. The most conflict ridden sector in terms of environmental impacts is mining, although artisanal and small-scale mining contributes to social inclusion. Energy has lower levels of public

exposure, although it is the main responsible for carbon emissions. Agriculture shows more resilience in changing the pattern of social exclusion while at the same time it contributes to carbon emissions and leads to soil and water contamination as a result of pesticides and fertilizers.

Brazil

The current structure of environmental management in Brazil remains based on "command and control" instruments. Even though the environmental protection system can be considered as relatively advanced if compared to other Latin American countries, important issues remain unresolved, and the indicators of environmental quality are still well below satisfactory. This is due to multiple reasons, i.e, the lack of investment in infrastructure and urban services (sanitation, public transportation, garbage collection, public housing); the persistence of large pockets of poverty (leading to the proliferation of slums and other degraded environments, as well as the advance of agriculture over deforested areas) and higher income consumption patterns (the fast growing fleet of private cars is the most glaring example).

Sectors selected were biofuels, forest and wind energy, and analysis showed that environmental aspects are still poorly integrated in the formulation of public policies, and the problem is compounded by the lack of information about the extent and significance of the problems resulting from degradation. Environmental authorities recognize the need to seek more efficient ways of control. There is growing consensus on the need to ensure greater flexibility for economic agents and seek new sources of funding that are directly related to the multiple causes of environmental problems.

Colombia:

Using primary and secondary sources of information, this case study provides an assessment of the potential for moving towards IGG, given the developmental model and growth pattern currently in place. The paper identifies the housing, agriculture and biodiversity sectors as the three most important sectors with the greatest potential for IGG.

This country has a well-developed legal framework for environmental issues but there is a significant implementation gap. The agriculture sector shows the most resilience on changing patterns of poverty and social exclusion. Biodiversity shows great potential for greening sectors that can hold market niches. The impact on overall inclusion is not significant however, given its small scale. The housing sector can offer better conditions for IGG since it can change the living conditions of the population, it can reduce the vulnerability to natural disasters (also caused by climate change), it can reduce water contamination by providing water and sanitation services and can encourage private sector to adopt green supplies as well as sustainable process in the building sector.

Peru

The Peruvian case addresses the following sectors: forestry (goods and services), mining and coffee. Coffee can be considered to have high potential for IGG, given that it is the first agricultural export product over the last decades. While in the case of forestry services it is necessary to take into account that two thirds of the national territory is located in the Amazonian Basin. However, the capture of GHG and biodiversity preservation lack market value and there is no statistical registry to take account of this value, a clear indicator of the lack of government interest despite its environmental benefits.

Finally, Peruvian mining has historically showed practices of environmental irresponsibility and social exclusion. On one hand, mining and petroleum comprise 70% of Peruvian exports and 20% of tax revenues but on the other hand, mining in and of itself has produced 6800 environmental liabilities many of which have caused serious damages to local communities. Even though there is an important number of public policies being implemented in each sector, strong lobbies set limits to establish IGG strategy particularly in the highly concentrated mining sector. In addition, informal gold mining is another impediment to green growth given its negative effects in local economies. Informal gold digging allows the laundering of income produced by coca (or illegal wood logging). It also leads to deforestation and by virtue of contamination leads to unfair competition with every activity that shares the use of water.

Comparative study: Brazil, Chile and Mexico

All three countries tried to increase competitiveness by supporting the creation and intensification of specific clusters of economic activity. Brazil and Mexico focused on the manufacturing sector, and in particular on the automobile industry, whereas Chile focused on the refining and extraction of natural resources, such as copper. As regards the implementation of green policies, all three have launched regulatory instruments and policy instruments and have given economic support to renewable energy sources. Brazil has also established GHG reduction plans, whereas Chile and Mexico have launched regulatory instruments to control local air pollution. However, many important challenges remain.

In the first instance poverty and inequality levels are still very high, despite the important progress made in the past decade. In particular, income indicators (household net disposable income and financial wealth) are well below the OECD average; inequality levels are very high in Brazil. Secondly, air pollution levels in big cities are still very high and life expectancy is well below average OECD levels. Thirdly, resources dedicated to R&D, especially in green goods sectors, are still at very low levels in comparison to OECD standards.

The need to address distributional issues is worthy of notice. Green policies should be identified favoring the poor and middle class, instead of only benefiting the upper classes and elites. Also the burden of the most vulnerable and disadvantaged communities that could be most affected by climate change should be alleviated with appropriate mitigation policies and direct payments to the poor and disadvantaged.

Each country also has its particularities and hence some specific activities have a higher potential to be developed successfully in each country. First, Brazil is the richest

in terms of resource wealth and has therefore the greatest potential in bioenergy, biomass and forest conservation. Secondly, Chile's activities with high growth potential are waste management activities in mining (copper in particular), and aquaculture. Finally, Mexico has a high potential to improve the efficiency of the transport sector with the subsequent reduction in emissions and also to increase the share of renewable energy supply and electricity generation from renewable sources.

1. *Policy recommendations for Mexico:* An intra-industry emission trading system could lead to substantial greenhouse gas reductions at lowest cost. Removing energy subsidies would not only encourage efficient resource use but also make the use of renewable energy sources more attractive. Decentralized energy systems from renewable should also be applied in remote areas
2. *Policy recommendations for Brazil:* The goals of Brazil's green growth strategy have to focus on reducing inequality and increasing social rights such education and health care while increasing the quality of those public goods.
3. *Policy recommendations for Chile:* The use of renewable energy in specific sectors such as transport should be promoted and the protection of biodiversity and water rights play a major role for two crucial industries in Chile namely, the mining sector and aquaculture. Public policies are not coordinated well enough to protect the environment from the negative side effects of those industries.

Putting all these research findings together we have edited all the background papers and national cases and translated some of them in order to publish the book "Los Desafíos del Crecimiento Sustentable con Inclusión en América Latina", edited by C. Quiliconi and J. Peixoto. The book gathers the background papers carried out in the first phase of the project and the country case studies developed in the second phase. The book was launched in print and online in the Regional Meeting in Peru, in November 2014.

In the course of that meeting we also discussed ongoing research on Value Chains and Sustainability, the last phase of the project. It included five case studies on Greening Value Chains in Latin America and the Caribbean. The papers analyze each selected value chain, and its greening strategies. Research findings of those papers can be summarized as follows:

Andean grains- quinoa in Peru

This research addresses the quinoa produced in Peru and its by-products. The paper not only studies the price and cost structures but also establishes a typology of the multiple and heterogeneous actors that participate in this productive chain. The paper argues that the state has played a key role articulating, promoting and regulating initiatives in this value chain. The research finds that big intermediaries oriented to the global markets coexist with small enterprises and producers associations oriented towards regional markets or producing for self- consumption.

Automotive industry in Mexico

This paper analyzes the greening of the automotive chain in Mexico that is strongly integrated to the North American market. The research carried out a survey to gather data on labor structure, participation of small and medium enterprises and technological upgrading. It analyzes the main structural weaknesses that are specific to this value chain in order to ponder the opportunities for greening.

Aircraft industry and wood products in Brazil

This research analyzes the structure and dynamic of the international value chain of the Embraer firm and the production of wood products and furniture in the Brazilian states of Rio Grande do Sul and Santa Catarina. The paper addresses the place that each firm has in the chain and the governance arrangements. Then it addresses the greening process in both value chains taking into account the implementation of environmental norms in them, and analyzing what sort of effects those norms have had on the firm performance and in the political institutional setting.

Dairy value chain in Argentina

This study analyzes the impact of the dairy value chain on the environment in Argentina as well as the greening measures the sector has implemented or is in the process of implementing. Preliminary findings show that dairy value chain has incorporated green technologies in industrial process, but that does not apply to suppliers (of milk) nor at the end of the value chain (waste management). In addition, the greening of the sector leads to market concentration, which has negative impacts on SMEs.

Photovoltaic Solar Systems in Puerto Rico

This research analyzes the photovoltaic solar systems value chain in Puerto Rico focusing on the green paradoxes it raises. The photovoltaic value chain systems can establish important linkages with sustainability, inclusiveness and the growth of small and medium enterprises. From the concepts of green innovation in value chains and the evaluation of the product life cycle the paper identifies three green paradoxes: the ecological paradox raised by this technology, the economic paradox of inclusiveness and the corporate and political paradox.

Objective 3. To build capacity on IGG with the aim of raising awareness of the issue among specific groups of actors (policymakers, private sector, civil society, and academics). Given the sparse state of this debate in the region we expect to generate a non-partisan space to encourage GG discussion in policy circles while promoting the progressive incorporation of young researchers.

First, the project hold Multisectoral Policy Dialogues in order to generate a non-partisan space to encourage IGG discussion that raises awareness on the issue. The initiative has been highly welcomed in each of the countries where dialogues were carried out. Participants agreed on the importance of connecting research and policy, and on the

relevance of research projects that promote stronger links between social and environmental dimensions.

Dialogues were organized following similar frameworks and guidelines in order to obtain a better feedback of the initiative and active participation of stakeholders. Nonetheless, they were quite diverse in many aspects, depending on the specific context and project partners in each country.

On average twenty-five people representing policymakers, the private sector, the civil society, and academics are summoned in half-day meetings. Institutions were selected on the basis of our previous mapping of actors. Meetings were developed in a very dynamic fashion, and provided in depth discussion about main challenges and opportunities of implementing IGG strategies in each country.

We organized several successful dialogues and expanded the dialogues to cover countries where case studies were carried out but not initially considered for hosting dialogues. As mentioned above, since the beginning of the project, fourteen multisectoral dialogues were been carried out (three in Argentina, three in México, three in Peru, two in Bolivia, two in Brazil and one in Costa Rica). In spite of the novelty of the topic and the skepticism in the region regarding the green growth discussion, dialogues were very welcome and successful. Allowing the project to obtain visibility, expand alliances and flag the cause of IGG.

Results of the dialogues are diverse and are detailed in our website, blog, Youtube channel, and Facebook. Here, we can list some of the main shared results:

- ❖ The lack of knowledge at the local government level is an important challenge, because that is the level of governance where green policies need to be implemented
- ❖ Fragmentation (and therefore inefficiency) of initiatives, lack of regulation, division of government agencies, and lack of institutional channels that promote participation threaten the capacity of giving accurate responses to new IGG challenges
- ❖ The GG agenda is still perceived by the private sector as an economic cost, and as a political cost in the public sector

In a similar vein, some opportunities for implementing GG strategies in Latin America were identified:

- ❖ Transition costs (or adaptation, mitigation, etc.) can result in competitive profits in the long run
- ❖ Developing green jobs not only contributes to sustainability, but also to social dimension, since green jobs generate higher incomes
- ❖ It is necessary to take advantage of existing initiatives and promote green concepts and innovation
- ❖ IGG is linked to sectoral discussions, and to the local context and dynamics
- ❖ The inclusion dimension of any green growth strategy must promote cultural heritage, ancient knowledge and biodiversity in global markets
- ❖ Raising awareness in public opinion is key, because a 'green citizenship' is crucial to promote change

- ❖ The private sector has to play an important role on key issues such as innovation, investment and technology transfer

In the pursuit of our objective of raising awareness, our second initiative was the launch of a Young Researchers paper and Brief Series on IGG topics. So far, we have already published four brief papers, and five working papers.⁷ Third, we have organized a regional award as well as a national Award (Peru) to select the best M.A. theses addressing IGG topics in Latin America. The best five theses won the prize and were published in the Young Researcher Series. Fourth, we have also organized two training courses in Bolivia, oriented to private and public sector, as well as civil society. These courses are a result of LATN's first dialogue in La Paz (June 2014), where several institutions asked for capacity building on the topics discussed in the project. Training courses were developed in both presence-based and online modalities.⁸

Last but not least, we are collaborating with the M.A. Program on Biotrade and Sustainable Development at the Pontificia Universidad Católica del Perú. LATN researchers are actively collaborating with the MA program on Biotrade and Sustainable Development (PUCP, Peru). Edmundo Claro, Pedro da Motta Veiga, Cintia Quiliconi, and Isabel Studer are teaching different modules in this program.

5. PROJECT IMPLEMENTATION AND MANAGEMENT

Continuing with LATN's tradition on Monitoring and Evaluation, the expertise of our technical team has improved the data gathering tools adapting them to the kind of events LATN has been developing within the IGG project. The interviews act as a communication channel with other members of the network and provide the opportunity to express their opinions about specific topics. Surveys have also proven to serve as self-learning tools, providing LATN the opportunity to capture the core of present debates in IGG from the experience of the participants in each activity.

In this sense, in order to monitor and evaluate the project and the evolution of the debate we have implemented both interviews and surveys. Questionnaires with both open and closed-ended questions were sent through our mailing list and distributed at project activities (multisectoral dialogues, regional meetings and training courses).

With regards to IGG questions, at the beginning surveys indicated that there is little consensus on the IGG topic in Latin America. It has also indicated that there is little debate on the topic in the community and that expertise on the topic is quite low. But, they have shown that respondents strongly agree on the importance of cultural change to improve the possibilities of Latin American economies to foster IGG strategies. Another consensus among respondents was on the importance of public policy in empowering IGG opportunities.

⁷ For Briefs, see: <http://www.latn.org.ar/coleccion-jovenes-investigadores-brief/> For working papers see: <http://www.latn.org.ar/coleccion-jovenes-investigadores-wp-2/>

⁸ See: <http://www.latn.org.ar/gestion-de-proyectos-y-crowdfunding-para-la-sostenibilidad/> and <http://www.latn.org.ar/curso-gestion-sostenible-empresarial/>

With regards to institutional questions, and questions related to the image of LATN, respondents in general agreed in the highly positive image of LATN, its products and skills as organizer and convener, and the importance of the IGG project in order to raise de visibility of the topic in the region.

Surveys were reshaped to take the results of the case studies into account. The results were also used to design evaluation sheets and an electronic survey to get a sense of the project's visibility at large. These surveys have also indicated that these events serve as a good opportunity for the development of networking and collaboration. They have also indicated that respondents find LATN's activities valuable for solving problems.

6. PROBLEMS AND CHALLENGES

At the beginning of this project there was a renewal of researchers and stakeholders as well as a reconfiguration of alliances and partnerships due to the novelty of the project. Moreover, given the expertise of the Central American Node (trade instead of sustainability), we have decided not to continue project activities in Costa Rica. Because of this, we have also faced challenges with finding new experts on IGG and expanding our research to countries that had not been in our network before i.e. Bolivia, Colombia, and Mexico.

Throughout the process and implementation of this project we have come to the conclusion that countries can be broken down into two types. One group, comprising of Chile, Colombia, Mexico, and Peru, is more likely to support an open debate when the public sector is committed to incorporate international standards provided that they had signed North-South FTAs that encompass environmental pledges. In addition, Mexico and Chile are also incorporating OECD green recommendations. The other group, Bolivia, Argentina, and Brazil, show different degrees of resistance towards the concept of GG. Some actors, especially in the public sector, are reluctant to use the term GG because it is thought to be created by developed countries and international agencies. As a consequence, the concept of IGG often came into question at LATN meetings.

Lastly, due to the new foreign exchange restrictions in Argentina, we had to overcome some obstacles regarding travel expenses, payments, and payments to partners abroad. We sought short term solutions through IRDC's regional office and considered hiring an institutional consultant to help simplify some of our difficulties.