

# CLIMATE, FORESTS, WATER, AND PEOPLE: A Vision of Development for Tropical America

KATOOMBA XX, Peru, April 2014



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Just months before the world assembles in Lima to advance international climate negotiations at the 20th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP20), Forest Trends and the Katoomba Group partnered with the Ministry of Environment (MINAM), the National Water Authority (ANA), and the National Superintendency for Sanitation Services (SUNASS) of Peru to host Katoomba XX – Climate, Forests, Water, and People. Built on the premise that sustainable development requires alignment of public and private efforts for climate, forests, water, and people, the meeting attracted over 600 participants, including government, civil society, and business experts and stakeholders from 17 nations. The meeting began with sessions open to the public in Lima, Peru on April 22-23 and progressed with a smaller group of select expert participants in the Andean Amazon region of San Martín, Peru on April 24-25.



Minister of Environment Manuel Pulgar-Vidal: The goal of COP20 is a global agreement on climate; there is no alternative.

Katoomba XX shaped a regional vision of integrated, participatory natural resource management for socio-economic development. This vision seeks not only to achieve resilient infrastructure, improved standards of living, and thriving communities, but also to achieve this vision through empowering, participatory processes. The tone was optimistic yet urgent as participants called for action on the part of all stakeholders to work together to advance this vision, building on success stories and learning from lessons the region has already experienced.

## Selection of Institutions Represented at Katoomba XX

Government Agencies	Civil Society	Private Sector and Financial Institutions
Ministry of Environment of Peru Ministry of Agriculture of Peru National Water Authority of Peru National Sanitation Service Superintendence of Peru – SUNASS National Protected Areas Service of Peru – SERNANP Interregional Council of the Amazon - CIAM San Martin Regional Government Loreto Regional Government Madre de Dios Regional Government Ministry of Environment of Colombia National Forestry Commission of Mexico Dept. of Environmental Affairs of South Africa State of Acre, Brazil Swiss Agency for Development and Cooperation US Agency for International Development	WWF The Nature Conservancy Peruvian Society of Environmental Law Conservation International RARE Amazónicos por la Amazonía – AMPA CONDESAN UN CEO Water Mandate Governors' Climate and Forests Task Force COICA OPIAC Earth Innovation Institute La Molina Agricultural University Climate Advisers EcoTrust	Bunge National Mining, Petroleum, and Energy Society of Peru National Cattlemen Federation of Colombia (FEDEGAN) Alianza Peru – Café Cooperativa Acopagro (Cacao) Cooperativa Oro Verde (Café) Apega – Peruvian Gastronomy Society Santiago Climate Exchange Verified Carbon Standard Inter-American Development Bank World Bank Banco de la Republica de Colombia Agrobanco Althelia Climate Fund Root Capital Reforesta Perú

## The Need and Opportunity for Alignment

*In the face of dangerously rising global temperatures, rapidly growing and developing global populations with increasing resource needs, and growing recognition of the systemic shortcomings of national and international economic and financial systems, participants called for a new model of development.*

### A Climate Crisis

The world's business-as-usual emissions trajectory will take us to levels of greenhouse gases associated with global temperatures 4-5 degrees Celsius above pre-industrialized levels – well over the 2 degree increase agreed upon in Copenhagen as a threshold that should not be surpassed. The stakes of reducing emissions could not be higher: according to the Intergovernmental Panel on Climate Change's most recent report, a 4 degree increase in global temperatures will bring "catastrophic" results. In order to cultivate the political will necessary to meet our climate mitigation and adaptation challenges, more effective communication is needed, beginning with re-naming the problem more accurately as a climate crisis. Peru and the region can demonstrate to the world the importance and opportunity of taking on the climate crisis through aligned strategies for forests, water, and people. As a country where almost half of emissions come from deforestation and land use change, and where glacier-capped mountains feed downstream populations, the integrated management of natural resources – across sectors, borders, and levels of government – is central to both mitigation and adaptation strategies for Peru and the broader Tropical American region.



Yolanda Kakabadse, President, WWF International: The world is facing a climate crisis.

### Food, Water, and Energy Resources: Growing Pressure and Feedback Loops

The National Water Authority of Peru estimates that the country will require an increase over 200 cubic meters of available freshwater per year and triple its current energy production to sustain its current rate of rapid economic growth. While Peru is a relatively water-abundant country overall, 96% of its hydrological resources are located on the Atlantic side of the Andes, hundreds of kilometers and a great mountain range away from population centers demanding food, energy, and water that rely on those hydrological resources.



Francois Muenger, Head of Global Water Initiative, Swiss Agency for Development and Cooperation: 45% of global GDP comes from areas of high water risk.

The story of increasing pressure on natural resources, particularly freshwater, to deliver the food, energy, and water needed for sustained economic growth in growing populations is told not only in Peru but throughout the region and world. And while increasing pressures on food, water, and energy resources have not been primarily caused by rising global temperatures, they are intimately in cause and effect.

Efforts to meet food, water, and energy needs must recognize the interaction between the natural, economic, and political systems that produce and distribute these goods, as well as their links to the climate crisis. This imperative calls for much greater horizontal integration of policies and finance to address these problems – that is, planning processes that are coordinated across ministries and sectors to create integrated solutions. The negotiation of the



Sustainable Development Goals, set to succeed the Millennium Development Goals in 2015, was identified as a key opportunity to agree on integrated goals on these challenges with key actors from the public and private sectors.

## A “Tipping Point” for Economic Systems

Leaders from all sectors identified the failure of national accounts, fiscal policy, and financial markets to incorporate environmental costs and benefits as a terminal shortcoming that must be addressed in order to adequately meet the climate and resource crises the world faces. Several panelists noted the increasing recognition of resources challenges among influential groups like the World Economic Forum, and Carlos Gustavo Cano, Co-Director of the Bank of the Republic of Colombia, even suggested that capitalism itself was at risk of failure if it could not appropriately account for environmental costs and benefits.



Francisco Dumler, Secretary General, National Water Authority: Peru must triple energy production to continue its pace of economic growth.



Carlos Gustavo Cano, Co-Director, Bank of Colombia: Capitalism must incorporate environmental costs to survive.

Dissatisfaction with the world’s dominant economic system stoked by the 2008 financial crisis and related national fiscal crises, increasing inequality, and global shifts in economic power have provoked an ideological crisis around economic systems and models of economic development, which Peruvian Minister of Environment Manuel Pulgar-Vidal and others pointed to as an opportunity for transformation. It was also recognized that to realize a transformation of economic development models along the lines of the vision articulated in the meeting, the “conservation agenda” would also have to evolve to engage allies in the private sector and fiscal policy houses to become what Daniel Nepstad, Executive Director of the Earth Innovation Institute, called a “pro-development, poverty-alleviating, production-inspiring agenda.”

## The Vision: A New Model of Development for Tropical America

*The vision for development from Katoomba XX understands that socio-economic development and conservation are inseparable goals. In this vision, production thrives in synergy with nature and culture: ecosystem services link conservation with sustainably intensified agricultural production, and traditional knowledge complements modern know-how. Investments and policies are the results of participatory processes, and effective solutions are enabled at the most appropriate level of governance.*

## Aligning Conservation and Value Chains

Productive landscapes that integrate robust economic development and conservation are at the center of the vision articulated at Katoomba XX. Several successful examples of this were shared over the course of the meeting. For example, the cattle sector, one of the most important economic activities for rural communities in Latin America, was shown to have great potential for dually supporting economic development and conservation. Despite cattle grazing historically being an environmentally harmful activity — associated with deforestation, soil degradation, and contamination of water bodies — recent initiatives in the region have proven that this sector can be managed sustainably. Cesar Garcia Mora, of the National Cattlemen Federation of Colombia (FEDEGAN), shared their strategy for returning ten million grazing hectares back to nature, while improving productivity,

through silvopastoral systems. Already having achieved some significant success transforming the pastoral systems of small producers in Colombia, FEDEGAN has demonstrated that the integrated management yields multiple benefits for producers, including micro-climate improvements, improved cattle health, and additional revenues from forest products. Similarly, Nepstad reported that Brazil's remarkable achievement in reducing deforestation by 70% was achieved while increasing agricultural productivity - primarily realized in the soy and beef sectors, which he attributed to a combination of legal support to stop agricultural expansion into the forests and economic demand for deforestation-free beef and soy.

### Resilient Infrastructure - Using New, Natural, and Ancestral Technology

Investment in gray infrastructure was recognized as an inevitable and necessary step for continued economic and social development, given the region's unmet needs for access to energy, clean water, and sanitation, the resource demands of growing industries, and the opportunity to continue to expand growth by increasing exports. However, the meeting also recognized that the great power of gray infrastructure to fuel economic growth also brings the possibility to negatively transform socio-ecological systems, with highways potentially bringing massive deforestation and illegal trafficking activities and dams potentially compromising life-sustaining ecosystems.

Participants therefore emphasized that built infrastructure — from highways and airports to dams and pipelines — must be planned for within the socio-ecological systems they will enter, where plans can be considered as part of comprehensive participatory planning processes.



Vice Minister of Agriculture Cesar Sotomayor: To think of only gray infrastructure is to only think of half of the solution.



Fernando Momiy, President of the Board, SUNASS: I dream of establishing a national fund for investment in natural infrastructure.

Moreover, nature and culture were identified as key components of an infrastructure package in the vision of development for Tropical America. Glaciers, wetlands, forests, and reefs have served as “natural infrastructure,” delivering clean and secure water, energy, and food for millennia. And ancestral technologies - like the terraces that the Incas and their predecessors carved into steep Andean slopes - can still play valuable roles as low-cost, gravity-fueled, resilient complements to concrete-and-steel infrastructure.

Innovative efforts are already underway to realize resilient infrastructure in the region. On the part of the private sector, Bernardo Roca Rey - President of Apega, the Association of Peruvian Gastronomy - told of their “Adopt a Terrace” program, in which restaurants and supermarkets around the world voluntarily support the restoration and maintenance of pre-Incan terraces and the small farmers who can afford to produce more sustainably because of the investment. Peru has also recently passed guidelines to define how very large infrastructure projects should offset their environmental impacts when they are not possible to avoid. Some companies are already starting to voluntarily initiate biodiversity offsets under the guidelines.

Thinking big, Fernando Momiy, President of the Board of SUNASS, suggested that Peru could learn from the example of countries like Colombia and Costa Rica by financing investments in natural water infrastructure through a national fund that could be financed by, for example, 1% of revenues from hydroelectric production.

## Participatory, Multi-Stakeholder Governance as a Fundamental Core of this Vision - Process as Outcome

The concept of resilient infrastructure defined at Katoomba XX encompasses the physical structures as well as the social and cultural fabric that informs and supports them. In line with this concept, the entire vision for development articulated by participants is as much concerned about the process as it is about the products. Empowering, participatory processes are at the center of this vision, from planning through to implementation and the distribution of benefits.

The meeting emphasized participatory processes that facilitate dialogue between the range of stakeholders who impact and who will be impacted by decisions, as a crucial way of ensuring alignment across sectors and between levels of governance. Beginning with the communities at the center of an investment or development strategy, the participatory process envisioned at the meeting must also include representatives of Ministries of Economy and Finance who are not often represented in these discussions, despite their responsibility for financing projects and plans.

Participants shared success stories for implementing integrated sustainable development strategies, like the ecosystem service-based landscape management of the State of Acre, Brazil, or the investments in watershed services program for Piuray Lake by the water company of Cusco with the support of SUNASS. These participants emphasized the central role of extended multi-stakeholder dialogue in creating and sustaining these initiatives.



Edwin Vásquez,  
General Coordinator, COICA



Juan Chang, Senior Specialist,  
Inter-American Development Bank



Karina Pinasco,  
Executive Director, AMPA

## Effective Solutions Designed and Implemented at Multiple Levels

The vision articulated at Katoomba XX recognizes that the complex challenges involved in transitioning to a model of green development call for innovative approaches and built-in learning from that innovation amidst population and migration fluxes, a changing climate, and transformations in the structure of local and regional economies. William Boyd, Senior Advisor and Project Lead to the Governors' Climate and Forests Task Force, compared climate-compatible development policies to start-up businesses: just as the majority of start-ups fail, most policies do not work as they are designed to. Particularly for solutions to climate change, where there is significant uncertainty and it is unclear what strategies or policies will be successful, Boyd argued that we should try to design policies that support and learn from innovation. Subnational jurisdictions were identified as particularly well-equipped to lead this innovation, as they are closest to the problems and able to experiment with new strategies on a smaller scale where potential failure will be less detrimental than at a national or international scale.

This emphasis calls for dynamic accommodation between levels of governance to balance efficiency and flexibility – in most cases correcting current systems to increase flexibility in national policy and financing frameworks to allow for diversity of approaches in subnational jurisdictions. In addition to closer proximity



to specific problems and therefore likely having greater capacity to implement solutions that better “fit” their contexts, subnational jurisdictions also have the visibility and, increasingly, the competencies to broadly consider ecosystem services in an integrated development strategy.

In countries like Peru, enabling this innovation becomes a question of resources. As noted in presentations from Madre de Dios and San Martin to the multinational GCF, regional budgets are not sufficient to realize innovative and effective strategies.

### Securing and Aligning Finance to Realize the Vision



Hugo Wiener, President Agrobanco: Agrobanco can be a facilitator, an interlocutor, a co-financer of public and private investments in sustainable forest management and agriculture

Achieving this vision will require the region to attract and direct sufficient financing to support integrated development planning processes, training and capacity-building for forest-compatible sustainable production, resilient infrastructure, law enforcement, and other investments. Without the resources and effective structuring, the vision will not be realized; in the words of Bettina von Hagen, Chief Executive Officer of EcoTrust, “No money, no mission.”

While a significant and critical challenge, attracting and structuring the financial resources for this strategy is also one of the clearest opportunities for achieving alignment across sectors and levels of governance for climate, forests, water, and people. Experts emphasized that there is sufficient financing to achieve this vision — beginning with existing cash flows in the country.

Alignment of agricultural incentives and loans with a green development strategy, for example, would support investments in training and efficient production systems that would allow for sustainable intensification of production that, in turn, could assure higher outputs while using less land, water, and chemical inputs. Hugo Wiener, President of Peru’s Agrobanco, emphasized that this is the vision of his bank, which aims to become a “green bank,” that supports environmental goals and social development while enabling agricultural production. Likewise, Victor Galarreta, Technical Secretary of the Interregional Amazon Council (CIAM), posited that a robust source of financing could come from the revenues generated by the extraction of Peru’s petrochemicals and mineral resources; this would represent a more than sufficient flow of funds which could be harnessed to secure support for sustainable development activities in the region. Pointing to other resource-rich countries that have successfully leveraged this resource for their development — like Norway, Canada, and Australia — Galarreta suggested that Peru harness a portion of these revenues to ensure sustainable development.

Furthermore, regional economic growth offers new opportunities for re-investment in natural capital. As tastes and budgets allow for more discretionary expenditures among the region’s growing middle and upper classes, there will be a opportunities for channeling those tastes to realize investments in the ecosystems and cultures of the region, as pioneering chefs like Pedro Miguel Schiaffino — who brought his brand of Amazonian cuisine to the meeting— have demonstrated.



Victor Galarreta, Technical Secretary, CIAM: Peru’s non-renewable resources can be the foundation for valuing its renewable resources.

Peru also showcased its innovative leadership at policy and project levels that allow for results-based compensation for environmental services, opening yet another potential stream of revenue to support the vision for development. MINAM's Roger Loyola described the country's payments for ecosystem services law – approved by the Peruvian Congress shortly after Katoomba XX – which creates a formal legal framework for compensating activities that yield ecosystem services. Fernando Momiy of SUNASS championed his organization's recent work with water utilities to systematically include watershed management in their investment plans – not far short of revolutionary for the sector. Furthermore, maturing regional and national strategies for jurisdictional REDD+, as well as guidelines to encourage (and eventually require) biodiversity offsets for large infrastructure projects indicate that Peru is becoming a world leader in recognizing and capturing the values of ecosystems.

## The Call to Action

*The vision for development was delivered with an urgent call to action: recognizing the shortcomings of historical attempts to “solve” the climate crisis with top-down, ineffective policies, leaders at the Katoomba meeting called for timely commitments from all sectors so that collective efforts may “add up” to realizing this shared vision.*

## Contributions from All

Panelists urged participants to adopt an ethos of action from all sectors, with others and with urgency. In the context of the climate negotiations, Climate Advisers' Andreas Dahl-Jorgensen challenged Tropical American countries to issue a conditional pledge on reducing emissions from land use change. By pledging to reduce emissions as much as possible on their own, but identifying the additional emissions that could be reduced with additional financial resources from developed countries, the region could show leadership, take immediate action on an issue that is crucial for both mitigation and adaptation, and create a clear opportunity for others to work with them for maximum impact.



Closing panel, from left: Carl Hausmann, Global Policy Advisor, Bunge Limited; Michael Jenkins, President, Forest Trends; Fernando Momiy, President of the Board, SUNASS; Yolanda Kakabadse, President, WWF International; Fabiola Muñoz, Director of Forestry and Wildlife, Ministry of Agriculture; Manuel Pulgar-Vidal, Minister of Environment.

The meeting's call to action also emphasized the imperative of exchange and coordination across sectors, borders, and levels of governance. Successful mechanisms for learning and coordination were highlighted, including the Ecosystem Services Incubator in Peru – which has facilitated technical and policy exchange between SUNASS and MINAM for investments in watershed services – and the Governors' Climate and Forests Task Force – which has allowed subnational jurisdictions to learn from each other's successes, in some cases enabling the diffusion of effective institutional models for public-private investment or policies for valuing ecosystem services.



## A Vision of Development from “Green Region” San Martín

Following the public Katoomba meeting in Lima, an international group of nearly 100 experts travelled to Moyobamba, the capital of the Andean Amazonian region of San Martín, Peru, to learn from and contribute to the region's strategy for realizing integrated green development. This portion of the Katoomba meeting took place on April 24-25, 2014 and was co-hosted by the Regional Government of San Martín, the Interregional Council of the Amazon (CIAM) and Amazónicos por la Amazonía. The meeting was an important opportunity to share expertise and experience about the potential for green growth across the Amazonian region and to build the relationships and alliances between the public sector, civil society, international cooperation agencies, and private sector to push this vision ahead.

### A Landscape Approach to Green Development

In 2006, the region of San Martín took on the moniker “Green Region,” and committed to a vision of green development with economic, environmental, and social focal axes. This vision led the participatory development of a land-use planning ordinance based on economic and environmental use values, guided the development of the new Regional Environmental Authority to integrate activities previously dispersed throughout the government's directions, and supported a variety of innovative mechanisms for capturing and leveraging ecosystem services as part of green growth. Under the leadership of Regional President Cesar Villanueva, who resigned from that post to become the President of the Council of Ministers of Peru in 2013, since 2006 the region impressively achieved a reduction of poverty levels from 51.9% to 26%, a dramatic reduction in narcotrafficking, and a significant increase in the amount of conserved forests, bringing the total to over 2 million hectares.

These impressive achievements have established the momentum for a region whose leaders are committed to making even greater gains in terms of economic, environmental, and social benefits for the people of San Martín. Villanueva presented the region's vision moving forward, which included as its targets: becoming the first carbon neutral region and the first region with a net-carbon-negative agricultural sector; zero tolerance to coca production; and becoming a leader in models of inclusive production and business, public-private partnerships, and access to finance for sustainable production.

### A Laboratory of Innovation

The meeting offered a unique opportunity for San Martín to share with experts and decision-makers from Peru and around the world the diversity of sustainable development initiatives in the region through site visits and a knowledge fair. The innovations showcased included local-level initiatives that yielded dramatic environmental and social results, such as improvements to the drinking water system and management of solid wastes in the municipality of Jepelacio, up through region-wide efforts to increase the sustainability of cocoa and coffee production through cooperatives and certification programs. Regional actors also displayed mechanisms that translated the value of watershed services into financing for conservation and restoration – in the Gera, Cumbaza, and Mishkiyaku-Rumiyaku-Almendra watersheds – as well as projects that are generating revenue by capturing the value of carbon sequestration through avoided deforestation, including in the Alto Mayo Protected Forest and the Alto Huayabamba Conservation Concession. A regional push toward developing a robust nature tourism sector was also highlighted, including a visit to the Santa Elena wetlands eco-tourism site. A focal dinner for meeting participants prepared by chef Pedro Miguel Schiaffino, who sources many ingredients for his premier Amazonian cuisine restaurants in Lima, demonstrated colorfully how biodiversity has begun to be valued in the delivery of unique ingredients – like the prehistoric paiche fish or the antioxidant-rich camu camu fruit – from the Amazon to buyers in markets like Lima.

## A Vision of Development from “Green Region” San Martín (Cont.)

### Expert Views for the Green Path Ahead

A series of expert panels allowed for formal reflections from Peru and abroad on how San Martín could learn from lessons and best practices of other efforts to build upon successes and to lead the Amazonian region toward an integrated model of green growth. The messages from these panels were:

- Value chains must be integrated with ecosystem services in order for the region to be successful and sustainable.
- Mobilizing the requisite financial resources requires timing and alignment of scales. Doing so will require a clear understanding of the activities the region will need to execute to implement its vision and the costs of those activities over time - after accounting for existing finance that could be re-directed to support those activities. From there, the region will need to work with the national government, cooperation agencies, and the private sector to design a financial structure that can strategically deliver benefits and attract financing at scale and with timing appropriate on both supply and demand ends.
- Scaling innovative mechanisms for sustainability will require moving ahead, past pilot projects, with the knowledge already constructed, toward an integrated, jurisdictional approach that can accommodate existing projects while lowering transaction costs.
- Designing public policies to guide an integrated approach and create room for cooperation with key actors. Managing risk was identified as one area where the public sector – and international cooperation agencies – can work together to make investments more attractive for private sector partners.

### Aiming to Score, Not to Play Beautifully

Addressing the chilling disillusionment and anxiety that many hold regarding the international climate negotiation process, Minister Pulgar-Vidal insisted, “We are not going to repeat Kyoto.” Rather than seeking an elegant top-down solution that dictates the means and ends of a global strategy to address climate change, Minister Pulgar-Vidal emphasized that the global agreement Peru seeks to lead the world to at COP20 will be distinctly creative.

In this approach, alignment across sectors and levels of government for climate, forests, water, and people will not come from carefully orchestrated plays but rather a shared vision with clear goals and measures of success. As was emphasized many times throughout the meeting, this must be a shared comprehensive vision for sustainable development, rather than an isolated discussion about mitigating and adapting to climate change in order to leverage the resources and ensure the coordination necessary to meet the scale of the challenge faced.

## Tambopata-Bahuaja REDD+ and Agroforestry Project and Althelia Climate Fund: Offsetting Partners of Katoomba XX

The hosts of Katoomba XX were proud to partner with Althelia Climate Fund and the Tambopata National Reserve and Bahuaja-Sonene Natinoal Park REDD+ and Agroforestry Project to guarantee the carbon neutrality of Katoomba XX.

Set in the region of Madre de Dios, this REDD+ project is a world-class example of leveraging markets to integrated and participatory sustainable development at scale. A partnership of the Peruvian Association for Research and Sustainable Development (AIDER), the National Protected Areas Service of Peru (SERNANP), and the Althelia Climate Fund, the project works with 1,300 small farmers to increase the value of agroforestry systems within a 4,000-hectare buffer zone insulating the Reserve and Park's remarkable biodiversity and avoiding deforestation and degradation that would have resulted in an average of 450,000 tonnes of greenhouse gas emissions each year.

Althelia Climate Fund retired 150 CCB Gold-validated Verified Carbon Units on behalf of Katoomba XX-Peru.

