BIOREGIONAL PLAN 2030

Ecological Transitions for the Amazon Sacred Headwaters of Ecuador and Peru

AMAZON SACRED HEADWATERS

Executive Summary

September 2021

Photograph: Pablo Albarenga
Rainforest Defenders - democraciaAbierta
Courtesy of Fundación Kara Solar

Allies Organizations

AIDESEP

CONFENIAE
UNIDAD TERRITORIO JUSTICIA Y LIBERTAD

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FEDERACIÓN DE LA NACIONALIDAD ACHUAR DEL PERÚ

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AMAZON SACRED HEADWATERS

This executive summary of the bioregional plan presents the results of 3 years of planning led by indigenous organizations of the Ecuadorian and Peruvian Amazon and their allies.

The full version of the Bioregional Plan and technical information can be downloaded at:

Escanea el QR

www.cuencasagradas.org
www.sacredheadwaters.org.

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Learn about the Amazon Sacred Headwaters Initiative: Territories for Life

Visit our newly redesigned website and learn how to become part of the movement

www.cuencasagradas.org or sacredheadwaters.org

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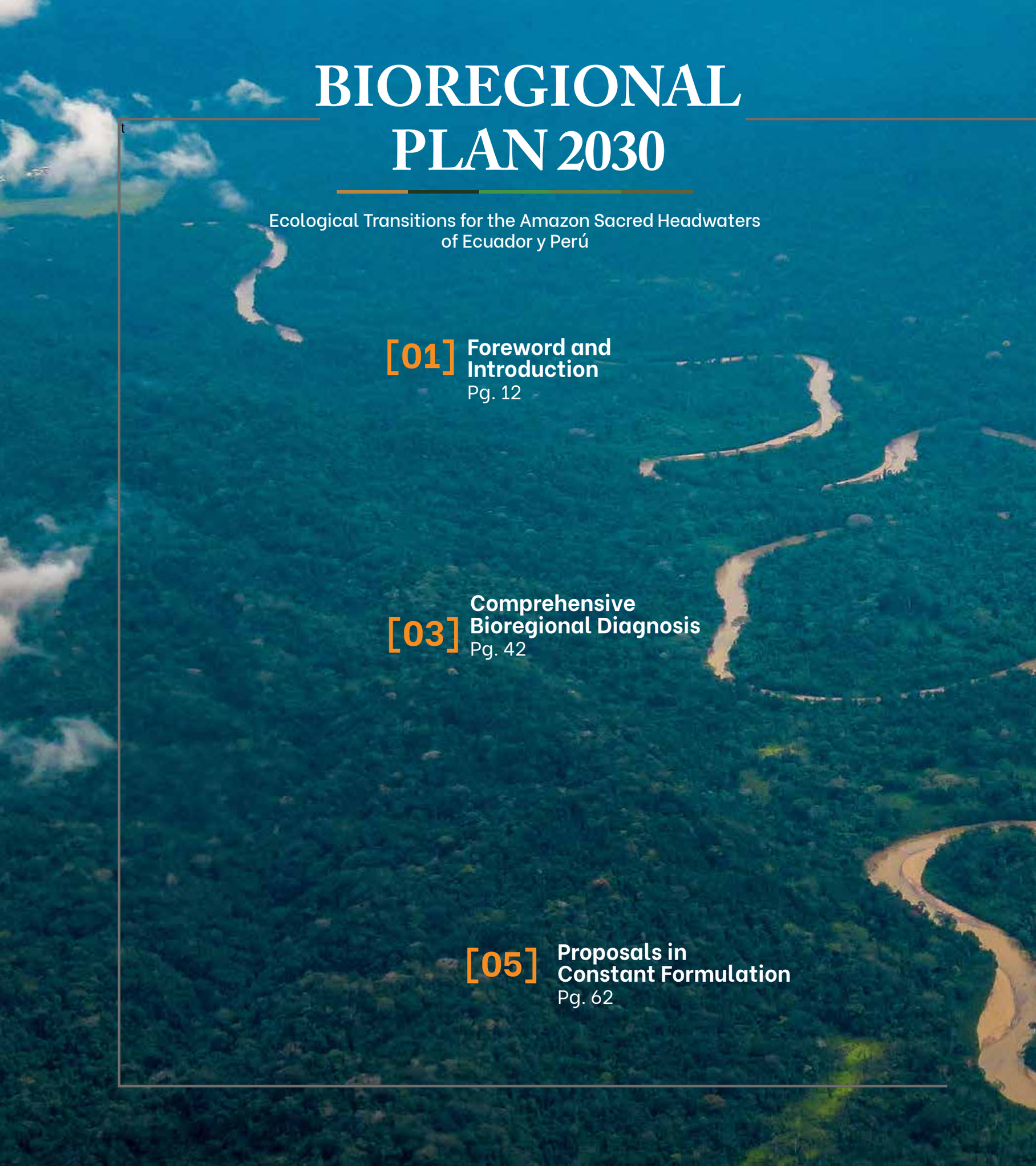
BIOREGIONAL PLAN 2030

Ecological Transitions for the Amazon Sacred Headwaters of Ecuador y Perú



Foreword

Indigenous peoples, with their territories in the Amazon Basin, interconnect spirituality, culture, and the elements (earth, fire, water and air). Additionally, they have their own political processes to exercise their autonomy and self-governance, each one according to their own worldview. This is in stark contrast to the map of destruction happening across the planet.

Where indigenous peoples live, there are forests, rivers, and abundance. Our relationship with our forests and rivers is not a relationship of 10 or 20 years, it is a relationship of more than 10,000 years. For thousands of years, we have preserved and defended nature through the strength of our cultures, worldview, and our way of respecting nature.

Indigenous peoples do not talk about conserving nature, we talk about respecting nature because we see her as our family, we see her as the mother, we see her as our home.

It is time for the work that indigenous peoples have done to be recognized.

Governments have proposed to protect only 30% of the areas that give life to this planet-only 30% by 2030! Our rights remain invisible, as do the viable solutions that are rooted in our own management models, validated by science as the only way to avoid the continued agony and destruction of the Amazon that we've known.

This agony is in every felled tree and indigenous relative who is killed while defending his or her home.

We need to mobilize at every level from states, organizations, peoples, communities, families and individuals so that like the drops of water that make up the great Amazon, we can fight strong, and in our flow of life we can dilute the greedy aspirations of extractive industries.

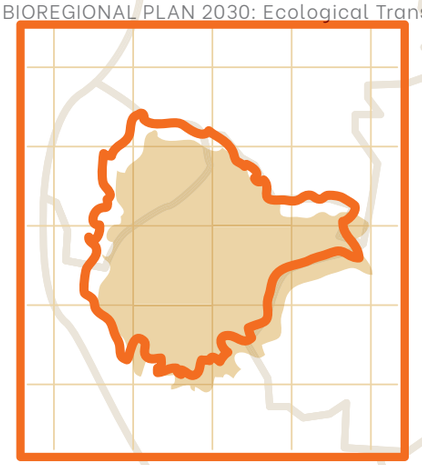
By its own sake, humanity must succeed in protecting at least 80% of the Amazon in a very short period of time--by 2025--to keep hope alive for a just future for all. We have begun to join together all the efforts, all the tools, the spirits of our ancestors, and the visions of our wise elders, so that together with the global community we can defend our mother. Calling on governments, indigenous peoples, and citizens everywhere to come together to protect our greater home!

We must do this so that the river continues to feed us and the rainforests continue to heal us, because the Amazon is life. Because our headwaters are sacred!

José Gregorio Díaz Mirabal

Coordinator of the Coordinating Body of
Indigenous Organizations of the Amazon Basin (COICA)

Photograph: Diego Mosquera



Sacred Headwaters: Territories for Life

The vast network of waterways born in the glaciers of the Andes of Ecuador and Peru descends to form the headwaters of the innumerable rivers that feed the Marañón and the Amazon River itself. These headwaters, which extend over an area of 86 million acres (35 million hectares), are home to more than 30 indigenous nationalities, and to dense forests that support incalculable forms of life. These are some of the most diverse ecosystems in the world, regulating the hydrological cycle of much of the South American continent and, indeed, the climate for our entire planet.

These Sacred Headwaters are of vital importance as we face a human-driven ecological crisis of unprecedented proportions. The ecological crisis is exacerbated by the increase in the extraction of oil and minerals, and deforestation to log timber, and propelled by a "modernizing" logic that treats "nature" as if it were a mere resource to generate short term profit to benefit of a small subset of life forms that exist on Earth.

The Sacred Headwaters initiative proposes a viable alternative to this modernizing logic, one that, in its stead, seeks to "ecologize" our economies, our political structures, and our modes of ethical behavior. It considers it essential to learn from the dynamics and qualities intrinsic to headwaters, as maximally expressed in one of the most majestic but also the most fragile watersheds in the world –the headwaters that sustains the vast web of life in the Upper Amazon.

The headwaters of a watershed delimits an area, a domain, but not in the usual political sense which imposes an order from above (as it happens with decrees and wars that create the borders of a country), but rather in an ecological sense. In other words, we see the headwaters of river basins as the emerging network of life that sustains and nourishes other fluvial networks that makes life itself possible. As such, it is a model for another way of relating, that we earthly inhabitants must learn to adopt, if we want to survive the ecological crisis that is affecting us all, regardless of nationality, ethnicity or even species.

Headwaters of river basins are fractal. Each and every one of us is like a unique headwaters' basin. Our veins are rivers. Our capillaries are the streams that feed them. A tree, with its trunk, branches and leaves that extend into the clouds, emanating from its roots and mycorrhizae that reach into the Earth, can also be a watershed. Each of us is nourished by a broader upstream watershed. Headwaters exist within other headwaters that give rise to yet others. They nurture and sustain those sources of water that preceded them and, along with many other sources, continue to give rise to others that we do not yet know of.

The river basins of the Upper Amazon are home to and are nourished by worlds of living forests ("selvas vivientes"). As described by the Amazonian communities, these living forests are made up entirely of communicative beings or "persons". These communicative beings, whether they are trees, insects, animals, or even their emergent associations, manifest and express the spirit quality that is inherent to all life as it emerges anew out of that which came before. This spirit quality is what makes such spaces of life, and the headwaters that sustain them, sacred. Recognizing this sacred nature of life helps us deepen our understanding of the close relationship between Human Rights and the Rights of Nature that this Initiative seeks to uphold in Ecuador and Peru.

The headwaters' basins with their countless streams and rivers create many connections, despite following their own paths. Migratory fish, such as the bocachico (Prochilodus sp.), travel upriver along the Sacred Headwaters to spawn in fresh streams and rivers; before returning downstream to the lagoons to feed. Similarly, the indigenous inhabitants of the region use rivers to exchange goods, travel and move, just as the bocachico does between different ecological zones.

Amazonians have long recognized this riverine mode of making connections across different domains and have developed a political philosophy that is based on forming alliances. Whereas Western political philosophy is founded on the concept of the friend who is like a brother, and thus essentially the same as oneself, Amazonian politics is founded on the concept of the enemy, as an "other" who is radically different but with whom one can nonetheless build a political alliance, through, for example, marriage or trade.

Crucially, many kinds of "persons" can be part of this alliance –plants, animals, forest spirits, other indigenous nationalities, mestizos and "whites," and each has something unique to contribute to this alliance if we just learn to listen for what they can teach us. The Sacred Headwaters region is a unified whole, yet its fractal networks also present a multitude of possibilities that contribute towards viable ways of living with others, with whom we share and shape this planet which, much like a watershed, constitutes a single entity.

The Sacred Headwaters Initiative recognizes this hydrographically inspired Amazonian form of relating and coming together across differences. It draws inspiration from it as it creates a set of political alliances between nationalities, governments and NGOs to face the planetary ecological crisis that is affecting us all. These alliances are nested within each other in the same way that the vast sacred headwaters of the Upper Amazon link one basin to another through their emerging networks.

This vast riverine network links the "territories for life" (territorios para la vida) of the indigenous nationalities that live within this domain. Each nation has its own unique way of expressing the web of sacred life that emerges in its territory. The Sacred Headwaters Initiative recognizes how each of these is a unique way of connecting to the sacredness of life. And it recognizes that each nation offers a distinct meaning of the sacred life of a living forest, where it is possible to live wisely within it, as ancient peoples have done for millennia.

In the spirit of this river alliance, the Sacred Headwaters initiative seeks to link this understandings of life with approaches stemming from the latest developments in Ecology, Systems Theory, and Earth Systems and Climate sciences, all of which intersects and joins with the new science of the green economy and cutting-edge forms of ecological activism, now emerging around South America and beyond.

Bearing in mind that our climate crisis is both local and planetary, such alliances that cut across different regions and scales are now crucial.

This special circumstance calls for a clear and viable proposal. We speak of region and planet. The present moment also demands that we speak of the future and of the new generations that will be active and formed with a different orientation. We have much to learn from the wisdom of the indigenous peoples, to protect the vast Amazon basin of Ecuador and Peru, since it is the only possible solution that is now within our grasp if we aspire to reach the future.

Wisdom Keepers Council

Prepared by Eduardo Kohn based on deliberations of the 1st gathering of the Council of Wisdom Keepers

Tumbaco, Ecuador - May 2019


COLOMBIA
ECUADOR
PERÚ
BRASIL
AMAZON
SACRED
HEADWATERS

The Earth is our family, She is part of us, and She is our teacher, because She is teaching us a way to sow, manage and live with Her.

Manari Ushigua
(Sapara leader – Ecuador)

Photograph:
courtesy of Fundación Pachamama

The importance of the Sacred Headwaters bioregion in numbers:

81.5M+ Acres
contiguous tropical rainforest

22.2%
areas protected by the national systems of protected areas in Ecuador and Peru

45%
of the territory is guarded by indigenous communities

49.4M Acres

Unprotected forests that must be conserved to maintainthe connectivity of the Andean-Amazonian ecosystem

5.63M Acres
Amazon forest unprotected by the State and/or indigenous communities

21.5M Acres
degraded or deforested forest that must be restored to maintain the connectivity of the Andean-Amazonian ecosystem

30+
indigenous peoples and nationalities are custodians of their forests, including at least two isolated peoples

22M+ Acres
Indigenous Peoples' unresolved claims for their integral territories in Peru

5.7M Acres
indigenous reserves in the process of legalization to protect peoples in isolation, including the "Napo-Tigre Reserve" in Peru

AMAZON SACRED HEADWATERS

WHO ARE THE PROPONENTS OF THE BIOREGIONAL PLAN?

The Amazon Sacred Watershed Initiative (ASHI) was founded in 2017 by an alliance led by indigenous nations of the bioregion with a shared vision to protect life, the ecological integrity and the ancestral territories of the nationalities and peoples of this region. Given the urgent situation for some of these populations who are in danger of disappearing under the pressure of a modern, materially and culturally predatory society, this unification is imperative.

The spokespersons and representatives who lead this alliance are the leaders of different organizations of the Amazonian nationalities of the bioregion of the Sacred Headwaters. From Peru, the Inter-Ethnic Association for the Development of the Peruvian Rainforest (AIDESEP), the Regional Organization of Indigenous Peoples of the Oriente (ORPIO), the Autonomous Territorial Government of the Wampís Nation (GTANW), and the Achuar Federation of Peru (FENAP) are members of the Alliance. From Ecuador, the Federation of Indigenous Nationalities of the Ecuadorian Amazon (CONFENIAE) is the lead organization , which in turn is coordinating the evolution and development of the initiative with the grassroots representative organizations of each nationality, such as the Achuar Nationality of Ecuador (NAE), which is also part of the alliance. At the regional level, The Coordinating Body of Indigenous Organizations of the Amazon Basin (COICA) was a founding convenor of this effort and has made the Sacred Headwaters initiative one of its key actions to defend and promote its agenda throughout the Amazon Basin.

The indigenous peoples' invitation to support the development of this initiative has been positively received by different civil society organizations. The NGOs that are initial members of this alliance include: Fundación Pachamama, The Pachamama Alliance, and Amazon Watch who are known for their long standing work in the region in support of indigenous peoples' rights, including territorial rights and forest protection. Since its inception in 2017, additional allies have joined as part of the Sacred Headwaters Network including Stand.Earth, Rainforest Foundation-US, EarthRights International, and The Collaborative for Bioregional Action and Learning (COBALT). These organizations have worked side-by-side with indigenous organizations. In addition, a growing number of public institutions, academia, donors, private actors and experts who support the vision and actions promoted by the initiative, have also contributed to this collaboration.

Territories of the peoples, nations and nationalities living in the Bioregion

- Achuar
- Awajun (Aguaruna)
- Andoa
- Arabela
- Bora (Bóóráá)
- Candoshi (Kandozi)
- Capanahua
- Chamicuro
- Chayahuita (Shawi)
- Cocama - Cocamilla (Kukama -Kukamiria)
- Cofán
- Huambisa (Wampis)
- Huitoto
- Iquito
- Jebero (Shiwilu)
- Kichwa
- Matsés (Mayaruna)
- Ocaina
- Orejón (Mae Juna)
- Piro (Yine)
- Kichwa, Lamas (Quechua)
- Kichwa, Napo (Quechua)
- Quechua, No especificado
- Kichwa, Pastaza (Quechua)
- Indigenous Reserves
- Sapara
- Sekopai (Secoya)
- Shapra (Chapara)
- Shipibo-Conibo
- Shiwiar
- Shuar
- Siona
- Ticuna
- Urarina
- Waorani
- Yagua
- Peasant communities
- Intangible Zone


COLOMBIA
ECUADOR
PERÚ
BRASIL
Océano Pacífico
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0 40 80 160 240 320 400
Km
Esri, CGIAR, USGS

Photograph: Pablo Albarenga
Rainforest Defenders - OpenDemocracy
courtesy of Fundación Kara Solar

Introduction

Indigenous Peoples Declaration for the Amazon Sacred Headwaters

Photograph: Diego Pérez

This is an urgent call for global action! The Amazon, our sacred territories, is being destroyed

We, the Indigenous Peoples of Ecuador and Peru together with our allies, call on the global community for solidarity, as our very survival depends on the survival of the Amazon rainforest which is under constant and unprecedented attack. While the world has awakened to the terrible fires in the Amazon, many do not know that there are also destructive plans for expanding extractive industries within the area known as the Amazon Sacred Headwaters. These plans represent an imminent threat not only to our survival, but also to global climate stability.

The Amazon, home to an enormous cultural diversity, contains the most biologically diverse ecosystem on the planet, generating rainfall and maintaining the hydrological cycle for all of the Americas. The Amazon helps regulate the Earth's climate. Protecting the Amazon rainforest is key for avoiding the tipping point of no return for our climate.

We call for support for our initiative and vision, which is rooted in indigenous cosmology and seeks in its initial phase to permanently protect 86 million-acre bioregion (35 million hectares) which is almost entirely tropical rainforests in the headwaters the mighty Amazon River–the Napo, Pastaza, and Marañon River Basins of Ecuador and Peru, an area we refer to as the Sacred Headwaters of the Amazon: Territories for Life. This region is the ancestral territory of more than 30 of our indigenous nationalities and peoples–some of us who are in contact with dominant society and others who still shun contact. We, the original peoples, have been conserving these forests for millenia due to our deep intrinsic inter-connection with our forest homelands, as has been documented in ample scientific evidence.

We call for the global recognition of the Amazon Rainforest as a vital organ of the Biosphere. We call on the governments of Ecuador and Peru, and on corporations and financial institutions to respect indigenous rights and territories and to stop the expansion of new oil, gas, mining, industrial agriculture, cattle ranching, mega-infrastructure projects and roads in the Amazon Sacred Headwaters region. The destructive legacy of the current model of "development" has been major deforestation, forest degradation, contamination, and biodiversity loss; decimation of Indigenous populations and human rights abuses.

We challenge the mistaken worldview that sees the Amazon primarily as a storehouse of "resources" where raw materials are extracted in pursuit of economic growth and industrial development. The ongoing industrial onslaught is pushing the Amazon to a tipping point of ecological unraveling. It is urgent that the global community join forces to prevent further harm and support actions that prioritize protection and restoration of forests and climate, and that respect indigenous rights.

Photograph: Atossa Soltani

Protecting this enormous bioregion does not only benefit indigenous Amazonians, but all of humanity and models the global imperative of accelerating a just transition to a post-extractive, pluri-national, intercultural, and ecological civilization.

In recognition of the importance of protecting the Sacred Headwaters of the Amazon, we want this cultural and ecological gem, these sacred territories and living forests, to be designated as off-limits to industrial resource extraction and permanently protected. We support a bottom-up participatory process of visioning a future for the region based on the recognition and respect for indigenous peoples' collective rights, the rights of nature and the pursuit of collective wellbeing – also known as Buen Vivir or Vida Plena.

We, the Indigenous peoples of the Sacred Headwaters of the Amazon, are offering the world a solution to the climate crisis by committing to protect our rainforest territories and leaving fossil fuels in the ground. This region represents more than 5.7 billion metric tons of carbon in standing forests and nearly 2.3 billion metric tons of CO2 in avoided emissions from undeveloped petroleum reserves.

As the authors of this declaration, our indigenous nationalities and federations ask civil society organizations, scientists, governments, financial institutions, and others to stand with us and become signatories to this declaration in support of protecting the Amazon Sacred Headwaters for the benefit of all life.

On behalf of our indigenous nations and peoples of the Amazon Sacred Headwaters:

AIDESEP

CONFENIAE
UNIDAD TERRITORIO JUSTICIA Y LIBERTAD

GOBIERNO TERRITORIAL AUTÓNOMO DE LA NACIÓN WAMPIS

ORPIO
Organización Regional de los Pueblos Indígenas del Oriente

COICA
Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica

NAE

Nacionalidad Achuar del Ecuador

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Strategic allies in solidarity:

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Fundación Pachamama

Rainforest Foundation US

STAND .earth

THE URGENCY FOR TAKING ACTION

The Amazon is one of the three most important forests for the ecological balance of the planet, but unfortunately it is an example of a draconian system.The deep social inequalities and the abuse of nature are not new phenomena, as they were incubated long ago in the Amazon region. Economic activities, population growth, the depletion of natural resources (renewable and non-renewable), global climate crisis, the mass extinction of plant and animal species, and the global loss of natural sinks are among the negative milestones that help us understand what is happening in the world we live in.

The appearance and expansion of COVID-19 is causing substantial changes in the short term in the international scenario and in the Amazon region of Ecuador and Peru. The coronavirus, however, could be only the first of a new wave of zoonotic diseases awakened by our pressures on Nature. (Aizen, 2020; Aguilera, 2020; Moutou, 2020; Toledo, 2020).

In addition to the global health pandemic that has severely hit the inhabitants of the Amazon region, there are deep structural economic crises. Ecological depredation has also skyrocketed, putting all life on the planet at risk.

IPCC Sixth Assessment Report (AR6)

In early August 2021, the first of three reports commissioned as part of the IPCC Sixth Assessment Report (AR6) was released. The purpose of this report was to analyze the physical evidence of climate change, i.e., the reality as it has happened and what is expected to happen in the future in relation to the impact of climate change on Nature and human life. This report has taken a major step in making the connection between climate change and extreme weather events and regional impacts. The IPCC has firmly and explicitly linked climate change with extreme weather such as the 2015-2016 El Niño phenomenon that caused an unprecedented drought in the Amazon, or the 2018 drought/heat wave that impacted the northern hemisphere. Temperatures are rising in all tropical forest regions and will most likely continue to rise, reaching levels unprecedented in recent decades. Changes in the hydrological cycle will lead to droughts and longer dry seasons. The AR6 recognizes the role that tropical forests, and especially the Amazon, play in regulating humidity and rainfall inside and outside tropical forest regions. The Amazon produces its own rainfall, critical for supporting agricultural productivity. This report has given scientific support to the urgent call of indigenous peoples and nationalities to care for and protect the Amazon as a benefit for all of humanity. The IPCC's report recognizes that the danger of rampant deforestation and forest degradation combined with climate change is triggering a tipping point of no return for the Amazon (IPCC 2021).

Triple nested crisis of planetary magnitude

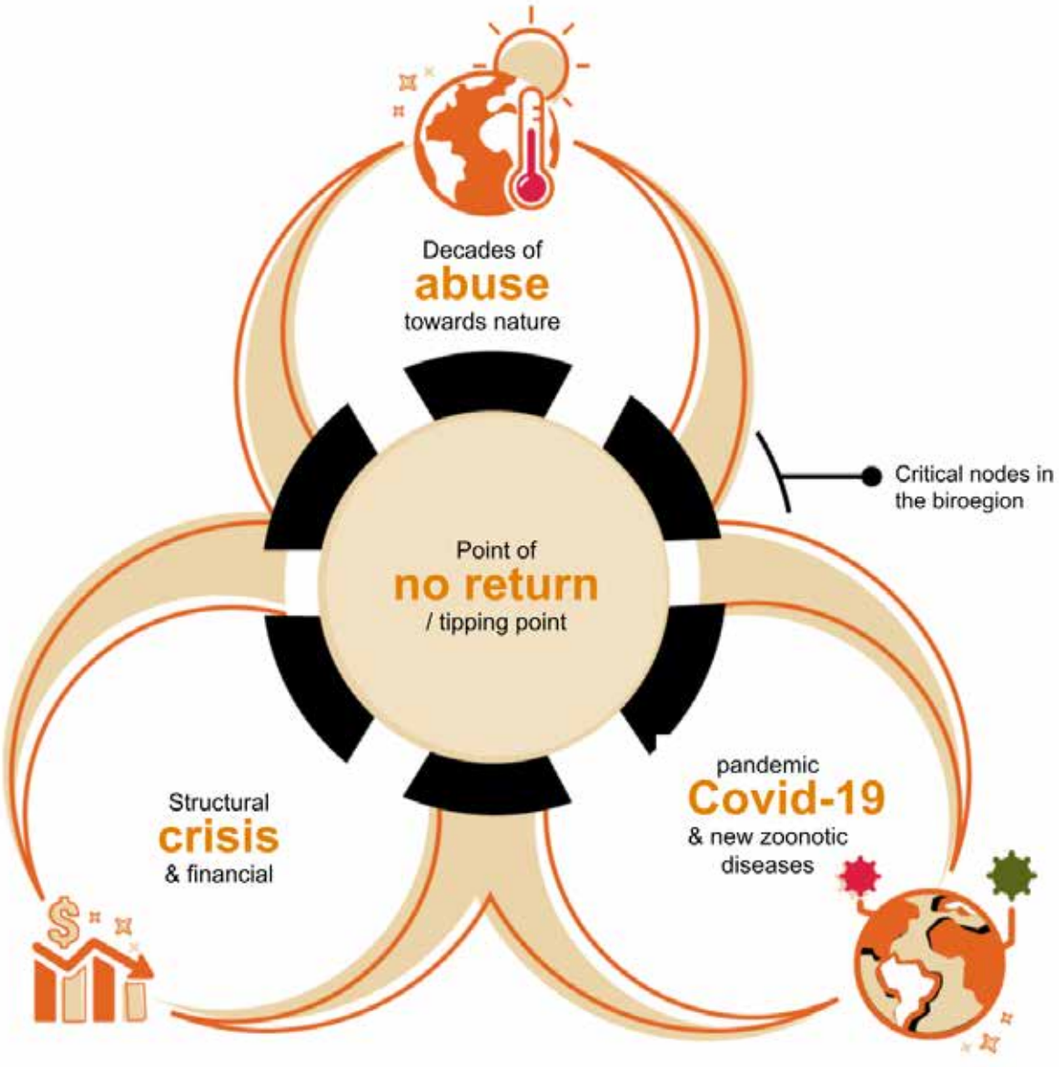

Diagram 1
The world is experiencing a triple civilization crisis: economic, health and environmental

BIOREGIONAL PLANNING

Ecological Transitions for the Amazon Sacred Headwaters of Ecuador and Perú

Photograph: courtesy of Fundación Pachamama

Photograph: courtesy of Fundación Pachamama

Why is bioregional planning necessary?

To accelerate a just transition, we need to create tools to jump start the process. Bioregional planning is a tool designed for this purpose.

Bioregional planning recognizes that there are unique ecoregions and geographies that share ecological, cultural, physical and historical characteristics. A bioregional approach requires a change in values, in the ethics and the mindset of planners and in the planning process itself, in order to move from an anthropocentric vision to an ecocentric one (Dedekorkut-Howes, 2014).

The Amazon Sacred Headwaters (ASH) Bioregional Plan is focused on the interconnected and interdependent ecological functions and dynamics at play as they affect the health and integrity of the bioregion as a whole.

So, a bioregional planning process is needed due to the profound and accelerated ecosystem fragmentation and degradation this region of exceptional biological and cultural diversity is experiencing. The ASH bioregion is in constant land conflict and lacks adequate land use planning strategies.

History has shown us that resource extraction for feeding the national coffers and global markets has not resulted in sustainable economic prosperity for Ecuador and Peru nor has it reduced the inequality affecting Amazonian local communities and needs to be shifted.

Indigenous peoples of the ASH bioregion are key stakeholders who have the local knowledge and the track record of stewardship to be launching this process. For a truly effective bioregional planning process, national, regional and local governments and sectors of civil society, business and academia must all participate in defining the solution pathways. This document is the starting point for such a process.

OUR VISION

The Amazon Sacred Headwaters is permanently protected and restored as a living bioregion, inspired by indigenous peoples' forest stewardship visions and practices.

In 2030, the people and forests are flourishing within a prosperous and inclusive wellbeing economy. The region is contributing to reversing global warming and biodiversity loss, and is an inspiring model for a just ecological transition.

Photograph: Pablo Albarenga
Rainforest Defenders - democraciaAbierta
Courtesy of Fundación Kara Solar

Photograph: Caroline Bennett
Courtesy of Amazon Watch

The Proposal

AMAZON SACRED HEADWATERS

Graphic 3
Vision and Objectives of Bioregional Plan

Bioregional Plan Objectives

Strengthening the amazonian wellbeing

Improve the living conditions of Amazonian populations, while maintaining biodiversity and cultural vitality.The creation of a Sacred Headwaters Fund jointly administered by indigenous organizations, civil society, governments and the socially responsible private sector, aimed at ensuring the health and well-being of Amazonian peoples and ecosystems.

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Ensure indigenous self-determination and territorial governance

Finalize the pending legalization of more than 22 million acres of indigenous territories, and strengthen local autonomy over their territories in Peru and Ecuador.

Stop the advance of extractive industries

An agreement between states, companies, indigenous and civil society organizations, and financial institutions to leave fossil fuels in the ground; the permanent protection of the Sacred Headwaters Bioregion as a zone off-limits to extractive industries.

Promote forest and river conservation and restoration

Prioritize the protection of 49.4 million acres (20 million hectares) of unprotected tropical forest of high biodiversity in Peru and Ecuador, as well as the restoration of more than 21.4 million acres (8.7 million hectares) of forest needed to maintain the connectivity of the Andean-Amazonian ecosystem.

Eliminate forest loss and ecosystem degradation

Promote a prosperous economy, based on activities that regenerate forests, keeping extractive resources under the ground, without deforestation and on the pathway to Buen Vivir..

¿What strategies and actions does the Bioregional Plan propose?

Strategies for a post-Covid recovery

Ensuring transitional pathways to a paradigm shift through a new ecological and social justice agreement.

An agreement between states, companies, indigenous and civil society organizations, and financial institutions.

Declare permanent protection of the Sacred Headwaters region, off-limits to extractive industries.

Strengthen indigenous governance over their lands and territories.

Finalize the legalization of more than 22 million acres of indigenous peoples' territories and the strengthening of indigenous governance over their territories in Peru and Ecuador.

Ensure the wellbeing of the region's inhabitants.

Improve the living conditions of Amazonian populations while maintaining biodiversity and cultural vitality.

Prioritize the protection of highly biodiverse and unprotected Amazonian forests.

Ensure the conservation of 49.4 million acres and the restoration of 21,5 million acres of forest necessary to maintain the connectivity of the Andean Amazon landscape.

The creation of a Sacred Headwaters Fund.

Jointly administered by indigenous organizations, civil society, governments and the socially responsible private sector, the fund is aimed at ensuring the health and well-being of peoples and ecosystems.

Our territories -the most biodiverse area in the world -
are home to billions of liters of water and many different cultures.

This remaining Amazon is invaluable for humanity. We are the guardians, the protectors of this rainforest, and only together we can protect it.

Men and women are fundamental and essential;
we cannot fight in isolation.

Tuntiak Katan
(COICA – Ecuador)

Photograph: Jacob Farris
Courtesy of Fundación Pachamama

COMPREHENSIVE BIOREGIONAL

DIAGNOSIS

Photograph: Pablo Albarenga
Rainforest Defenders - OpenDemocracy
courtesy of Fundación Kara Solar

Critical issues

The current situation in the Amazon is the result of a structural crisis of profound magnitude.

The response should guarantee a just and ecological transition that recognizes the autonomy and self-determination of indigenous peoples.

The Amazon is a space of permanent international appropriation.

It condenses the asymmetries in power relations between the rich, industrialized North and the impoverished countries of the South. These asymmetrical relations are caused by:

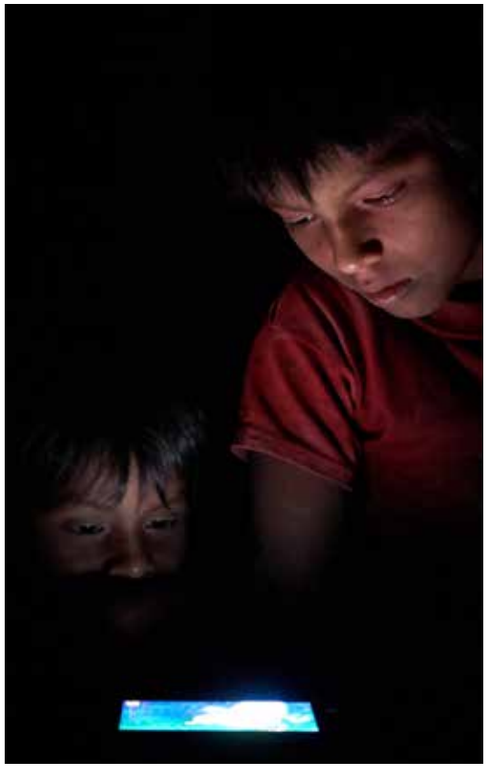
- the effects of global trade and the climate crisis

- unequal trade does not consider the loss of biodiversity in its export prices nor the ecological functions it provides

Industrial production and extraction processes have caused irreversible and cumulative social and environmental damage over time.

An accelerated environmental deterioration has been scientifically proven.

The answer must be to achieve sustainability and a profound respect for the rights of Nature and humans.



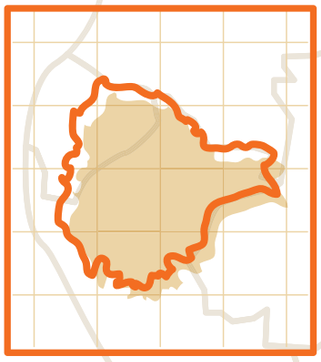
Human capacity building is weak

Educational processes (formal and non-formal) should be strengthened, particularly those related to education and ecological awareness.

Governance shows deterioration

The absence of governance of indigenous peoples in their territories is a concern.

The self-determination of peoples and nationalities is not respected and is constantly being violated.



Deforestation:
forest fragmentation, degradation and loss

The indigenous territories and protected areas have been well conserved by the indigenous communities that inhabit them and by State bodies that oversee their conservation. However, the bioregion is susceptible to national and global demand for commodities from natural resources such as palm oil, timber and, recently, balsa.The loss of forest affects the capacity, food sovereignty and loss of livelihoods of more than 600,000 indigenous people living in this bioregion. Recent studies warn of the need to strengthen forest conservation tools and methods in the bioregion.

According to the Ministry of Environment (MAE) (2016, p. 48), from 2008 to 2014, 64.9% of forest lost in Ecuador became pasture for cattle ranching; 11.8% agricultural mosaics; 3.7% cocoa; 3.1% hard corn; 3% African palm; 2% coffee; and 10.2% other types of cover. The remaining 1% of the deforested area was distributed among infrastructure, mainly in urban areas and dense rural settlements.

The vegetation of the Ecuadorian Amazon, up to 2016, associated with the spatial patterns of recent deforestation areas (2014-2016), shows a severe loss of connectivity between the Amazon and the Andes. As can be seen in Map 6, the high concentration of deforestation in piedmont forests, along the main access roads (i.e. Troncal Amazónica E45, Troncal Amazónica Alterna E45A, E10, E40, E451) has exacerbated fragmentation in the Southern Amazon (Ecuador), particularly in the Kutukú and Cóndor mountain ranges, and has generated the functional dismemberment of these areas in relation to the alluvial plain (Cuesta et al. 2019).

Their restoration is probably one of the main actions to preserve the ecosystemic integrity of the Amazon basin. It is worth mentioning that the areas selected in this scenario have greater importance in the context of climate change. Restoration of the piedmont forests of the eastern cordillera is a priority as a climate change adaptation strategy, as climate change will cause the migration of Amazonian species higher up towards the Andes (Cuesta et al. 2015).

In Peru, deforestation and forest degradation are responsible for almost half of all GHG emissions in the country (MINAM, 2010). Since 1975, Peru has lost 5.3% of its forest mass, as a result of anthropogenic land conversion, mainly, in agricultural areas, or from natural disasters such as forest fires (Zelli et al., 2014). Deforestation was most accelerated in the 1980s, and subsequently declined in the late 1990s. Since then, it has continued at a slow pace (FAO, 2010). In the period between 2005 and 2010, Peruvian forest areas decreased by 150,000 ha per year (- 0.22% per year). Recent figures from the Ministry of the Environment (MINAM) report that annual forest loss has decreased to 106,000 hectares (Llactayo et al., 2013).

Despite this trend, some sectors and economic activities maintain or even increase deforestation in specific regions of the Amazon. For example, the departments of Loreto and San Martin during the period 2009-2011, report an annual rate of forest loss of 35,279 hectares and 30,206 hectares respectively, representing the highest rates of forest loss in the Peruvian Amazon (Llactayo et al., 2013).

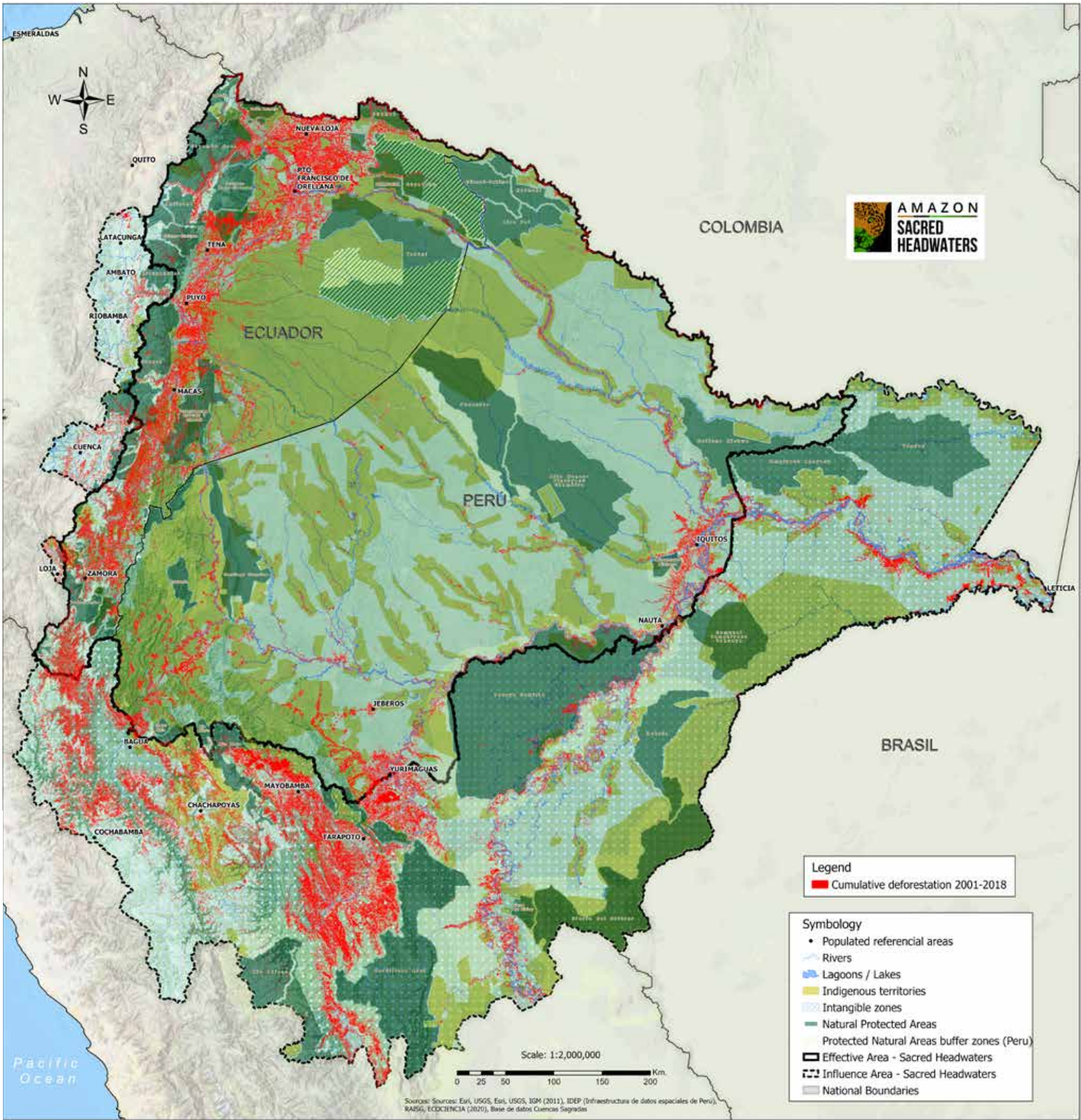
1.08M ac.
of forest have been lost between 1985 and 2018 (RAISG, 2020)

65%
of deforested areas in Ecuador from agricultural and livestock activities (MAE, 2017)

181
confiscations of illegally harvested timber in Ecuador between January and July 2020 (MAE, 2020)

3.176 m³
of timber confiscated from illegal logging (MAE, 2020)

62%
of Ecuador's carbon emissions due to forest degradation(Walker et al., 2020)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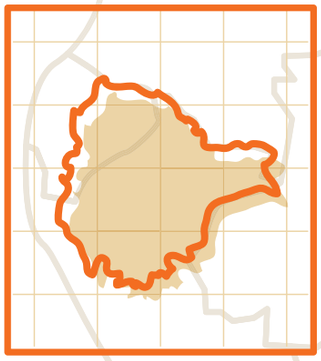
Sources: Sources: Esri, USGS, Esri, USGS, IGM (2011), IDEP (Infraestructura de datos espaciales de Peru), RAISG, ECOCIENCIA (2020), Base de datos Cuencas Sagradas
Legend
Cumulative deforestation 2001-2018
Symbology
Populated referencial areas
Rivers
Lagoons / Lakes
Indigenous territories
Intangible zones
Natural Protected Areas
Protected Natural Areas buffer zones (Peru)
Effective Area - Sacred Headwaters
Influence Area - Sacred Headwaters
National Boundaries



Oil industry:
Decades of environmental, social and cultural impacts

Historically, the oil industry, especially over the last 50 years, has had very significant environmental, social and cultural impact in Ecuador and Peru. The legacy of contamination is present in both countries, as evidenced by the pipeline networks --several of them in ruins--that frequently rupture and continue to generate spills that affect indigenous territories and Amazonian ecosystems along their path. The communities whose human rights have been violated by the oil industry have not been attended to by either governments nor by the companies.

In Ecuador and Peru, oil activity (exploration, seismic, etc.) began several decades ago. It is located on indigenous territories and even in protected areas, as in the case of the Yasuní National Park. This has meant a series of environmental and social impacts, such as the contamination caused by the Chevron-Texaco company in the Ecuadorian Amazon, or the recurrent spills around oil fields 8 and 192 and the Northern Peruvian Amazon Pipeline.

Most of the oil activity is located in the northeastern part of the Sacred Headwaters bioregion. This region has large areas of deforestation. The oil wells and pipelines are located within the Siona, Cuyabeno-Imuya and Kichwa communities. However, there are contiguous oil blocks (Ecuador) and lots (Peru) on both sides of the border region, such as blocks 77 (Ecuador) and lot 64 (Peru), in the Shuar and Achuar indigenous territories of both countries. Likewise, blocks 86 (Ecuador) and 192 (Peru) are contiguous, meaning they are on both sides of the border.

According to Finer and Mamani, in Yasuní National Park in the Ecuadorian Amazon, the direct deforestation of 169 hectares (for the installation of oil infrastructure) and indirect deforestation of 248 hectares, corresponding to colonization along a road that was built for oil extraction purposes, have been documented (Finer and Mamani, 2018). Thus, deforestation totals 417 hectares, which exceeds the area of 300 hectares, the maximum limit approved by Ecuadorian voters in a popular consultation in 2018.

According to data from OSINERGMIN and OEFA for Peru, from 2000 to 2019, 474 spills have been recorded in oil concessions. Since 2014, a significant increase in oil spills affecting the Northern Peruvian Pipeline stands out. This has caused a substantial decrease in the health and well-being of the population. From the total number of spills, 65.4% occurred in the Amazonian oil concessions and along the Northern Peruvian Pipeline, during the period 2000-2019, as a result of pipeline corrosion and operational failures (León and Zúñiga, 2020).

60.6%
of ASHI effective area threatened by oil extraction

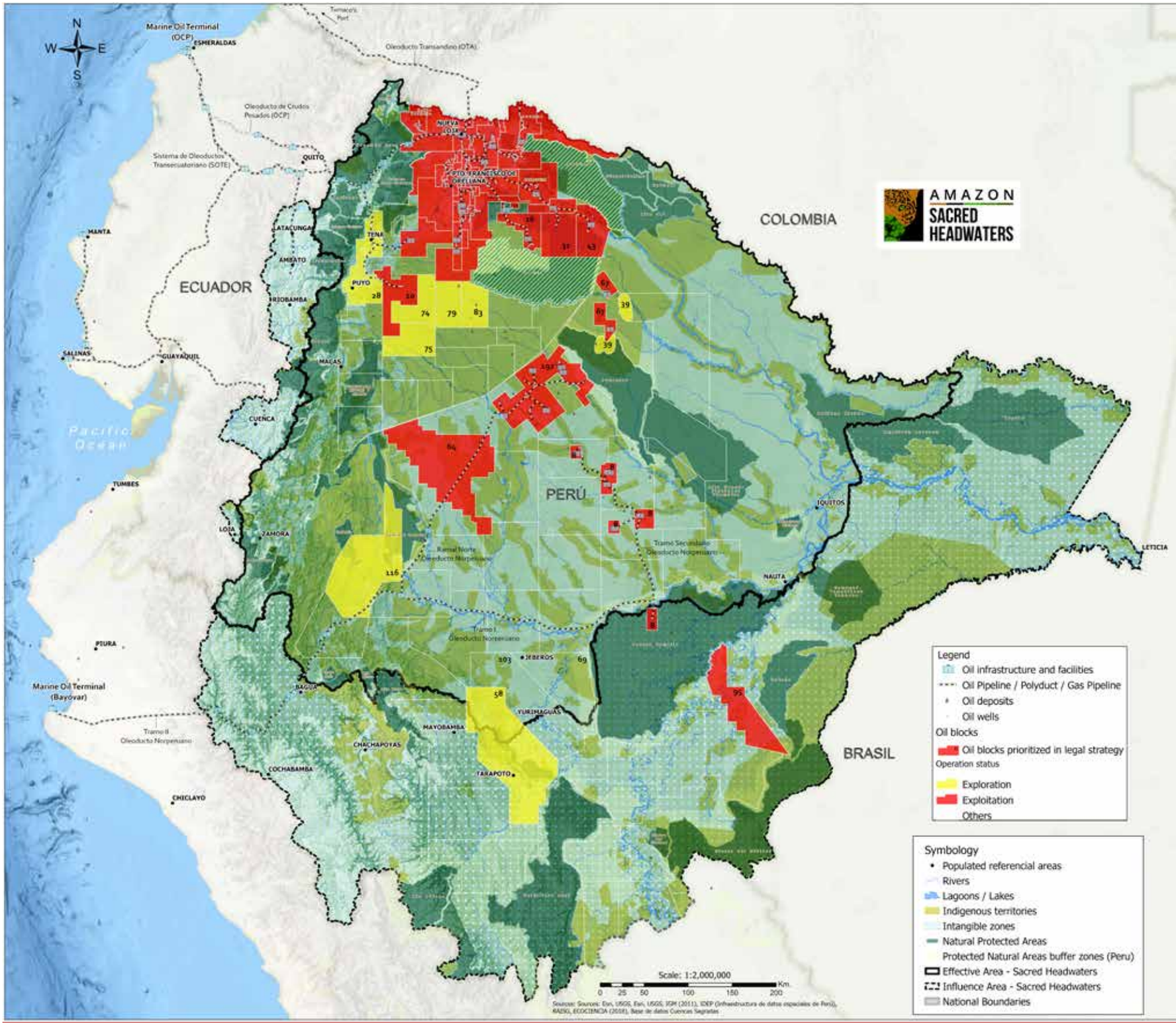
56
Crude oil spills in the Norperuvian Pipeline between 2011-2018

US$-37.63
price of 1 barrel of WTI oil (benchmark for Ecuador), reached its lowest price in history in April 2020, heralding the end of the oil era.

15 800 barrels
of crude oil spilled in April 2020 in the Coca and Napo rivers

12 years
remaining net oil exports forecasted for Ecuador to 2020 (Larrea, 2017)

2.3 Billion t
of CO2 avoided in proven oil reserves in the bioregion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Marine Oil Terminal (OCP)
ESMERALDAS
Oleoducto Transandino (OTA)
Oleoducto de Crudos Pesados (OCP)
Sistema de Oleoductos Transecuatoriano (SOTE)
QUITO
COLOMBIA
AMAZON SACRED HEADWATERS
MANTA
LATACUNGA
TENA
AMBATO
ECUADOR
PUYO
RIOBAMBA
SALINAS
GUAYAQUIL
MACAS
CUENCA
Pacific Ocean
TUMBES
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LETICIA
LOJA
ZAMORA
Ramal Norte Oleoducto Norperuano
Tramo Secundario Oleoducto Norperuano
NAUTA
PIURA
Tramo I Oleoducto Norperuano
JEBEROS
Marine Oil Terminal (Bayovar)
BAGUA
YURIMAGUAS
Tramo II Oleoducto Norperuano
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COCHABAMBA
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CHICLAYO
Legend
Oil infrastructure and facilities
Oil Pipeline / Polyduct / Gas Pipeline
Oil deposits
Oil wells
Oil blocks
Oil blocks prioritized in legal strategy
Operation status
Exploration
Exploitation
Others
Symbology
Populated referencial areas
Rivers
Lagoons / Lakes
Indigenous territories
Intangible zones
Natural Protected Areas
Protected Natural Areas buffer zones (Peru)
Effective Area - Sacred Headwaters
Influence Area - Sacred Headwaters
National Boundaries
Scale: 1:2,000,000
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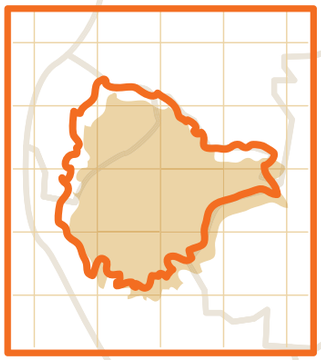


Large-Scale Mining:
the importance of dismantling the Myth of Mega Mining

Studies and experiences in neighboring countries in the region indicate that the large-scale mining leaves ecological depredation and ecosystem contamination that are likely irreversible, and at the same time does not offer any solution to the economic crisis, but rather the opposite, generating environmental liabilities/ecological debt, disappointment, poverty and violence in the territory.

Currently, illegal mining activities -booming in the bioregion- affect water sources and bring violence and corruption to local communities. As can be seen in the map, there are several types of mining that threaten the bioregion. On the one hand, we find the mining concessions created by the States of Ecuador and Peru, for projects of different magnitudes (small, medium and large scale); but we also identify illegal mining activities that are rampant in this region. All these activities, regardless of their legality or size, have a direct impact on local populations, indigenous territories and their ecosystems, especially on water sources, which are essential in a region of high water recharge.

In Ecuador, mining activity represents a threat to the entire bioregion because it could have a transboundary impact. Although this industry has been of little significance historically for the country, it is currently being promoted as a state policy, particularly in this bioregion. The map shows the mining registry for the Ecuadorian territory, which encompasses 983,865.6 hectares, representing a total of 3,028 mining concessions. In other words, 38.8% of concessions in the country are in the Amazon, affecting 8.4% of the Amazonian territory and, within this, covering 13.4% indigenous peoples territories (Colectivo Geografía Crítica de Ecuador, 2019). Around 30 large-scale mining projects are planned in Ecuador by Canadian, Chinese, Australian and Chilean companies.

5 Billion t.
of soil and stone material will be excavated for the extraction of gold, silver, copper and other metals in Ecuador.

5,470
mining concessions in the Bioregion

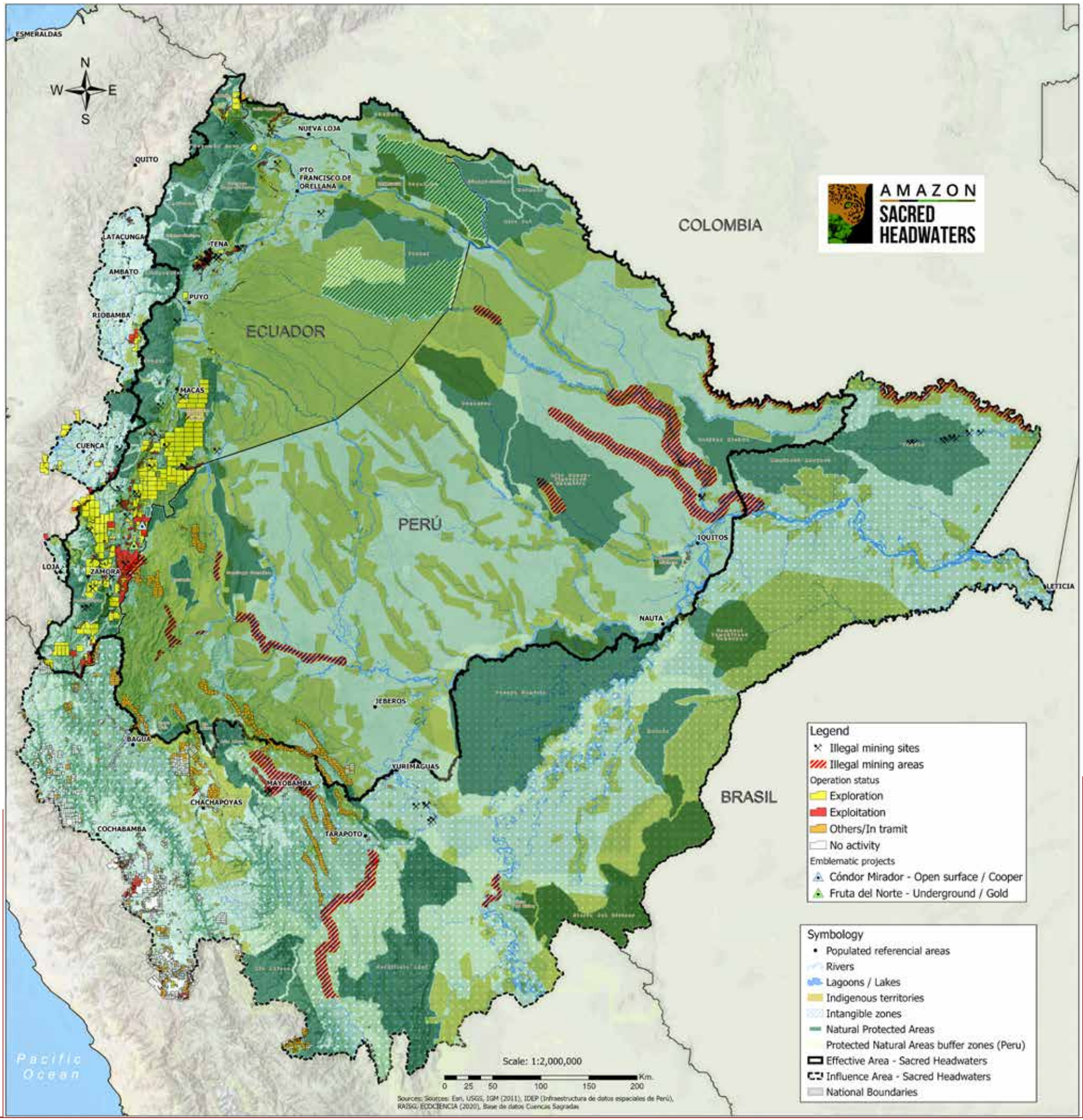
23.90%
of Shuar Territory is designed for mining activities

100 families
being displaced from their territories by the military and police to guarantee the work of a Chinese mining company in Ecuador.

$ 897M per month
State budget for salaries in Ecuador (Acosta et al., 2020)

$ 875M per year
projected revenues for the State in Ecuador from mining activities of Australian, Chinese, Canadian, Australian and Chilean companies.

This estimate does not include imminent environmental remediation costs. (Acosta et al., 2020)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Sources: Sources: Esri, USGS, IGM (2011), IDEP (Infraestructura de datos espaciales de Perú), RAISG, ECOCIENCIA (2020), Base de datos Cuencas Sagradas
Legend
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Illegal mining areas
Operation status
Exploration
Exploitation
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Cóndor Mirador - Open surface / Cooper
Fruta del Norte - Underground / Gold
Symbology
Populated referencial areas
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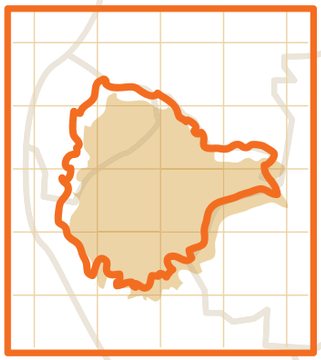


ROAD AND ENERGY INFRASTRUCTURE:
road and hydroelectric projects threaten the natural interconnectedness of ecosystems and communities

The impacts from highways and roads in the region is an issue that should be highlighted. According to a World Bank study, for every kilometer of road built by the oil industry, between 400 and 2,400 hectares of forest are deforested (Ledec, 1990). Consequently, new roads favor timber exploitation. Thus, increasing accessibility to natural resources, from the construction of various types of roads, are decisive in stimulating the arrival of large agricultural producers who intensify the use of land and, as a consequence, exert greater pressure on existing natural resources (Martino, 2007).

In Peru, by 2009, there were already some 8,000 kilometers of roads built in the Amazon region. By 2013, in the Department of Loreto alone, 2,604 km had been projected (Dourojeanni, 2009). Apart from this, more than 14,000 additional km, on occasionally passable roads, were built informally by the initiative of oil, mining, agricultural or logging companies; usually with the support of municipalities and without any environmental or social care (Dourojeanni, 2019). To date, The Initiative for the Integration of the Regional Infrastructure of South America, (IIRSA) includes nine major road projects in the Peruvian Amazon, with a view to completion by 2026, with a proposed total investment of US$ 9.4 billion (Vilela et al., 2020).

In the Ecuadorian Amazon, by 2012, the average road density had tripled compared to the rest of the Amazon basin (37.5 km/km2). These road branches were often developed to facilitate oil exploitation. It is worth comparing them with Brazil, the largest country in the Amazon basin, which at that time reached road density of 13.8 km/km2 (RAISCG,2012).

The resulting impacts of building these roads are habitat fragmentation, degradation of stream networks and water quality, propagation and spread of invasive exotic species, increased wildlife mortality and species loss. As a result there is a direct impact on local climate change (Southworth et al, 2011). In this map, it is possible to observe the different road infrastructures, both highways and waterways, built and proposed, which allow us to visualize the existing and potential risks to this bioregion.

After roads and railways, we come to the impacts of waterways, particularly those that attempt to dredge and widen rivers for ship navigation by dredging and channeling them and by building locks (Dourojeanni, 2013, p. 199). In Peru, the Amazon Waterway project aims to increase navigability for four major rivers of the Peruvian Amazon: Huallaga, Amazon, Marañon and Ucayali, along 2,687 km. This raises a number of concerns, including uncertainties arising from potential harmful impacts on ecosystems and the livelihoods of the local population, and the weak social and environmental standards of the EIA (Environmental Impact Assessment) and its citizen participation process (DAR).

Finally, the new hydroelectric dams that are being promoted, particularly on the Peruvian side, are latent threats to communities and watershed ecosystems. Currently, at least three hydroelectric power plants have been identified, precisely on the waters of the Napo (1) and Marañón (2) rivers. These are the following projects: (i) Mazán hydroelectric power plant and its Mazán - Iquitos Transmission line, at 220 KV, on the Napo River; (ii) the Manseriche hydroelectric power plant and, (iii) the

Roads:

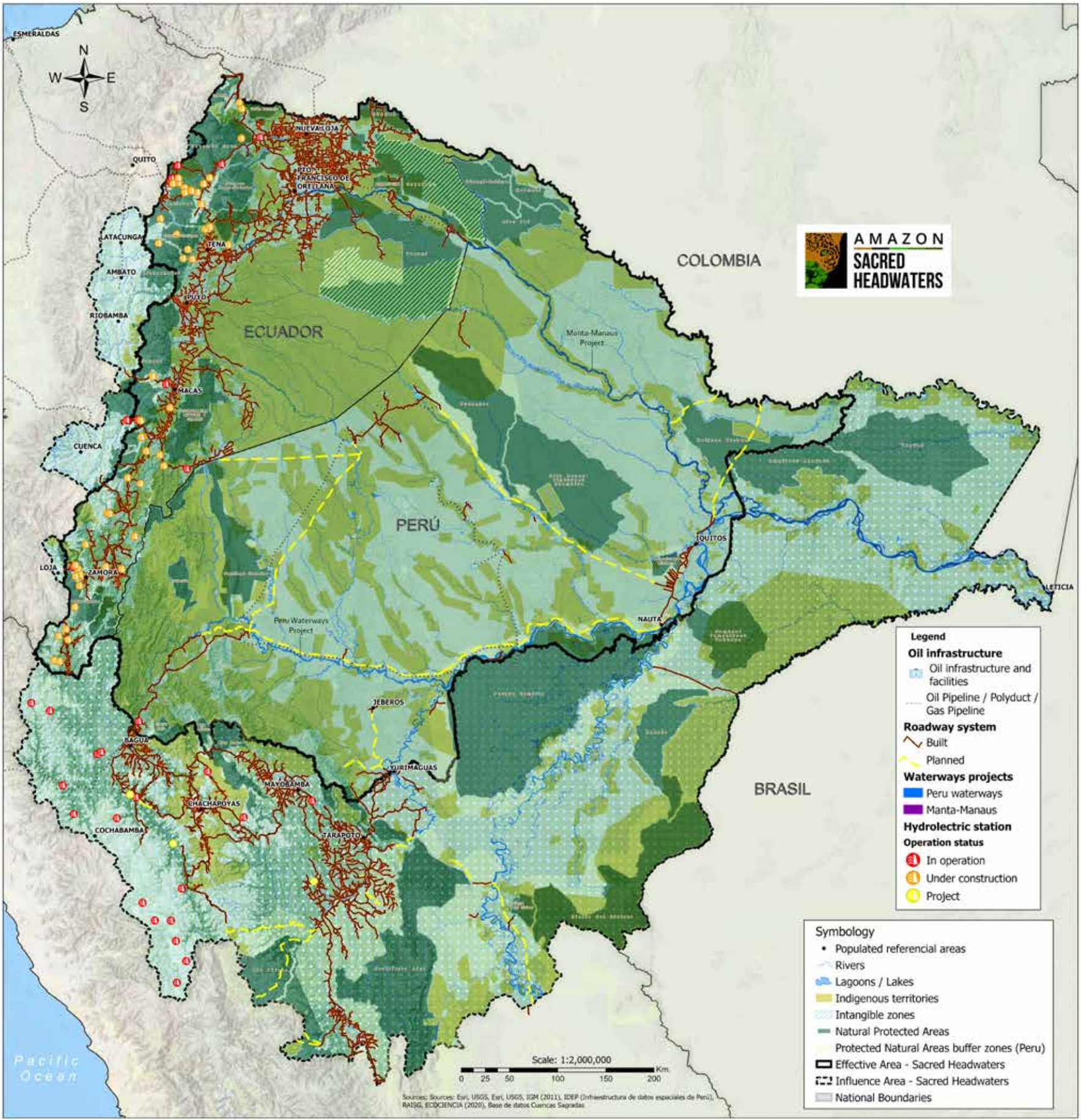
90% of deforestation
occurs in the vicinity of roads (Laurance, 2012)

988 ac. - 6000 ac.
of deforested forest per road built km
(Ledec, 1990)

Waterways and dams:

US$ 9.4 Billion
proposed investment for 9 major road projects in Peruvian Amazon (Vilela et al. 2020)

2,697 km
planned waterways in Peru, mainly on the Amazon, Marañon and Ucayali rivers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Manta-Manaus Project
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COCHABAMBA
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BRASIL
Pacific Ocean
Legend
Oil infrastructure
Oil infrastructure and facilities
Oil Pipeline / Polyduct / Gas Pipeline
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Planned
Waterways projects
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Manta-Manaus
Hydroelectric station
Operation status
In operation
Under construction
Project
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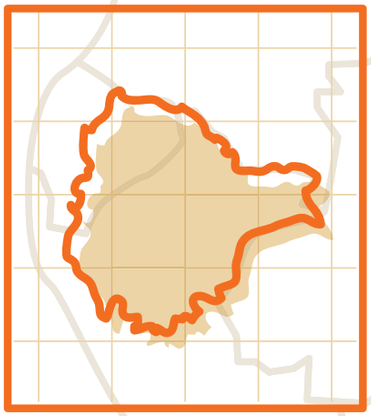


Status of the territorial rights of indigenous peoples in the Sacred Headwaters Bioregion

Both Ecuador and Peru legally recognize individual and collective rights of indigenous or native peoples and nationalities, such as the right to self-determination, the right to maintain their own forms of government and decision-making, and the right to retain collective ownership and ancestral possession of their lands and territories. Both countries have ratified international instruments that recognize indigenous rights namely, ILO Convention 169 (1989) and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007) that stipulate other rights related to their lands and territories. These instruments strengthen the national legal frameworks for protection of indigenous rights.

However, despite the rights and legal statutes stipulated in legislations of both countries, in practice, the real and effective protection of indigenous land rights, which in turn allows for the guarantee of their other rights, is far from being adequate. In particular, there is serious concern over the Peruvian Government's failure to recognize indigenous peoples rights to their global ancestral territories (as opposed to community by community land titles). The State of Peru is failing to meet its obligations under the aforementioned international legal frameworks.

The ancestral territories of indigenous peoples and nationalities in the Sacred Headwaters region are affected and threatened by the invasion of third parties, illegal actors, extractive industries and large infrastructure projects. These activities not only impact the livelihoods of indigenous communities, but also affect their health as well as their rights to live dignified lives. Despite the harmful activities affecting their territories, the best preserved forests in Ecuador and Peru are those where indigenous peoples and other traditional communities live.

According to Peru's indigenous organizations, the legal recognition of the global territories of indigenous nations and peoples is a key priority that must needs to be addressed. **Their agenda includes:**

1. **The legal recognition of their lands and territories, as well as their social, cultural, economic and ecosystem rights and access to justice.**
2. **Zoning and titling of pending community land claims.**
3. **Legal recognition and / or expansion of global indigenous territories and conflict resolution.**
4. **Legal recognition of indigenous territorial reserves for Indigenous Peoples in Isolation and Initial Contact (PIACI)**
5. **Legal recognition of communal reserves within the framework of protected natural areas (ANP).**
6. **Indigenous peoples' claims for integral territories require legislative reforms to comply with international treaties to which Peru is a signatory.**
7. **Conflict resolution in cases where protected natural areas, permanent production forests, etc overlap with indigenous territories;**
8. **The recognition of PIACI territorial corridors and the standardization of the registry of native communities by the Peruvian State.**

A central demand of the Sacred Headwaters Initiative is the recognition of the Napo Tigre Indigenous Reserve of more than 1 million hectares, to ensure the protection of peoples living in voluntary isolation and initial contact (PIACI).

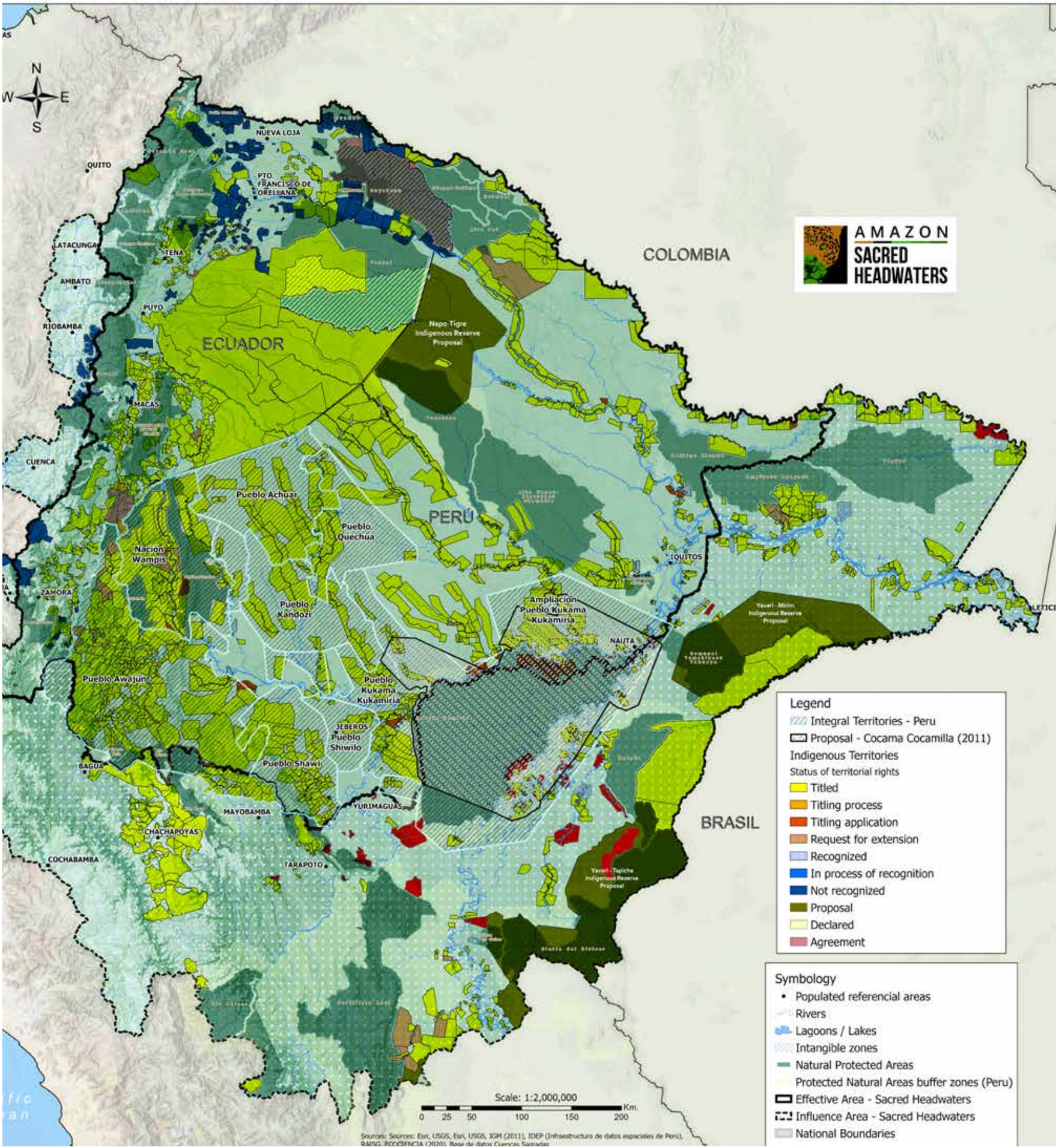
This reserve borders Yasuní National Park and the Intangible Zone of the Tagaeri and Taromenane peoples in isolation.

Indigenous organizations in both countries are proposing the creation of the Yasuní-Napo Tigre Binational Corridor.

In Ecuador, there is still a long way to go to ensure full recognition of territorial rights of peoples and nationalities. There are several indigenous communities in the Amazon that do not have their land titles recognized, and the land titling process has been chaotic which makes formal management of territories and financing schemes difficult. There are more than 6 million hectares of indigenous territories formally recognized, or in the process of being recognized in Ecuador, and around 800,000 hectares are still pending. Indigenous organizations and their allies have developed different strategies to secure their territorial rights. CONFENIAE and its 11 member federations lobby national and local governments to include their life plans in public policies and territorial planning, and have resisted the expansion of oil and mining industries within their territories.

The indigenous organizations in Peru have developed four main legal strategies:

1. **Self-proclaiming themselves as autonomous governments within their territories**
2. **Ensuring, within the current national legal framework, the legalization of their communal lands**
3. **According to data from the indigenous organizations themselves, there are nearly 14 million hectares mapped as integral territories (CORPI, AIDESEP, GTANW, FENAP, Awajún).**
4. **Both Peruvian and Ecuadorian indigenous organizations recognize the importance of having a collective bioregional agenda.**


N
W
E
S
NUEVA LOJA
QUITO
PTO. FRANCISCO DE ORELLANA
LATACUNGA
TENA
AMBATO
PUYO
RIOBAMBA
ECUADOR
Napo Tigre Indigenous Reserve Proposal
MACAS
CUENCA
COLOMBIA
AMAZON SACRED HEADWATERS
Pueblo Achuar
PERÚ
Pueblo Quechua
Nacion Wampis
ZAMORA
Pueblo Kandozi
Ampliación Pueblo Kukama Kukamiria
IQUITOS
Yavari - Mirim Indigenous Reserve Proposal
NAUTA
Pueblo Awajún
Pueblo Kukama Kukamiria
JEBEROS
Pueblo Shiwilo
Pueblo Shawi
BAGUA
MAYOBAMBA
YURIMAGUAS
BRASIL
CHACHAPOYAS
COCHABAMBA
TARAPOTO
Yavari - Tapiche Indigenous Reserve Proposal
Legend
Integral Territories - Peru
Proposal - Cocama Cocamilla (2011)
Indigenous Territories
Status of territorial rights
Titled
Titling process
Titling application
Request for extension
Recognized
In process of recognition
Not recognized
Proposal
Declared
Agreement
Symbology
Populated referencial areas
Rivers
Lagoons / Lakes
Intangible zones
Natural Protected Areas
Protected Natural Areas buffer zones (Peru)
Effective Area - Sacred Headwaters
Influence Area - Sacred Headwaters
National Boundaries
Scale: 1:2,000,000
0 25 50 100 150 200 Km.
Sources: Sources: Esri, USGS, Esri, USGS, IGM (2011), IDEP (Infraestructura de datos espaciales de Perú), RAISG, ECOCIENCIA (2020), Base de datos Cuencas Sagradas

PATHWAYS FOR ECOLOGICAL TRANSITION

Photograph: Pablo Albarenga
Rainforest Defenders - OpenDemocracy
Courtesy of Fundación Kara Solar

All peoples live near rivers.
The rivers that are born in the territory are sacred because there is a relationship between humans and nature.

The whole forest is fed by the rivers and their environment with which humans are spiritually connected.

Uyunkar Domingo Peas
(Achuar Leader and Territorial Coordinator of the Sacred Headwaters Initiative - Ecuador)

We are peoples without borders. We continue to defend our living spaces: our Amazonian territories that our ancestors guarded. It is an initiative of the peoples and nationalities, not only for us but for humanity, for the world.

Marlon Vargas
(President of CONFENIAE - Ecuador)

Photograph: Caroline Bennett

A necessary transition

The diagnosis detailed in the previous chapter clearly illuminates the critical issues facing the Amazon Sacred Headwaters bioregion. All together the confluence of threats including: continuous deforestation, the expansion of extractive industries, social inequality, the impoverishment of the Amazonian populations, unresolved territorial claims and conflicts, the weak cultural and educational environment, and the poor access to healthcare demands a progressive and holistic socio-environmental agenda. In order to protect the region's unparrallled biodiversity, promote social equity and protect the wellbeing and vitality of indignous peoples and cultures including vulnerable populations who live in state of isolation, innovative alternatives are proposed in this Bioregional Plan. Many of these innovative solutions have been tested and evaluated in international policy circles for some time.

On the one hand, the diversity and complexity of this region, the myriad actors, conflicts, interests and interrelationships present in the territory invite us to think and articulate a multitude of transition pathways. This can be achieved by also reviewing the proposals that are being disccussed and debated internationally, such as economic degrowth, debt relief and eco-taxes. Degrowth proposes a relative and absolute reduction in the consumption of materials and energy of rich and industrialized societies and a set of principles of social organization based on low-pollution activities such as care for people, reciprocity, social welfare and culture.

In designing this transition, we must identify different exit pathways out of the current extractive economy. For example, the proposal to keep fossil fuels in the ground in areas rich in biodiversity and culture is revived, contributing to the avoidance of co2 emissions and addressing climate change. Also there is a complementary proposal for the creation of an intergenerational oil fund. During the transition phase, all social and environmental costs must be internalized, in the sense that extractive companies have to generate new accounting practices that allows for environmental externalities or damages to be revealed, so that the "true costs" of all their operations (exploration, seismic, extraction, transportation, refining, etc.) can be determined.

The proposals presented start to reveal the foundations of an economy that is life-affirming. Concepts such as ecological debt, the green new deal and innovation ecosystems, among others are presented here. To this end, the plan advocates for a universal basic income, a different metric to measure social and environmental health and progress, and proposed strategic plans for education and healthcare as the cornerstones for an ecological transformation.

The Bioregional Plan has collected the voices and contributions of national and international specialists among whom the following stand out:

- Tzeporah Berman
Fossil Fuels Non-Proliferation Treaty

- Jason Hickel y Alnoor Ladha
Rethinking universal basic income ecosystem approach

- Charles Eisenstein
Sacred economy for the Amazon

- Erik Brenes, Javier Félix y Belén Páez
Alternative Means of Exchange

- Natalia Greene
Metal mining moratorium

Shifting the Paradigm – From now to 2030

Critical issues in the bioregion

Extractivism:
pollution, destruction of ecosystems and social inequity

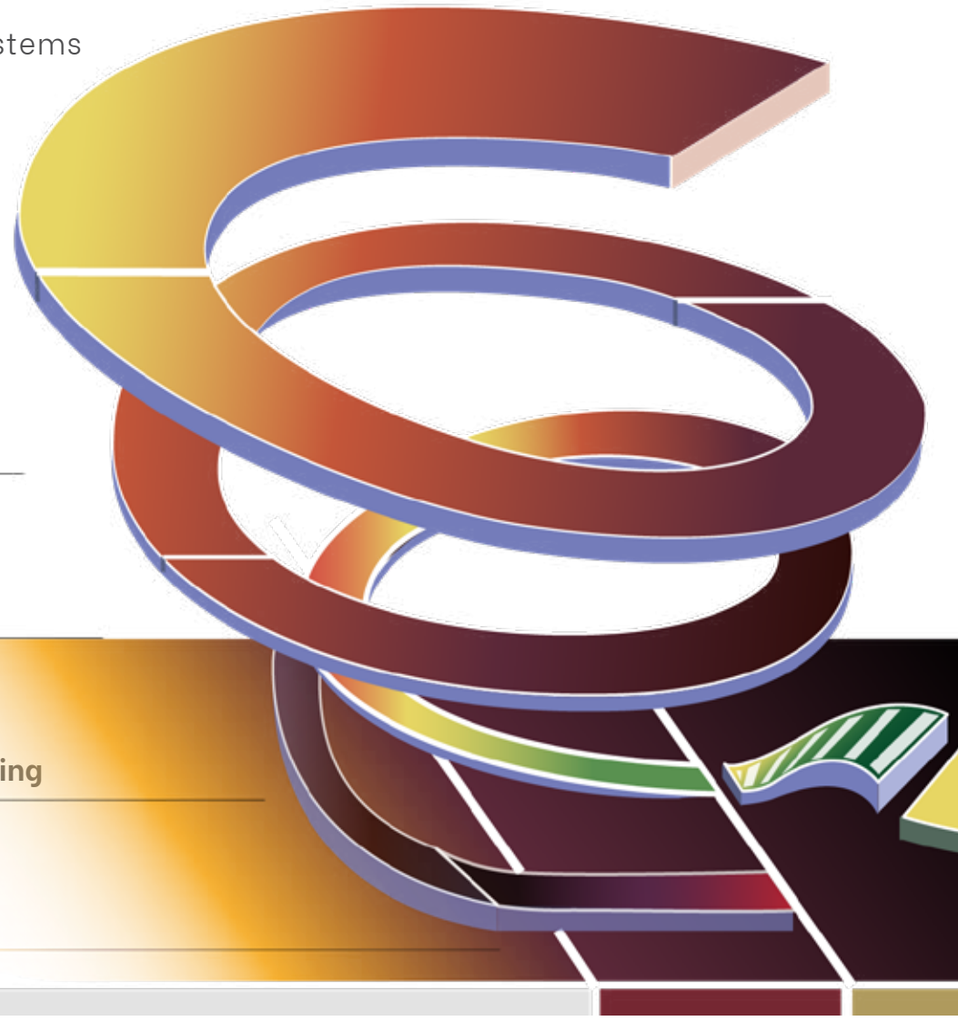
Deforestation:
degradation, fragmentation, loss of forests and biodiversity

Social inequality and impoverishment

Territorial demands, lack of governance and planning

Loss of ancestral knowledge, cultural and educational weakening

Health and sanitation in critical condition



1970–2019

2020

There is hope if we radically change the way humans interact with the living world, and implement a just ecological and social transition towards the Amazonian Buen Vivir with concrete and viable production, regeneration and conservation initiatives.

The Bioregional Plan is the first comprehensive transition effort to address key issues affecting the bioregion. The Plan has been developed in the midst of a global health pandemic that has severely affected the inhabitants of the Amazon region.

Transition pathways must be effective in:

1.
Keeping fossil fuels in the ground in areas of high ecological value.

2.
Create new metrics for social, economic and environmental wellbeing indicators.

3.
Support the transition to a regenerative economy to meet local needs and promote new sources of income that respect nature and incorporate ancestral knowledge.

Gráfico 9
El cambio de paradigma hacia 2030
Elaborado por Alejandro Bermeo, Juan Manuel Crespo

2021-2030 Visión 2030

PROPOSALS IN CONSTANT FORMULATION

Photograph: courtesy of Fundación Pachamama

Photograph: Pablo Albarenga
Rainforest Defenders - OpenDemocracy
courtesy of Fundación Kara Solar

Participatory construction process

The socio-ecological transition requires an integrated vision and concrete actions in line with the principles of the Sacred Watershed Initiative. Defining the necessary actions for this transition process requires a broad participatory process to gather the actions already being implemented in the territories by the indigenous organizations from the territories, as well as to identify those actions already planned by the local actors, and those most necessary or urgent to activate this process.

In this sense, the process started by the Sacred Watershed Initiative, through this bioregional planning tool, has involved an approximately 18 month proess of collaborative construction. In this process, situational diagnostic information of the bioregion has been collected, the results have been discussed and fed back to the key actors from the territorial and regional organizations, the information collected and discussed has been processed and systematized, and finally, disseminated to communicate the final proposal. In this process, approximately 10 workshops were held with the organizations involved in the Initiative, their technical teams and specific territorial groups. Approximately 50 people have also collaborated in one way or another in the identification of priority actions to be implemented as part of this Bioregional Plan.

The proposals presented here respond to the current needs of the Amazon, to turn the current situation around, to regenerate the forests and watersheds, as well as to maintain and prolong the life of the people who inhabit it. For the articulation of these proposals, policy documents have been prepared by specialists in various fields of knowledge, gathering existing experiences and proposing innovations in fields such as: territorial defense, intercultural health, education, alternative energies, regenerative economies, connectivity, spatial and intelligent planning, conservation and restoration of ecosystems, jurisprudence, among others. Once these documents were prepared, the results were reviewed and reformulated by the organizations and their representatives in workshops held with the Initiative's technical team.

The vision and objectives of the Bioregional Plan are ambitious, insofar as they require compliance with human ights, and the rights of nature and with environmental laws contemplated in international agreements and in the constitutions of Ecuador and Peru. The criteria used to elaborate the goals of this planare the universalization of rights as well as the creation of precise disruptions that help change the current trajectory for the Amazon. The plan seeks to build human capacities, productive opportunities and ensure basic services that consolidate the Amazonian Good Living "Buen Vivir" for local communities. The plan also aims to protect and strengthen territorial defense and governance to conserve threatened ecosystems and restore degraded ecosystems.

Given the strategic importance of the Amazon, the proposals presented here are international, bioregional and local in nature. The implementation and fulfillment of the goals until 2030 require the joint effort of national and local governments, indigenous communities and organizations, NGOs, private companies, universities, among others.

We must be clear that the proposals included in this Bioregional Plan are not entirely new, nor do they seek to be. The collaborative effort builds on historical processes that have been carried out by various actors in the territories for the life of the Sacred Headwaters, articulating and reinforcing them from a re-empowered vision fora social and ecological transition that is holistic to transform and shift the paradigm to one based on "buen vivir"for all living beings who inhabit the Amazon.

Photograph: Caroline Bennett

Methodology for Prioritizing Territorial Action *

This section defines priorities for conservation, regeneration, intervention, budgeting and territorial evaluation based on multiple environmental, social and economic criteria.

The Amazon region is a unique mosaic of life. Its biological integrity (ensuring it is not fragmented) and maintenance must be achieved. From this conceptual starting point, this work identifies territorial priorities.

To this end, we begin with the studies from Cuesta, Peralvo and Baquero (2019) and Cuesta, Peralvo and Suárez (2020), in which the main conservation and regeneration areas are defined, using environmental data. The conservation of areas rich in diversity and species, and the regeneration of affected areas is fundamental. Cuesta and colleagues constructed a set of indicators using the pressure-state-response (PSR) conceptual framework, proposed by the Organization for Economic Cooperation and Development (OECD) in 1993 and adopted by the Convention on Biological Diversity and the Ministry of Environment of Ecuador.

The results of the PER are used as input for the Multi Criteria Analysis (MCA). The MCA incorporates economic, social and biophysical information to improve decision making and combines alternatives and criteria. By combining environmental, economic and social criteria, with the territories, a ranking of territories that are now necessary to intervene is obtained, without neglecting the rest of the counties or departments. This is complemented with the territorial political demands of the peoples and nationalities. The priorities determined by the MCA constitute a guide for decision making regarding the allocation of economic and material resources, directed to the communities of the Sacred Headwaters (who to attend to most) or regarding the temporary allocation of governmental and non-governmental resources (who to attend to first).

The MCA integrates the different dimensions of reality into a single framework of analysis to achieve a comprehensive analysis. In this section, an MCA is used to determine priority areas for intervention in the ASHI Bioregion. It is a pioneering exercise, useful for defining priorities, and can be articulated with the needs of indigenous peoples and nationalities in their territories.

The Multi Criteria Analysis (MCA) Seeks to:

a) To safeguard priority areas of high conservation value and reduce threats in low risk areas, due to a high degree of impact;

b) To recover areas that are in a relatively low state of conservation and that are experiencing intermediate levels of pressure;

c) Improve the living conditions of the indigenous and local populations in order to reduce the pressure on Amazonian forests.

*. The authors of this section are Rafael Burbano y Fander Falconí.

The MCA is a tool that facilitates the analysis of complex problems characterized by the confluence of diverse dynamics and the participation of diverse social actors with different, and sometimes even antagonistic, worldviews. The MCA goes beyond the traditional approach of evaluating projects based on financial aspects. It incorporates multiple criteria (social, environmental, economic, cultural) to build a better representation of the real world.

Munda (2008) is one of the most recognized authors in the development of multi-criteria social evaluation. In the MCA, physical, monetary and qualitative measurement scales converge. In the case of Ecuador, we can review the work of Vallejo, Burbano, Falconí and Larrea (2015), which concludes that conservation and non-oil extraction is much more socially profitable than extractive proposals. We can also review the study of Burbano, Larrea and Latorre (2017) to explore development alternatives in the Amazon.

In this multi-criteria study, the criteria are expressed in their own units of measurement. Much of the data is certain, while some of the data may have a degree of imprecision. The MCA can handle quantitative as well as qualitative information. The MCA that wascarried out includes conservation priorities identified in the works of Cuesta, Peralvo and Baquero (2019), as well as in the work of Cuesta, Peralvo and Suárez (2020). To this analysis, additional criteria and dimensions are added that provide a comprehensive and integral view of priorities at the territorial level.

In Ecuador, territorial prioritization is carried out at the level of the 41 Amazonian counties belonging to the 6 Amazonian provinces. In the case of Peru, territorial prioritization is carried out at the level of the 25 provinces belonging to the 3 Amazonian departments.

The indicators were developed based on information from the VII Population Census and VI Housing Census - 2010 of Ecuador, and the XII Population Census, VII Housing Census and III Indigenous Communities Census - 2017 of Peru.

The dimensions and criteria included in the multicriteria analysis, are defined in the following table.

The results found regarding the prioritization of actions in the territory of the Bioregional Plan have been defined according to the deficiencies in the territories. The territories with the largest conservation or restoration areas, and with the highest level of vulnerability for indigenous populations are considered priority areas. The criteria in the multi-criteria analysis account for these priority areas for conservation and restoration and adds to these criteria the gaps in health, education, opportunities, and services. The criteria also incorporate culture and the condition of women in society.

In Ecuador, for example, a county with a lower percentage of the population having access to adequate water sources for human consumption, has a higher priority in contrast to a county with a higher percentage of the population having access to adequate sources of water. In the MCAs*, territories are ranked according to 17 criteria in Ecuador and 15 in Peru.

* he indicators or variables still show a trend in the Amazonian territories. After the new census in Ecuador, postponed due to the Covid-19 pandemic, it will be necessary to update the multi-criteria study. The variable 'Internet provision' is outdated, so it is excluded from the analysis in the Ecuadorian case. Solid waste management is not consulted in the census for Peru, so it is excluded from the analysis.

MCA's Dimension and Criteria

Dimension	Criteria
Conservation / Restoration	- Total prioritize areas - % of prioritize areas
Health	- Adequate water quality for human consumption - Adequate sanitary service - Proper solid waste management
Education	- Elementary education - High school education
Opportunities	- Study locally - Works locally
Services	- Electric energy supply - Internet access
Culture	- Preservation of ancestral language - Self-identified indigenous population
Women	- Population

Photograph: Miguel Vázquez

Results obtained for Ecuador

Priority areas of high conservation value

The highest priority counties are: Pastaza, Arajuno, Taisha, Loreto and Aguarico located in the provinces of Pastaza (Pastaza and Arajuno), Morona Santiago (Taisha) and Orellana (Loreto and Aguarico). In addition, these counties have the largest conservation areas, particularly in the case of the first two listed. On the other hand, the lowest priority counties are Palanda, Sucumbíos and Chinchipe located in the provinces of Zamora Chinchipe (Palanda and Chinchipe) and Sucumbíos (Sucumbíos). These three counties (along with the Quijos County) do not have conservation areas.

Areas of high conservation and threat areas

In this case, the highest priority counties are Taisha, Arajuno, Logroño, Morona and Loreto. The cantons of Taisha, Logroño and Morona belong to the province of Morona Santiago, while Arajuno belongs to the province of Pastaza and Loreto to Orellana. The Taisha countie is the one with the highest conservation value and threat area. At the other extreme are the counties of Palanda (Zamora Chinchipe), Pablo VI (Morona Santiago) and Chinchipe (Zamora Chinchipe).

Priority areas for restoration

The priority counties in the restoration areas are Taisha, Arajuno, Logroño, Aguarico and Morona. The first three repeat the previous order of priority and the last two are present in the first locations, according to the first and second priority, respectively. Among the lower priority counties are Paquisha, La Joya de los Sachas and Chinchipe. The Chinchipe counties is in the last position in all three rankings.

Results obtained for Peru

Areas of high conservation value

The scenario that recognizes areas of high conservation value selected a total of 18,305,784 ha of areas of high conservation value, equivalent to 45% of the remaining vegetation of the study area. The most important areas are located mainly in the Department of Loreto, which represent about 84% (15,369,684 ha) of the total areas prioritized in this scenario. Within Iquitos, the forests of the provinces of Maynas, Ucayali and Mariscal Ramón Castilla are particularly relevant, which together contain a little more than half (52.3%) of the prioritized areas in the department of Loreto.

The Protected Areas and Indigenous Territories of greatest relevance due to the number of priority areas they contain within them and their geographic location are 13, including: (1) Pacaya-Samiria (962,534 ha), (2) Alto Nanay-Pintuyacu Chambira (610,702 ha), (3) Cordillera Azul (789,339 ha), (4) Napo-Tigre (718,229 ha).

Photograph: courtesy of Fundación Pachamama

Areas of high restoration value

The selected areas with high restoration value are concentrated in the basins of the Napo, Lower Ucayali and Putumayo rivers and hydrographic Unit 4977, which together contain 75% (5.7 ha) of the areas prioritized in this scenario.

Twenty-one percent (7.2 ha) of the areas prioritized for restoration are concentrated in the department of Loreto, particularly in the provinces of Maynas (2.9 ha), Mariscal Ramon Castilla (1.33 ha), and Putumayo (1.52 ha) (Table 6, Figure 5, Annex 1). These 3 provinces comprise 76% of the areas selected in this scenario and are a priority for maintaining connectivity between the Amazonian ecosystems of Peru and Ecuador as well as vertically towards the Andean foothills in the departments of Amazonas and San Martin.

Photograph: Caroline Bennett

Strategic pillars

AMAZON
SACRED
HEADWATERS

Technology, transportation and connectivity
Communication, both physical and digital, is essential to develop productive processes and improve living conditions. Technological sovereignty in means of transport and connectivity is essential to build autonomy and territorial self-determination.

Territorial governance and indigenous self-determination
Necessary actions to ensure indigenous territorial defense, recognition of collective and territorial rights, and the construction of life plans to legitimize indigenous governance

Renewable energy:
Transition towards sustainable, decentralized, participatory, community-based, and decarbonized renewable energy systems

Transition pathways:
Actions needed for a just transition from a socio-economic model based on the extraction of natural resources, to a regenerative model that puts the reproduction of Life at the center of its concerns

Education and ecological consciousness
Including intercultural ecological awareness of local realities within curricula and non-formal programmes in order to reduce the educational gap.

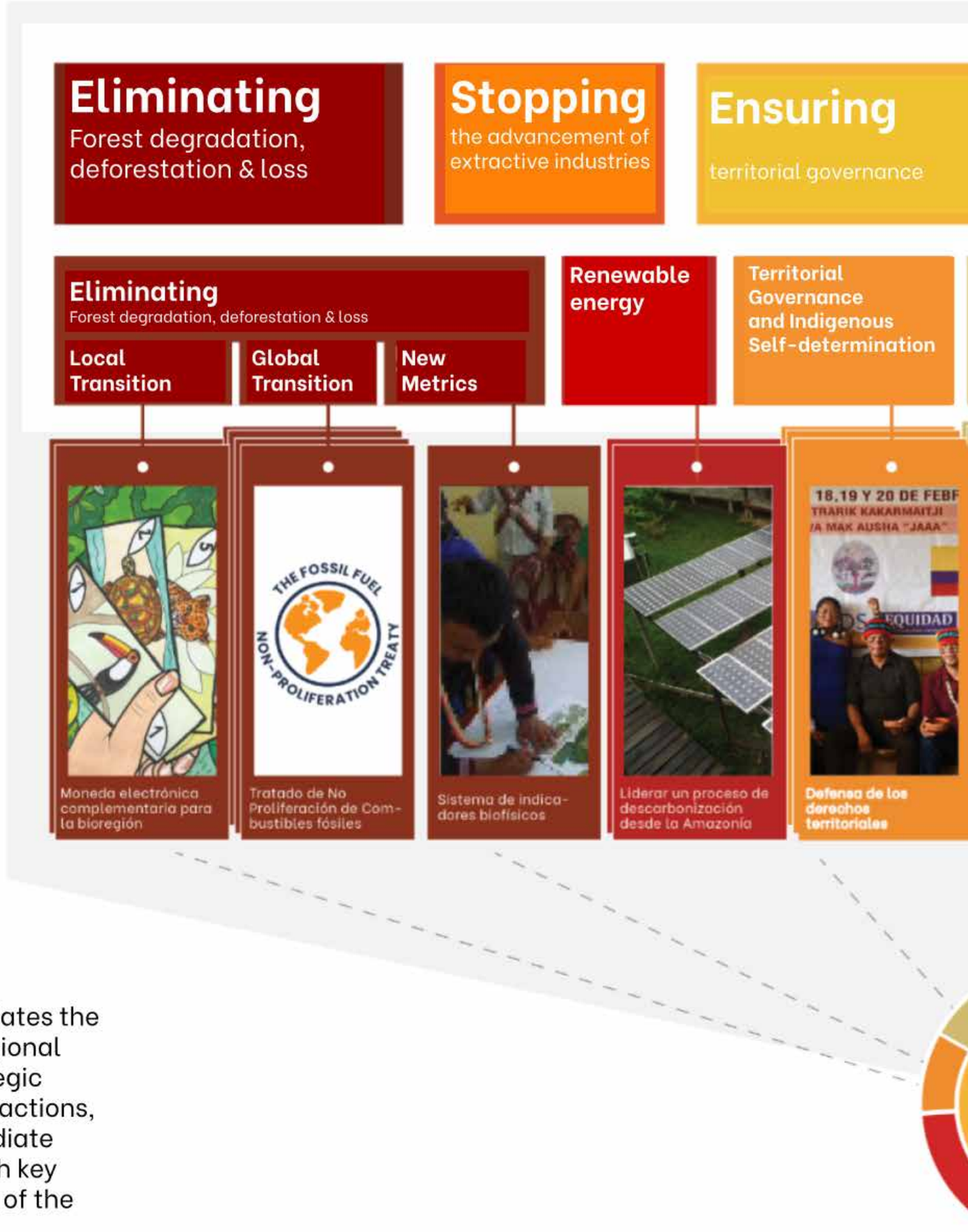
Intercultural healthcare:
Resilient actions to respond to communities' vulnerability after the COVID-19 pandemic. Develop intercultural health programs to respond to the lack of State action during health emergencies in the ASH bioregion.

Smart planning, right to the city and social housing:
Cities must articulate themselves in ambitious challenges such as decarbonization, efficient transportation, adequate waste management, among others.
Amazonian cities require specific housing proposals that ensure prioritization of social and environmental needs over the speculative real estate logic. It is necessary to plan dignified and sustainable physical spaces in ecological terms.

Forest Economy and regenerative entrepreneurship:
The creation of productive economic opportunities is fundamental so that the Amazon peoples can effectively commit to the reproduction of life and stop depending on the extraction of natural and primary resources in order to sustain their livelihoods

Conservation and restoration of forests and river basins:
The real and permanent conservation of areas under pressure is crucial, both for the people who live in the bioregion and for maintaining the climate balance on the planet.
Mechanisms of commitment and co-management with current and future human generations must be ensured.

Articulation of actions



This section articulates the vision of the Bioregional Plan through strategic areas and specific actions, as well as intermediate and final goals with key indicators for each of the general objectives.

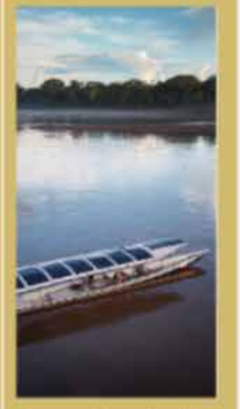
Consolidating

The Amazonian Buen Vivir (well-being)

Promoting

forest & watershed restoration and conservancy

Transportation & Connectiviy



Transporte sostenible como alternativa al avance de carreteras

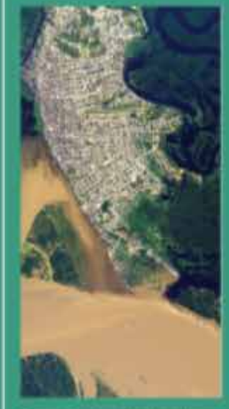
Education & Ecological Counscousness

Fortalecer capacidades pedagógicas en escuelas interculturales bilingues, y complementar la educación formal con la no formal

Intercultural Healthcare

Afianzar relaciones comunitarias para el trabajo en salud

Smart Urban Planning



Promover eficiencia energéntica en ciudades amazónicas

Forest Economy & Regenerative

Capacitación para emprendimientos regenerativos

Conservation & Restoration of Forest and River Basin

Acciones de manitoreo y co-manejo

Biorregional planning Matrix: Project highlights

AMAZON SACRED HEADWATERS


C. Vallejo

From the Amazon to the world:

global and local actions for ecological transition *

The socio-ecological transition includes two interconnected processes:

1) The degrowth of rich and affluent societies.
2) The internal energy transition.

It must prioritize renewable energy over non-renewable energy, and this must happen in a synchronized way. This means decarbonizing and generating redistributive processes in the economies of rich industrialized countries. This also means uplifting the impoverished economies through instituting mechanisms such as universal basic income, and linking the payment of the ecological debt with financial debt. The transition must also include the accompaniment of international eco-taxes on the depletion of so-called 'natural capital' or fossil energy, as well as a commitment to advancing the fossil fuel non-proliferation treaty.

This requires a renewed initiative to keep fuels underground, the creation of an intergenerational oil fund with the available resource in already consolidated fields, suspension of large-scale mining, ensured transparency of the social and environmental liabilities of the extractive industry (true costs), significant energy use changes in Amazonian cities, and the promotion of activities with high social profitability, such as community tourism, productive enterprises and new types of jobs.

The second pillar is the new metric. We have long advocated for a new way to measure a country's well-being, of evaluating the elements that bring people happiness. As it stands now, budget allocation is done using conventional monetary indicators such as GDP, despite the fact that its limitations have been thoroughly demonstrated.

This pillar articulates actions needed to move from a socio-economic model based on the extraction of natural resources, towards a regenerative model that puts the reproduction of life at the center of its concerns. It is aimed at actions on a national scale in Ecuador and Peru, but also on a global scale due to the relationship of the Amazon with the rest of the world. It seeks to create indicators based on a new metric for well-being; the creation of an intergenerational oil fund to ensure that the last resources from extraction are invested in a true post-extractivist transition; the signing of a global fossil fuel non-proliferation treaty to help guarantee the preservation of regions, demand the suspension of all types of extractive activities in regions of high biodiversity and indigenous territories, and understands the "sacred" value of these regions; the creation of an international fund for water and forest restoration with high ecosystemic value to mitigate climate change, among many other proposals that are necessary to achieve a just social and ecological transition.

*. This section has been written by Fander Falconí, with the respective contributions of the Technical team of the Sacred Headwaters Initiative.

TRANSITION PATHWAYS

Action Area	Strategy	Action
Metrics for Well-Being (Buen Vivir)	1. Develop a system of biophysical indicators to measure and evaluate Buen Vivir.	Design a conceptual proposal and a set of indicators to measure deforestation, and forest and water restoration.
		Create a system of biophysical indicators to monitor progress or set back on Buen Vivir, and to monitor regression.
Financial mechanisms and alternative means of exchange	2. Promote the creation of an electronic currency in the bioregion.	Strengthen the scheme developed in Alto Pastaza.
		Replicate the Alto Pastaza experience in other areas.
Intergenerational oil fund	3. Intergenerational Oil Fund.	Generate a proposal for the creation of an intergenerational oil fund.

Targets		
Unit of measurment	**Intermediate**	**Final**
Biophysical indicators Territorial governance indicators.	1/6 months	10 indicators implemented at the territorial level / 3 years
Follow-up and monitoring indicator system.	1 system created / 1 year	System implemented / 3 years
Population of the area that uses an alternative exchange system.	-	40% / 5 years
Number of communities that use alternative currencies. Proposal implemented / 5 years Proposal implemented / 5 years	10/2 years	200/5 years
Designed proposal.	Construction of a proposal / 2 years	Proposal implemented / 5 years

TRANSITION PATHWAYS		
Action Area	**Strategy**	**Action**
Relationship of the Amazon with the World	4. Leave natural resources in the ground in areas of high ecological and cultural value, international support and commitments.	Preparation of an international proposal for the reduction of coal as a global energy source.
		(Re) activate a campaign to keep oil in the ground in perpetuity.
		Construction of a proposal to keep oil in the ground in the Northern Amazon of Peru.
		Promote, with the active participation of social and indigenous organizations, the “International Treaty to prevent the proliferation of fossil fuels.“
		Generate a proposal to suspend large-scale mining including viable mechanisms from legal and technical points of view, in areas of high ecological and cultural value.
		Ensure there is strong control of environmental licenses issued by regulatory entities for extractive activities.

Targets		
Unit of measurment	**Intermediate**	**Final**
Proposal presented with sufficient support.	1 proposal / 2 years	International support / 5 years
Campaigns implemented to keep oil under the ground	1 campaign implemented / 2 years	920 million barrels underground (Yasuní) / 10 years
Campaigns implemented.	1 campaign implemented / 2 years	160 million barrels underground / 10 years
Presentation of the treaty at the international level. Amount of fossil fuels avoided.	2/2 years	19/10 years
Number of large-scale mining projects avoided	Construction of a proposal / 2 years	Proposal implemented / 5 years
Number of processes with follow-up.	2/2 years	20/10 years

TRANSITION PATHWAYS

Action Area	Strategy	Action
Relationship of the Amazon with the World	4. Leave natural resources in the ground in areas of high ecological and cultural value, international support and commitments.	Require States to implement effective regulations and controls to counteract illegal mining activities.
		Position the need to cease extraction of oil in areas rich in biodiversity and culture, in climate change discussions and in the international media.
	5. Influence global meetings related to the economic system and its relationship with the Amazon.	Active participation in degrowth networks and groups to promote the effective decarbonization of rich and industrialized countries and the generation of redistributive mechanisms.
		Creation of an international commission to assess the different components of ecological debt and to identify debtors and creditors.
		Promote a new international property system and the construction of a proposal to liberalize patents related to public health, energy efficiency technologies, renewable energies.
		Creation of an international fund to finance and replicate energy efficiency projects in homes, particularly in rural areas. The fund will be financed through an eco-tax on energy consumption.

Targets		
Unit of measurment	**Intermediate**	**Final**
Number of illegal mining control operations.	20/1 year	100/3 years
Number of international media publications reporting on the non-extraction of oil in areas rich in biodiversity and culture.	10/6 months	50/4 years
Formation of support networks for decarbonization. countries and the generation of redistributive mechanisms.	2 networks / 2 years	5 networks / 5 years
Number of international processes created / participated.	Commission created / 4 years	Assessment carried out / 6 years
Elaborate proposals.	1 proposal / 2 years	100 patents released / 5 years
Constitution of the fund.	1 proposal / 3 years	Fund constitution / 5 years

TRANSITION PATHWAYS

Action Area	Strategy	Action
Relationship of the Amazon with the World	5. Influence global meetings related to the economic system and its relationship with the Amazon.	Constitution of an international fund for water and forest restoration. The fund will be financed through an eco-tax on energy consumption.
		Influence WTO meetings to ensure the fair price of primary products and food, and trade without social and environmental damage in countries of product origin.
		Active participation in international fair-trade networks, allowing for producers to have direct access to consumers.
	6. Within the international arena, position the Sacred Headwaters as part of humanity's cultural and natural heritage.	Secure agreements with States, companies, and financial institutions to declare the permanent protection of the Sacred Headwaters.
		Promote the moratorium on the foreign debt of Ecuador and Peru, and reallocation of interest on debt paid to the preservation of the Amazon and to human and social development.
		Advocate for the creation of an international environmental fund for the preservation of tropical forests by creating a tax of $ 1 for each ton of CO_2 emitted by middle and high-income countries.

Targets		
Unit of measurment	**Intermediate**	**Final**
Number of hectares restored.	1 proposal / 3 years	Fund constitution / 5 years
WTO agreements for fair trade.	Construction of a proposal / 2 years	WTO agreement for fair trade
% of commerce in networks, with respect to total exports.	1% in 2 years	10% in 10 years
Committed agreements.	Adoption of agreements between major actors (local governments, companies, financial institutions and society) in 5 years	In 10 years internationally recognized agreements are signed between governments in the climate debate.
Years of debt forbearance and USD recognized as debt service.	5 years / 2 years	10 years / 10 years
Campaigns implemented. Millions of USD raised.	1 campaign implemented / 2 years	$ 30 billion / 10 years

TRANSITION PATHWAYS		
Action Area	**Strategy**	**Action**
Universal Basic Income	7. Establish a Social Function Dividend income and a Dignified Labor Guarantee Scheme for each of the 650,000 indigenous inhabitants living in the Sacred Headwaters bioregion, in recognition and compensation for the essential services they provide to humanity by maintaining an essential biome on Earth.	Create a proposal to generate local and international support for a social function income and a dignified job guarantee scheme.
		Implement a social function income system and a dignified job guarantee scheme by indigenous populations to prevent deforestation
Amazon Green Deal (Pact)	8. Promote a pact for the Amazon region that becomes a model towards a post-oil and conservation era for the indigenous communities and nationalities.	Position the Amazon Green Pact in global and regional forums to promote a grand alliance for the defense of the Amazon as part of our global heritage.
Degrowth of rich and industrialized economies	9. Support an international agreement for the economic degrowth of rich and industrialized countries.	Position degrowth in global and regional forums.

Targets		
Unit of measurment	**Intermediate**	**Final**
Designed proposal. Number of institutions that support.	Construction of a proposal / 2 years	Proposal implemented / 5 years
Percentage of forests con-served.	20% / 2 years	100% / 10 years
Pact created.	1 agreement in 2 years	Agreement endorsed at 8 years
Agreement created.	1 agreement in 2 years	Agreement endorsed at 8 years

Indigenous governance and self-determination *

The indigenous Amazonian peoples of Ecuador and Peru share the western portion of the Amazon basin, and this biogeographic space has a long history. The richness of this megadiverse natural environment constitutes the territorial seat of a set of human communities that represent an extraordinary cultural diversity. More than 50% of the area of the Sacred Headwaters is indigenous territory or under dispute within the judicial system as indigenous territorial claims, and represents the home of more than 30 peoples and nationalities some of them living in voluntary isolation. Both countries share the legacy of a colonial past, an inequitable socio-economic structure, and dependence on extractive activities with high environmental and social impacts. The Amazonian indigenous organizations of Ecuador and Peru have several points in common.

Their political and organizational processes respond to a logic of defense of territory and cultural identity, which began in the 1960s in Ecuador and in the 1970s in Peru. Over time, the organizations had many experiences and built strong track records. They have forged their character in critical moments of social conflict, in which mobilization has proved to be a powerful mechanism for positioning the agenda of demands in the political discussion of their countries. In some cases, their demands, struggles and processes have gone beyond local agendas and have become international issues.

The Amazonian indigenous peoples of Ecuador and Peru have five key demands as part of their joint platform:

1. **The secured tenure and recognition of their lands and territories.**
2. **Self-determination, expressed in territorial self-governance and the right to decide what happens to their territories in the present and future.**
3. **The defense of the territory against external threats such as extractive industries, infrastructure megaprojects, deforestation and monocultures.**
4. **Respect for cultural identity and cosmovision and worldview**
5. **The right to fully exercise their collective and individual human rights, without discrimination or neglect by the state, and without the provision of quality public services being conditional on the delivery of their territory to external interests.**

The chart below outlines the necessary actions to guarantee indigenous territorial defense, the recognition of collective and territorial rights, and the construction of life plans to ensure legitimate indigenous governance. The main actions are: the participatory preparation and implementation of life plans for nationalities and peoples, that include representative indicators for indigenous people's worldviews and living conditions; the strengthening of the processes for defending their territories through community monitoring and vigilance; capacity building and strengthening the management and institutional capacities of indigenous peoples and nationalities; the protection of the territories inhabited by peoples living in isolation or initial contact (PIACI); guarantee that collective and territorial rights can be fully exercised; litigation and legal actions to address socio-environmental and territorial conflicts in the bioregion. The strategies, actions, goals and evaluation indicators are presented below.

*. This sub-section has been edited by Inés Luna with contributions from: Mario Melo, Belén Páez, Laura Posada, Esteban Falconí, Katherina Luz Paukar, Anabel Pérez, Nanki Wampankit, CONFENIAE, AIDESEP.

INDIGENOUS GOVERNANCE AND SELF-DETERMINATION

Action Area	Strategy	Action
Life plans in indigenous territories	1. Participatory preparation and implementation of life plans for nationalities and peoples that include indicators adapted to their worldviews and living conditions.	Prepare an autonomous) population census led by an indigenous technical team.
		Diagnosis and updating of life plans.
		Implementation of life plans.
	2. Promote the creation and implementation of life plans based on the vision and effective participation of indigenous women from the territories	Strengthen the presence of women in Indigenous governance entities and organizations.
		Create schools for women: a space for leadership workshops, training in business management, marketing spaces and and receive psychological and legal support for cases of gender violence.
	3. Strengthen the processes for defending territory through community monitoring and vigilance.	Support existing processes of monitoring and surveillance of indigenous territories.
		Equip and support capacity building for indigenous monitoring of security protocols and information management (with an emphasis on youth and women).
		Consolidate autonomous technology and repositories of information, and centralize information in indigenous organizations and their allies (Observatory for the Vigilance and Monitoring of extractive activities).
		Construction and maintenance of a binational network of territorial defenders of the Amazon for territorial defense.

	Targets	
Unit of measurment	**Intermediate**	**Final**
Census executed.	Design and preparation of the Census / 2 years	Execution of 2 censuses / 3 years
Number of life plans prepared and / or updated.	15/2 years	35/4 years
Number of peoples / nationalities in the life plan implementation stage.	15/2 years	35/10 years
Number of women leaders participating in decision making and organizational directive spaces	30% / 4 years	50% / 10 years
Number of schools created	4 / 5 years	10 / 10 years
Number of indigenous territorial monitoring systems installed and functioning.	15/2 years	35/10 years
Number of trained indigenous monitors (number of youth, number of women).	300/2 years	500/10 years
Monitored area through indigenous systems (hectares).	4 information and technology centers	7 information and technology centers
Number of nationalities and peoples that make up the binational network.	10/2 years	35/10 years

INDIGENOUS GOVERNANCE AND SELF-DETERMINATION

Action Area	Strategy	Action
Territorial Defense	3. Strengthen the processes for defending territory through community monitoring and vigilance.	Strengthening of institutional capacities, with an emphasis on improving their infrastructure, organizational practices, formation and technical training.
		Create two decision making units (CONFENIAE / AIDESEP).
	4. Protect the territories inhabited by Peoples living in isolation and/or in Initial Contact (PIACI).	Work with institutions in each country to create protected areas and/or indigenous reserves, and protect areas to guarantee no contact for peoples living in isolation.
Recognition of Territorial Rights	5. Guarantee collective and territorial rights can be fully exercised.	Influence the recognition of territorial rights and self-determination in indigenous territories, Indigenous Territorial Constituencies (ITC) in Ecuador, integral territories and autonomous governments.
		Reform the organic law for comprehensive planning of the Amazonian special territorial district, to include demands from indigenous organizations.
		Clean up, demarcate and legalize 9 million hectares of indigenous lands and territories.
		Promote and strengthen ICCA processes.
		Recognition of the Napo Tigre Indigenous Reserve (1,023,137 ha).

Targets		
Unit of measurment	**Intermediate**	**Final**
Number of organizations and/ or governing bodies.	10/2 years	35/10 years
Creation of decision making units.	2/6 months	
Legal processes presented.	1/6 months	32 years
Number of self-determination processes recognized by the States.	32 years	10/10 years
Number of advocacy projects for reform.	1/6 months	32 years
Percentage of legalized indigenous territories.	40% / 4 years	100% / 10 years
Number of territories regis-tered in ICCA.	10/2 years	30/10 years
Number of hectares recognized as an Indigenous Reserve.	Recognition of the Reserve / 5 years	1,023,137 Ha / Term 10 years

INDIGENOUS GOVERNANCE AND SELF-DETERMINATION

Action Area	Strategy	Action
Recognition of Territorial Rights	5. Guarantee collective and territorial rights can be fully exercised.	Organize advocacy actions at the Permanent Forum for Indigenous Issues and the UN Rapporteur , positioning the ICS proposal and the main risks for the physical and cultural survival of indigenous nationalities.
		Within the framework of the Inter-American Human Rights System (SIDH), create an innovative cross-border petition that links the international responsibility of the two member states, with indigenous peoples or nationalities whose territories transcend Peru and Ecuador border.
	6. Litigation and legal actions to address socio-environmental and territorial conflicts in the bioregion.	Actions against Infrastructure and megaprojects: Ecuador: - Río Piatua Peru case: - Amazon Waterway, Iquitos-Satramiriza Highway.
		Actions against oil companies: Ecuador: Block 28, Blocks 79 and 83, Yasuní (Blocks 31 and 43) and Tagaeri and Taromenane Intangible Zone, Block 22, Oil spill due to the rupture of three OCP and SOTE pipelines. Peru: Lot 64, Lot 95, Station 5, Lot 8 and 192.
		Actions against mining companies: Ecuador: Cóndor Mirador, Sinangoe, San Carlos Panantza and Fruta del Norte. Peru: Cordillera del Condor / Cenepa.
		Actions against logging companies: Ecuador: Raft in the Amazon. Peru: Timber concessions in PIACI territories.
		Land trafficking: Peru: Land trafficking between Awajún Nation and settlers.

Targets		
Unit of measurment	**Intermediate**	**Final**
Interposed actions.	2/1 year	32 years
Petition filed.	-	1/1 year
Actions filed and lawsuits won.	-	3 legal actions won in 5 years
Actions filed and lawsuits won.	-	10 legal actions won in 5 years
Actions filed and lawsuits won.	-	5 legal actions won in 5 years
Actions filed and lawsuits won.	-	2 legal actions won in 5 years
Actions filed and lawsuits won.	-	1 legal actions won in 3 years


C. Vallejo

Forest economies and regenerative ventures *

The indigenous inhabitants of the Amazon have preserved natural ecosystems, while also resisting extractive industries and preventing deforestation of the forest in their ancestral territories. Their ancestral practices in regards to the use and management of natural resources have evolved over time. However, the alternatives in place have not been enough to protect the Amazon from external pressures, thus there must be continued cooperation between the actors in the territory to ensure that alternative economic opportunities are generated to help transition away from the extraction of natural and primary resources. Forest economies have specific characteristics unique to forest dependent peoples and any initiative that supports those systems should aim to balance between ancestral knowledge and new sustainable production techniques.

There can be no sustainable production efforts of forest resources or crops, without first ensuring the tenure rights and use of resources for traditional communities. There is still work to do in defining and legally recognizing these land rights for certain peoples and nationalities in the Amazon Sacred Headwaters region. Even for those indigenous peoples that have their rights legally recognized, ensuring their full sovereignty and self-governance is essential. In the absence of the basic guarantee of these rights, sustainable management and production is discouraged.

Forest economies and regenerative ventures are essential to building an alternative paradigm that generates livelihoods without devastating biodiversity. To ensure food sovereignty and the development of regenerative economic initiatives, we propose the following strategies:

1. Develop high diversity agricultural systems with an emphasis on soil regeneration, based on the combination of contemporary agro-ecological techniques and ancestral knowledge, and through focusing on improving community food sovereignty;
2. Zoning of indigenous lands and territories for natural resource management planning, linked to the development of life plans that, in turn, promote adaptive management and co-management of forest products with institutions from different levels (community, local, regional, national and binational);
3. Promote investment to strengthen human capacities, and research and development of regenerative production processes, prioritizing financing for indigenous peoples and nationalities & boosting financing for research and development of products with economic and cultural significance, selecting resources with complementary seasonal cycles;
4. Incorporate cultural considerations when shifting the economic dynamics of peoples through the implementation of regenerative ventures.

The proposals, actions and indicators detailed below respond to these strategies and are presented with their respective goals and evaluation indicators.

*This section has been edited by Inés Luna with contributions of policy papers by: Jacob Olander, Anders Siren, Rodrigue Gehot, Stefan Kistler, Daniel López.

FOREST ECONOMIES AND REGENERATIVE VENTURES

Action Area	Strategy	Action
Conservation	1. Ensure co-management and conservation of high priority conservation areas.	Secure agreements with the States, companies and financial institutions to declare the permanent protection of the Sacred Headwaters.
		Achieve recognition of the Napo Tigre, Yavarí Tapiche and Sierra del Divisor Indigenous Reserves. Kawsak Sacha, Kamunguishi, SACRE and similar territories in Peru.
	2. Promote regional planning utilizing a landscape approach led by local governments and based on the life plans of indigenous nationalities	Declaration of protection and conservation areas at the subnational level, incorporating considerations of nationalities and non-indigenous communities of 18'305,784 ha and 2'276,979 ha in the unprotected rainforests of high biodiversity in Peru and Ecuador, respectively.
	3. Demand that the people and nationalities of the sacred headwaters are recognized for their knowledge and also benefit from the use of the genetic resources of the region.	Identify cases of exploitation (biopiracy) of genetic resources that have not been recognized, and where peoples and nationalities have not benefited.
		Launch internal claim actions (protection actions) to demand the right of indigenous peoples and nationalities from the region to share in the benefits of use.

	Targets	
Unit of measurment	**Intermediate**	**Final**
Committed agreements.	Adoption of agreements between priority actors (local governments, companies, financial institutions and civil society) in 5 years.	Adoption of agreements between National Governments, and international recognition within the framework of the climate debate in 10 years.
Recognized reserves.	1 reservation in the process of recognition, 1 year	3 recognized reserves / 4 years
Number of declared protected areas.	5 proposed protected areas - 3 years	5 protected areas created / 5 years
Research on biopiracy and recommend agenda for action.	-	1 research in 1 year
Legal actions taken.	2 in 2 years	10 in 10 years

FOREST ECONOMIES AND REGENERATIVE VENTURES

Action Area	Strategy	Action
Restoration	4. Promote and consolidate initiatives to restore forests and watersheds by promoting local employment.	Constitution of River Reserve Systems of the Sacred Headwaters for the restoration and eco-management of forests and rivers.
		Strengthen and replicate indigenous restoration initiatives, remediation plans for polluted rivers, favoring the local use of the restoration of 7'654.582 ha in Peru and 1'056.766 ha in Ecuador of forest, which is the area necessary to ensure the ecological integrity of the region.
	5. Strengthen the agroforestry management capacities of communities with emphasis on women and youth.	Train women and young people in the communities in reforestation techniques, as well as in plant and land management.
Agroforestry Management	6. Promote Forest Utilization Plans and the implementation of Management and Control Systems within the territories.	Implement forest harvesting plans and the design of internal regulations regarding the exploitation of raft and other timber species.
Climate change	7. Demand that both Ecuador and Peru comply with their international commitments and obligations to global climate agreements.	Carry out a study on the implementation, compliance and impacts of public policies that seek to abide by the NDCs proposed by Peru and Ecuador, through citizen oversight with emphasis on indigenous peoples and nationalities.
		Present compliance actions as an enforceability mechanism for compliance for those who have not yet submitted progress reports to the Ministries of the Environment of both countries (responsible for climate policy).

	Targets	
Unit of measurment	**Intermediate**	**Final**
Number of river reserve systems constituted.	Declaration of the Sacred Headwaters River Reserve -3 years	Constitution of the reserve / 5 years
Number of remediation plans implemented	4 restoration initiatives - 3 years	8 restoration and conservation initiatives / 10 years
Number of trainings carried out	8 / 2 years	50 / 10 years
Number of forest use plans implemented.	23 plans and regulations for forest use - 3 years	50 plans and regulations for forest use / 5 years
Studies realized.	-	1 in 6 months
Interposed actions.	2 in 1 year	5 in 3 years


C. Valleio

Intercultural Health *

Socio-historical determination, as well as cultural and natural diversity, determine particular patterns of health/illness. On the one hand, there are health problems characteristic of socioeconomic deprivation and lack of basic services (including health services), while on the other hand, there are health problems resulting from the indiscriminate exploitation of resources (pollution, destruction of ancestral territories, changes in traditional lifestyles, violence). These two health/disease profiles intermingle at the local level, forming unique characteristics in each territory and require territorialized health plans, based on the community (its needs and strengths), with broad citizen participation, and constructed with a non-anthropocentric vision.

For the proposal, seven representative examples of successful intercultural health work experiences in the Sacred Headwaters bioregion were compiled: Clínica Ambiental - Salud Integral desde el Suelo; Proyecto de Salud Integral de Sucumbíos - El potencial del trabajo organizativo desde lo local; Naku; Mamás del Río; Proyecto Claverito; Instituto Chaikuni; and Centro Takiwasi.

The Covid-19 pandemic demonstrates the need to strengthen intercultural health, to ensure that the abandonment of vulnerable peoples by the States is not repeated. This axis articulates actions around the following strategies:

1. Strengthen community relations for health work;
2. Establish spaces for health, technical training and to ensure intellectual property insurance of Amazonian bio-knowledge, by recognizing the historical wisdom keepers who have dedicated their lives to healing;
3. Implement resilience mechanisms for responding to environmental and health emergencies;
4. Prevent gender violence against women and domestic violence, and demand the protection of the rights of children, women, adolescents, the elderly and the disabled;
5. Eliminate chronic child malnutrition, with an emphasis on children from 0 to 5 years of age, based on the principles of food sovereignty;
6. Remediation and compensation to communities affected by the impacts of extractive activities;
7. Design and implement participatory health plans, with intergenerational, gender and intercultural approaches, and facilitate their integration into territorial governance processes.

The actions within this area are presented below with their respective goals and evaluation indicators.

*The authors of the health policy document are Juan Mateo Espinosa and Andrés Peralta. Other contributors: the Board of Directors of CONFENIAE, AIDESEP, ORPIO and FENAP.

INTERCULTURAL HEALTH

Strategy	Action
1. Guarantee that communities are participants in all aspects of community health work.	Participatory health diagnosis survey at the territorial level to establish health care priorities.
2. Establish spaces for health, technical training and the protection of intellectual property of Amazonian bio-knowledge, integrating the wisdom of traditional healers who have devoted their lives to healing.	Build intercultural Amazonian health centers and hospitals.
	Implement Amazonian Medicine Schools and Research Centers in new and existing hospitals.
	Ensure intellectual property of Amazonian bio-knowledge.
	Develop a curriculum and emergency care protocols in native languages.
	Form itinerant medical brigades by training young people and women as community health promoters.
	Elaborate guides for the proper use of Amazonian medicines.
	Develop research on eating habits and nutritional value of the diets of indigenous peoples and nationalities.
	Develop communication methodologies and pedagogies for health information.

Targets		
Unit of measurment	**Intermediate**	**Final**
% of the population with diagnosis.	Diagnostic design / 6 months	100% Diagnosed / 3 years
Number of intercultural Amazonian health centers operating. Number of intercultural Amazonian hospitals operating.	20 health centers / 2 hospitals / 3 years	80 health centers / 6 hospitals / 10 years
Number of schools and operational centers. Number of enrolled students	2 schools and research centers / 500 students / 4 years	20 schools and research centers / 5,000 students / 10 years
Number of registered patents for indigenous communities and nationalities.	20/1 year	1,000 / 10 years
Number of emergency units that apply the protocols.	Design and implement pilot program 2 languages / 2 years	Implementation in 100% of towns and nationalities / 5 years
Number of people trained. Number of operational brigades.	50 trained / 2 years	200 trained / 5 years 100 operational / 4 years
Number of published and operational user guides.	10 registered medicinal products / 2 years	100 registered products / 10 years 1 published guide / 2 years 100 workshops / 5 years
Number of investigations carried out.	2/6 months	20/5 years
Number of workshops held. % of the population benefited.	20% / 1 year	100% / 5 years

INTERCULTURAL HEALTH

Strategy	Action
3. Implement resilient mechanisms to address environmental and health emergencies.	Design and implementation of the Amazon Emergency Fund.
4. Eliminate prevent gender violence against women and at the intra-family and communtiy levels and domestic violence, and demand that the rights of the protection of the rights of children, women, adolescents, the elderly and the disabled are protected.	Organize spaces for women to share and learn together: * Workshops for young women (13-23 years) on self-care: "knowing our body, our sacred territory" * Workshops on gender equality: "how to identify and confront micro acts of machismo; violence against women within the communities."
	Establish alliances with higher education centers who have clinical psychology specialty to offer internships for women leaders and for the accompaniment of victims of gender violence.
	Legal training for women between 18-40 years of age on defense processes related to gender violence.
	Establish mechanisms for action against gender-based violence (network of shelters for victims, support protocol, follow-up of complaints and care for the aggressor) and train and promote a support network for victims of gender-based violence.
	Workshops on the protection of children's rights and identification of possible threats within communities
	Strengthen and scale-up current maternal and child health projects (midwives).
	Strengthen women's associations and organizations with a focus on developing their financial sustainability and independence.
	Influence the government's processes for protection of vulnerable groups with active participation of civil society.

Targets		
Unit of measurment	**Intermediate**	**Final**
Creation of the Emergency Fund.	Design / 2 years	Implementation / 4 years
Number of workshops held	30 workshops / 2 years	150 / 10 years
Number of cohorts organized	2/ 2 years	6/10 years
Number of workshops hel	4/ 2 years	50/10 years
Increase in the number of cases reported on gender-based violence made	20% / 2 years	50% / 10 years
Number of workshops hel	10 / 2 years	100 /10 years
Number of projects supported. % of deliveries attended.	2 projects strengthened / 1 year 10% deliveries attended / 1 year	10 replicated projects / 5 years 80% deliveries attended / 5 years
Number of organizations involved. Number of women benefited.	20 organizations / 1 year 500 women / 1 year	100 organizations / 5 years
Actions in support of vulnerable groups, in particular, women, children and adolescents, the elderly and the disabled.	10 actions / 2 years	100 actions / 5 years

INTERCULTURAL HEALTH

Strategy	Action
4. Eliminate prevent gender violence against women and at the intra-family and communtiy levels and domestic violence, and demand that the rights of the protection of the rights of children, women, adolescents, the elderly and the disabled are protected.	Develop communication and pedagogical (audio-visual) initiatives for different audiences on the prevention of domestic violence and violence against women.
	Lead initiatives to reduce the consumption of processed foods.
	Promote actions for breastfeeding.
5. Remediation and compensation to communities affected by extractive activities.	Support legal processes that protect and guarantee the rights to health, a healthy environment, a dignified life, among other rights.
	Support initiatives that improve access to drinking water, especially in areas affected by water pollution and in Amazonian cities.
	Develop and implement early warning systems and document the socio-cultural and environmental impacts of extractive industries in indigenous territories.
6. Design and implement participatory health plans, focusing on intergenerational, gender and intercultural approaches and facilitate their integration into territorial governance processes	Design and implement community health plans, aimed at recovering ancestral knowledge and natural medicines, involving young people and women as intercultural health promoters.
	Promote public policies that foster and promote ancestral medicines.
7. Promote sexual health programs to control sexually transmitted diseases and improve reproductive health in the communities.	Conduct information campaigns and training workshops for young people 13-23 of all genders on contraceptive methods and STD prevention and treatment.

Targets		
Unit of measurment	**Intermediate**	**Final**
Number of audiovisual products developed. Number of presentations and workshops held.	5 products / 1 year 5 workshops / 1 year	20 products / 3 years 50 workshops / 5 years
Number of stores that reduce the sale of processed foods.	50% / 2 years	100% / 10 years
Number of mothers benefited.	5,000 / 2 years	20,000 / 5 years
Number of legal processes.	10 processes / 2 years	50 processes / 5 years
Percentage of the population with access to drinking water.	50% / 4 years	100% / 10 years
Number of participating communities.	1 system / 2 years	8 system / 10 years
Number of plans designed. Number of plans implemented.	10 plans designed / 2 years	20 plans designed / 5 years 30 plans implemented / 10 years
Draft and present a new law. Number of communities benefited.	1 project / 1 year. 10% communities / 2 years	100% communities / 6 years
Number of youth benefited Number of indigenous organizations involved	20% / 3 years	50% / 10 years

Ecological Awareness and Intercultural Education *

Education based on an understanding of 'Buen Vivir' and the promotion of ecological awareness, contribute to the socio--environmental transition, because these learnings influence behavioral changes. Thus, erroneous and harmful practices on nature by individuals and communities are avoided. This form of education contains principles, strategies and behaviors aimed at recovering, restoring and improving life.

For the proposal, three experiences located in the Ecuadorian Amazon region were reviewed: the Sumak Kawsay in situ ecotourism and scientific project (Pastaza), the Kuamar community theater (Shuar territory) and the Sumak Kawsay and Kawsak Sacha intercultural bilingual education system of the Sarayaku people.

The production of appropriate educational material agreed upon with the communities themselves, within the framework of Intercultural Bilingual Education (IBE), is essential. Indigenous peoples, nationalities and rural communities can integrate and adapt the curricula to their natural environment, their daily life practices, and their cultures (Ushigua, 2020). Likewise, communities are free to organize the activities of their "schools" according to their own interests (Echeverri, 2008).

The improvement of the educational process in the Amazon requires an articulation between territory, community, social organization and school. This means strengthening the pedagogical capacities of the educational districts and promoting a model of educational management in networks of schools (circuits) articulated with the territories and communities. In addition, it is necessary to:

1. Deploy a model of work in multi-grade schools as an opportunity to incorporate environmental education.
2. Pay special attention to the development and methodologies of language acquisition in the early grades of schools.
3. Promote schooling for the Amazonian population, especially for young people.
4. Develop programs to address the segment of the population 18 years of age and older that did not finish school.
5. Strength teaching capacities.

Educational objectives can be achieved in non-formal educational experiences, but there remains the challenge of sustainability, scale and gender equity.

The actions within this area are presented below with their respective goals and evaluation indicators.

*Authors of the policy paper: Juan Manuel Crespo and Fander Falconí. Thanks to the following for their contributions: Board of Directors of. CONFENIAE, AIDESEP, ORPIO and FENAP, Oscar Alejo

ECOLOGICAL AWARNESS AND INTERCULTURAL EDUCATION

Strategy	Action
1. Strengthen pedagogical capacities in bilingual intercultural schools.	Strengthen the capacities of educational mentors in bilingual intercultural schools.
	Institutionalize within the national education system the position of "indigenous wisdom keepers" as educators in ancestral knowledge.
2. Incorporate ancestral knowledge and ecological awareness into the curriculum of intercultural bilingual educational networks of forest schools	Influence and expand access to education that is based on the worldview of indigenous peoples.
	Creation of curriculums and programs that focus on ancestral knowledge and ecological awareness.
3. Strengthen non-formal methodologies for teaching native languages.	Promote and expand family educational modules with a focus on oral transmission of culture, language and knowledge.
4. Promote scholarships for the Amazon population, especially for young people.	Create scholarship systems that encourage young people to attend school.
	Promote the creation of higher education centers within the territories of indigenous peoples.
5. Strengthen the capacities of teachers in the Amazon.	Create modules and APP training applications for Amazonian teachers.
6. Complement non-formal education with formal education.	Create and promote non-formal educational projects that complement formal educational structures, making the most out of existing infrastructure.
	Create mobile itinerant schools recognized by the Ministries of Education that promote ecological awareness.
7. Promote online education models, with access to the internet and digital mediums.	Create modules and certifications through telematics systems, utilizing radio and satellite communication.
	Develop an online academic and professional training program for the Amazonian population.
8. Promote network management models (school-territory-community).	Promote and strengthen educational processes within networks that incorporate subjects and activities related to ancestral knowledge, and based on participatory methods of selection and implementation.

	Targets	
Unit of measurment	**Intermediate**	**Final**
Number of mentors trained.	300/3 years	600/5 years
Number of “indigenous wisdom keepers“ recognized by the State	30 / 4 years	100 / 10 years
Number of educational declarations recognized by the Ministries of Education from nationalities and peoples in Ecuador and Peru. Number of intercultural schools and number of students enrolled in schools.	15 declarations / 3 years; 10% increase in schools and students / 3 years	30 declarations / 10 years; 30% increase in schools and universalization of matriculation in primary and high school / 10 years
Curriculum created.	15 curriculums created / 4 years	35 curriculums created / 10 years
Elaboration of modules.	10 modules developed / 3 years	35 modules distributed and in use
Number of scholarship students.	500 scholarship students / 3 years	5,000 scholarship students / 10 years
Number of higher education centers created	creation of 1 project per country / 3 years	creation of 3 projects per country / 10 years
Number of applications created.	10 applications / 3 years	15 applications / 10 years
Number of educational projects created.	Creation of 1 project /2 years	30 projects that integrate formal and non-formal education
Recognition by the Ministry. Number of Itinerant schools recognized by Ministries of Education.	Recognition by the Ministries of Education; 5 mobile schools / 2 years	40 mobile schools
Number of certification modules created	10 modules and certifications in design - 3 years	30 modules and certifications working
Number of programs developed. Number of programs implemented.	1 program in design - 2 years	25 academic training programs
Number of networks created.	3 networks created - 4 years	15 networks working


C. Valkjo

Renewable Energy*

The Amazon region must lead in the transition to using renewable energy and in the process of decarbonization on the planet. The goal is to transition to using alternatives while universalizing access to electricity and replacing fossil energy sources with renewable sources to guarantee sustainability. Extensive national and international legislation is needed to promote clean energy generation. According to the Ecuadorian Foundation for Appropriate Technology (FEDETA), 80% of renewable energy projects in communities are obsolete and, therefore, non-functioning solar panels become waste. It is essential to transition to sustainable, decentralized, participatory, community-based, stable, and decarbonized renewable energy systems. With this transition, Amazonian communities will be able to maintain their vision and mission to care for the forests, while also being able to have contact and access to the world through the internet, refrigeration, and opportunities for work (entrepreneurship), and also being able to study after daylight hours.

The following options are proposed to achieve a clean energy transition:

1. Solar and photovoltaic energy: A large investment for the "solarization" of isolated communities is justified, due to the projected improvements in the quality of life for local peoples and the benefits to the environment, in addition to the solar potential of the Amazon region,. A viable energy solution is to replicate existing and successful solar power generation projects (solar mini-grids and individual solar panel systems), and also maximize the use of solar power for other uses (heating water, cooking, production, etc.).

2. Micro-hydroelectric: The technology of small-scale hydroelectric plants has evolved, and Ecuador presents the optimal conditions for this type of investment. This alternative is proposed for localities near Amazonian cities and mountain range foothills, as community projects that can generate local electricity. The kinetic energy of water can also be harnessed on a small scale, not as micro hydro-power stations but as micro-generating water mills. These micro plants can generate multiplier effects on the local economy, since the communities themselves can be co-owners of such ventures and direct small enterprises.

3. Biodigesters: the maximum use of solid waste, evading garbage creation and decomposition, and generating energy through the utilization of small-scale biomass (biodigesters for cooking, use of biomass for water heating, use of natural fertilizers). There are effective biodigesters in Ecuador that can replace LPG (subsidized) liquefied petroleum gas and / or coal for cooking food and for other domestic uses. Biogas is used for cooking food and bio-oil can be used as a bio-fertilizer to be directly applied to the land. This technology provides a solution that not only replaces liquefied petroleum gas (LPG), but also can treat animal waste, which generates many environmental issues. Lack of sanitation within Amazonian communities is a serious problem, but with some design changes, human waste can also be used in Amazonian communities (which do not have cattle or pigs) to generate energy.

4. Wind energy: the Amazon does not have places with great wind power potential; however, small windmills can be installed within hybrid and mixed power systems.

5. Associated gas: supply electricity to oil facilities and neighboring communities with their own plans for energy generation to reduce the volume of associated gas and crude used. Reduce the use of diesel or crude oil and avoid its harmful gas flares, while facilitating the transition to relinquish use of this type of energy option. In Amazonian cities, public electric transport and alternative transport options should be promoted. Designing pedestrian cities is encouraged, for cyclists, and discouraging the use of private vehicles is essential. Using the roofs of buildings, stadiums, fields and even cars, as platforms for solar energy. Waste management can be transformed into a great opportunity for generating clean energy, by using biodigesters for vehicle combustion, reusing recyclable material, and generating electricity with methane.

Specific actions are presented below with their respective goals and evaluation indicators:

* This section was elaborated based on the policy paper from Natalia Greene and Verónika Mendoza

RENEWABLE ENERGY

Strategy	Action
1. The Amazon leads in the decarbonization process.	Establish a decarbonization program.
2. Implement an autonomous energy model with renewable energies, in difficult-to-access Amazon forests.	Conduct energy audits of the communities and nationalities, to identify the amount of energy that they require and their sources.
	Design and implement autonomous electrification microgrids.
	Design and implementation of autonomous solar systems in territories outside the electrification networks.
	Design and implementation of biodigesters in communities.
	Design and implementation of micro hydroelectric power plants in the Andean piedmont
3. Promote energy efficiency in Amazonian cities, while influencing State institutions and extractive industries that continue to operate in the Amazon.	Manage renewable energy development processes in Amazonian cities.
	Require state institutions to comply with their obligations to guarantee universal access to energy.
	Require the capture of gas associated with oil production (currently flared) and require its use in oil facilities and surrounding communities.

Targets		
Unit of measurment	**Intermediate**	**Final**
Percentage of decarbonized energy.	50% in 5 years	100% energy autonomy in the bioregion in 10 years
Number of diagnoses of communities and nationalities.	35 complete diagnoses in 2 years	
Number of projects implemented. KW of energy generated. Benefited population.	Design and pilot implementation in 3 years	
Number of projects implemented. KW of energy generated. Benefited population.		
Number of projects implemented. KW of energy generated. Benefited population.		
Number of projects implemented KW of energy generated population benefited		
Number of projects implemented. KW of generated energy, Benefited population.		
Percentage increase in the population with access to electricity.	Gap reduction by 20% in 2 years	
Number of gas flares replaced by gas capture plants. Liters of associated gas recycled.	Capture 100% of gas from the oil industry in 4 years	

Transportation and Connectivity *

To develop productive processes and improve the living conditions of local populations, both physical and digital communications are indispensable. technologies that can contribute to improve means of transportation and connectivity are essential in a world where the need to move people, products and information is increasingly necessary.

However, the implementation of new technologies to meet these needs cannot be carried out without a correct analysis of the context in which they are to be implemented and developed. It is also necessary to have a scalability strategy to have a significant effect at the bioregional level. Technological sovereignty is essential to build autonomy and territorial self-determination. Roads are the most dangerous form of infrastructure that threaten territorial conservation, and the expansion of roads are conditional on the processes of deforestation, colonization, and the establishment of extractive industries.

Implementing new technologies in a territory requires a pedagogical, participatory and playful process with decolonized methodologies that respond to community needs without generating future dependencies.

This pillar explores:

1. Technological sovereignty.
2. Sustainable transport
3. Connectivity
4. Actions for strengthening local human capacities for management, maintenance and technological innovation.

All of this thematic areas, are essential to achieve technological sovereignty, and to ensure the sustainability of projects that involve the use of technologies (energy, transport, connectivity, monitoring, among others). This is why is necessary to promote sustainable transportation systems adapted to Amazonian contexts to meet human and productive mobility needs that are viable alternatives to the advancement of highways, connectivity projects (telecommunications, HF radios, Internet, telephony) for example to have autonomous communication and territorial monitoring to achieve mass access to the Internet for educational purposes at low cost.

The specific required actions are presented below with their respective goals and evaluation indicators.

*.This section has been edited from Juan Manuel Crespo's policy paper. The contributions of Peter Bloom (Rhyzomatica), Oliver Utne (Kara Solar Foundation) and Oscar Alejo (ITB) are gratefully acknowledged.

TRANSPORTATION AND CONNECTIVITY

Action Area	Strategy	Action
Technological sovereignty	1. Strengthen local human capacities for management, maintenance and technological innovation to in turn achieve technological sovereignty and the sustainability of projects that involve the use of different technologies (energy, transportation, connectivity, monitoring, among others).	Create indigenous technological innovation laboratories with participatory and inclusive methodologies that seek to respond to the needs of the communities.
		Training local technicians in sustainable methodologies for, maintenance, repair and implementation of technological projects.
Sustainable transport	2. Promote sustainable transport systems adapted to Amazonian contexts, to meet human and production mobility needs as that are viable alternatives to the advancement of highways.	Identify and strengthen existing sustainable transportation projects.
		Generate feasible research processes and studies to replicate, scale and accompany sustainable river transport systems.
		Develop capacities in the local population to construct solar river boats.
		Implement sustainable river transport systems for human mobility and for production activities.
Connectivity	3. Uplift systems that ensure autonomous connectivity (telecommunications, HF radios, Internet, telephony) for communication and territorial monitoring.	Implement autonomous connectivity projects that help strengthen production processes,the identities, and territorial defense.
		Implement GIS laboratories and infrastructure essential for an Intelligent Comprehensive Monitoring System that systematizes social, environmental and economic information.
	4. Ensure universal low-cost access to the internet for educational purposes.	Promote a satellite broadband educational initiative; develop an online academic and professional training program that addresses all levels and sectors of society for education through the tools (Moodle).

Targets		
Unit of measurment	**Intermediate**	**Final**
Number of laboratories created.	2 laboratories (1 Ecuador and 1 Peru) / 3 years	5 laboratories / Term: 10 years
Inhabitants of the bioregion certified in technical aspects related to technologies.	50 technicians / 4 years	300 technicians / Term: 10 years
Number of projects identified and strengthened.	1 project / 3 years	4 projects (the most efficient of the new projects) / Term: 10 years
Number of studies carried out and / or accompanied projects.	4 studies or projects / 3 years	10 studies / 5 years
Inhabitants of the bioregion certified in the construction of solar boats.	50 technicians / 4 years	300 technicians / Term: 10 years
Kilometers of river with sustainable river transport service.	1,000 km of rivers / 4 years	3,000 km of rivers / 10 years
Percentage of the population of the bioregion with access to autonomous communication mediums.	50% of the population / 4 years	100% of the population / 10 years
Number of intelligent monitoring systems implemented.	15 systems / 4 years	35 systems / 10 years
Percentage of the bioregional population with access to online educational programs.	30% of the population / 4 years	100% of the population / 10 years


C. Vallejo

Smart Cities and Bio-social Housing *

The absence of adequate urban planning should instigate a reversal of urbanization processes and in the aesthetic planning of Amazonian cities. Cities must seek to balance social and environmental needs, while meeting ambitious goals in the realms of decarbonization, efficient transport, adequate waste treatment, etc.

Bio-social housing requires concrete proposals that ensure housing development models do not respond to real estate speculative logic, but that respond to social and environmental needs. It is necessary to design physical spaces that dignify human life, but that are also sustainable in energy and ecological terms.

Recognizing the various difficulties that cities face and the limitations on the different levels of the State to implement progressive strategies, we face a complex problem that lacks short-term solutions, because we must begin by demarcating the Amazonian territory. To do this, the adoption of an endogenous view of territorial planning and urban centralities is proposed, to form a joint urban planning strategy for local governments in the Amazon:

- Generate data, through satellite imagery and drones, for the institutions in charge of Amazonian territorial planning to be able to anticipate what areas are being urbanized. In the short term, this could begin as a pilot program with one of the municipal governments that has great interest in this problem.

- Reflect on the urban and rural categories, and explore what new categorizations in the territory could be created to integrate specific forms of urbanization that are emerging.

- Share experiences to be able to analyze the effects of different policies on the control and harmonization of new urban sprawl.

In terms of actors, the provincial or regional governments, as well as the local and municipal governments, should be integrated, as should the social actors that are generating new nuclei, and that are associated with the Neighborhood Federations, and the indigenous nationalities represented by their mother organizations and federations. Actors from the central states should also be integrated.

Bio-social housing requires concrete proposals to ensure housing development models do not respond to real estate speculative logic, but that respond to social and environmental needs. It is necessary to design a plan for physical spaces that are dignified and worthy of human life, but that must also be sustainable in energy and ecological terms. The actions are articulated around the following strategies: changing the paradigm that drives the formation of cities and their peripheries, realizing the enormous potential of urban voids (areas that are currently solely destined to generate urban capital gains and that are not fulfilling their social function) through the implementation of a 'Rights of the Amazonian City' program; create a system of articulation between local governments for Amazonian urban planning; promote energy efficiency in Amazonian cities.

These actions are presented below with their respective evaluation goals and evaluation indicators:

* This section was ellaborated based on the policy paper presented by Óscar Alejo y Manuel Bayón

SMART URBAN PLANNING AND BIO-SOCIAL HOUSING

Thematic Area	Strategy	Action
Smart urban planning	1. Change the paradigm that drives the formation of cities and their peripherals, to realizef the enormous potential of urban voids (currently solely destined to generate urban capital gains and that are not fulfilling their social function) through the implementation of a 'Rights of the Amazon City' program (PDCA).	Generate efficient social housing initiatives that are in line with a new form of urban planning, where associations and indigenous organizations can create collective spaces for the design and implementation of sustainable urban projects.
		Link existing indigenous organizations with indigenous migrants in cities as a way to create plurinational spaces of plurinationality in otherwise urban environments where there is significant racism. This politically challenges the process of cities to centrally urbanize.
		Implement comprehensive and sustainable waste management models in communities and in rivers that connect cities to territories (led by community cooperatives).
	2. Form an InterGAD Articulation System between local governments for Amazon Urban Planning (SAIGPUA).	Generate data through satellite imagery and drones for institutions in charge of Amazonian territorial planning to use to be able to anticipate new urbanization areas, as well as determine where the risk areas are.
Energy Transition	3. Promote energy efficienct technologies in Amazonian cities.	Implementation of solar microgeneration in Amazonian cities (Smart-grids) and electric public transport.

	Targets	
Unit of measurment	**Intermediate**	**Final**
Number of urban projects developed/Number of beneficiaries of urban projects.	2/2 years	20/10 years
Number of events or workshops to promote integration.	2/1 year	20/5 years
Number of waste management projects implemented / Number of tons of waste processed.	5/2 years	20/10 years
Number of urbanization control plans developed.	2/2 years	10/10 years
Number of projects with solar energy microgeneration capacity / Megawatts of energy produced through solar microgeneration.	5/4 years	20/10 years


C. Vallejo

Forest and Watershed Conservation and Restoration *

Water planning is needed in the Sacred Headwaters bioregion. The Amazon has a unique fluvial morphology in the world.

The regenerative economy consists of regenerative assets. Within this new vision of the economy, these assets provided by nature are considered vital. The regenerative economy is, therefore, associated with the Ecological Economy by demonstrating that disregarding the original assets provided by nature leads to unsustainable growth. (Daly, 1999: 73-88).

The regeneration of ecosystems is necessary in any transition scheme. In the recovery of the Amazon's water sources, which includes adequate management of discharges and solid waste, reforestation and waste management are indispensable. It is urgent to create a river reserve to protect the ecosystems, but also to protect the sources of water supply. Many freshwater fish species have declined by 76% in less than 50 years. Worldwide, the number of migratory freshwater fish has declined, according to a study by Lovgren (2020).

Regeneration is a controversial issue. After the fires erupted in the heart of the Amazon, there has been a lot of concern and discussion about whether regeneration of the affected areas will be possible, and cientists are not unanimous on the answer. In England, for example, while the University of Oxford announced that their research still shows that regeneration is possible, research from the University of Cambridge indicated that without sufficient rainfall, the Amazon is condemned to become a savannah (Diaz, 2019).

The regeneration of the Amazon must be institutionalized as a state policy and all local governments must participate in this activity. The transition to this future must be a collective work, with a high degree of commitment and with a strong allocation of resources. It should not be accelerated in time, although it should be accelerated in terms of effort.

The proposed actions are articulated around the following strategies: ensure the co-management and conservation of high priority conservation areas; promote regional planning using a landscape approach led by local governments and the life plans of the nationalities; promote and consolidate forest and watershed restoration initiatives that also promote local employment; demand that Ecuador and Peru comply with international climate agreements; promote forest harvesting plans, and the implementation of management and control systems within the territories. The actions to be taken are presented below with their respective goals and evaluation indicators.

* This section has been edited by Belén Páez and Juan Manuel Crespo based on the conservation and restoration plans of the indigenous organizations and projects being implemented.

FOREST AND WATERSHED CONSERVATION AND RESTORATION

Thematic Area	Strategy	Action
Conservation	1. Ensure co-management and conservation of high priority conservation areas.	Secure agreements with the States, companies and financial institutions to declare the permanent protection of the Sacred Headwaters.
		Achieve recognition of the Napo Tigre, Yavarí Tapiche and Sierra del Divisor Indigenous Reserves. Kawsak Sacha, Kamunguishi, SACRE and similar territories in Peru.
	2. Promote regional planning utilizing a landscape approach led by local governments and based on the life plans of indigenous nationalities	Declaration of protection and conservation areas at the subnational level, incorporating considerations of nationalities and non-indigenous communities of 18'305,784 ha and 2'276,979 ha in the unprotected rainforests of high biodiversity in Peru and Ecuador, respectively.
	3. Demand that the people and nationalities of the sacred headwaters are recognized for their knowledge and also benefit from the use of the genetic resources of the region.	Identify cases of exploitation (biopiracy) of genetic resources that have not been recognized, and where peoples and nationalities have not benefited.
		Launch internal claim actions (protection actions) to demand the right of indigenous peoples and nationalities from the region to share in the benefits of use.
Restoration	4. Promote and consolidate initiatives to restore forests and watersheds by promoting local employment.	Constitution of River Reserve Systems of the Sacred Headwaters for the restoration and eco-management of forests and rivers.
		Strengthen and replicate indigenous restoration initiatives, remediation plans for polluted rivers, favoring the local use of the restoration of 7'654.582 ha in Peru and 1'056.766 ha in Ecuador of forest, which is the area necessary to ensure the ecological integrity of the region.

Targets		
Unit of measurment	**Intermediate**	**Final**
Committed agreements.	Adoption of agreements between priority actors (local governments, companies, financial institutions and civil society) in 5 years.	Suscripción de acuerdos entre Gobiernos Nacionales y reconocimiento internacional en el marco del debate climático en 10 años
Recognized reserves.	1 reservation in the process of recognition, 1 year	3 reserva reconocidas / 4 años
Number of declared protected areas.	5 proposed protected areas - 3 years	5 Áreas protegidas creadas / 5 años
Research on biopiracy and recommend agenda for action.	-	1 investigación en 1 año
Legal actions taken.	2 in 2 years	10 / 10 años
Number of river reserve systems constituted.	Declaration of the Sacred Headwaters River Reserve -3 years	Constitución de la Reserva / 5 años
Number of remediation plans implemented	4 restoration initiatives - 3 years	8 Iniciativas de Restauración y conservación / 10 años

FOREST AND WATERSHED CONSERVATION AND RESTORATION		
Thematic Area	**Strategy**	**Action**
Restoration	5. Strengthen the agroforestry management capacities of communities with emphasis on women and youth.	Train women and young people in the communities in reforestation techniques, as well as in plant and land management.
Agroforestry Management	6. Promote Forest Utilization Plans and the implementation of Management and Control Systems within the territories.	Implement forest harvesting plans and the design of internal regulations regarding the exploitation of raft and other timber species.
Climate change	7. Demand that both Ecuador and Peru comply with their international commitments and obligations to global climate agreements.	Carry out a study on the implementation, compliance and impacts of public policies that seek to abide by the NDCs proposed by Peru and Ecuador, through citizen oversight with emphasis on indigenous peoples and nationalities.
		Present compliance actions as an enforceability mechanism for compliance for those who have not yet submitted progress reports to the Ministries of the Environment of both countries (responsible for climate policy).

	Target	
Unit of measurment	**Intermediate**	**Final**
Number of trainings carried out	8 / 2 years	50 / 10 years
Number of forest use plans implemented.	23 plans and regulations for forest use - 3 years	50 plans and regulations for forest use / 5 years
Studies realized.	-	1 in 6 months
Interposed actions.	2 in 1 year	5 in 3 years

Photograph: courtesy of Fundación Pachamama

FINANCING FOR LIFE

Photograph: Caroline Bennett

Photograph: Caroline Bennett

A historic opportunity to invest in the protection of the Sacred Headwaters of the Amazon

The bioregional plan includes preliminary estimates for investments needed for implementing the priority actions detailed in the plan, as well as detailing possible sources of funding from international and national climate and biodiversity frameworks, a set of proposed principles for regenerative finance, and suggested next steps for developing the financial architecture for the plan's implementation.

While the bioregional plan may seem ambitious, it offers an enormous opportunity for safeguarding this important region of the Amazon and for creating an inspiring model for the world. This section establishes the budget amounts, based on the vision and principles to avert the tipping point of no return that the Amazon biome is facing.

Protecting this global treasure must go hand in hand with improving the living conditions of the indigenous and local populations in order to reduce the pressure on the Amazon rainforests, since inequality, poverty, and the gap in meeting basic needs (drinking water, education, health, among others) have many ecological implications.

Preliminary Cost Estimates *

In the 2021-2030 period, financial flows will be oriented towards:

1) Supporting governance processes, land rights/titling, capacity building and construction of life plans.

2) Promoting systemic transition pathways (debt relief, moratorium on extraction, wellbeing indicators)

3) Regenerative livelihoods and standing forest economic initiatives.

4) Connectivity, mobility and transportation based on clean energy.

5) Conservation and restoration of ecosystems, and greening urban /rural regions.

6) Ecological awareness, education and intercultural health.

7) Building a Skilled Workforce and Human Talent.

8) Advocacy and communication.

The preliminary cost estimate for the implementation of the plan is **$18.241 billion over 10 years**. This includes upfront investments and recurring costs.

The majority of the amount above, **$17,57 billion, falls within the primary responsibilities of national and local governments** in meeting obligations to their citizens in, for example, the areas of health, education, transportation, urban planning and greening of cities **(of this amount 31% would be by theEcuadorian government and 65% by the Peruvian government)**.

An estimated **$672 million over 10 years would be what indigenous and other civil society organizations of this vast bioregion** would be seeking to raise and deploy for the implementation of priority actions representing 3.7% of total costs. This is a preliminary estimate that will likely grow over time.

When reviewing the budgets of all levels of government for each country, we see that for the average of the last three years in the 6 Ecuadorian provinces and 3 Peruian Departments, projected over the next 10 years, the total expenditures reach upwards of $76 billion. Compared to this amount, the cost estimates for implementing the ASHI bioregional plan is 22.9 %. This clearly shows that the levels of expenditures being proposed by the Sacred Headwaters Initiative are fully feasible and viable while also recognizing the need to attract additional investments to complement the work of the local and national government of Peru and Ecuador.
Implementing many of the proposed transition pathways requires processes for changing legal and policy frameworks, public opinion, and societal values. Pathways and costs to achieving these changes are hard to estimate.

* Rafael Burbano and Fander Falconí were in charge of budgeting and costing section.

Table 22

Estimated Budget 2021-2030 and Budgetary Responsibilities (billions of USD$)

Action Areas	Amazon Sacred Headwaters Initiative	Ecuadorian State	Peruvian State	Total Cost
Transition Pathways	0,013	0,004	0,004	0,138
Renewable Energy	0,005	0,281	0,729	1,014
Strengthening Territorial Governance	0,114	0.0	0.0	0,114
Transport and Connectivity	0,341	0,046	0,102	0,489
Ecological Awareness and Intercultural Education	0,078	0,724	1,440	2,242
Intercultural Health	0,008	1,956	2,555	4,519
Smart Cities and Bio-social Housing	0,004	2,426	5,601	8,030
Forest Economy & Regenerative Ventures	0,104	0.0	0.0	0,104
Conservation & Restoration of Forests and River Watersheds	0,004	0,239	1,473	1,715
Total	**0,671**	**5,676**	**11,904**	**18,251**
Percentage distribution	3.7%	31.1%	65.2%	100%

The National regulatory framework and debates on sustainable financing *

To undertake sustainable activities, costs related to solving problems such as the lack of land titles, the modification of public policies, seed capital, innovation, certification, training, among other things, must be considered (Haug Larsen et al., 2018; Falconer et al., 2015).

The effectiveness of securing indigenous land tenure rights and supporting management of their territories according to their traditional knowledge, are already proven comprehensive protection strategies for the Amazon and have demonstrated fundamental environmental value in mitigating climate change. Even so, between 2011-2020 Indigenous Peoples and Local Communities (IPLC) tenure rights and forest management received on average $270 million per year, that is less than 1% of official development aid (ODA) for climate mitigation and adaptation in the same period. The Rights and Resources Initiative (RRI) has estimated that scaling up land tenure recognition in 24 countries ready for medium and large scale projects will require approximately $8B in funding. In the past decade, just 30% of that amount was disbursed for the entire tenure and forest management agenda globally and just 3% was allocated to land rights and tenure projects in forests. This clearly points to a funding gap and demonstrates that resources are not reaching indigenous communities (Hatcher et al., 2021; RRI, 2021).

Both Ecuador and Peru are signatories to the Paris Agreement in addition to having signed bilateral agreements on forests with Germany and Norway. These agreements commit both countries to significant goals, both in reducing deforestation and restoring forests and in recognizing the territorial rights of indigenous peoples and nationalities. Additionally, the provincial government of Pastaza and six regional governments in Peru, three of which are in the Sacred Headwaters Region (Loreto, Amazonas and San Martín Departments) are part of the GCF Task Force. In this context, the indigenous organizations of Ecuador and Peru are creating their own planning and financial mechanisms.

* The budget and costing section was prepared by Rafael Burbano and Fander Falconí. The financing section was prepared by Inés Luna with contributions from Atossa Soltani, Sandra Vela and Gisela Lujan.

Ecuador has created its National Climate Financing Strategy, published in March 2021, in which indigenous peoples are also recognized as implementation agents. Ecuador has created the Sustainable Environmental Investment Fund (FIAS) as the main financial mechanism for receiving and channeling funds for environmental management in Ecuador. Created by Executive Decree 146 on September 6th, 2017, the FIAS has an executive board made up of the Ministry of Foreign Affairs and Human Mobility, the Technical Secretariat for Planning of Ecuador, the Ministry of the Environment, as well as three entities representing the academy and civil society: REDU-EPSOL, CEDENMA and a representative of the public. FIAS is a possible option for the establishment of a Sacred Headwaters Fund. Nested in the FIAS, each fund would have its own advisory and oversight bodies that would help guide its fundraising and grant-making.

Peru is creating its National Program for the Conservation of Forests for Mitigation of Climate Change (2010-2030) and has drafted its National Strategy on Forests and Climate Change (2016-2030). Peru has a Mechanism of Conditional Direct Transfers, which implies the delivery of incentives for titled native and campesino communities in order to strengthen the conservation capacities of their forests and favor the reduction of deforestation. In the framework of the 2014 Bonn Challenge, Peru committed to reforest 3.2 million hectares by 2020. Peru is also a sponsor of the Lima Challenge, where participants support the global goal of reducing the rate of loss of natural forests by at least half by 2020, and to end forest loss by 2030. Peru is also a supporter of the Copenhagen Commitment, which aimed to achieve net zero emissions for the LULUCF sector by 2021.

The Fund for the Promotion of Natural Protected Areas PROFONANPE was a private non-profit entity absorbed, under the merger with the National Environment Fund, FONAM (DU 022-2020). Since then, PROFONANPE has been in charge of recruiting, management and administration of financial resources for the implementation of various actions, programs, projects and other interventions related to the conservation of the country's biodiversity and the fight against climate change.

Although the commitments from Ecuador and Peru in regards to climate change were made several years ago, environmental goals have not yet been achieved, and the funds committed by the international community have yet to fully reach the territories.

Our evaluation is that this is in part due to the difficulty that the communities have in accessing the open calls made by the central governments, as well as the need for technical support for the communities that receive financial support.

The Bioregional Plan is presented in this context as a real and viable way for both Ecuador and Peru to fulfill their commitments in facing the climate and mass extinction crisis, with respect for the rights of indigenous peoples and nationalities, and by effectively allocating financial resources to directly benefit local communities and their priorities. The preliminary estimates for the financing of the implementation of the Bioregional Plan can be seen in terms of priorities for the short-term (2023), medium-term (2026) and long-term (2030).

Photograph: Pablo Albarenga
Rainforest Defenders - OpenDemocracy
courtesy of Fundación Kara Solar

The Amazon Sacred Headwaters financial strategy vision

By 2030, sufficient resources have been raised to sustainably finance the implementation of the Bioregional Plan. The funds have been managed and deployed in an efficient, effective and transparent manner, promoting a social and ecological transition, benefitting indigenous peoples and local communities and protecting the ecological integrity of the Amazon Sacred Headwaters Region in the Ecuadorian and Northeast Peruvian Amazon.

Scope

This financial strategy covers the five objectives and 9 axes of action of the Bioregional Plan, a proposal led by the indigenous peoples of Peru and Ecuador, for the more than 35 million hectares in the Sacred Headwaters bioregion. The financial strategy contemplates the management and deployment of funds from a variety of actors and institutions of the public and private finance sectors, civil society, international cooperation, academia, local communities and indigenous organizations, for a period of 10 years (2021-2030).

Principles for ASHI financial mechanisms

Ensures Sustainability

Ensure that the resources, as well as the results achieved with those resources, are sustained over time through the diversification of funding sources, financial planning, investment in human capacities and regenerative processes.

Generates and strengthens local capacities

Ensure that resources favor traditional and local, social and organizational structures, strengthening and reinforcing innovative processes and technology transfer.

Promotes community wealth and wellbeing in the territories

Ensure the equitable distribution of benefits, evaluating possible negative and/or disruptive impacts on the communities. Ensure that the beneficiaries of the funds are the local inhabitants and indigenous communities.

Protects and restores life and ecological integrity

The use of the resources of all the mechanisms or sources of financing received must maintain respect and care for nature.

Respects the rights of indigenous peoples and nationalities, human rights, and Rights of Nature

Fundraising, resource management, and implementation must respect the rights of indigenous peoples in accordance with ILO Convention 169, the United Nations Declaration on indigenous peoples, and the national regulations of Ecuador and Peru and ensure that fundraising, management and implementation do not violate human rights.

Guarantees Participation, transparency and access to information

This includes access to quality information related to fundraising, agreements with donors, compliance with established principles and guidelines, as well as the management and implementation of the funds raised.

Ensures Accountability

Ensures that funders, donors and taxpayers receive information collected in an appropriate manner, respecting national regulations, as well as ensuring evaluation and auditing processes.

Promotes Efficient and effective use of financial resources

Ensures that the financed actions achieve the best possible impact by optimizing resources.

Self-Directed management

Promotes local and autonomous actions in the territories, aligned with the implementation of the Bioregional Plan.

Additionality

Demonstrates that the funds collected are in addition to the commitments that the States of Peru and Ecuador must comply with, to fullfill their duties as States of law.

Co-responsibility

Recognizes that the implementation of the Bioregional Plan requires the commitment and action of a diversity of actors that includes: financial institutions, national and subnational governments, public and private institutions, civil society organizations, academia, indigenous organizations and communities, and individuals, among others.

Non-commodification of Nature

Recognizes that Nature is a living being and a right bearing entity, and hence, doe not consider Nature as an object to be traded in carbon markets.

Prioritizes Systemic Change

Financial contributions should be directed at legal and policy change that addresses systemic drivers of deforestation and forest degradation, rather than directed at standalone projects.

Funding Sources

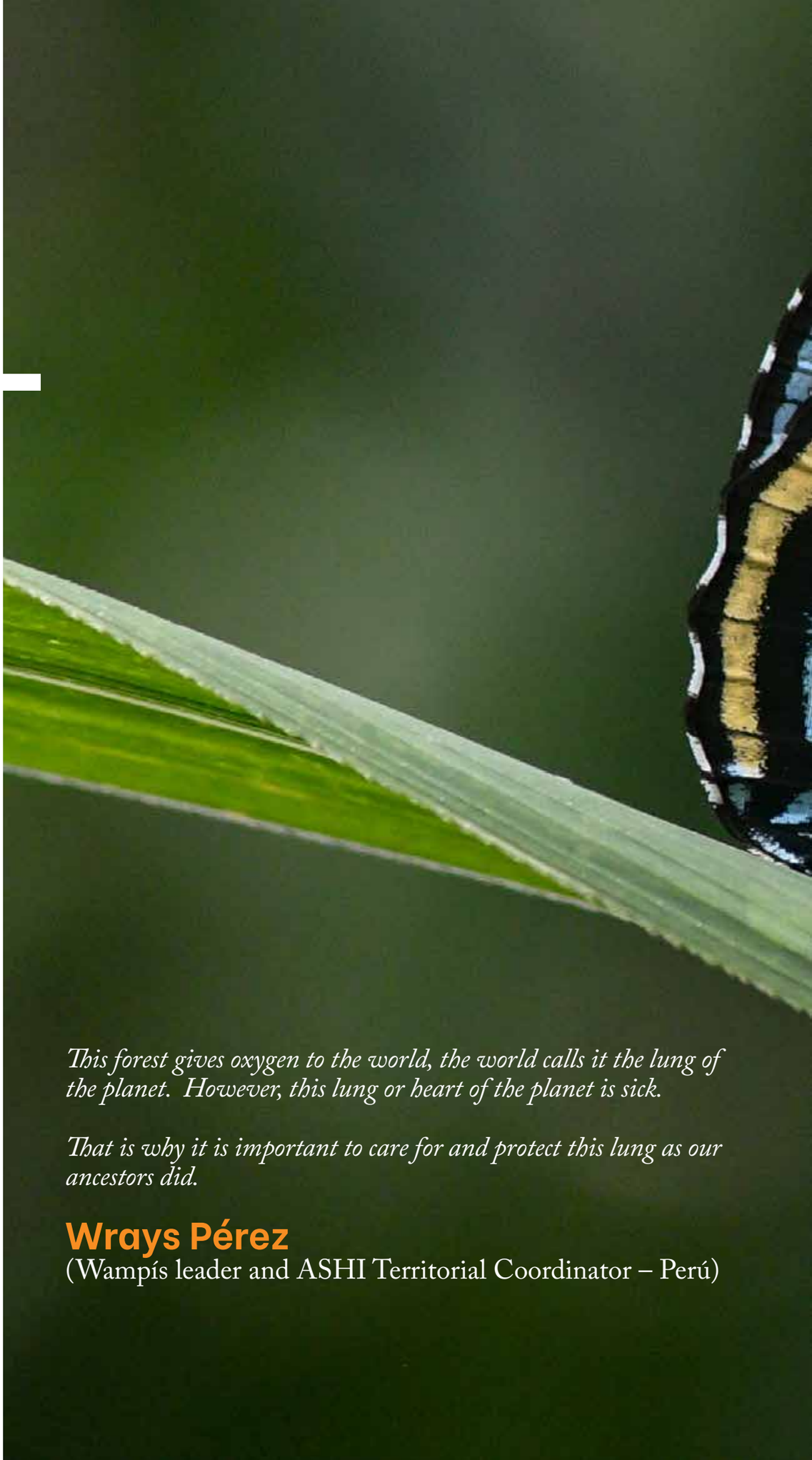
Here are possible funding sources. This list is not exhaustive.

- National, regional and local governments (especially the ministries of the environment and already established environmental funds such as FIAS and Profonampe).
- International environmental funds (GCF, GEF, Climate Invest Fund, Forest Investment Project, among others).
- Multilateral organizations and development banks (United Nations system, World Bank, IDB, CAF).
- International cooperation (from countries such as Germany, England, Norway, the United States, France).
- International NGOs (such as WWF, CI, TNC, Rainforest Alliance, especially as accredited organizations in the GCF and GEF).
- Private sector (national and international companies).
- Foundations and philanthropists (international foundations such as Ford, Rockefeller Brothers, Moore, among others).
- Individual donors and crowd funding mechanisms

Implementing agencies

- Subnational governments.
- Civil society organizations, registered at the national level.
- Indigenous organizations of the first, second and third degree.
- Technical execution units of indigenous organizations.
- Community associations and the local productive sector.
- National academic institutions.

NEXT STEPS



This forest gives oxygen to the world, the world calls it the lung of the planet. However, this lung or heart of the planet is sick.

That is why it is important to care for and protect this lung as our ancestors did.

Wrays Pérez
(Wampís leader and ASHI Territorial Coordinator – Perú)

Photograph: courtesy of Fundación Pachamama

ECOLOGICAL TRANSITION

TOWARDS 2030

The agreement of the Sacred Watersheds reminds us that the initiative and the Bioregional Plan is a proposal driven by the indigenous peoples of this territory, aspiring to change the dream of the modern world so that life may flourish for many generations to come. May we all be able to live in harmonious relationship with ourselves, with each other and with all beings! May we honor the reciprocity and complementarity that governs the pluriversity of all our relationships! May we be guided by the ancestral wisdom and the genius of the Amazon forest to live in deep and liberating interconnection of our greatest potential as daughters and sons of this tremendous planet that is our home!

As humanity we lack the humility to recognize that we cannot continue on our current path. We are at a critical point in our history, between our 'modern' ways of structuring our identity, consciousness and love, and the irresistible call of our ancestral future. Life's own evolutionary impulse is manifesting through us, asking us to change course(s). Listening to the call of the Sacred Watersheds, we know it is time to collaborate as never before so that together we can achieve our vision!

Thank you to all readers: public decision makers, students, academics, entrepreneurs, indigenous communities, youth groups who are curious to discuss and add their visions. We hope that the Bioregional Plan will be an open road to rethink the possibilities of the next decade. May these pages and chapters give you the necessary impulse to advance with concrete actions towards a genuine and ambitious Ecological Transition towards 2030. Thanks to the technical team of more than 50 technicians and experts from the world and the region who for two years have contributed to the finalization of this text in July 2021.

Maketai,

Belén Páez and Uyunkar Domingo Peas

The Secretariat of the Amazon Sacred Headwaters Initiative

Photograph: courtesy of Fundación Pachamama

Immediate Actions and Priorities of ASHI

1. Create, establish and operationalize a Sacred Headwaters Fund as a vehicle for funding the Bioregional Plan's implementation with meaningful participation of indigenous organizations and allies (develop a coherent financial campaign structure, determine combination of endowment vs spend down funds, and develop governance structure, fundraising strategy).

2. Determine pathways for private investments from the growing pools of Impact / Green investment funds, backed by public investments.

3. Establish a platform using GIS in service to fundraising, donor and partnership management, and increased collaboration by indigenous peoples, NGO, and governments.

4. Design and establish the system for monitoring and evaluation of the initiative's results and learnings and process design working in partnership with Sustainamatrix and Collaborative for Bioregional Action Learning and Transformation.

5. Collectively evaluate and adapt international financial mechanisms that are aligned with the principles established in this chapter and those that are not.

6. Expand ASHI's fund development capacity and team and fundraising campaign and secure financial pledges for the next phase.

7. Research and develop financial scenarios and innovative strategies for reforming public expenditure decisions and the implementation of transition pathways (Debt Relief, basic income, and social bonds, alternatives systems of exchange).

8. Establish and support ongoing processes where indigenous peoples are defining their priorities for action from their life plans from their territories.

9. Establish direct fundraising and collaboration platforms where indigenous and local communities can present their visions and priorities and report on their actions directly to potential funders, general public and governments and where civil society and investors can co-create and fund campaigns for systemic change.

Photograph: Caroline Bennett
courtesy of Amazon Watch

10. Carry out studies of potential financial and wellbeing benefits that will result from the implementation this plan (e.g. from new sustainable economic initiatives, from reduction of costs, from debt relief, from international transfers, etc.) so as to estimate the economic opportunity, this bioregional plan presents for Perú and Ecuador, as well as for local governments and population.

11. Engage in communications, advocacy campaigns to enrol local communities, decision makers and the public in the Bioregional Plan 2030.

12. Involve the global commission of experts as a laboratory for innovation.

13. Engage local and national government policymakers, local authorities and influencers in making commitments towards the plan's implementation

14. Design and implement pilot projects and create infrastructure for collaboration and scaling.

15. Convene roundtables and solutions summits to influence public debate around climate and COVID recovery.

16. Support landmark legal cases and land claims and legalize isolated peoples territories.

17. Further refine proposals for debt swaps, universal basic income, alternative currencies and for leaving fossil fuels in the ground.

Photograph: Caroline Bennett

ENDORSE INDIGENOUS PEOPLES' DECLARATION FOR THE AMAZON SACRED HEADWATERS

The Indigenous federations that are part of the Amazon Sacred Headwaters Initiative are calling for emergency support to stop the governments of Ecuador and Peru from expanding new fossil fuel, mining, and large-scale industrial development in one of the critical headwaters regions of the Amazon River.

View their powerful declaration below and share widely with others:

https://sacredheadwaters.org/declaration/

Join the thousands of peoples that have already signed the Pledge of Solidarity to declare your support for the indigenous federations and other institutions working to protect the Amazon Sacred Headwaters for the benefit of all life.

Photograph: Caroline Bennett
courtesy of Amazon Watch

We have to protect, love and keep our territories because they belong to our children's generation. The Amazon Sacred Headwaters Initiative advocates for our health, our medicines, education, the Sumak Kawsay (Amazonian wellbeing) in our territories.

Elvia Dagua
(Kichwa women's leader – former member of
the governing council of CONFENIAE - Ecuador)

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Photograph: Caroline Bennett

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HEADWATERS


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