INITIATIVE FOR CONSERVATION IN THE ANDEAN AMAZON

ICAA-WIDE FINAL REPORT

March 2016

PROJECT COVER SHEET

1.1 ***NAME OF THE PROJECT: ICAA II***

1.2 ***DATES (START/FINISH)***

Contract: September 1, 2011 – March 31, 2016

Report period: September 1, 2011 – March 31, 2016

1.3 ***PRIME PARTNER: INTERNATIONAL RESOURCES GROUP***

1.4 ***NAME OF PROJECT DIRECTOR: JESSICA HIDALGO***

E-MAIL: *JHIDALGO@UA-ICAA.ORG*

PHONE NUMBER: *637-8154 X 202*

1.5 ***NAME OF USAID CONTRACT OFFICE REPRESENTATIVE (COR): MONICA SUQUILANDA***

1.6 ***NAME OF ALTERNATE COR: ANNIE WALLACE***

1.7 ***USAID CONTRACT NO.: AID-EPP-I-00-04-00024 / TASK ORDER NO. AID-OAA-TO-11-00048***

March 2016
This report was prepared by consultant Robert Hofstede and International Resources Group (IRG) and its subcontractors Sociedad Peruana de Derecho Ambiental (SPDA), ECOLEX, Patrimonio Natural (PN), Conservation Strategy Fund (CSF), and Social Impact (SI).

EXECUTIVE SUMMARY

USAID's Initiative for Conservation in the Andean Amazon (ICAA) triggers positive change in one of the most biodiverse regions on earth: the northwestern portion of the Amazon basin. Started in 2006, this long-term program has brought sustainable livelihood options to dozens of indigenous communities, ensured their land rights and supported wise use of their natural resources. In addition, it strengthened the knowledge base for the conservation of the Amazon basin, stimulated improved environmental governance, promoted economic incentive schemes for forest dwellers, and addressed emerging threats through applied research. Rather than supporting single organizations through bilateral projects, USAID adopted a regional approach, with international consortia that focus on key landscapes and themes across and within boundaries. This created a regional-wide network of leading international and Amazon-based NGO's, research institutions and indigenous peoples' organizations who have been producing positive outcomes towards wise management of Amazon' natural resources through research, training and policy support.

The second phase of the program (ICAA II, 2011-2016) focused on supporting indigenous peoples' and other forest dwelling communities and on achieving tangible conservation and sustainable livelihood results in the field. Therefore, it achieved hundreds of individual, small-scale impact of great significance to the people who directly interact with and manage the Amazon landscape. All these local impacts together, constitute a chain of jewels spanning over the entire Andean-Amazon, connecting landscapes, communities and countries. In total, the landscape level results sum up to millions of hectares of land under improved management, thousands of individuals, men and women, with strengthened technical capacities, hundreds of families with increased income from sustainable livelihood practices and dozens of communities in the entire region with consolidated land tenure, land use planning and applying good governance over their natural resources.

To achieve the tangible results at landscape level, ICAA II partners worked through scales to stimulate an enabling legal and policy environment with local, national and international governmental organizations, not only in the environmental sector but also in mining, infrastructure, culture, agriculture and others. The program increased knowledge through research and dissemination of information. It contributed considerably to strengthened capacities of indigenous peoples' organizations, environmental NGO's, and Amazonian universities that together form the forefront of conservation activities in the region.

ICAA II is leaving a legacy of well managed conservation units and indigenous territories of high biological value, indigenous peoples' communities with improved rights and a bright future based on sustainable livelihoods, environmental, academic and indigenous peoples organizations strengthened and well equipped to continue the positive work done through ICAA II and a strongly improved knowledge basis and awareness among broad sections of society about the challenges and solutions for Amazon conservation. The program was truly international in its character, with connected activities in Peru, Ecuador and Colombia and, through its implementing partners, reaching out to Bolivia, Brazil and other Amazon countries. At the level of the Andean-Amazon countries, the regional integration provided by the ICAA Support Unit (ISU) shared experiences among the major stakeholders; encouraged national governments communicate and collaborate, aligned management in transborder areas and created a regional wide knowledge basis. ICAA II crossed borders, scales and sectors to mitigate the local effects of some major threats to Amazon biodiversity

During ICAA II implementation, the program management learned how to deal with many challenges related to a complex international context in the Andean Amazon. Therefore, they are now ready to upscale the existing success to a regional scale. A regional situation analysis, based on scientific evidence and validated by multiple stakeholders, should form a basis for a regional conservation vision and future

strategy to consolidate the impact of USAID's support at different levels. A network of key conservation initiatives and organizations will constitute a platform for thorough debate and policy development about the emerging threats (i.e. illegal logging, mining, oil, and climate change) in the Amazon region. Finally, a regional program unit will stimulate the regional vision and broker policy proposals and innovative approaches to governmental agencies at all levels.

TABLE OF CONTENTS

EXECUTIVE SUMMARY **2**

TABLE OF CONTENTS **4**

Tables **5**

Figures **5**

ACRONYMS and ABBREVIATIONS **7**

1. OVERALL PROGRAM DESCRIPTION **11**

1.1. Context: Why a conservation program in the Andean Amazon? **11**

1.2. Birth of a conservation program in the Amazon basin **13**

1.3. ICAA program logic **13**

1.4. Program structure **16**

1.5. Monitoring and reporting **19**

2. THE MAIN ACHIEVEMENTS OF ICAA II **20**

3. ICAA INTERMEDIATE RESULTS **23**

3.1. IR1 – Selected landscapes managed sustainably **23**

3.1.1. Large-scale planning 23

3.1.2. Conservation units 24

3.1.3. Indigenous territories 26

3.1.4. Private and Communal land 27

3.1.5. Area of land under improved management 28

3.2. IR2 - Key elements of natural resources governance functioning in critical landscapes **30**

3.2.1. Land titling and tenure 30

3.2.2. Indigenous rights 31

3.2.3. Forest legislation 32

3.2.4. Infrastructure and gold mining 33

3.3. IR3 – Increased capacity to utilize payment for environment services (PES)-like and other economic incentives **34**

3.3.1. Economic incentives through sustainable livelihoods practices. 35

3.3.2. Economic initiatives based on ecosystem services management. 37

3.3.3. Number of Initiatives of Economic Incentives promoted and hectares positively affected 40

3.4. IR4 – Greater understanding and solutions for key environmental issues **40**

3.4.1. Knowledge generation 41
3.4.2. Knowledge dissemination 43
4. CROSS-CUTTING THEMES 46
4.1. Improve policy and policy implementation 46
4.2. Increase gender awareness and gender-related program outcomes 49
4.3. Strengthening of selected organizations and institutions and partner organizations 50
4.4. Improved capacity through training 51
4.5. Increase indigenous people participation 52
5. LESSONS LEARNED 54
5.1. Program implementation and effectiveness 54
5.2. Program structure and efficiency 56
6. RECOMMENDATIONS 57

Tables

Table 1. Number of hectares with improved management, achieved during the ICAA II program (Indicator 1) (cumulative) 28
Table 2. Amount and types of initiatives to promote economic incentives developed during ICAA II (Indicator 4) and number of hectares positively affected (indicator 5). 40
Table 3. Number of information products produced during the ICAA II program, by all program partners (Indicator 7). 44
Table 4. Number of Policies/Plans, Laws, Agreements and Regulations produced during three years of ICAA II implementation (Indicator POL-1). 47
Table 5. Number of stakeholder dialogue activities for the development of policies, laws, agreements and regulations; including participants during the ICAA II program implementation (Indicators POL-2 and POL-3). 49
Table 6. Number of organizations (n=9) showing increased institutional capacity through participation in ICAA II's Regional Institutional Strengthening program. 51
Table 7. Number of training events, people trained, number of hours and total amount of person-hours during ICAA II programme (Indicators CAP-2 and CAP-3) 52

Figures

Figure 1. Graphic representation of the ICAA II results framework 15
Figure 2. Increase of Private Conservation Areas (cumulative, in number and area) during the ICAA II program 27
Figure 3. Distribution of types area with improved management, achieved during the ICAA II program. 29

Figure 4. Percentage of individual areas that received different types of improvements in management.. 29

Figure 5. Distribution per category of information products produced during the ICAA II program..... 44

Figure 6. Level of progress of policies, laws and regulations..... 48

Figure 7. Thematic distribution of Policies/Plans, Laws, Agreements and Regulations produced during ICAA II..... 48

ACRONYMS and ABBREVIATIONS

ABCI	Amazon Basin Conservation Initiative
ACT	Amazon Conservation Team
AFIMAD	Asociación Forestal Indígena de Madre de Dios
AGROSHIT	Grupo Agroforestal de Shiringueros de Tahuamanu
AIDER	Asociación para la investigación y Desarrollo Integral (Peru)
AIDESEP	Asociación Interétnica de Desarrollo de la Selva Peruana
AMPA	Amazónicos por la Amazonía (Peru)
APNP	Alto Purus National Park
ASCART	Asociación de Castañeros de la Reserva de Tambopata
BSNP	Bahuaja Sonene National Park
C&G	Conservación y Gobernanza (consortium)
CDG	Capacity Development Group on Economic Incentives for Conservation
CIFOR	Center for International Forestry Research
CIPAV	Centro para la Investigación en Sistemas Sostenibles y de Producción Agropecuaria (Colombia)
COICA	Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica
CONPES	Economic and Social Political National Council (Colombia)
COP	Conference of the Parties
CORPOAMAZONIA	Corporación para el Desarrollo Sostenible del Sur de la Amazonia (Colombia)
CSF	Conservation Strategy Fund (USA, Bolivia, Colombia, Peru)
DIREPRO	Dirección Regional de la Producción (Peru)
DOI	United States Department of the Interior
E3	Bureau for Economic Growth, Education and Environment (USAID)
ECOLEX	Corporación de Gestión y Derecho Ambiental (Ecuador)
ECOMUSA	Empresa Comunal Jebe Natural del MAP Tahuamanu
EI	Economic Incentives
FA	Fondo Acción (consortium)
FECONAPIA	Federación de Comunidades Nativas de Puerto Inca y Afluentes
FEMA	Fiscalía Especializada en Materia Ambiental
FENACOCA	Federación Nativa de Comunidades (Peru)

FENAMAD	Federación Nativa del Río Madre de Dios y Afluentes
FONDAM	Fondo de las Américas
FSC	Fundación Sobrevivencia Cofán (Ecuador)
FY	Fiscal Year
FZS	Frankfurt Zoological Society
GOREMAD	Gobierno Regional de Madre de Dios
HED	Higher Education for Development
IADB	Inter American Development Bank
IBC	Instituto del Bien Común (Peru)
ICAA I	Initiative for Conservation in the Andean Amazon, Phase I
ICAA II	Initiative for Conservation in the Andean Amazon, Phase II
IL	Indigenous Landscapes (consortium)
IP	Indigenous Peoples
IR	Intermediate Result
IRG	International Resources Group
ISU	ICAA Support Unit
LAC	Latin America and the Caribbean
LAC/RSD	Latin America and Caribbean Bureau's Regional Sustainable Development
LMT	Loreto and Manu-Tambopata (consortium)
MABOSINFRON	Asociación de Manejo y Conservación de Bosques sin Frontera de la cuenca del Río La Novia
MDD	Madre de Dios (consortium)
MINAGRI	Ministry of Agriculture, Animal Husbandry and Irrigation (Peru)
MINAM	Ministry of Environment (Peru)
MINEM	Ministry of Energy and Mining (Peru)
NGO	Non-Governmental Organization
NOA'iKE	Nacionalidad Originaria A'i Kofan Ecuador (formerly FEINCE)
NTFP	Non Timber Forest Products
OpEPA	Organización para la Educación y Protección Ambiental (Colombia)
OPIAC	Organización de los Pueblos Indígenas de la Amazonía Colombiana
ORAU	Organización Regional de AIDESEP-Ucayali
PCR	Purus Communal Reserve
PEM	Proyecto Especial Madre de Dios

PES	Payment for Environmental Services
PIACI	Pueblos Indígenas en Aislamiento Voluntario o Contacto Inicial (Indigenous Peoples in Voluntary Isolation and Initial Contact)
PLARs	Policies, Laws, Agreements and Regulations
PM	Purús-Manu (consortium)
PMCC	Purús-Manu Conservation Corridor
PROCOMPITE	Iniciativa de Apoyo a la Competitividad Productiva
PROCREL	Programa de Conservación, Gestión y Uso Sostenible de la Diversidad Biológica de Loreto
PSNR	Pacaya Samiria National Reserve
RA	Rainforest Alliance
REDCIP	Red de Comunicadores Indígenas del Perú
REDD+	Reducing Emissions from Deforestation and Forest Degradation and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries
RIS	Regional Institutional Strengthening Program
RF	Results Framework
RN	Reserva Nacional
RONAP	Recolectores Orgánicos de Nuez Amazónica del Perú
SAN	Sustainable Agriculture Network
SAR/Env	Operating Unit for South America Regional/Environment
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SENACE	Servicio Nacional de Certificación Ambiental
SENPLADES	Secretaria Nacional de Planificación y Desarrollo (Ecuador)
SERFOR	Servicio Nacional Forestal y de Fauna Silvestre (Peru)
SERNANP	Servicio Nacional de Áreas Naturales Protegidas por el Estado (Peru)
SI	Social Impact, Inc.
SINCHI	Instituto Amazónico de Investigación Científicas (Colombia)
SL	Sustainable Landscapes (consortium)
SOTI	Sistema de Ordenamiento Territorial Indigena
SPDA	Sociedad Peruana de Derecho Ambiental (Peru)
TEEB	The Economics of Ecosystems and Biodiversity
TNC	The Nature Conservancy
TSP	Technical Support Partner

TT-RCA	Tamshiyacu Tahuayo Regional Conservation Area
UNAMAD	Universidad Amazónica de Madre de Dios
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USFQ	University of San Francisco in Quito
USFS	United States Forest Service
USG	United States Government
WCS	Wildlife Conservation Society
WHCR	Woods Hole Research Center
WWF	World Wildlife Fund/World Wide Fund for Nature

1. OVERALL PROGRAM DESCRIPTION

1.1. Context: Why a conservation program in the Andean Amazon?

The Amazon Basin contains immeasurable environmental and cultural wealth. Conserving and sustainably developing this natural and social wealth represents both an immense opportunity and responsibility. On a daily basis, governments and civil societies within the Amazon Basin face the challenge of meeting short- and long-term needs by balancing environmental conservation and economic well-being. It holds the largest area of contiguous and relatively intact tropical forest in the world. With its staggering biological diversity, economic value, and role in moderating the world's climate, the Amazon has immense value to the world, to the region, and to its human and animal inhabitants. Geological and evolutionary processes, related to the uplift of the Andes that created changes in regional climate and diverse edaphic patterns, made the Andean Amazon the most species-rich portion of the Amazon Basin.[1] Peru, Colombia and Ecuador (the three countries of the Andean Amazon where ICAA II is implemented) is home to 20% of the watershed total of 7.3 M km.[2]

The Amazon region is of immeasurable ecological importance. It is the most biodiverse region on the planet and forms the largest extension of intact tropical forests. A compilation of species in the Amazon region from 2005 found at least 40,000 plant species, 75% of which are endemic to the region.[3] The same study found that 427 mammals, 1,300 birds, 378 reptiles and 427 amphibians had been scientifically classified for the region. More species of primates can be found in the Amazon than anywhere else on Earth. With some estimates as high as 3,000, this is the region with the largest number of freshwater fish species. For the largest groups of living beings, the invertebrates, the number is almost impossible to list. In approximately five hectares of Amazon rainforest, 365 species from 68 genera of ants were found. By the beginning of the 21st Century, between 96,660 and 128,840 species of invertebrates had been described by scientists in Brazil alone.[4] In short, many experts believe the region probably encompasses 10% of the world's known biodiversity.[5]

The Amazon is the world's largest river basin. It is drained by the greatest freshwater system on Earth, both in length and in volume, and holds a staggering 12-20% of the world's global running freshwater. The Amazon is very important for its carbon stock and it is estimated that the region contains almost 10% of the global reserve of carbon stored in the aboveground compartments of land ecosystems. The role of the Amazon in climate stability and functioning is even more important than the amount of carbon it stores. The rainforest drives the atmospheric circulation in the tropics by absorbing energy and recycling about half of the rain, which falls on it. Evaporation from the Amazon is important for sustaining South American rainfall and economies (agriculture, hydropower). Historically, Amazon biodiversity resources have been the basis of local, national, regional and world economies and are used for food, building materials, making tools and utensils, as raw materials for manufacturing and also in socio-cultural ceremonies, traditions and rituals.

---

[1] Hoorn, Wesselingh, ter Steege, Bermudez, Mora, Sevink, ISanmartín, Sanchez-Meseguer, Anderson, Figueiredo, Jaramillo, Riff, Negri, Hooghiemstra, Lundberg, Stadler, Särkinen, Antonelli, 2010. Amazonia Through Time: Andean Uplift, Climate Change, Landscape Evolution, and Biodiversity. Science 330: 927-931

[2] USAID/IRG/AED/SPDA/SI. 2011. Initiative for Conservation in the Andean Amazon (ICAA I) Final report.

[3] Da Silva, J.M.C. Rylands, A.B. da Fonseca, G.A.B. 2005. The Fate of the Amazonian Areas of Endemism. Conservation Biology 19 (3), pp 689-694

[4] Lewinsohn, T.M. and Prado, P.I. 2005. How Many Species Are There in Brazil? Conservation Biology. Volume 19 (3), 619.

[5] Maretti, C.C., Riveros S.,J.C., Hofstede, R., Oliveira, D., Charity, S., Granizo, T., Alvarez, C., Valdujo, P. & C. Thompson. 2014. State of the Amazon: Ecological Representation in Protected Areas and Indigenous Territories. Brasília and Quito: WWF Living Amazon (Global) Initiative.

Humans have lived in the Amazon region for at least 11,000 years.[6] Despite historically important immigration movements from people of European descent, related to the extraction of natural resources (cinnamon, quinine, timber and especially rubber), roughly up until the mid-20th Century, the occupation of the Amazon was mostly sparse, with very low density and with relatively small impacts on the natural environment. Since then, the region has seen an intensification of human occupation and use of natural resources, including land, minerals, and sources of energy. Important geopolitical developments related occupation and land "development" policies have seen an increase in the establishment of roads, settlements and military presence. Roads have opened the way for further settlement, increased exploration, more intensive use and exploitation of resources like timber, minerals, oil and gas and hydropower.[7]

Today, the Amazon population is estimated at 34.1 million inhabitants, which represents 11% of the population of South America. The countries with the largest Amazon population are Brazil (70%) and Peru (11%). The average demographic density for the Amazonian region (4.5/km^2) is almost five times lower than the South American average (20/km^2). Although the population is traditionally associated with forest dwellers and rural settlers, 65% of the population is living in fast growing urban centers such as Manaus (Brazil), Iquitos (Peru) and Belém (Brazil). Land use among the population in the Amazon region ranges from industrial zones to historical cities, as well as local communities (rubber tappers, riverine settlers, etc.), African-descendant communities and indigenous peoples. The latter comprises 385 ethnic groups, with 60 of these living in voluntary isolation.[8] Farmers and ranchers represent a very important and diverse group of the population.

Unfortunately, the Amazon Basin is beset by unsustainable resource management and extraction, which is driven by economic, political and social forces at the local, national and international levels. Precipitation patterns are changing in the Amazon Basin, with less rainfall in some areas and uncharacteristic flooding in others, elevating the concern of climate change and its impact on the Amazon. The incidence of devastating forest fires is also on the rise. At the local and national level, these changes mean fewer livelihood options over the long term for long-time indigenous populations and others, as well as reductions in revenues for national economic development. The consequences are extremely grave if these patterns of large-scale deforestation continue.[9][10]

USAID believes that the conservation of this natural richness and the sustainable development of the Andean Amazon region represent a great opportunity and responsibility. For more than 20 years, USAID funding has supported the creation of new protected areas with new forms of shared environmental governance, enhanced local capacity for land management that minimizes damage to the resource base, secured land titling of thousands of acres for indigenous peoples, and provided real economic alternatives such as sustainable forest management, ecotourism, and certification of rainforest products. Throughout this history, USAID programs have worked closely with counterpart government agencies to strengthen environmental management. While USAID has a long and effective history of activities through its Mission programs, these efforts are largely focused on specific sites and conservation areas in the region. Seeking to increase USAID's regional impact on alarming deforestation rates, the US Congress directed USAID to design and implement a regional biodiversity conservation program in the FY2004 appropriations bill. USAID led a consultative design process across the region with conservation stakeholders including indigenous groups, NGOs, universities, regional governments, other donors,

---

[6] Roosevelt, A.C., da Costa, M. Lima; Machado, C. Lopes, Michab, M., Mercier, N., Valladas, H., Feathers, J., Barnett, W., da Silveira, M. Imazio; Henderson, A., Sliva, J., Chernoff, B., Reese, D.S., Holman, J.A., Toth, N.& Schick, K. 1996. Paleoindian Cave Dwellers in the Amazon: The Peopling of the Americas". Science 272 (5260): 373–384.
[7] Maretti, C.C. 2014. Amazon: There is Hope! If we all do 'the right thing'; Deforestation, Protected Areas and Indigenous Territories: Past, evolution and … Which future? Brasilia, WWF Living Amazon Initiative; internal report.
[8] Maretti, et al. 2014.
[9] Mardas, N., Bellfield, H., Jarvis, A., Navarrete, C., Comberti, C., Leggett, M. & Oakes, N. 2013. Amazonia Security Agenda: Summary of Findings and Initial Recommendations. Global Canopy Program & International Centre for Tropical Agriculture
[10] Maretti et al. 2014.

technical experts and other USG agencies. The resulting program is the Initiative for Conservation in the Andean Amazon (ICAA; originally called Amazon Basin Conservation Initiative - ABCI). It is the flagship regional biodiversity conservation program of USAID/LAC, complementing a long-standing history and wide array of Mission and other Agency-funded conservation and natural resource management activities in the Amazon Basin.

1.2. Birth of a conservation program in the Amazon basin

Toward the end of a 16-year regional program focused on protected areas in Latin America and the Caribbean, Parks in Peril, USAID decided that its next regional program would focus on the Amazon Basin because of its global significance for biodiversity and climate change and regional economic importance. The design process for this new program included a 2004 assessment of the key threats and opportunities for Amazon Basin conservation. The assessment used a variety of methods to collect perspectives from a range of stakeholders and other experts from Brazil, Bolivia, Colombia, Ecuador and Peru. The assessment team found that economic, political and social forces were driving deforestation and habitat degradation through logging, agricultural frontier expansion, poor practice in agriculture and cattle ranching, fire, mining, petroleum exploration, fishing and habitat conversion, development of hydroelectric dams and introduction of invasive species. Economic forces included infrastructure expansion and global markets for commodities, oil, and mining products. Political forces ranged from insecure land and natural resources tenure to migration and policy advocacy included gaps in the overall framework, distorted incentives and weak enforcement. Social forces included struggles over the territorial and human rights of indigenous peoples, intercultural conflicts and gender disparities. During the last decades, many donors were involved with the reduction of these threats, but there has been too little funding for conservation of biological diversity on indigenous lands, sustainable management of aquatic systems and fisheries, and biodiversity conservation in agricultural systems.

The environmental themes that were prioritized for ICAA's strategies at local level included protected areas and conservation landscapes, Indigenous territories, Sustainable agriculture, Sustainable forestry, and Sustainable fisheries. In addition, large-scale actions were prioritized that would help mobilize regional critical mass for conservation: governance and civil society, best practices for landscape and natural resource management, markets, trade and financial mechanisms and public policies.

1.3. ICAA program logic

In 2006, USAID initiated the first phase of the ICAA program (ICAA I). During its implementation (2006 - 2011), ICAA I had as its main goal strengthening capacities and commitment to conservation and the sustainable use of biodiversity and ecosystem services in the Amazon biome of Bolivia, Colombia, Ecuador and Peru. The program was designed to work innovatively across and within boundaries to save one of the world’s most biodiverse areas by strengthening indigenous groups, convening national and regional policy dialogues on the main drivers of forest destruction and empowering local organizations and agencies to create and manage new protected areas and indigenous territories.

ICAA I was considered a development phase focused on encouraging regional cooperation, participation and capacity building. The second phase of ICAA, denominated 'execution phase' and planned to last for two five-year periods, focused primarily on the introduction and expansion of best practices in NRM, in governance and in improving livelihoods of the region’s population in environmentally sustainable ways. USAID initiated the first five-year period (ICAA II) of the second phase in 2011 to work in Bolivia, Colombia, Ecuador and Peru. Due to the deteriorating US/Bolivia relationships, ICAA terminated activities in Bolivia in May 2013. The USAID Missions in countries that touch on the Amazon Basin agreed that this regional USAID program would complement bilateral program activities that are inherently more national in scope (e.g. national policy dialogue, strengthening a national park system, conservation activities in non-Amazon regions). ICAA II has a $75 million budget for a five-year period

(2012-2016) and is managed by USAID/Peru's regional platform, the Operating Unit for South America Regional/Environment (SAR/Env).

At the start of ICAA II, new analysis of threats and opportunities was undertaken to adapt the main areas of work, but rather lessons learned and information generated during ICAA I resulted in a more focused landscape approach for ICAA II. Also, region wide results on large-scale planning, economic incentives and knowledge management were included as well as more cross-cutting issues.

ICAA II fits within the structure of intended results that make up the results framework (RF) for USAID/Peru's SAR/Env unit, which originated in the Latin America and Caribbean Bureau's Regional Sustainable Development (LAC/RSD) Office. ICAA II focuses on a single Development Objective: *Amazon Biome Maintained*.

Three broad program objectives support this goal:

- Objective 1 – Reduced deforestation and biodiversity loss
- Objective 2 – Natural resources governance functioning effectively
- Objective 3 – Increased livelihood quality and sustainability

Four Intermediate Results (IRs) support the achievement of these three objectives:

- IR 1: Selected landscapes managed sustainably
- IR 2: Functioning of key elements of natural resources governance in critical landscapes improved
- IR 3: Capacity to use payment for environmental services (PES)-like and other economic incentive programs increased
- IR 4: Understanding of key environmental issues and solutions improved

In addition, the program prioritized five cross-cutting issues to enhance the expected results: policy, gender, indigenous populations, capacity building and strengthening of regional institutions (Figure 1)

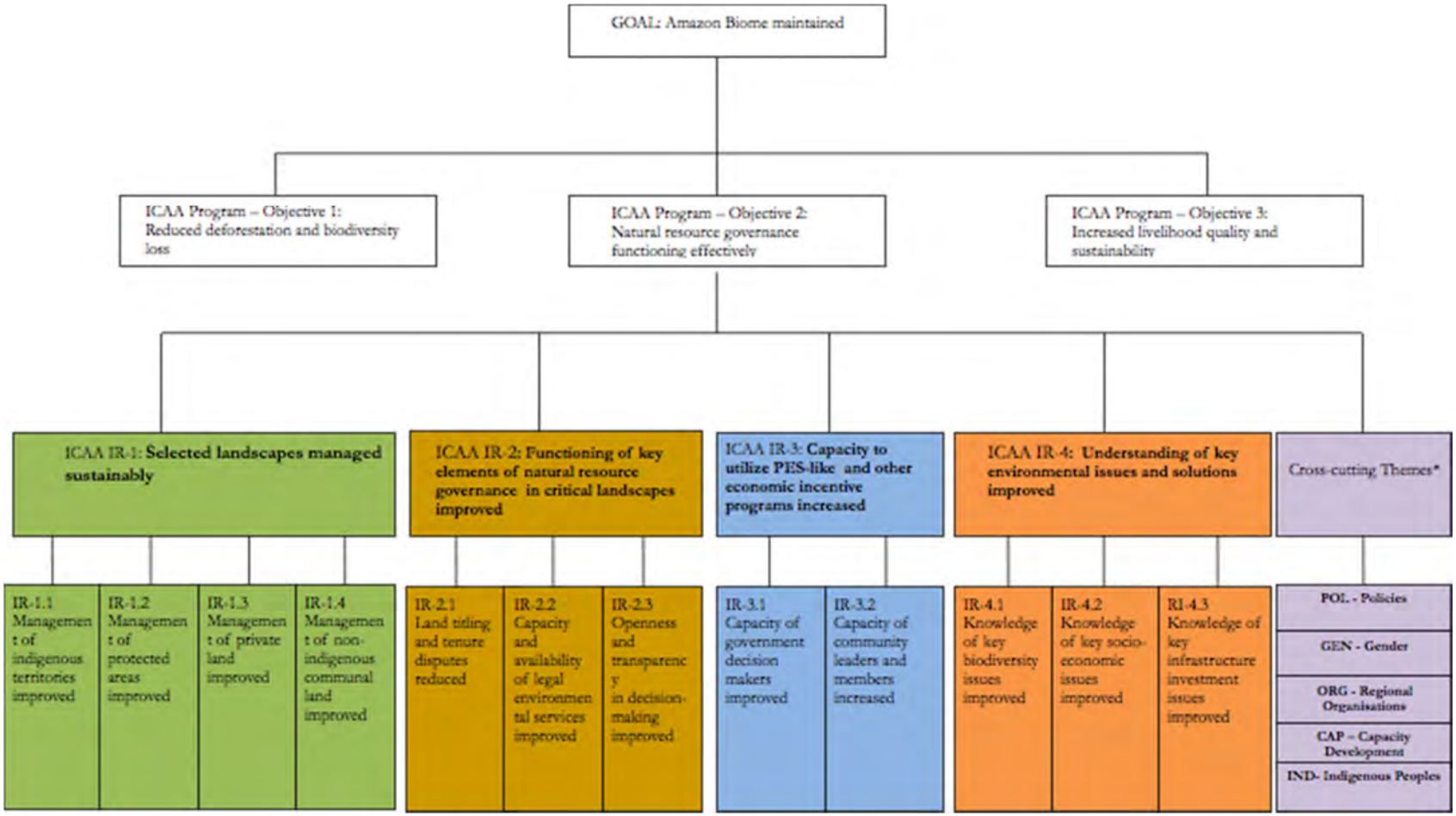

FIGURE 1. GRAPHIC REPRESENTATION OF THE ICAA II RESULTS FRAMEWORK

In 2013, at the operating level of the ICAA II program, through a collaborative process in the framework of the USAID E3[11]'s Measuring Impact Project, the ICAA II partners developed a set of detailed "results chains" to help program partners establish a shared vision of the intended outcomes of this program, IRs that lead towards those outcomes and common strategies across the program's wide range of partner organizations. Results chains were annotated by the partners themselves to indicate the strategies on which they are working. The results chains show the strategies that the various implementing partners are pursuing and the outputs, outcomes and broader results of the program that these strategies are expected to achieve. A total of ten results chains were developed. Although these results chains have not formally superseded USAID's RF for this program, they provide a better causal relationship between ICAA II strategies and expected results and help to understand the achievement of the results

The correspondence of result chains to intermediate results (IR) is as follows:

Intermediate Results	ICAA II Results Chains
IR 1: Selected landscapes managed sustainably	Large-Scale Planning
	Conservation Units
	Indigenous Territories
IR 2: Functioning of key elements of natural resources governance in critical landscapes improved	Infrastructure
	Land Tenure
	Forest Legislation
	Indigenous Rights
IR 3: Capacity to use payment for environmental services (PES)-like and other economic incentive programs increased	Sustainable Livelihoods
	Economic Incentives
IR 4: Understanding of key environmental issues and solutions improved	Knowledge Generation and Dissemination

1.4. Program structure

USAID administers ICAA II through three partner groups: a set of seven landscape consortia, a regional support unit and four technical support partners. These groups are described in more detail below.

Landscape Consortia – There are seven ICAA II landscape consortia, each consisting of several organizations working under a lead organization. The consortia are organized around landscapes and focus on holistic solutions to the threats that put the Andean Amazon at risk. Together, they are responsible for achieving IR1 (selected landscapes managed sustainably) but also implement activities that contribute to the other IR.

[11] USAID's Bureau for Economic Growth, Education and Environment

Consortium	Consortium Objective(s)	Consortium Partners
IL: Indigenous Landscapes (Ecuador and Peru)	Strengthen Amazonian indigenous organizations in environmental management issues. Reduce threats to indigenous landscapes and areas important for biodiversity. Establish sustainability mechanisms for management of natural resources.	**The Nature Conservancy (TNC)** Fundación Sobrevivencia Cofán (FSC) Coordinadora de Organizaciones Indígenas de la Cuenca Amazónica (COICA) Nacionalidad Originaria A´i Kofan del Ecuador (NOA'iKE) Instituto del Bien Común (IBC) Conservation Strategy Fund (CSF)
LMT: Loreto-Manu-Tampopata (originally: Loreto - Madidi – Manu) Consortium (Peru)	Ensure sustainable land use and conservation of biodiversity at the landscape level. Expand the use of sustainable, productive alternatives and economic incentives for conservation. Strengthen local capacities for good governance of natural resources. Strengthen local capacities to develop agreements and consensus around environmental issues.	**Wildlife Conservation Society (WCS)** Sociedad Peruana de Derecho Ambiental (SPDA) Fondo de las Américas (FONDAM)
MDD: Madre de Dios Consortium (Peru)	Mitigate the environmental impact caused by mining, recovering areas degraded by this activity. Help improve the environmental management of the Tambopata and Inambari watersheds, as well as the areas around the highway. Strengthen the population's capacity to adapt to the effects of climate change.	**University of Florida** Woods Hole Research Center (WHRC) Proyecto Especial Madre de Dios (PEM) del Gobierno Regional de Madre de Dios Universidad Amazónica de Madre de Dios (UNAMAD) Asociación Huarayo
PM: Purús – Manu Consortium (Peru)	Strengthen the management of the Alto Purús National Park, Purús Communal Reserve and land reserves for indigenous peoples in voluntary isolation and initial contact. Contribute to the sustainable management of natural resources and improvement of the socio-economic welfare in the Purús-Manu Conservation Corridor (PMCC). Strengthen and promote strategies and policies for long-term conservation and welfare of the people of the PMCC.	**World Wildlife Fund (WWF)** ProNaturaleza CARE Frankfurt Zoological Society (FZS) Organización Regional AIDESEP-Ucayali (ORAU) ProPurús
SL: Sustainable Livelihoods Consortium (Ecuador and Peru)	Promote proper planning and use of sustainable practices for natural resource management in selected landscapes. Improve environmental governance, strengthening the participation of civil society in the management of natural resources and supporting the adoption of policies, laws, agreements or regulations that protect biodiversity. Improve access to sustainable livelihoods and the resilience of ecosystems, strengthening the organizational and business capacity of non-traditional	**Rainforest Alliance (RA)** Asociación para la Investigación y el Desarrollo Integral (AIDER) Corporación Gestión y Derecho Ambiental (ECOLEX)

Consortium	Consortium Objective(s)	Consortium Partners
	enterprises and applying them to payment markets for environmental services.	
FA: Connected Landscapes in Caquetá Program (Colombia)[12]	Guide and establish participatory models of sustainable land management and conservation mechanisms. Strengthen traditional knowledge to assure food sovereignty and reduce pressures on the forest. Ensure cultural diversity and gender perspective.	**Fondo Acción** Amazon Conservation Team (ACT) Gobernación del Caquetá
C&G: Conservation and Governance Program in the Amazonian Piedmont (Colombia)[13]	Improve the living standards of the population through the management of productive systems and natural resources use. Improve planning and the management of biodiversity conservation of selected landscapes. Strengthen territorial governance and institutions by generating and strengthening capacities for making informed decisions through a process of "learning-by-doing".	**Fondo Patrimonio Natural** Parques Nacionales Naturales de Colombia Instituto Amazónico de Investigación Científicas (SINCHI) Centro para la Investigación en Sistemas Sostenibles y de Producción Agropecuaria (CIPAV) World Wildlife Fund (WWF) Wildlife Conservation Society (WCS)

ICAA Support Unit (ISU) – International Resources Group (IRG) manages the ISU consortium which not only serves as the program secretariat (providing assistance to program management, and technical support to program partners) but is also responsible for three intermediate results, for five cross-cutting themes and for knowledge management.

Consortium	Consortium Objective(s)	Consortium Partners
ICAA Support Unit (ISU)	Ensure achievement of three intermediate results: • IR2 (Natural Resource governance) • IR3 (Economic Incentives) and • IR4 (Understanding of key environmental issues). Implement activities to address cross-cutting themes (policy, gender, strengthening of organizations, capacity building and indigenous peoples). Promote and support the dissemination of knowledge among all ICAA II partners. Serve as the program secretariat, providing assistance in program management, and administering the ICAA Grants Program. Provide technical support through the areas of knowledge management, communications, monitoring, and institutional strengthening.	**International Resources Group (IRG)** Sociedad Peruana de Derecho Ambiental (SPDA) Social Impact Corporación Gestión y Derecho Ambiental (ECOLEX), Fondo Patrimonio Natural Conservation Strategy Fund (CSF)

[12] The Colombia based landscape partners (FA and C&G) only contributed to the ICAA II joint reporting system in FY2014 and their achievements are not included in this report.
[13] Id.

Technical Support Partners (TSPs) – TSPs provide technical support and complement the work of the consortia and ISU, sharing their experience in the management and conservation of natural resources. This group includes the Center for International Forestry Research (CIFOR), Higher Education for Development (HED), the U.S. Department of the Interior (DOI) and the U.S. Forest Service (USFS).

1.5. Monitoring and reporting

USAID partners report on progress under ICAA II based on a common set of performance indicators established in relation to the original Results Framework (RF). The ISU consortium developed and regularly updated a Performance Management Plan[14] to provide detailed instructions to all partners on the indicators measurement and reporting. An internal information system was set up (ICAA Shared Indicator System, ISIS) where all partners can upload and ISU centrally manage information on indicators. The ISU was responsible for collecting ICAA partner data on a routine basis, but not for data integrity or timely reporting. In addition, to the fourteen program wide indicators, each of the twelve consortia and partner groups has additional indicators that they use internally to monitor progress.

ICAA II Program-Wide Performance Indicators
Indicator 1: Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance (Standard indicator 4.8.1-26)
Indicator 2: Number of hectares in areas of biological significance and/or natural resource showing improved biophysical conditions as a result of USG assistance increased (Standard Indicator 4.8.1-1).
Indicator 3: Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance (Standard indicator 4.8.1-6)
Indicator 4: Number of initiatives that promote the implementation of economic incentives increased
Indicator 5: Increased number of hectares under initiatives of economic incentives
Indicator 6: Percentage of recipients of ICAA products with knowledge about the main environmental problems and their solutions
Indicator 7: Number of products regarding the Andean Amazon developed by ICAA partners increased
Indicator 8: Number of distributed copies of products regarding the Andean Amazon developed by ICAA partners increased
POL1. Number of policies, laws, agreements or regulations promoting sustainable natural resource management and/or biodiversity conservation officially proposed, adopted or implemented as a result of USG assistance (*)
POL2. Number of stakeholder dialogue activities, focused on policies, laws, agreements or regulations to promote the more sustainable use of Amazon resources increased
POL3. Number of people that attend dialogue activities with interest groups focused on policies, laws, agreements or regulations to promote the more sustainable use of Amazon resources increased
CAP1. Percentage of people trained with increased knowledge of natural resource management and/or biodiversity conservation increased
CAP2. Number of people – training hours in natural resource management and/or biodiversity conservation as a result of USG assistance (Standard indicator 4.8.1-29)
CAP3. Number of people trained in natural resource management and/or biodiversity conservation increased (Standard indicator 4.8.1-27)
CAP4. Number of organizations, institutions and networks with key capacities, increased

[14] ICAA II program. Indicadores del programa ICAA - Plan de Gestión del Desempeño 2011-2016.

2. THE MAIN ACHIEVEMENTS OF ICAA II

The goal of ICAA II is to maintain the Amazon biome. The program certainly contributed to this, through a large series of on-the-ground achievements in key landscapes throughout the most biodiverse and one of the most threatened portions of the Amazon biome: the Andean Amazon. The program focused on supporting indigenous peoples' and other forest dwelling communities and on achieving tangible conservation and sustainable livelihood results in the field. Therefore, it achieved hundreds of individual, small-scale impact of great significance to the people who directly interact with and manage the Amazon landscape. All these local impacts together, constitute a chain of jewels spanning over the entire Andean-Amazon, connecting landscapes, communities and countries. In total, the landscape level results sum up to millions of hectares of land under improved management, thousands of individuals, men and women, with strengthened technical capacities, hundreds of families with increased income from sustainable livelihood practices and dozens of communities in the entire region with consolidated land tenure, land use planning and applying good governance over their natural resources.

To achieve the tangible results at landscape level, ICAA II partners worked through scales to stimulate an enabling legal and policy environment with local, national and international governmental organizations, not only in the environmental sector but also in mining, infrastructure, culture, agriculture and others. The program increased knowledge through research and dissemination of information. It contributed considerably to strengthened capacities of indigenous peoples' organizations, environmental NGO's, and Amazonian universities that together form the forefront of conservation activities in the region.

ICAA II is leaving a legacy of well managed conservation units and indigenous territories of high biological value, indigenous peoples' communities with improved rights and a bright future based on sustainable livelihoods, environmental, academic and indigenous peoples organizations strengthened and well equipped to continue the positive work done through ICAA II and a strongly improved knowledge basis and awareness among broad sections of society about the challenges and solutions for Amazon conservation. The program was truly international in its character, with connected activities in Peru, Ecuador and Colombia and, through its implementing partners, reaching out to Bolivia, Brazil and other Amazon countries. At the level of the Andean-Amazon countries, due to the regional integration provided by the ISU, it shared experiences among the major stakeholders, made different national governments communicate and collaborate, aligned management in transborder areas and created a regional wide knowledge basis. ICAA II definitely crossed borders, scales and sectors to mitigate the local effects of some major threats to Amazon biodiversity.

The main achievements of the program were attained through work across the four results areas described further on in this report. In fact, the cumulative effect of the outcomes in these result areas contributed to the three project objectives.

The main contribution to **program objective 1** (Reduced deforestation and biodiversity loss) was achieved through working across scales to improve planning, management and governance of different areas of biological significance. The program achieved improved management of nine million hectares of governmentally administrated conservation units, community administrated areas and private reserves. These included three of the largest and most diverse protected areas in the Andean Amazon (Alto Purus National Park, Bahuaja Sonene National Park, Pacaya Samiria National Reserve) and two of the ones with easiest access, direct interaction with communities and large numbers of visitors (Tambopata National Reserve, and Cuyabeno Wildlife Reserve). Community managed reserves that were strengthened included Tamshiyacu Tahuayo Regional Conservation Area and the Purus Communal Reserve. Twelve

private conservation areas were established in Peru, totaling 282.6 hectares. One of these (100 hectares) was established by an indigenous community (Puerto Prado). In Ecuador, the inclusion of 77,000 hectares of indigenous peoples' land of two nationalities (Cofán and Quichua) in the Socio Bosque conservation program created *de facto* conservation units. Finally, through improved planning and application of sustainable livelihood practices in indigenous territories and farmer communities in buffer zones of conservation units and other biologically significant areas, an additional six million hectares saw improved management and potential to safeguard their biodiversity and ecosystem services (Table 1, total sum of indigenous territories and non-indigenous communal land).

The work on different scales implied working with the national protected areas agency to improve the enabling environment: ICAA II partners developed a new model for protected areas master plans, stimulated more efficient rules for indigenous peoples participation in conservation unit management and private reserve establishment, and worked across sectors to promote protection of Indigenous Peoples in isolation or initial contact (PIACI), control environmental crime and tackle illegal logging and mining. At the landscape level, ICAA II partners work with local governments and civil society organizations to improve planning of conservation units and corridors, control illegal use and encroachment of agriculture, analyze and lobby against the impacts of large infrastructure and build awareness among the population in the landscape about the importance of conservation. At the level of the individual conservation units, ICAA II partners developed and updated master plans, life plans of indigenous territories, management plans of entire parks and visitor plans of tourist areas that were accepted by the park authority. It supported multi-stakeholder management committees including participation of indigenous peoples' organizations, monitoring and surveillance with different sectorial representation, trained park rangers and resolved conflicts with communities within and bordering the conservation units, through which the once considered enemy, became an ally of the area's management. The successful work at the local level was then up-scaled again to the national level: the surveillance and monitoring tools developed locally by ICAA II partners and the visitor management plans were adopted by national governments to be applied in other protected areas, such as Yasuní (Ecuador) and Manu (Peru), two of the other major and most diverse protected areas.

One of the major success stories of the ICAA II program has been the declaration of the Sierra de Divisor National Park in 2015 (Peru), bordering a national park of the same name in Brazil and now constituting the largest continuous national park area in the Andean Amazon. This area was declared reserved zone two decades ago, but never was designated a formal category and management scheme. Several program partners collaborated in a working group since 2003, which was supported during the first phase of ICAA. However, work done during ICAA II, especially on the monitoring of a planned road, identification and protection of PIACI and supporting sustainable livelihoods with surrounding communities, was crucial to create a social basis and triggered the attention of the central government to declare the highest protection category possible to this area.

ICAA II also strongly contributed to **program objective 2** (Natural resources governance functioning effective). Governance of natural resources was improved by the development of plans, laws and regulations at different levels and by strengthening capacities of those organizations that should implement these. In total ICAA II supported the development of 34 Laws, a same amount of policies and formal plans, 87 regulations and 118 agreements that support biodiversity conservation and sustainable livelihoods in the selected landscapes. Forest legislation at the national level was improved in Peru, through a new forest Law in 2011(developed during ICAA I) and accompanying regulation (developed and supported by ICAA II) and a Law for Retribution of Ecosystem Services. ICAA II partners delivered valuable inputs to both legal instruments by organizing working groups and drafting specific articles. At the subnational level, ICAA II landscape consortia supported the development of regional biodiversity and climate change strategies in Peru, formal zonal planning with provincial and municipal governments in Ecuador, and a tri-national early warning system for disasters in the Peru-Bolivia-Brazil border area. The ISU integrated and complemented this work to improve environmental governance and policy at the

national and regional level. To all these planning and governance improvement, research, information (maps, inventories) and knowledge generated by ICAA II were key ingredients.

Particularly relevant impact was achieved through the improvement of the legal capacity on the interrelated fields of prosecution of environmental crime, mitigate impacts of economic development projects and promote environmental compensation. At international level, the ISU brought prosecution agencies together to share experiences and identify common challenges. A significant event was a study tour of the *Red Latinoamericana de Fiscalías Ambientales,* to Mato Grosso. Based on this example from Brazil, both Ecuador and Peru selected one region in the Amazon to pilot the inclusion of satellite images for prosecution purposes. In spite of complicated adjustments in legal regulations and intersectorial coordination, this tool has been formally approved at national level in Ecuador and Peru. This strongly increased capacity to rapidly detect and prosecute environmental illegal activities. ICAA II brought together, both at national and international scale, representatives from the environmental sector (environmental impact agencies), hydrocarbon and infrastructure sectors to improve capacities to establish adequate environmental impact in the Amazon region and design systems to apply environmental compensation. This has led to several important achievements: private companies, NGO and the Inter-American Development Bank (IADB) agreed to jointly increase capacities of the national environmental licensing agencies in Peru (SENACE); in Colombia, multi-sectorial workshops on low-impact roads were organized; and certification courses on Environmental Law Enforcement in the Amazon, Focused on Mining, and on Prevention and Resolution of Socio-Environmental Conflict Associated with the Oil & Gas Industry were held in Colombia and Peru. Finally, studies executed by ICAA II partners on the impact of mercury on the environment and health in Colombia, directly led to the approval of a regional strategy to stop illegal mining in the Department of Amazonas.

At the local scale, the experience with community legal operators (local leaders trained in land related rights and procedures), developed in Ecuador, was replicated by ICAA partners in Colombia and Peru. A total of 76 people, mostly from indigenous communities, were trained to support issues like land titling and legal recognition of indigenous organizations. Combined with strengthening of local official authorities and civil defense agencies, this has successfully increased local capacity to improve indigenous rights, land rights and to denunciate and prosecute illegal logging and mining. Community legal operators have initiated over 100 procedures in the three countries, and in only one landscape (Madre de Dios) public denunciations through civil defense agencies doubled after ICAA II support.

Another significant achievement of ICAA II in improved environmental governance is the increased capacity of indigenous organizations. An innovative approach of ICAA II was to include several indigenous peoples' organizations as implementing partners of the program. This direct involvement strongly increased their administrative and organizational capacities, placed them at the same level as national and international NGO's and provided the program with more relevant grassroots work. Especially noteworthy is the increased access indigenous peoples' organizations obtained in national and international governmental planning platforms, culminating at the vice presidency of COP 21 of UNFCCC by COICA.

ICAA II partners significantly contributed to **program objective 3** (Increased livelihood quality and sustainability) because it applied the approach of conservation through sustainable community development throughout. In the dozens of indigenous peoples and other forest dwellers' communities where ICAA II partners worked, conservation actions went hand in hand to development of sustainable livelihoods practices, all included in local planning and sustained by improved rights and strengthened local organizations. Through its integral approach to improve local livelihoods, the ICAA II program not only created economic incentives for forest communities but also improved land and resources access rights, improved equity and community organization.

In the communities where ICAA II partners stimulated sustainable livelihood practices, work started with ensuring rights and good governance. Resolution of conflicts is a first step to achieve land tenure, which

on its turn, is of crucial importance to plan land use, make long-term investments and access credits or incentives. Establishing rights and good governance requires established and recognized local organizations. Therefore, ICAA II partners have successfully supported conflict resolution, land titling, organizational strengthening and legal approval of by-laws in these communities as key steps towards sustainable livelihoods.

After ensuring rights, tenure and good governance, ICAA II partners developed local participatory planning through indigenous life plans (Peru) and territorial ordination (Ecuador). The life plans have shown to be a fundamental planning tool throughout the ICAA II program, because it includes both organizational, strategies and territorial planning of the communities. It helped communities to have a tool to plan their productive activities as well as their forest management. Clear examples of its usefulness are forest resource management plans (for timber, Brazil nuts, etc.), which are aligned with the life plans, were accepted by local authorities to allow communities to legally extract resources. In some cases, ICAA II partners in addition, improved the legal framework to allow for this extraction, like in Loreto where a Regional Ordinance for the Management of Fishery Resources was developed and approved, and the improvement at national level of Brazil nut and palm fruit harvesting regulations.

Through participatory research, exchange of experiences, training and market development, ICAA II partners supported a suite of sustainable livelihood practices, based on sustainable agriculture (cocoa, coffee, and naranjilla), fish farming, sustainable timber and non-timber forest product extraction. The latter is the area where probably most success has been achieved in terms of income generation, particularly through the development of markets for certified Brazil nuts, export agreements of latex to Brazil and the installation (with external credits) of primary processing equipment for timber. Through gender training in communities and to ICAA II partners, women participation was increased in producer groups and particularly in non-traditional areas such as handicrafts and fruit processing.

3. ICAA INTERMEDIATE RESULTS

3.1. IR1 – Selected landscapes managed sustainably

3.1.1. Large-scale planning

At the landscape level, different bodies plan the management of land and natural resources. ICAA II partners recognize the importance of good governance, where governmental agencies make plans and take decisions in continuous collaboration with civil society. Efficient implementation and transparent monitoring of policies are fundamental approaches to create trust and accountability. Especially in the Amazon region, with its large cultural diversity and heritage, respect and fair representation of indigenous authorities in governance structures is important to achieve equity and governability. Therefore, ICAA II partners have supported local governments and indigenous authorities alike, to strengthen their capacities for planning and implementation of good land and natural resources management in the selected landscapes. They have also promoted the active participation of civil society organizations in governance structures and provided these structures with information and tools for planning.

General environmental plans were developed by regional governments supported by ICAA II partners in the different landscapes in Peru. (Note: In Peru sub-national governments are referred to as regional governments.) In Madre de Dios, roundtables were established between different sectors of regional government, environmental NGO's, indigenous groups and academy to establish the regional biodiversity and climate change plans. ICAA II partners collaborated with partners from other USAID-financed projects (Perú Bosques) and projects from other donors, to the functioning of the roundtables and to stimulate participation of different sectors of government and society. Direct training was provided to the regional government on climate change adaptation and mitigation. SPDA (a member of the ISU and LMT

consortia) placed support staff within the environmental and agricultural departments of the regional government to increase planning capacity. This has resulted in effectively formulated and formally accepted biodiversity and climate change adaptation and mitigation strategies for Madre de Dios. Vulnerability analysis at provincial level (Purus and Tahuamanu) provided input into the regional and provincial adaptation plans and the Concerted Development Plan for Madre de Dios.

The LMT consortium provided support to the development of the Action Plan for the Regional Biodiversity Strategy of Puno; including the identification of priority sites. In Loreto, the Regional Environmental Agency was established, which included plans to establish a regional system of protected areas. The MDD consortium helped the environmental management plans of La Novia, Alerta and Pacahuara. These plans were issued and presented to the Mayor of the District of Tahuamanu for their subsequent approval through a District Municipal Ordinance.

ICAA II partners also supported the formal spatial planning process (elaboration of territorial ordination plans), contributing to wise land management. As a key input to the spatial planning in Ucayali (Peru), the IL consortium provided zonation studies (including mining activities). In Ecuador, the IL and SL consortia supported planning for the Sucumbíos province, the Sucumbíos municipality and the Gonzalo Pizarro municipality. In these proposals, priority was given to conserving over 280,000 hectares and restoring more than 86,000 hectares throughout the province. In Napo, the IL consortium supported a nested approach to spatial planning, at parish and community level. A parish-level plan was developed to meet requirements by the national planning agency (SENPLADES), which ensured the formal recognition. Based on the parish plan, seven communities developed their own integrated management plans. In line with these plans, forest management plans were developed, which allowed them to start legal, sustainable timber harvesting. Also based on the planning process, areas were identified for conservation (5,500 ha) and restoration under the Socio Bosque program. The youth forestry association ASOCOSAWAKA was designated to apply a control and surveillance system of the conservation area in Wamaní.

ICAA II partners have been successful in supporting the development and implementation of specific planning policies at landscape level. In Loreto, the LMT consortium worked closely with the regional and national governmental agencies to develop environmental plans for regional protected areas, forest management, fishing and other productive activities with agencies such as PROCREL, SERNANP and DIREPRO (see also IR3). The MDD consortium developed an early warning system for extreme events, based on information provision, monitoring and capacity building (training and equipment). This was done in close collaboration with different regional and national authorities such as the Regional Emergency Operation Centre, the Regional Technical Roundtable, the National Water Agency and the National Civil Defense Institute. In Madre de Dios, an Emergency Brigade (19 women and 27 men) was established and equipped. Through effective collaboration with local authorities in neighboring regions of Bolivia and Brazil, the early warning system is effectively tri-national. Through a successful simulation and a real-life event (February-March 2015 flood), the early warning system proved to be effective.

3.1.2. Conservation units

Protected areas continue to be one of the most effective tools to conserve biodiversity and ecosystems.[15] About 20% of the Andean Amazon is included in different categories of protected areas and these include the most diverse and best-conserved areas.[16] However, the enormous size and difficult access of many of these areas and limited resources and capacity (in terms of numbers of park staff) makes that management

[15] Butchart, S. H. M., J. P. W. Scharlemann, M. I. Evans, S. Quader, S. Aricò, J. Arinaitwe, M. Balman, L. A. Bennun, B. Bertzky, C. Besançon, T. M. Boucher, T. M. Brooks, I. J. Burfield, N. D. Burgess, S. Chan, R. P. Clay, M. J. Crosby, N. C. Davidson, N. De Silva & C. Devenish (2012) Protecting Important Sites for Biodiversity Contributes to Meeting Global Conservation Targets. *Plos One,* 7, 1-8

[16] Maretti et al. 2014.

of these areas is far from optimal. Conflicts remain with illegal logging, fishing hunting and colonization. ICAA II partners have been working to strengthen management effectiveness of a series of conservation units in the Andean Amazon, both at national and subnational level. They have been supporting planning processes, strengthened capacities of staff of the responsible authorities, and strengthened governmental and civil society organizations to increase good governance. Considering that many conservation units limit to or overlap indigenous territories, ICAA II partners stimulated indigenous peoples' involvement with the protected area management. Existing conflicts between indigenous peoples and protected areas were resolved, communities were trained to apply good and legal forest management, and they became allies in control and surveillance.

During the ICAA II program, almost 9 million hectares of conservation units received improved management (Table 1). The program worked effectively through scales in protected areas management, from national to local and *vice-versa*. Members of the ICAA II consortia traditionally have a good working relationship with the national protected area agencies and the work *in situ* was strengthened through collaboration at national level. For instance, the LMT consortium directly worked with SERNANP to draft a manual for the development of management plans (awaiting formal approval). Based on these guidelines, management plans were updated for Bahuaja Sonene National Park (BSNP), the Reserva Nacional Matsés and the Machu Picchu National Sanctuary. In the Manu National Park, integrated monitoring systems based on occupancy models were established, and park staff was trained to manage this monitoring. The LMT consortium also developed a training system for management effectiveness (SMART), which is now recognized by SERNANP as a formal tool for information management in the National System of Protected Areas.

The PM consortium focused most of their activities to the Alto Purus National Park (APNP), including neighboring communal reserves. It achieved the development and formal acceptance of the master plans for the APNP and the Purus Communal Reserve (PCR). A proposal for new Communal Reserve in Yurúa (112,131 hectares) was developed together with indigenous peoples' organizations. Management capacity was significantly increased by training the directors of the protected areas, park rangers and surveillance agents on the details of the master plans and its monitoring. Also specific training was provided on Indigenous Peoples in Isolation or Initial Contact (PIACI). As a result, APNP has improved its control and surveillance processes. ICAA II financed patrol expeditions resulting in the detection of illegal mining and illegal logging in indigenous territories, which were halted by the authorities. Several overflights were executed, with the innovation that they counted with participation of inspectors from different sectors (environment, forests, mining, and culture). This proved to be highly effective in detecting different kind of threats during single surveillance flights.

To increase good governance in several Peruvian conservation units, ICAA II partners directly strengthened management committees through training, organizational and infrastructure support. This was done in BSNP, Matsés National Reserve and Tamshiyacu Tahuayo Regional Conservation Area (TT RCA; LMT consortium), APNP (both in Ucayali and in Madre de Dios regions), and Tambopata (SL consortium). Through the management committees, ICAA II partners could actively advocate to increase indigenous and local communities' participation in management decisions. For instance, strengthening tenure and resolving land conflicts with surrounding communities changed these communities from enemies to allies of the reserve (see also IR2). Lessons from community natural resource management committees in place in TT-RCA and PSNR are promoted by SERNANP at the national level as positive examples of co-management.

The SL consortium achieved conspicuously positive outcomes strengthening tourism management in protected areas in Ecuador and Peru. They developed a Sustainable Visitor Management Plan (including the definition of acceptable limits of change) for the Cuyabeno and Limoncocha reserves and for the Yasuní National Park in Ecuador. These plans were formally accepted by the park authorities and are now under implementation. The methodology was approved by the Ministry of Environment and the Ministry

of Tourism and is being applied to other protected areas in the country. The Ecuadorian Ministry of Environment also accepted the Security Plan that the SL consortium developed for Cuyabeno reserve and the National Secretariat for Risk Management approved 5 risk management plans for tourism operations in the same reserve. In Peru, in the National Reserve of Tambopata (Lake Sandoval, the most intensively visited site), the SL consortium provided information to define the acceptable limits of change for the definition of the number of tourist and visitor permits the SERNANP can grant.

The SL consortium also developed an Operations Manual for sustainable tourism in the Yasuní Park and the Cuyabeno and Limoncocha reserves. This manual was based on the direct collaboration with private tourism companies (lodges). As a result of this collaborative process to increase sustainability in the tourism sector, 13 tourism companies are now implementing environmental regulations; 12 of these achieved the minimum required score of 90 points needed to obtain 2014 patents, an improvement from an initial average of 59. Similar efforts were done with 11 Rainforest Alliance certified lodges in the Tambopata buffer zone in Madre de Dios. The regional government of Madre de Dios incorporated the natural resource and cultural tourism maps into their planning exercises

3.1.3. Indigenous territories

Indigenous peoples have interacted during centuries with amazon ecosystems and the fact that most of indigenous territories are covered with mostly well conserved forest, is the best evidence that the indigenous peoples are good stewards of Amazon biodiversity[17][18]. For instance, the Cofán territories in the Northern Ecuadorian Amazon, together with protected areas, are the only remaining forest patches in a further deforested landscape[19]. Therefore, much of ICAA II's conservation planning work focused on indigenous territories.

ICAA II partners supported indigenous communities to improve the management of 3.4 million hectares (Table1). One of the main strategies of ICAA II partners to improve management of indigenous territories was to provide support to the development of life plans (Peru). In addition to management of forest resources and other practices, life plans include territorial planning and therefore are a crucial first step for planning of land and resource management as well as for the development of sustainable livelihood strategies (IR3). For example, in the Madre de Dios region, the SL consortium supported the development of life plans in six indigenous communities in the Tambopata buffer zone. These life plans included land-use zoning strategies and monitoring plans. Based on these plans, forest management plans were elaborated as a basis for legal forest product extraction (see IR3). In Ucayali, the IL consortium supported development of life plans in three communities in Callería that were used as a basis for the regional government to select development support activities and the PN consortium supported updating the life plan (Comprehensive Development Plan for Indigenous Peoples of Purus) of FECONAPU (Federation of Native Communities of the Alto Purús). This plan now includes gender, risk management, and climate change adaptation. Based on the work of ICAA II partners in the different regions, the ISU consortium developed a guide for life plan development and other complementary tools together with the Vice-Ministry for Interculturality and AIDESEP.

In addition to development of life plans, through the ICAA II program indigenous peoples' organizations were strengthened and trained to manage their territories as conservation units. For instance, the PM consortium increased the conservation status of the Purus Communal Reserve (Ucayali) through strengthening of the ECOPURUS indigenous peoples' organization. In Ecuador, three Cofán communities

---

[17] Schwartzman, S. & Zimmerman, B. 2005. Conservation Alliances with Indigenous Peoples of the Amazon. Conservation Biology 19 (3): 721–727;

[18] Mongabay 11 March 2013. Parks, indigenous territories are effectively reducing Amazon deforestation. http://news.mongabay.com/2013/03/parks-indigenous-territories-are-effectively-reducing-amazon-deforestation/

[19] USAID, Chemonics 2007. Helping Indigenous Nationalities in Ecuador Conserve their Territory and Culture Conservation in Indigenous Managed Areas Final Report. pdf.usaid.gov/pdf_docs/Pnadk832.pdf

in Sucumbíos are now fully participating in the SocioBosque scheme covering 77,000 hectares and in Napo; the Wamaní community includes another 556 hectares. These are now *de-facto* conservation units.

3.1.4. Private and Communal land.

In the selected landscapes, ICAA II partners also supported planning in private and communal (non-indigenous) land, particularly through the establishment of Private Conservation Areas (PCA). The LMT consortium provided technical and legal advice for the consolidation of private conservation areas in Loreto and Madre de Dios. To do this, technical assistance was provided to SERNANP at national level, which contributed to simplifying procedures for indigenous people to be part of private conservation arrangements. During ICAA II, a total of 12 PCA's (summing 282.6 hectares) were formally established (Figure 2).

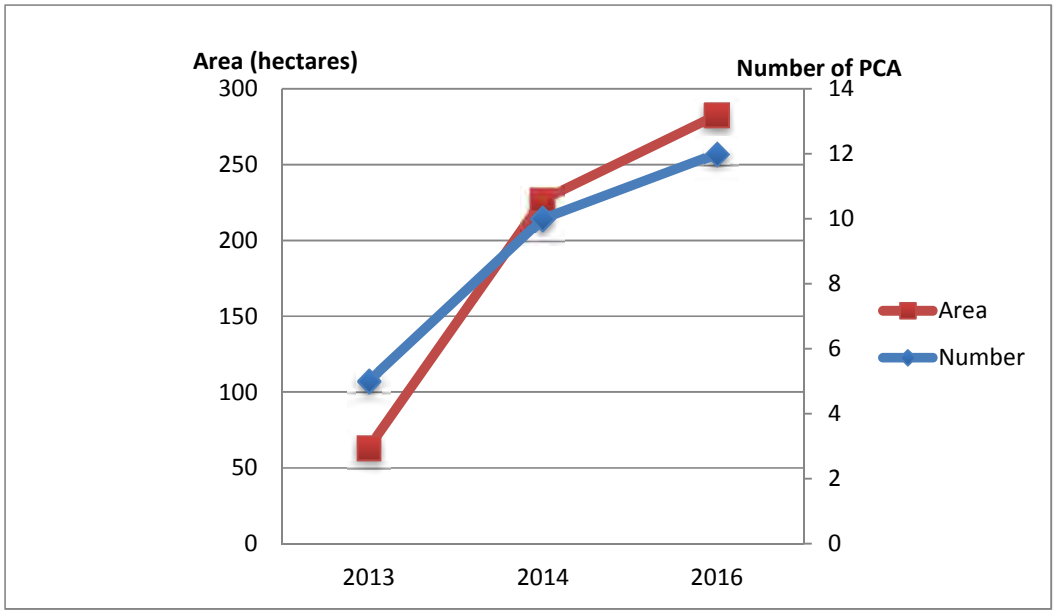

FIGURE 2. INCREASE OF PRIVATE CONSERVATION AREAS (CUMULATIVE, IN NUMBER AND AREA) DURING THE ICAA II PROGRAM

In Ucayali, the process of strengthening conservation planning in the La Novia watershed (a communal forest concession) was based on the strengthening of the Association for the Management and Conservation of Forests without Borders in the La Novia Watershed (MABOSINFRON). This non-indigenous Association made progress towards its consolidation as a relevant organization, as well as in its concession management (the first formal forest custodians in Ucayali). MABOSINFRON is now consolidated as a benchmark conservation organization at the local and national level.

In outmined areas in Madre de Dios, the MDD consortium worked with local land-owners to develop restoration techniques for the recovery of degraded soils. Based on participatory research, the Manuani community has developed technologies that are now being adopted by governmental agencies in other outmined areas in the Tambopata buffer zone. The Manuani people now are able to transfer technology for the implementation of ecological restoration in degraded areas and act as service providers.

3.1.5. Area of land under improved management.

In total, the program affected positively the management of more than 15 million hectares in the three countries (Table 1). Fifty-nine percent of this was in conservation units, 23% in indigenous territories and a similar area in communal (non-indigenous) land (Figure 3). To evaluate the improved natural resource management, ICAA II categorized the types of management improvement received by particular areas. The types of improvement most widely applied were implementation of particular management actions (77% of all 795 individual areas where management was improved), followed by development of human and institutional capacity (37%) and the design of management actions (35%, Figure 4). Approximately forty percent of all areas received more than 2 types of improvement and a quarter of all areas received four or more types of management improvement. The PM consortium reported that through their assistance, 4.5 million hectares in areas of biological significance show improved biophysical conditions (40% in indigenous territories and 60% in conservation units; Indicator 2).

TABLE 1. NUMBER OF HECTARES WITH IMPROVED MANAGEMENT, ACHIEVED DURING THE ICAA II PROGRAM (INDICATOR 1) (CUMULATIVE[20])

Type of área	2012	2013	2014	2015
Indigenous territories	2,151,014	2,773,793	3,300,490	3,431,148
Conservation units	2,962,728	4,183,710	6,776,023	8,963,096
Private land	7,690	11,843	18,401	36,974
Communal (non indigenous) lands	31,735	1,415,660	2,426,038	2,708,173
Total	5,153,167	8,385,005	12,520,953	15,159,231[21]

[20] The number of hectares presented is the sum of all individual areas that were reported at any stage during ICAA II under indicator 1; hence it represents the total area that has received improved management during the program. It defers from formal Indicator 1 reporting, which presents a per annum overview of area with improved management.
[21] This figure does not represent the sum of all types of areas, because 19,840 hectares were not classified.

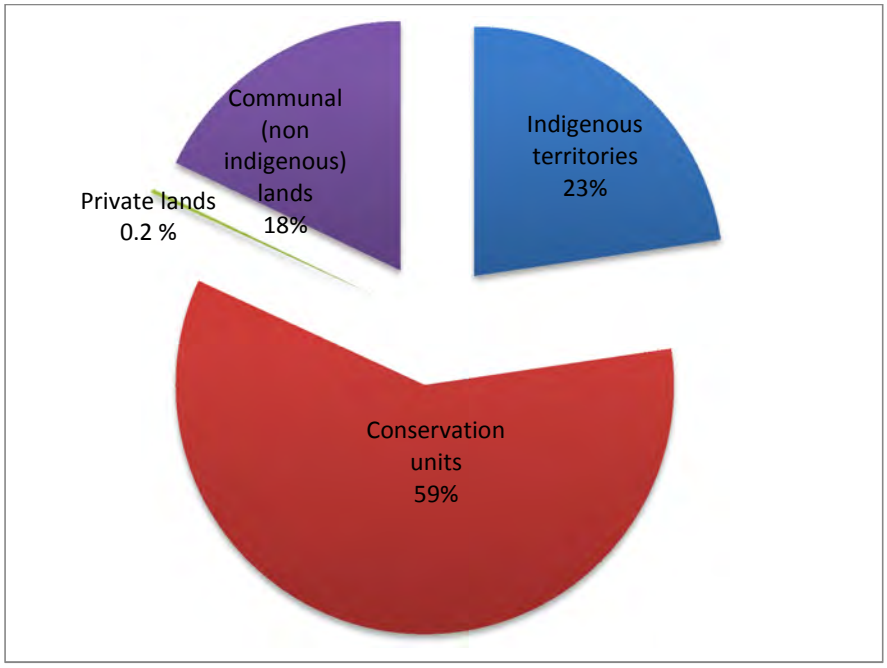

FIGURE 3. DISTRIBUTION OF TYPES AREA WITH IMPROVED MANAGEMENT, ACHIEVED DURING THE ICAA II PROGRAM.

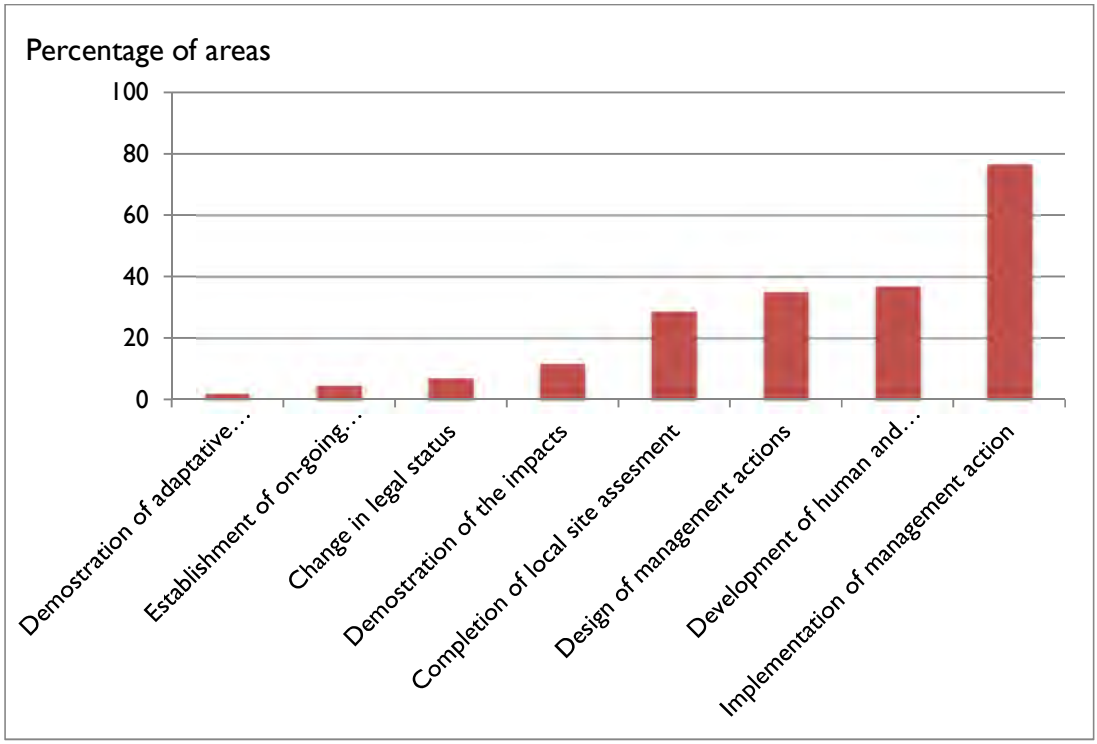

FIGURE 4. PERCENTAGE OF INDIVIDUAL AREAS THAT RECEIVED DIFFERENT TYPES OF IMPROVEMENTS IN MANAGEMENT.

3.2. IR2 - Key elements of natural resources governance functioning in critical landscapes

Indigenous peoples are the traditional wardens of the Amazon ecosystems and biodiversity. However, not all indigenous peoples have seen their rights being respected and not all of their territories have been duly recognized, demarcated and enforced. Their representing organizations are not fully recognized or have limited access to decision-making levels. Therefore, ICAA II partners have worked to strengthen the implementation of these rights, through protection of PIACI, land titling and resolution of conflicts, legal recognition of traditional organizations and the creation of legal capacity among indigenous peoples' groups.

3.2.1. Land titling and tenure

In many of the landscapes where ICAA II worked, land disputes, unclear tenure and lacking formal titling formed a barrier to effective governance. Overcoming conflicts and attaining formal titles not only allowed the community to apply decision-making, but also to engage in initiatives such as REDD+ or receive credits necessary for implementing sustainable productive activities. The level of success depends on the initial status of conflict and organization of the communities: in well-accessible areas that have received technical and organizational support from previous projects (e.g. in case of the Ecuadorian communities) the strategy resulted in fully established organizations, titles and planning while in areas of difficult access and short history of external support (e.g. some areas close to the APNP or BSNP) the fact that the community has been formally delimited and by-laws of the organization have been drafted can already be seen as a major success.

The first step in obtaining land titles is to solve conflicts and have borders recognized. ICAA II partners resolved many border conflicts by legal support, establishment of limits and conflict management processes between communities and state parties. ISU contributed to securing 124,450 hectares of indigenous lands by solving fourteen land disputes in the Andean Amazon (seven in Ucayali, four in Madre de Dios, two in Sucumbios and one in Putumayo). Five other cases are in process to be secured (two in Madre de Dios and three in San Martin; totaling 22,500 hectares). First, inventories of existing land conflicts were executed to identify the key areas and underlying factors beyond long standing conflicts.[22] All these conflicts were between indigenous peoples' communities and other stakeholders, i.e., the State (in case of protected areas), mestizo settlers or neighboring communities. The solution was achieved through innovative approaches. For instance, in Ecuador an 18-year-old conflict between indigenous peoples and mestizo farmers was resolved through the establishment of an informal and voluntary "agreement of good neighborliness" rather than a formal (legal) settlement. In Peru, four communities could finally obtain formal land titles because ISU's partner SPDA outplaced qualified staff in key departments of the local government to speed up bureaucratic procedures. This was also supported by well-planned coordination between the regional government and the indigenous peoples' federation of Madre de Dios (FENAMAD).

In Ucayali and Madre de Dios a series of land conflicts have been solved through the joint recognition of boundaries. Representative of the different parties in the conflict did this by exploring, agreeing and demarcating the boundaries. The work has been adopted as a major land titling policy approach by the indigenous organizations FENACOCA (Ucayali) and FECONAPIA (Huánuco). Therefore, as a result of their collaboration now delimitation is underway in 24 communities in these two regions. In addition, the PM consortium has supported six indigenous communities in Purus in the legal process of their formal titling process; now 100% of titling demand in Yurúa and Purus are achieved.

From the point of view of biodiversity conservation, a challenging land conflict exists between indigenous peoples' communities and protected areas. The SL consortium resolved border conflicts

[22] ICAA II Program (2013) Línea de Base de Conflictos en Madre de Dios (ISU-PRD-189), Línea de Base de Conflictos en Sucumbios (ISU-PRD-190), Línea de Base de Conflictos en Napo, Orellana y Pastaza (ISU-PRD-191)

between communities and conservation units in Peru (Tambopata) and Ecuador (Sumaco). This was done in close collaboration with the protected area authority, because it became clear that the land titling process provided more security for the indigenous peoples' community that enables them to apply sustainable use of forest resources herewith forming a natural barrier to the encroachment of unsustainable use like mining and illegal logging. In this, the process did not stop with the definition of boundaries; four communities around Tambopata updated and approved their communal statutes to align them with their land-use plans and control actions. The parish of Hatun Sumaco (limiting the Sumaco National Park) had its spatial planning formally approved, including the borders with the park and their position within the buffer zone of the park. In parallel, the communities within the parish were legally accepted through which they qualified for fee exemptions, and obtaining recognition as ancestral lands.

3.2.2. Indigenous rights

The attention for the rights and policy towards Indigenous Peoples' in Isolation or Initial Contact (PIACI) was low at the start of ICAA. Increasing conflicts related to oil exploration and illegal logging, demanded particular attention to the issue within the program. Initially, the technical support partner DOI organized a meeting among the three countries and mapped PIACI in the region.[23] After this meeting and with ISU support, the Ministry of Culture in Peru created a specific department for PIACI within the Vice-Ministry for Interculturality. Based on examples from the field, from ICAA landscape consortia, this department along with SERNANP and SERFOR developed a PIACI surveillance protocol and contingency plans for national park authorities and infrastructure and forestry enterprises.[24]

As a result of the overall improved context for PIACI, four Territorial Reserves for PIACI have been recognized in Peru, and in Colombia a PIACI policy is now under development. At landscape level, ICAA II helped to strengthen the PIACI Technical Commission of MDD and the issue was incorporated into the MDD Concerted Development Plan. The Ucayali Regional PIACI Roundtable was recognized by the regional government, a regional PI directorate was established and a strategy was agreed to update the PIACI protection plan of Ucayali;[25] the regional indigenous peoples' organization (and ICAA II partner) ORAU and the Ministry of Culture signed an institutional agreement to work jointly in favor of PIACI and implement surveillance. The actual suspension of the construction of the Pucallpa-Cruzeiro del Sur road crossing the Sierra del Divisor Park was partly due to the lobby from ICAA II partners to protect PIACI's in this region. An important reason for the success of improved PIACI protection in ICAA II was that the program not only worked on the legal aspects and surveillance, but also on practical aspects of other sectors. By the cross-pollination at landscape level between the results in indigenous territorial consolidation (conflict resolution, improved planning), protected areas management (support to planning, control and research) and landscape planning, has enhanced synergies to reduce the threats to PIACI in the landscape (e.g. illegal logging, hunting and fishing, infrastructure).

Specific cases of improvement of indigenous rights were achieved. For instance, the Constitutional Court of Colombia cancelled a mining title in the Yaigojé Apaporis National Park, as a result of the Association of Indigenous Yaigojé Apaporis claims, which was initiated in a public audience and supported with ISU legal assistance. Also, as a result of the ISU funded mercury contamination study in the Cahuinari National Park (section 3.2.4), the Colombian Ministry of Environment, the Ministry of Mines and

[23] DOI 2012. Two maps about territories of indigenous peoples in voluntary isolation (DOI-PRD-001).
[24] WWF/MINCUL. 2015. Marco general para la elaboración de Planes de Contingencia Antropológica para Protección de PIACI en el marco del desarrollo de actividades productivas (PM-PRD-222); WWF/SERNANP. 2015. Lineamientos para la elaboración de Planes de Contingencia Antropológica para Protección de PIACI que se desplacen en el marco de la gestión de un Área Natural Protegida. (PM-PRD-223).
WWF/SERFOR (2015): Lineamientos para la elaboración del Plan de Contingencia Antropológica para Protección de PIACI que se desplacen en Unidades de Manejo Forestal (PM-PRD-224).
[25] GOREU. 2015. Plan Regional para la Protección de los pueblos indígenas en aislamiento y contacto inicial de Ucayali (PM-PRD-225).

CORPOAMAZONIA were requested to investigate illegal mining in the park for violating indigenous rights to water, health and food security.[26]

At national level in Peru, IL consortium members (COICA and TNC) and the Peruvian Amazon Indigenous Federation (AIDESEP) developed the Indigenous Land-Use Planning System (SOTI). This proposes formal indigenous governance of land planning aligned with national territorial planning rules. This system, now at the level of dissemination and validation, will be an important tool to adjust land planning to indigenous territorial vision.

3.2.3. Forest legislation

The ICAA II program has paid considerable attention to improving national and subnational forest legislation, to improve the legal context for good governance of natural resources. Much of this was achieved because the ICAA II program could build on the long-standing institutional commitments of ICAA II partners with the national and local governments. Although these relationships are strongest in the environmental sector (ministries of environment, forest departments), ICAA II has made considerable progress towards inter-sectorial coordination by actively involving ministries of culture, agriculture, mining and infrastructure.

During ICAA II implementation, Peru implemented a new Forest and Wildlife Law and accompanying regulation.[27] Also, the Law for Retribution of Ecosystem Services[28] was accepted. Because of the positive and close relationship of several ICAA II partners with the central government and their active participation in thematic and regional working groups, many experiences and approaches of ICAA II partners were included in the new forest legislation. These included technical elements (forest product management) and procedural elements (e.g. benefit sharing). Among others, ISU provided inputs on land use change and in the chapter on non-timber forest products; the proposal for non-timber forest products was prepared jointly with Madre de Dios Brazil nuts association (AFIMAD). The SL consortium achieved that SERFOR approved the terms of reference for palm fruit management and harvesting (not existing previously), which include guidelines for the elaboration of management plans.

In the field of forest legislation, ICAA II partners supported the improvement of regulations on forest concessions through ministerial resolutions.[29] In Madre de Dios, many ICAA II partners participated in the Regional Dialogue and Forest Conservation Roundtable, which had the aim to reinforce forest policies in the region. As a result of ICAA II support, this forestry roundtable incorporated community forest management and Brazil nut collection into their lines of action. In Ucayali, policy development was supported through the approval of three regulations that aim to boost legal forest management in forest concessions.

The lack of local capacity to know and enforce legislation is an important barrier for effective environmental governance. ICAA II has made conspicuous progress towards strengthening this legal capacity at different levels. The ISU focused on training both public officials as well as legal operators from communities. To strengthen public officials' capacities on environmental crimes control, an Environmental Crimes Training Program was organized in Colombia for 34 public officials and indigenous leaders, together with Universidad Javeriana, HED, DOI and the Colombian National Parks Agency. Over the years, more than 90 public officials and indigenous leaders were trained for 120 hours, increasing their skills in prosecuting environmental crimes. In all three countries, the community legal operators program trained 76 indigenous leaders on indigenous rights and land tenure and titling enabling participants to understand the administrative mechanisms involved in protecting their rights. To illustrate

[26] El Mundo (Colombia) 16 March 2015: Investigan contaminación con Mercurio por minería en el Parque Nacional Cahuinarí.
[27] Law 29763
[28] Law 30215
[29] E.g. Resolución ministerial No.0162-2014-MINAGRI endorsing the terms of reference for the design and the guidelines for the development of forestry management plans for palm trees in natural forests.

increased capacities, these community legal operators have initiated over 100 procedures in the three countries.

At landscape level in Loreto and Madre de Dios, the LMT consortium provides information and legal assistance to legal land-holders and natural resource use rights holders to use legal tools in their defense against threats (e.g. illegal mining, land invasions, illegal logging). According to the *fiscalia*, this also has considerably increased the amount of denunciations against illegal logging and mining, as well as prosecutions because ICAA II partners help the operations of control agencies (incl. Police and Prosecutors).

At international and national level, Prosecution Agencies were strengthened to improve law enforcement related to environmental crime. In the Amazon region, prosecution of environmental crime (illegal logging, mining, land invasion) used to be complicated because of difficult access to the area and lack of technical information to prove violation of laws. In order to provide Public Ministries with necessary capacity, ISU organized a study tour for the Latin American Environmental Prosecutors Network *(*Red Latinoamericano de Fiscalías Ambientales), to Mato Grosso. Based on this example from Brazil, both Ecuador and Peru selected one region in the Amazon to pilot the inclusion of satellite images for prosecution purposes. This required intersectorial agreements with the ministries that provide the geographical information (environment, agriculture), legal adjustments to allow for geographical information a proof. Finally, it was successfully implemented and in Ecuador, it is yet included in a ministerial decree. A specialized unit (Unidad de Monitoreo Satelital) was created within the Special Prosecutor Office for Environmental Matters (FEMA - Fiscalía Especializada en Materia Ambiental). In addition, the LMT consortium organized workshops with FEMA to discuss the application of the abbreviated process in case of environmental crime and the ISU trained 100 legal officials (judges and prosecutors) on environmental legislation. ISU support also triggered the establishment of a Satellite Monitoring Unit (Unidad de Monitoreo Satelital) in Ucayali's Prosecution Office.

ACCA (a LMT consortium partner, and supported with an ISU research grant) developed an innovative deforestation monitoring system based on near-real-time satellite image analysis to detect the current deforestation (IR4). This has promoted concrete conservation actions by Peru's protected areas and forestry agencies (SERNANP and SERFOR respectively), and is used by FEMA and the National Prosecutor's Office in the process described above.

3.2.4. Infrastructure and gold mining

Illegal and ill-planned gold mining is one of the major and rapidly increasing threats to the Amazon, particularly in the Southwest Colombian and the Southeast Peruvian Amazon regions. ICAA II partners have recognized this and applied a series of strategies to improve regulation, increase control and mitigate impacts. Much work has been done at landscape level through identification, prosecution and control of illegal mining activities. The strengthening of prosecution agencies (see above) provided key support for these actions. Promoting sustainable production activities and other economic incentives (IR3), provide an alternative to mining activities. Finally, restoration techniques for outmined areas have been developed through participatory research and now promoted at landscape level (IR1). The MDD consortium achieved an agreement with the Ministry of Mining (MINEM) to promote recovery of outmined areas to other areas and to promote the process for legalization of informal miners.

In Colombia, ISU supported their governmental partner (National Parks Agency) and other governmental agencies (among others, the government of the Amazonas Department) to deal with the issue. First, participatory studies led by DOI [30] showed local perceptions of the consequences of illegal mining. An

[30] DOI, USAID, ICAA II. 2014. Cartografia cultural y vision tradicional de los pueblos Nonuya, Muinane y Matapi sobre el origen de la contaminacion en el agua; DOI, USAID, ICAA II. 2014. Cartografia cultural del resguardo Nonuya de Villa Azul y áreas impactadas por minería ilegal.

academic study, financed by ISU, was executed to determine mercury presence in the environment, in food and in people[31] and these results were disseminated to show the urgency for action. Then, technical staff members of local institutions were trained on problem and conflict analysis. Finally, together with national environmental agencies and the United Nations High Commissioner on Human Rights the implementation of a strategy to reduce illegal mining in the Amazonas Department was promoted. This will be included in the Amazon Contract Plan (a three –year $2.5M public investment project developed to finance implementation of the strategy approved by the Colombian Planning Department). All candidates for governor of the Amazonas Department, including the elected Governor, signed an agreement to incorporate the mining strategy in the Department's Development Plan.

At the start of ICAA II, several major infrastructure development projects were planned in the Andean Amazon region, crossing areas of large biological and cultural value. By executing studies on potential impact, supporting grass root debate and lobby with decision makers, ICAA II partners aimed at reducing the impact of these roads or even halting the projects.

At a general (national) level, the LMT consortium supported capacity building of the National Environmental Certification Service (SENACE) to ensure high quality assessment of infrastructure and hydrocarbon projects. To do this, LMT organized exchanges on technical and legal aspects with similar agencies in Chile and Colombia. At the same time, consensus was achieved among MINAM, IADB, Civil Society organizations, some key private firms and the LMT consortium to strengthen SENACE. ICAA II partners established the priorities for strengthening SENACE to apply a national environmental compensation policy. This process will be followed up after the ICAA II program with funding from the Moore Foundation.

The work at different levels (international, national, landscape) on infrastructure was particularly successful in the case of the Pucallpa-Cruzeiro do Sul road, crossing the Sierra Divisor National Park. The Conservation Strategy Fund (IL and ISU consortia) directed a research on the impact and cost-benefit of different alternatives,[32] showing that the original alternative was not efficient. ICAA II funding supported the establishment of a multi-stakeholder civil society platform in Ucayali *(grupo monitoreo)* which claimed participation in decision-making and a well-executed consultation process. *Grupo monitoreo* was established in ICAA I and financed through the ISU grants program in ICAA II. Finally, smart political lobby, based on the research results and supported by the multi-stakeholder platform, resulted in a change of the project design from a road to a (less impacting and more efficient) railway. After achieving positive outcomes in this case, the IL consortium published the "Challenges for Sustainable Interconnection in the Ucayali Region," aimed at disseminating and socializing technical information on the road interconnection projects in the Ucayali Region among policy decision-makers and the general public.

Other ICAA II activities about infrastructure included research and monitoring of the planned Iñapari-Puerto Esperanza road, whose proposal is now temporary closed, partly because of the increasing concern about its environmental and social impact demonstrated by ICAA II partners. In Colombia, DOI established as a strategic technical partner of the government, facilitating and organizing roundtable events with different stakeholders in the infrastructure sector, to strengthen environmental planning and management for infrastructure projects.[33]

3.3. IR3 – Increased capacity to utilize payment for environment services (PES)-like and other economic incentives

---

[31] This study financed by ISU and implemented by the Colombian National Parks Agency, the University of Cartagena and doctoral students of the Stanford University focuses on the rivers Cahuanarí, Cothué and Apaporis (still ongoing at the time of editing this report).
[32] Conservation Strategy Fund 2012. Análisis económico de la carretera Pucallpa - Cruzeiro do Sul; Hopkins, A., Malky, A., Glave, M., Ventocilla, R., Ledezma, J.C. & Arana, A. 2015. Análisis económico y socioambiental de los proyectos de interconexión Pucallpa-Cruzeiro do Sul. ICAA II; Conservation Strategy Fund, SERIE TÉCNICA No. 32. (IL-PRD-169)
[33] Reference to success stories documentary.

3.3.1. Economic incentives through sustainable livelihoods practices.

Several of the main threats to the natural resources of the Andean-Amazon find their origin in unsustainable land use and ill-planned management of forest and river resources. Underlying factors are related to poverty: alternative land use practices or sustainable natural resources management do not yet provide enough economic incentive to ensure they are more profitable than current unsustainable land and forest use practices. The reasons behind this lacking economic incentive are knowledge gaps, poor technical support and difficult access to markets for sustainable products. Bearing this in mind, ICAA II implemented a strategy across all landscapes to promote sustainable livelihoods to local communities, based on good agricultural practice and sustainable natural resources management. This is done through the development of good management practices, training to land-users and market development for sustainable produce. Also, formal management plans of forest and river resources were developed to allow legal extraction by communities.

In the Purus-Manu landscape, indigenous communities in the buffer zone of the APNP have now access to several new sources of income, which diversified their livelihoods and reduced pressure on the Park. Communities of Purus and Yurúa and their indigenous organizations have developed market studies and business plans for the commercialization of mahogany seeds and copaiba oil. In the southern part of APNP, ICAA II partners improved natural latex production and export (to Brazil and Portugal) through the establishment and support to two producer associations: AGROSHIT (LMT consortium) and ECOMUSA (PM consortium). These are now examples at the local and regional levels of a well-run local business based on non-timber forest products. In the northern portion of the Park, with PM consortium assistance, the Mabu Hiwe Artisans Committee improved its production activities through training and developed a business plan which helped to improve production quality and increased income generation. In addition, traditional resource use (agriculture, fisheries and forestry) was improved to make them more profitable and sustainable. In the same landscape, four indigenous communities (Gastabala, Nuevo San Martín, Pankirentsy, and Sinai) have a total of seven communal agroforestry plots; in Tahuamanu, two fisherfolk associations agreed on a fisheries management plan and the communal Forest Concession Ariana EIRL in Sepahua has a Complementary Management Plan, to regulate extraction activities of cedar seeds and copaiba, complementary to timber extraction.

In Loreto, the LMT consortium did groundbreaking work by developing a Regional Ordinance for the Management of Fishery Resources together with DIREPRO, which provided better control of fisheries and allowed communities as stakeholders that can manage fisheries in the region. Based on this improved legal context, legal fishery activities were improved around the region. Fishermen of five communities of the buffer zone of the Pacaya Samiria National Reserve formalized their access to fisheries through four Artisanal Fisherfolk and Processor's Association that have developed three Fisheries Management Programs of Amazonian lakes within and outside the Park. Among others, they managed a permanent agreement to provide Paiche *(Arapaima gigas)* to six Lima gourmet restaurants. Improved fisheries management is benefitting directly 57 families and indirectly approximately 1,185 people. Also in the Yavari Mirin and Putumayo basins, the LMT consortium provided technical and financial assistance to local fishery associations (OSPAYM, Arahuana and Cocodrilos) for the preparation and implementation of their Fisheries Management Programs. The Putumayo associations finished the fishing season with profits up to US$ 23,000. In addition to fisheries, sustainable wildlife management was also promoted in the PSNR buffer zone boosting river turtle and peccary pelt certification. The effect of better income from sustainable fisheries and wildlife management is shown by the commitment of the Indigenous People from the Nueva Esperanza community not to hunt the uakari *(Cacajao calvus)* monkey inside the communal territory or in the Lago Preto conservation concession.

In the buffer zone of the Tambopata National Reserve and the Bahuaja Sonene National Park, the SL, LMT and MDD consortia collaborated effectively to support sustainable livelihoods, as alternatives to unsustainable timber and wildlife extraction and alternatives to illegal mining. In six communities, land

use zoning plans (incl. monitoring) were fully incorporated into their life plans (see IR1) and resource management plans were based on this. Four of these communities were assisted to develop a 5-year forestry plan based on the results of forest inventories. These plans, which were formally approved, allow them to legally extract timber. They also established timber committees responsible for ensuring adequate timber extraction and increased their primary processing efficiency (local sawmills and storage areas). These activities have led to an average increase in income of 6%. In one of the communities (Boca Pariamanu), for the first time, four families jointly harvested 20,000 board feet of lupuna *(Ceiba pentandra)* using low impact logging techniques. As a result, they could establish a seed fund for the purchase of a timber re-saw machine. Because of the sawmill, in 2014 Tres Islas could sell value-added timber products yielding over $19,000. In deforested areas that were converted into monocultures, the MDD consortium helped to install agroforestry species to improve soils, agrobiodiversity and food security. In total, 1 million seedlings were planted in over 500 hectares.

Five of the six communities in the Tambopata landscape developed Brazil nut management plans. Two of these obtained legal permits to harvest Brazil nut within both protected areas. This allowed all communities to legally harvest Brazil nuts and sell to the certified market. The SL consortium strengthened the value chain of Brazil nuts. With their facilitation, the producer associations AFIMAD, RONAP and ASCART renewed their fair trade and organic certification and consolidated their sales and negotiation competencies, selling roughly over US$ 500,000 of Brazil nut in the first semester of 2015. Details of negotiation were improved, increasing the premium paid for Organic certification by 50% and reducing transport costs. The largest producer organization (AFIMAD) was supported to develop the OHEE commercial brand, which can now be seen on shelled Brazil nuts, Brazil nut oil and candied Brazil nut snacks but also on other products like ungurahui (*Oenocarpus bataua*) and aguaje (*Mauritia flexuosa*) pulp and tamshi *(Thoracocarpus bissectus)* handicrafts.

A crucial economic incentive is access to credits. This does not only facilitate up-scaling and professionalization of forest resource use, but also increases self-determination of communities and builds trust with external financial partners. Through an agreement of the SL consortium with AGROBANCO, indigenous communities in Madre de Dios for the first time have accessed credit for Brazil nut activities. In January, 2015, roughly 86 Brazil nut producers from 4 AFIMAD member communities accessed 46,000 US$ in credit at a 7% interest rate/semester: by July it was fully repaid. ASCART was supported to negotiate a $115,000 loan to cover 2014 harvesting costs, which was also fully repaid. This support is critical for communities because until now, only 20% of the harvest costs were covered by the buying company in advance. In addition, the community of Tres Islas and ASCART obtained three financing agreements from FONDAM, GOREMAD and PROCOMPITE for forest resource use totaling US$ 200,000. The funds were invested to develop value-added processing infrastructure for Brazil nut and palm-fruit processing.

In the Cuzco region, in the buffer zone of the Megantoni reserve, the SL consortium worked with local producers to improve coffee production. First, to establish a positive institutional context, the multi-stakeholder representation of the Coffee and Cocoa Technical Roundtable was strengthened and 20 local organizations and public authorities in Cuzco signed an agreement to incorporate sustainability principles into their operation plans for coffee and cocoa in the Megantoni Sanctuary buffer zone.

Due to ICAA support, three hundred farmers with 7,000 hectares from four cooperatives and two private businesses maintained their Sustainable Agriculture Network certification. Cooperatives from eight zones as well as two exporter companies, consolidated implementation of best management practices which has enabled them to achieve or maintain voluntary certifications such as Rainforest Alliance Certified, Organic, FairTrade, among others. One producer cooperative and one business have adopted climate-smart agricultural practices, driving the implementation of these practices among their 200-member producer base

In the Ucayali landscape, like in Madre de Dios, ICAA partners provided support at different levels to the local communities. Apart from the support to governmental agencies to create an enabling legal and planning context and support to the indigenous peoples' communities for resolution of their conflict, organizational strengthening and life plan development (IR1), sustainable livelihood practices were developed and promoted. In the Callería zone, the IL consortium developed techniques to farm fish in floating cages within the river. The Paiche grown here was sold to the (relatively close) Pucallpa market and revenues were invested in a community fund (microbanco) to make loans to fishermen from the community at a 20% monthly interest rate. The sale of their fishing catch as live food for the Paiches has enabled the fishermen to pay off 100% of their loan. Fish farming, managed by committees with participation of more than half of the families, not only diversified income through sales in Pucallpa, but also increased awareness about the contamination of the river and now; the communities apply better control of the river system to illegal fisheries (using poison) that affect their fish farming. It has been so successful that the technique is now being applied by the Cofán community in Ecuador with support of the provincial government of Sucumbíos.

In the Sucumbíos landscape, the Cofán communities of Dureno and Duvuno have profited from earlier project supported by USAID. Therefore, the IL consortium could support a wide range of activities (some new, some existing) in the field of agriculture and forest management and associate them to the community plans of the different Cofán centers. Nowadays, these communities possibly are among the most diversified in the Ecuadorian Amazon, in terms of sustainable livelihoods. They apply practices that range from certified timber extraction, medicinal plan production and forest based tourism to cocoa production, small domestic animals, handicrafts and fish farming.

In Napo, the SL consortium complemented the strategy of local organization strengthening and planning (IR1) with the development of sustainable activities. In this area, including the buffer zones of the Sumaco National Park, the most common cash crop is naranjilla *(Solanum quitoense),* a fruit crop traditionally associated with high pesticide use. To clean the naranjilla productivity, first the legal framework for the formation of a clean naranjilla producer organization was clarified and coordinated with the Ministry of Agriculture and the National Institute for Economic Solidarity. A naranjilla roundtable, consisting of producers, governmental agencies, NGO and academy, developed a best management practices manual for clean naranjilla production using the Sustainable Agriculture Network and government agricultural sanitation criteria. Through formation of a producer association (ASOPROBISUM), and training, farmers became familiar with the standards which were successfully applied to 7 farms: producers are now implementing 80% of SAN principles and criteria, more than doubling their initial compliance of 35% and especially scoring well in ecosystem conservation principles. This high level of adoption and positive cost-benefit figures from the initial period has generated much interest in replication. To sustain the market of clean naranjilla, the members of the Naranjilla Roundtable secured approval of an initial grant of US$120,000 from the Provincial Government of Napo to establish a pulp processing plant in Wamaní College (one of the communities ICAA II has supported integrally). Also, the State University of the Amazon and naranjilla pilot farmers initiated the process to establish a unique brand and product attributes with the Ecuadorian Institute of Intellectual Property (IEPI) which will enable ASOPROBISUM to sell differentiated products under a special label similar to a certificate of origin. Sustainability in time has been secured because a new project[34] in Napo has adopted the Naranjilla Roundtable responsibilities.

3.3.2. Economic initiatives based on ecosystem services management.

In addition to localized economic incentives created through profitable livelihood activities, ICAA II recognized the need to provide incentives at larger scale that recognize the value of the standing forest and intrinsically, compensate those forest dwelling communities that apply good stewardship to the

[34] Funded by the Global Environmental Facility (GEF) through the Food and Agriculture Organization of the United Nations (FAO)

natural ecosystems and their services. During ICAA II, USAID's partners in the Andean Amazon have effectively strengthened the capacity of governments to design and improve such schemes and the capacities of communities and indigenous peoples' organizations to access these incentives. This has resulted in improved legislation in Peru, more equitable and effective PES schemes, and actual access of communities to these schemes, increasing their income and ensuring conservation of the natural ecosystems.

Growing concerns about the impact of climate change and the insufficient capacity of local communities to adapt to higher temperatures and less predictable precipitation regimes has increased the vulnerable situation of the Andean Amazon. At the same time, conservation of standing forests is an important mechanism to mitigate climate change by avoiding emissions of greenhouse gas. Traditional knowledge and diverse forest based livelihoods proved to be good elements to be included in adaptation strategies.[35] Therefore, international mitigation schemes such as REDD+, applying appropriately social and environmental safeguards, have the potential to convert the concern of climate change in opportunities for forest conservation and sustainable management as well as reducing poverty and increasing governance.[36]

At the start of ICAA II, the issue of REDD and PES-like schemes were being explored by many initiatives, but few had actually applied this in practice. During ICAA II, the ISU has managed to improve the applicability of the concept by improving legislation and creating knowledge and capacities among regional and national organizations. One of the most significant achievements is the development and approval of the Law for Ecosystem Services Retribution Mechanisms in Peru (IR2), and ICAA partners have continuously provided input into this Law text. Also, an analysis of Fiscal and Monetary Incentives (FMI)[37] was conducted, based on which policy briefs were developed for the Peruvian and Colombian Amazon region. Based on this, the Economic and Social Political National Council (CONPES) of Colombia, a national level planning institution, is evaluating the inclusion of the proposed modifications to reduce conversion costs for more sustainable productive practices.

The ICAA II program has been instrumental in the development of an indigenous approach to REDD+. In close collaboration with the Amazon-wide indigenous peoples' organization *(Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica,* COICA; a partner in the IL consortium), ISU created the Capacity Development Group on Economic Incentives for Conservation (CDG). This strengthened eight key indigenous organizations in Ecuador, Colombia and Peru through tailor made train-the-trainers workshops for indigenous peoples principally on climate change and REDD+. The CDG participants continued to keep in contact and obtained permanent presence in strategic and policy discussions about climate change and REDD+ in their countries. ICAA II developed an instrument based on objective indicators to measure the institutional capacities and encountered an average 80% increase during the initial 18 month of functioning of the Capacity Development Group about adequate management of EI concepts.[38]

With strengthened base organizations, COICA developed the proposal for a mechanism to apply REDD+ in indigenous territories (REDD Indigena).[39] With ICAA II support, this was presented at COP20 of UNFCCC in Lima and was well received. On one hand, COICA's work towards the following global meetings in 2015 (SBSTTA 19 and COP21 of UNFCCC) has placed Amazonian indigenous organizations at the heart of those events. For several months, COICA has been conducting advocacy

---

[35] Lara, R. & Vides. R. 2014. Sabiduría y adaptación: el valor del conocimiento tradicional en la adaptación al cambio climático en América del Sur. Quito, IUCN.
[36] Angelsen, A. , Brockhaus, M., Sunderlin, W., Verchot L. & Dokken, T. (Eds.) 2012. Analysing REDD+: Challenges and Choices. Bogor, Indonesia: CIFOR.
[37] De la Torre Ugarte, Kamiche y Huanqui 2015. Incentivos Fiscales y Monetarios con Incidencia en la Biodiversidad de la Amazonia Andina en el Perú. Universidad del Pacifico. ISU-PRD-566; Alterio 2015. Orientación, implementación y ajuste de incentivos fiscales y monetarios de la Amazonía Andina colombiana.
[38] ICAA II program. Informe de resultados y lecciones aprendidas del GDC de IEC.
[39] http://www.amazonia-andina.org/sites/default/files/construccionreddindigenaamazonicocoica.pdf

with the highest levels of French government, resulting in Jocelyn Therese, Vice-Coordinator of COICA, being named Co-chair of the COP 21. On the other hand, the Indigenous REDD program was applied in the field in Colombia (Predio Putumayo, Eastern Vaupés, Resguardo de la Cuenca media y alta del Río Inírida); Ecuador (the Kutukú Shaimi Protection Forest); Peru (Amarakaeri Communal Reserve); Brazil (Igarapé Lourdes); and Bolivia (Itonama, Movima). Apart from ensuring preservation of these areas and providing fair compensation to the communities, it has strengthened the involved indigenous organizations.

At landscape level, the ISU has integrated ecosystem services into planning through grant-funded studies of the Universidad del Pacifico. This was done using the TEEB[40] planning tool. Among others, six action plans were developed that will guide subnational governments in Colombia, Ecuador and Peru. Based on this, the Colombian departments of Caquetá and Amazonas are exploring to adopt the BanCO2 mechanism that was successfully developed in the Colombian Andes.[41] Napo and Sucumbíos have adopted the TEEB action plan through their environmental departments. Six pilot projects on PES mechanisms, financed by the ISU grants program, have resulted in three Economic Incentives for Conservation Programs in full implementation (all on hydrological ecosystem services). The other three pilot projects were on REDD+, two of which are being implemented under other approaches (one applied to the voluntary Carbon market and another has been accepted for payments under the Peruvian Programa Nacional de Conservación de Bosques y Cambio Climático.)

One of the successful pilots for payment for hydrological watershed services was done in the Cumbaza watershed (San Martín, Peru), through effective complementary action of several ICAA II partners. Although San Martin is renown as one of the regions that first included PES mechanisms, the existing systems had several flaws. In the Cumbaza watershed the pilot was applied to an area where during 10 years misunderstandings between the management committee of the Regional Conservation Area and indigenous peoples' groups about their participation in benefit sharing destination of possible hydrological PES schemes, formed a barrier to implement PES mechanisms. The IL consortium contributed to a PES scheme in which indigenous peoples participated in design, administration and benefits. They helped to develop investments plans for the communities, so income from the PES scheme supported sustainable activities. At the same time, through its grants program, ISU strengthened the management committee of the watershed and implemented awareness campaigns, through which conservation agreements were established between authorities and communities. Lessons learned from the legal arrangement of this PES scheme were included in the drafting of the rules and regulations of the national Retribution of Ecosystem Services law.

During recent years, in Ecuador several government-led economic incentives have taken shape. ICAA II has successfully supported communities in both Ecuadorian landscapes to access these schemes. Three Cofán communities in Sucumbíos are now fully participating in the Socio Bosque forest conservation[42] covering 77,000 hectares and in Napo the SL consortium helped the Wamaní community to identify, propose and negotiate inclusion of 556 hectares in Socio Bosque conservation. Revenues from this incentive (US$13,000/yr.) are used to finance sustainable production activities. Both the SL and IL consortia have provided the development of active and passive restoration proposals for the new restoration chapter of Socio Bosque PSB. In Gonzalo Pizarro (Sucumbíos) and Lumbaqui, the Cofán organization NOA'ïKE (IL partner) prepared a proposal for 3300 hectares. In Wamaní (Napo) 200 hectares are proposed, projecting US$ 90,000 over 10 years. This same community was the first at national level that accessed the commercial reforestation incentive for the Ministry of Agriculture,

[40] www.teebweb.org
[41] www.banco2.com
[42] http://sociobosque.ambiente.gob.ec/

receiving US$ 70,000 for 50 hectares.[43] This makes Wamaní the first community that benefits from all government economic incentives, benefiting 140 community members due toICAA II support.

3.3.3. Number of Initiatives of Economic Incentives promoted and hectares positively affected

The ICAA II program achieved the development of 48 initiatives in the three countries, among which that provided concrete incentives for sustainable livelihoods (certification, reforestation incentives) and PES and REDD+-like initiatives (Table 2). Fourteen pertained to PES like initiatives, one to REDD+ and 33 to other incentives (mostly certification of produce and reforestation incentives). Thirty-nine of these initiatives produced a concrete benefit conservation and good management of 416 thousand hectares. Two of the consortia that promoted economic incentives (PM and IL) reported that in total, these benefitted economically a total of 2983 individuals (Indicator 3).

TABLE 2. AMOUNT AND TYPES OF INITIATIVES TO PROMOTE ECONOMIC INCENTIVES DEVELOPED DURING ICAA II (INDICATOR 4) AND NUMBER OF HECTARES POSITIVELY AFFECTED (INDICATOR 5).

Type of incentive	2012	2013	2014	2015	Total	Number of hectares positively affected
PES			5	9	14	96,914
REDD				1	1	127,004
Other	5	6	19	12	33	192,133
Total	*5*	*6*	*24*	*22*	*48*	*416,051*

3.4. IR4 – Greater understanding and solutions for key environmental issues

The Andean-Amazon is a highly complex region: cultural and biological diversity, geographical landscapes, historical processes and social dynamics have created the current context for biodiversity conservation and natural resource management. It is impossible to know all the parameters, variables and interactions of the factors determining this context. Therefore, to provide solutions for the multiple environmental challenges that Amazon communities face on a day-to-day basis, there is a continuous demand to increase the knowledge basis through the generation and dissemination of information. ICAA II partners have applied a multitude of strategies to generate this kind of knowledge, which has positioned ICAA II as a key source of science-based information for conservation in the region.

At landscape level, practically all activities had a research component: landscape planning needed social and geographical information; development of sustainable livelihoods was based on experimental (participatory) research, and conservation units required biological assessments. Therefore, knowledge generation can be considered as mainstreamed in the project activities. Furthermore, to ensure people increase their capacities to provide good management of their natural environment, the generated knowledge has to be disseminated to the primary users. Hence, training to land users and decision makers has been the most important dissemination tool applied in ICAA II. These aspects of knowledge generation and dissemination are fully embedded in the results at landscape level (IR1 and IR3) and in capacity building (see 4.4).

At the regional level, ISU provided research grants to young professionals for individual studies on key issues and to leading environmental NGO's for cutting-edge applied research. Linking these grantees to regional and international universities, created a regional research network that has resulted in published

[43] http://www.agricultura.gob.ec/magap-inicia-programa-de-incentivos-economicos-para-reforestacion-con-fines-comerciales/

practical policy recommendations for improved best practices applicable to landscapes, protected areas, and the conservation of biodiversity.

3.4.1. Knowledge generation

In addition to the above-described knowledge generation mainstreamed at landscape level, ICAA II partners developed specific studies about actual environmental issues encountered in the field. These studies have directly generated the required understanding to tackle the challenges. Some examples include:

- The cost-benefit analysis, executed by CSF, of different alternatives for the Pucallpa-Cruzeiro do Sul road[44] was a turning point in the government's decision to cancel funding for the originally proposed alternative and (possibly) development of a less impacting alternative
- CIFOR conducted field studies in Ecuador and Peru on ecology and management of fast growing (secondary forest) tree species.[45] Based on their results, they drafted regulations for adequate use of these species, which are an important and massively used resource for domestic purpose, but until recently fell under the same harvest regulation as any other forest species. The proposed regulations, which were subsequently formally adopted in Peru, permit the increased legal and sustainable use of this group of timber species.
- Specific studies on mining impact on indigenous peoples and health in Madre de Dios were important inputs for a multi-stakeholder congress about health and mining, held in Puerto Maldonado in 2014.[46] The congress was organized by national (UNAMAD) and international universities (UF, HED) together with the health department of the regional government and attended by both environmental and health stakeholders from around the Amazon region.
- The MDD consortium developed field research on restoration in outmined degraded areas with members of the Manuani community. Its success in terms of restored area and people able to apply this technique in other areas was nationally recognized by winning the Premio Ambiental Antonio Brack Egg (November 2015).
- The ISU-supported academic study on mercury presence in the environment, in food and in people in Colombia[47] showed worrying high levels and alerted the urgency for action on illegal mining. This was key inputs for the National Parks Agency and other agencies of the National Environmental System (Ministry of Environment, SINCHI Institute, and others) being able to negotiate a US$ 2.5M grant from the Ministry of Finance to develop and implement a strategy to combat illegal mining.
- The IL consortium recorded traditional knowledge through information-gathering workshops on use and management of two medicinal plant species (kenene and yuku). With the generated information, application will be made for denomination of origin for both products as a means of protecting them and positioning them in the market, in coordination with the national Intellectual Property Agency and the National Science and Technology Secretary of Ecuador.

---

[44] Conservation Strategy Fund 2012. Análisis económico de la carretera Pucallpa - Cruzeiro do Sul. See also: Hopkins, A., Malky, A., Glave, M., Ventocilla, R., LEdezma, J.C. & Arana, A. 2015. Análisis económico y socioambiental de los proyectos de interconexión Pucallpa-Cruzeiro do Sul. ICAA II; Conservation Strategy Fund, SERIE TÉCNICA No. 32

[45] Cronkleton et al. 2013. Peruvian smallholder production and marketing of bolaina (*Guazuma crinita)*, a fast-growing Amazonian timber species: call for a pro-livelihoods policy environment. CIFOR Infobrief No 23

[46] http://censap.org.pe/wp-content/uploads/2015/11/Programa-del-I-Foro-Mercurio-en-Madre-de-Dios.pdf

[47] This study financed by ISU and implemented by the Colombian National Parks Agency, the University of Cartagena and doctoral students of the Stanford University focuses on the rivers Cahuanarí, Cothué and Apaporis (still ongoing at the time of editing this report).

- Joe Sixto Saldaña's M.Sc. thesis on the potential for mahogany seeds management by indigenous communities[48] enabled four communities to develop techniques for successful seed management and sales.
- Research on fishery stocks, with support of the PM consortium in Tahuamanu province formed the basis for the district fishery management plan.
- The SL consortium supported the Municipality of Tarapoto to conduct water studies to comply with the sustainable tourism strategy developed for Cuyabeno Reserve.
- Monitoring of hunting and dissemination of the results, executed by community members supported by the LMT consortium, resulted in drastic reduction of illegal hunting in the Yavari Mirim basin (Loreto)
- A Decision-Support-System (DSS) has been completed for Napo and Cuzco landscapes, enabling local government officials and technicians and other key local stakeholders to visualize and analyze trends in deforestation, habitat fragmentation and in government investment projects

Contributing to the goal of strengthening research capacity and increase understanding of key environmental issues, the ISU awarded research grants through a competitive process to individual researchers and institutions. In total 13 scholarships were awarded to young professionals with high priority research topics related to the Economic Tools for Conservation. Several of these research projects, all of which were finished in 2015, had remarkable impact in actual processes and policy.

- Viviana Zamora developed a REDD+ methodology in Colombia[49] that was adopted in national the REDD+ plan
- Paula Zuluaga's analysis of institutional arrangements to improve fisheries management50 by indigenous communities in the Colombian Amazon provided science-based information for the establishment of community resource management agreements.
- Guillermo Carlos' findings about climate change adaptation practices based on traditional knowledge[51] were adopted by the communities where he conducted research, and the methodology is applied in practice by the ISU, developing climate change adaptation plans with a gender focus, for four indigenous communities in San Martin.
- Janeth Lessmann's cost/benefit analysis for protected areas[52] was adopted in the development process of new protected areas in Peru (among others in Yaguas Reserved Zone)
- The results and recommendations of two research projects on the operations and effectiveness of the Socio Bosque Program in Ecuador[53] were adopted by the program and resulted in a new research plan

Seven research grants were awarded to established conservation organizations focusing on biodiversity, socio-economic, and infrastructure issues. This research has been instrumental in supporting policy design and improved resource use practices throughout the ICAA II target region. For instance, ACCA

---

[48] Saldaña Rojas. 2015. Estimación del potencial para manejo de semillas de caoba *(Swietenia macrophylla* King) en tres comunidades indígenas del Purús, Ucayali, Perú. M.Sc, Thesis, CATIE, Costa Rica.
[49] Zamora, V & Malky Harb, A. 2014 Análisis de costos de oportunidad de la iniciativa de implementación temprana REDD en el sector Güejar-Cafre: Departamento del Meta - Colombia ICAA II; Conservation Strategy Fund, Serie Técnica No. 27.
[50] Zuluaga, P.A. & Franco, M. 2014 Comportamiento de pescadores frente a distintos arreglos institucionales en la Estrella Fluvial de Inírida - Amazonía Colombiana. ICAA II; Conservation Strategy Fund, Serie Técnica No. 28.
[51] Carlos Gómes, G. 2015. Capacidad de adaptación al cambio climático en comunidades indígenas de la Amazonía peruana. ICAA II; Conservation Strategy Fund, Serie Técnica No. 36.
[52] Lessmann, J. & Brunner, A. 2015. Integrando costos económicos en la identificación de áreas prioritarias para la conservación en la Amazonía occidental. ICAA II; Conservation Strategy Fund, Serie Técnica No. 33.
[53] Campoverde, D. 2014. Cooperación e incentivos para conservar el bosque amazónico en comunidades kichwas: un análisis desde la economía experimental. ICAA II; Conservation Strategy Fund, Serie Técnica No. 38.; Robles, M. 2015. Un acercamiento a los factores que inciden en la aplicación del incentivo del Programa Socio Bosque en Ecuador. ICAA II; Conservation Strategy Fund, Serie Técnica No. 38.

developed a near-real time deforestation mechanism for the Peruvian amazon which was integrally included in the national forest monitoring system (IR2) and contributed to the online tool "Monitoring of the Andean Amazon."[54] Tropenbos International executed participatory research in the Colombian Amazon to determine environmental and cultural impacts of illegal mining and analysis of livelihood alternatives.[55] This also was a key input for the combat of illegal mining strategy in the Amazonas Department. Finally, WCS developed a wildlife monitoring system based on occupancy models, which is a robust and cost-effective indicator for conservation status of areas with high potential to be used at regional level.

The HED consortium awarded four higher education partnerships across three targeted countries. These Partnership agreements (valued at approximately US$ 750,000 each and with duration of two years and five months) were awarded to the Pontificia Universidad Javeriana (Colombia), the Universidad San Francisco de Quito (USFQ) and Escuela Politécnica Nacional (Ecuador), the Universidad Nacional de Ucayali (Peru) and the University of Florida (Peru, Brazil). Under the partnerships, scholarships are offered to pursue Masters Degrees as well as grants for researchers, professors, organizations and workgroups in Amazon conservation topics.

In Colombia, the HED partnership organized train-the-trainers workshops for faculty staff and students of four universities about biodiversity and conservation research; four research working groups were supported financially to execute research related to key environmental issues and workshops with civil society organizations (TNC, OpEPA) were organized to discuss themes on the interface of research and conservation (environmental flows and environmental education to 19 schools in the Amazon and in Bogotá).

In Ecuador, a M.Sc. program on ecology, with specialization in Amazon Studies was developed at USFQ. Within the scope of the M.Sc. program, a household survey in the Northern Ecuadorian Amazon was conducted (and socialized with local governmental partners) to provide base line information for the development of socio-environmental research. In Peru, the partnership with UNU consisted in establishing an interdisciplinary environmental certificate program that is based on applied, experiential learning through professional internship/training at various governmental and non-governmental institutions. All 11 students who participated in this program, obtained scholarships to conduct research with ICAA II partners in the field, e.g. with ProPurus on indigenous related issues, with the Ucayali regional government on mining related issues and with AIDER on gender issues. Also the University of Florida organized train-the-trainer events and study visits on scientific learning. In addition, faculty and students of the National Amazonian University of Madre de Dios (UNAMAD) were supported through six small projects of interest to government and stakeholder groups in the region on mining and infrastructure. The UF led landscape consortium (MDD) collaborated directly with UNAMAD and Universidad Antonio Abad (Cuzco), incorporating students into their field activities.

3.4.2. Knowledge dissemination

To increase the shared knowledge in key issues for the conservation of biodiversity in the region, ICAA II partners have applied three general strategies: dissemination of information products, environmental education and training/capacity building. The results of the latter are included in the description of the results at landscape level (IR1 and IR3) and the cross cutting theme of capacity building.

In total, the ICAA II program produced 1700 information products (Table 3). Half of these (49%) consisted of communication materials, including leaflets, videos, and magazine articles targeting local communities and the Amazon population in general (Figure 5) There were also approximately 400

[54] http://maaproject.org/en/
[55] Tropenbos. 2014. Manejo tradicional de los impactos de la mineria en la salud del ambiente y poblaciones del medio Río Caqueta. Unidad de Apoyo ICAA-USAID.

knowledge products (scientific papers, technical reports, books) and training materials produced for a more technical and academic audience. One hundred policy documents and plans targeted decision makers and were only part of the large number of PLAR (see 4.1).

TABLE 3. NUMBER OF INFORMATION PRODUCTS PRODUCED DURING THE ICAA II PROGRAM, BY ALL PROGRAM PARTNERS (INDICATOR 7)[56].

Categories	2012	2013	2014	2015	*Total*
Training/capacity building materials (handouts, manuals, guidelines)	14	20	52	69	*155*
Knowledge products (papers, books, reports)	44	73	73	112	*254*
Communication products (leaflets, videos, magazine articles)	72	186	264	305	*827*
Policy papers and texts	7	17	37	41	*102*
Program management (progress reports, strategies, work plans, methodologies)	28	53	37	83	*201*
Other (field reports, community plans)	12	36	36	29	*98*
Total	*177*	*385*	*499*	*639*	*1,700*

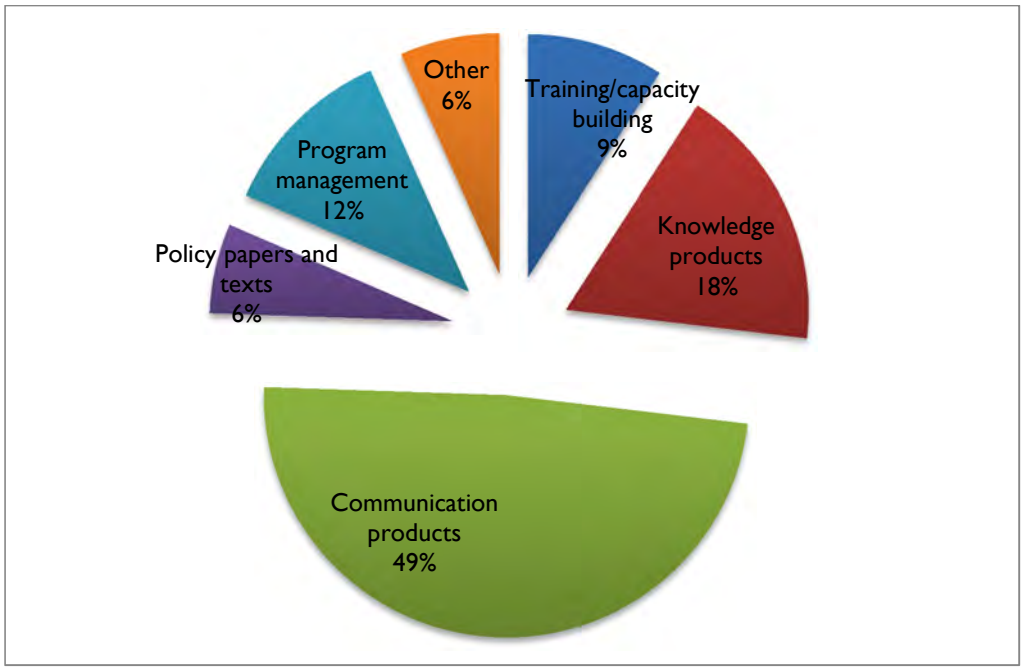

FIGURE 5. DISTRIBUTION PER CATEGORY OF INFORMATION PRODUCTS PRODUCED DURING THE ICAA II PROGRAM.

[56] Program management-related products (action plans and reports) were not included.

A specific study was applied to a sample of 2000 people who received different ICAA knowledge products to measure increased understanding about environmental problems and solutions in the Amazon. This showed that the recipients generally obtained a good comprehension about these problems and solutions. These people have a high level of awareness about the relevance of Amazon environmental problems for personal and collective livelihoods. Half (53%) of all participants in this study identified a high support of ICAA II in strengthening their knowledge and capacities to protected Amazon rainforests, another third (32 %) considered 'some support' from ICAA II to enhancing their knowledge.[57] During the last year (2015), unique visits to the website www.amazonia-andina.org increased to 5000 per month.

Among the relevant products published and disseminated are:

- The status of policies and legislation addressing monocultures and land use changes (ISU): nearly 500 hard copies have been distributed and the combined ICAA and SPDA websites register 338 downloads.
- Second editions of "Entender la Pequeña Minería, "La Minería Artesanal" and "Los Decretos Legislativos Vinculados a la Minería Ilegal" (ISU)
- Tool kits on economic incentives for indigenous people (ISU)
- Information leaflets (one pagers) on various legal issues and sustainable management ("Right to..."-series; LMT/ISU)
- Books "Parque Nacional Bahuaja Sonene: Inventarios Biológicos Rápidos" and "Parque Nacional Bahuaja Sonene: Inventario Artístico" (LMT)
- Training material on gender and conservation (ISU)
- Policy papers on palm cultivation, REDD+ and PIACI (ISU)
- Impacto de la minería en 11 comunidades indígenas de Madre de Dios (MDD Consortium)
- Indigenous peoples in Madre de Dios describing the origin of indigenous peoples, their ancestral knowledge of the forest, flora and fauna and the history of the Indigenous Federation (MDD Consortium)
- Fundamazonia 2014. Cambio climático y fauna silvestre en la Amazonía peruana" (LMT)
- Environmental education tools for children and schools and APNP and PCR bilingual communication/education material elaborated with indigenous communities (PM)
- Conservation Strategy Fund 2014 "Infraestructura y Conservación: El caso de Pucallpa-Cruzeiro do Sul", communication material and maps on infrastructure impacts and indigenous people (IL)
- Deforestation analysis along road Puerto Maldonado-Iñapari; communication material on disaster risk and prevention (flooding; MDD Consortium)

Academic research products were presented through various media, including peer-reviewed journals (among others, one of the young professionals of the scholarship program). Third parties (national press) dedicated various newspaper articles to ICAA II supported research.[58] Researchers did well in bringing their findings to adequate audiences. A good example for this is the careful communication process about the results of the study on the Pucallpa-Cruzeiro do Sul road, not only presented as key information for the multi-stakeholder monitoring group and the ministries of public works and environment, but also to Chinese investors during their visit to the region and which in the end resulted in a search for other options. Also, the study on the effects of mercury in Colombia was immediately presented to national

[57] ICAA II Program. Informe del estudio comprension sobre problemas y soluciones en la amazonia andina

[58] El Mundo (Colombia) 16 March 2015: Investigan contaminación con Mercurio por minería en el Parque Nacional Cahuinarí; El Espectador, Colombia (1 August 2015): Alarma por altos niveles de mercurio en etnias amazónicas; El Nuevo Siglo, Colombia (17 March 2015): Investigan Parque Cahuinarí contaminado. El Comercio (Peru) 4 September 2015. Illegal oil palm cultivation in the Peruvian Amazon.

government agencies, resulting in a regional strategy to ban illegal mining. Based on their publication on fast growing tree species, CIFOR immediately developed a policy proposal that was accepted almost integrally in the national forest regulations.

Research results were also shared with the wider academic community. The ISU organized an international meeting (Lima, 2015) to present results of studies by young professionals who received a scholarship to a panel of well-known conservation experts from the region. In addition, ICAA research grantees organized national dissemination activities in all three countries. ICAA II research was presented at several international meetings, such as the Congress on Biodiversity and Conservation of the Tropical Andes and the Amazon Rainforest (Lima, 2015) where ISU organized a complete symposium, and the sixth world congress on ecological restoration (Manchester 2015; MDD Consortium).

Environmental education was done in nearly all landscapes; not only to school students but also to adults. For instance, the PM consortium developed the strategy for the positioning campaign of the Purus-Manu Conservation Corridor *"Cree en la Magia de Purus Manu. Pura Amazonia".* This campaign reached an estimated audience of more than 5 million people through different media (internet, video, radio, promotion materials). Also, the rangers of APNP and PCR elaborated dissemination materials about their protected areas' master plans, which will be showcased to the local population herewith attaining broader participation in management. Finally, environmental education to schools was done in the four key areas within the Purus landscape (Tahuamanu/Las Piedras, Yurua, Sepahua/Atalaya and Purus). Materials (booklets, posters, travelling exposition) were developed and teachers were trained. The impact was measurable: by self-assessment, teachers and students of Tahuamanu/Las Piedras and Yurua declared they are more aware of the protected area's values and rely on specialized educational materials.

Finally, during eight weeks late 2015, the ISU organized a communication campaign in Lima, but with international outreach, to connect urban population with the Amazon (#AMAZONIAQUI[59]). Through a mixed-media strategy that employed radio, TV, Internet, ads in public spaces and artistic and cultural activities, the message directly and indirectly reached over 70 million people in the Andean Amazon countries. [60] More than 200,000 youth directly engaged with the campaign by sharing content on social media and via mobile phones. Thirty institutions and private sector businesses formally supported the campaign, actively promoting this “first urban campaign for the Amazon” on various media channels. In Lima, more than 30 popular artists donated their Amazon-inspired work in the form of pictures, paintings and music that reached 10 districts of Lima, featured at shopping centers, supermarkets, university campuses, the National Library and city parks. Fourteen thought leaders from television and music joined the #AMAZONIAQUI campaign as ambassadors and 20 athletes and artists expressed their public support. The highlight of the campaign was the Selvatón, a massive public festival for the Amazon, which convened several thousand youth and their families on November 14 in the Barranco neighborhood. Of those who interacted with the campaign, 100% demonstrated a positive perception of the campaign and message, laying the groundwork for ongoing support for Amazon conservation in Peru.

4. CROSS-CUTTING THEMES

4.1. Improve policy and policy implementation

Improved governance of natural resources and land management requires an enabling legal and policy environment across scales. Therefore, supporting policy development and its implementation is a cross-cutting strategy in the ICAA II program. At landscape level, enabling policies have been promoted by the ICAA II partners with local governmental agencies and traditional authorities. In addition, at national

[59] www.amazoniaqui.pe
[60] This calculation is based upon readership and estimated audience of key media outlets

level ICAA II partners promoted laws, resolutions and institutional agreements to support the landscape level work throughout. At international level (Andean Amazon-wide) agreements were promoted between agencies of different countries to facilitate cross-learning and joint strategies.

ICAA II produced almost 400 policies, laws, agreements or regulations (PLAR) promoting sustainable natural resource management and/or biodiversity conservation. Half of these referred to agreements among and between governmental agencies, local communities, and NGO's to implement plans and projects. Thirty-seven policies and plans were developed, most of these relating to Natural Resource management of communities, conservation units and departments/provinces. Approximately 90 regulations were developed, including community by-laws and resource exploitation/extraction protocols and contracts/agreements. Finally, 40 legal documents (Laws and decrees) were supported at different levels (national, regional, departmental, municipal).

TABLE 4. NUMBER OF POLICIES/PLANS, LAWS, AGREEMENTS AND REGULATIONS PRODUCED DURING THREE YEARS OF ICAA II IMPLEMENTATION (INDICATOR POL-1).

Category	**2012**	**2013**	**2014**	**2015**	***Total***
Policies (plans)	7	10	7	13	*37*
Laws	6	11	2	21	*40*
Agreements	24	43	62	83	*212*
Regulations	5	22	45	17	*89*
Unspeficied		5	14		*19*
Total	42	91	130	134	*397*

Of all promoted policies and plans, 22% (8 out of 37) are under implementation at the end of the program, and another 35% are formally adopted (Figure 6). Of all laws and regulations, approximately half were formally adopted and only few already under implementation. It is important to note that ICAA partners rarely reported PLAR implementation.

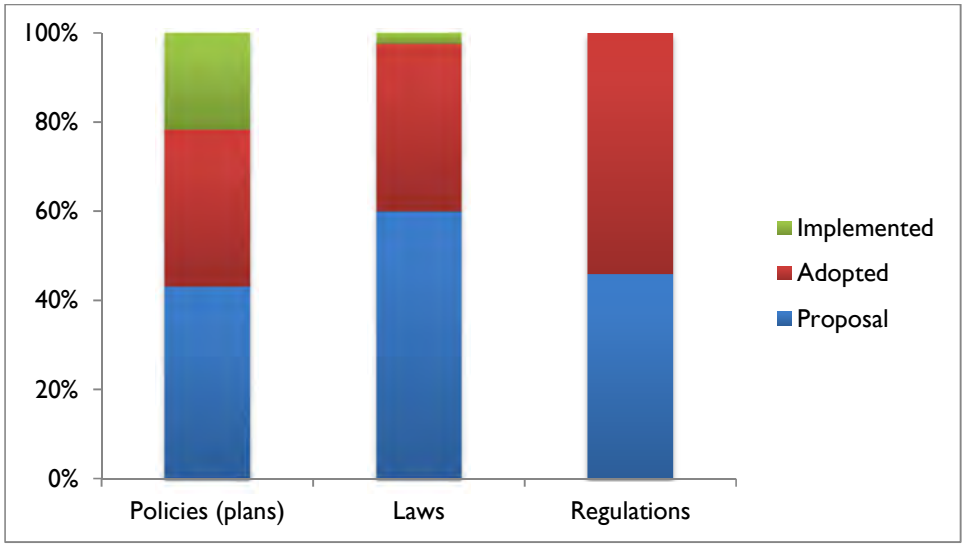

FIGURE 6. LEVEL OF PROGRESS OF POLICIES, LAWS AND REGULATIONS

There was a strikingly even distribution of the main themes of the PLAR (Figure 7): Agroforestry/NTFP received 19% of all PLAR, but Conservation units, indigenous territories, land tenure, forestry/fauna management and indigenous rights each received between 10 and 15% of all policy documents; infrastructure and climate change just a bit less (5 - 8 %).

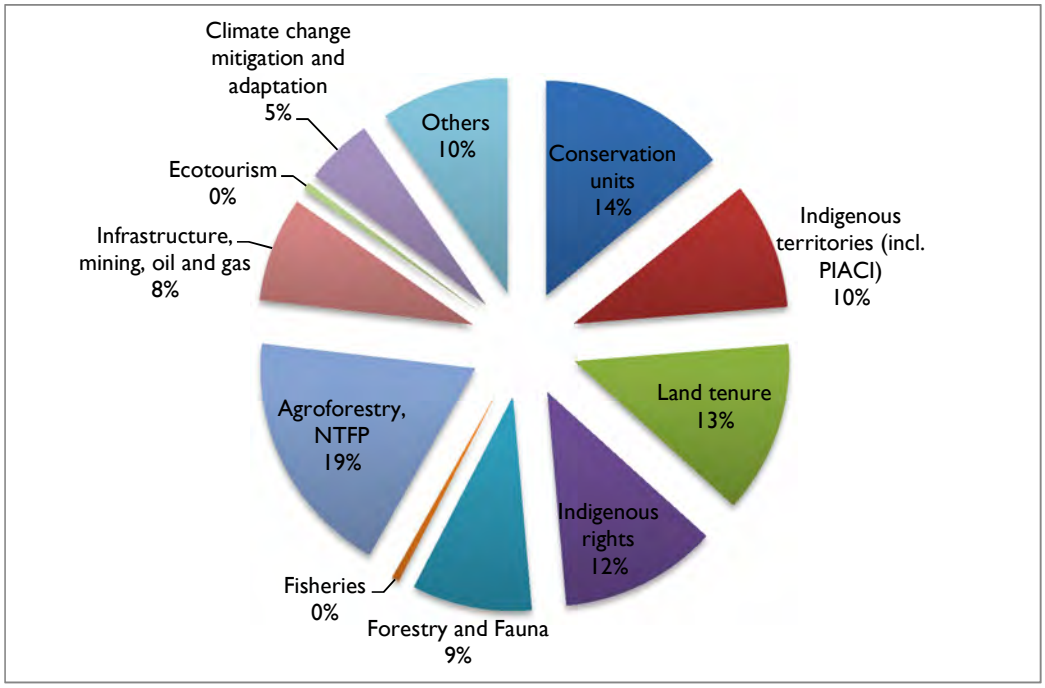

FIGURE 7. THEMATIC DISTRIBUTION OF POLICIES/PLANS, LAWS, AGREEMENTS AND REGULATIONS PRODUCED DURING ICAA II.

All policy development in ICAA II was done in a participatory manner and was based on a series of stakeholder dialogue activities. In total 566 events were organized assisted by more than 10,000 persons, of which approximately 35% were women (a fairly consistent share during the four years of the program). These activities included targeted meetings assisted by only a few people, like a discussion with a community board or a high level meeting with a government representative, as well as regional stakeholder platforms with several hundred attendees (like the *I Foro sobre Fortalecimiento de la Institucionalidad Ambiental,* Peru or the regional meetings on Gender and Medicinal Plants and on Water in the Andean Amazon). And, of course, everything in between, at all levels.

TABLE 5. NUMBER OF STAKEHOLDER DIALOGUE ACTIVITIES FOR THE DEVELOPMENT OF POLICIES, LAWS, AGREEMENTS AND REGULATIONS; INCLUDING PARTICIPANTS DURING THE ICAA II PROGRAM IMPLEMENTATION (INDICATORS POL-2 AND POL-3).

ICAA Partner	2012	2013	2014	2015	*Total*
Number of events	83	142	156	223	*604*
Number of participants	1620	2898	3213	2807	*10535*
Female	*38%*	*38%*	*34%*	*32%*	*35%*
Male	*62%*	*62%*	*66%*	*68%*	*65%*

4.2. Increase gender awareness and gender-related program outcomes

In line with the USAID policy, [61] ICAA II aimed at applying a gender approach that improves people's wellbeing through creating more equality between women and men, empowerment of women and girls who can fully participate and benefit from the development of their communities. In the Amazon, men and women, boys and girls have diverse and differentiated roles both in everyday activities as well as in governance and decision-making. Recognizing these roles and empowering less advantaged groups in society not only improves human rights and equality within society but also improves natural resources management through improved participation. However, at the start of ICAA II, it was found that the large majority among the 30 conservation and indigenous peoples' organizations that partner with USAID, did not have an adequate gender approach or policy.[62] They did not count with a gender methodology, specialized staff or specific activities to promote gender equality. The survey showed that the linkage between gender and conservation was poorly understood. Therefore, the strategy applied by the ISU (charged with mainstreaming gender throughout the program) focused on including a gender policy and approach at institutional level with the program partners. This resulted in gender action plans and gender integration in partner workplans.

During ICAA II, institutional capacities on gender strongly improved. All program partner organizations committed to gender equity evidenced by formal declaration of principles and by the inclusion of gender indicators and targets in their annual plans.[63] This was achieved through mobilizing willingness at directive level of the organizations, gender training to staff, developing of institutional policies, establishing gender committees within consortia, developing specific gender methodologies, and including concrete actions as part of the projects of their organizations.

[61] https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy0.pdf
[62] ICAA II program. 2012. La equidad de género en ICAA. Recomendaciones para los procesos de planificación de sus socios (ISU-PRD-001).
[63] ICAA II Gender Indicator 1: Percentage of ICAA partners who include gender indicators and targets in their annual plans increased.

Knowledge and information on gender and environmental management was developed through two gender and conservation research grants about economic incentives (AMPA) and traditional knowledge (AIDER). Also, fifteen thematic bulletins were elaborated on issues related to gender. Additionally, a Gender and Conservation manual highlighted the gender mainstreaming concept and oriented to implement activities with a focus on gender equity. Gender and Conservation Community of Practice was established that had over 153 people registered in the virtual site, which has over 200 specialized resources online. This formed a key platform to disseminate and exchange information and experience on gender in environmental management.

The ISU gender mainstreaming approach was installed within institutional policy, strategy and practice of 90% of ICAA II's partners.[64] First, a Capacity Development Program for ICAA partners was executed: 21 representatives from 17 ICAA partner organizations completed the 9-month Capacity Development Group (CDG) program implemented by grantee IUCN. The CDG achieved a total of 21 concrete results by elaborating policies, methodologies, training and studies. Among others, a gender approach was included in the regional climate change strategy of Madre de Dios, UNAMAD included a gender dimension in a study on water resources, IBC developed a methodological proposal for life plan-development including gender tools, SINCHI included a gender approach in a useful plants inventory through which the amount of identified plants increased with 10%. Similarly, the Javeriana University developed a Diploma on Gender and Conservation (June 2015). All ICAA II consortia developed a gender action plan to stimulate a gender approach in their projects, which by self-assessment, consider to have been advanced between 3 and 4 on a 5 points scale.

At the level of their institutional partners, the ICAA II program achieved to develop and approve gender policies. A tailor made gender scorecard based on 10 indicators was applied to all partner organizations. This showed an increase of 80% (score 4 to 7) in the integration of gender in institutional practices.[65] Ten out of thirty partner organizations have now a fully developed gender policy. Eighteen organizations have identified one or more staff members with gender expertise. Several organizations have established gender indicators in their institutional monitoring systems.

Concrete results at landscape level reflect the gender capacity generated at institutional level. Organizations apply strategies to promote female participation in planning workshops and promoted activities according to their expectations. The mid-term evaluation of ICAA II counted 12 (out of 18 communities where gender-specific information could be obtained) with clear examples of active participation of women in the promoted sustainable livelihood practices, including in groups that traditionally are mostly male dominated (timber, hunting). In seven communities, women had formed specific groups for implementation of these practices. It was evident that food -and health-related practices generally had greater female leadership or participation (e.g. handicrafts in Palma Real, small domestic animals and medicinal plants in Dureno).

4.3. Strengthening of selected organizations and institutions and partner organizations

To address a regional agenda for natural resource management and sustainable development in the Andean Amazon, ICAA, under the leadership of the ISU, implemented the Regional Institutional Strengthening (RIS) program to improve organizational capacities and sustainability of selected Andean Amazon-based organizations with current or potential regional impact. Through a competitive application process, nine organizations were selected to participate in this program over periods of 17 to 22 months with a total budget of US$ $2 million. This was the first time for these organizations to manage USAID funding directly. The RIS program had important achievements: an objective assessment of institutional capacities showed that all organizations strengthened their capacities in at least one of the selected

[64] ICAA II Gender Indicator 2: Percentage of ICAA partners who implement gender actions in their programs increased.
[65] ICAA II Gender Indicator 3: Percentage of ICAA partners with improved capacity for gender mainstreaming increased. (score range 1-10)

priority capacities[66] and seven increased capacities in all selected priority capacities. The two organizations that did not achieve improvements in all areas suffered from strong budget reductions (beyond the control of the RIS program) affecting some institutional capacities. The institutional capacities that were most widely prioritized and improved were positioning (seven organizations), fundraising and knowledge management (six), followed by financial systems (five organizations, Table 6).

Meaningful institutional changes started under RIS, such as the closure of an NGO with more than a decade of experience with a proposal of transforming into a new organizational model; modification of institutional bylaws, internal policies, and staff profiles to embed recommendations and initial changes; legitimization of new young leaders into mature organizations; introduction of new technologies into regular duties; strategic orientation of institutional positioning and fundraising efforts. The participating organizations' have begun to demonstrate increased leadership towards the conservation of the Andean Amazon. This was evidenced by their increased participation in international technical meetings with donors; leadership in regional networks aligned with institutional mandate, and participatory preparation of regional proposals.

TABLE 6. NUMBER OF ORGANIZATIONS (N=9) SHOWING INCREASED INSTITUTIONAL CAPACITY THROUGH PARTICIPATION IN ICAA II'S REGIONAL INSTITUTIONAL STRENGTHENING PROGRAM.

Institutional capacities	Number of organizations showing increased capacity/ total number of organizations having prioritized this capacity
Strategic planning	4/5
Monitoring and evaluation	3/4
Internal governance	1/1
Administrative and financial systems	4/5
Fundraising/financial sustainability	6/6
External communication/positioning	6/8
Human resources management	3/3
Information and knowledge management	6/7
Culture and leadership	2/2
Internal communication	1/2

4.4. Improved capacity through training

Training activities to strengthen capacities of individuals, communities and institutions have been a fundamental tool in all work areas of ICAA II. The capacity built up through this training was of key importance for the good achievements of the four intermediate results.

During ICAA II, a total of over 53,000 people participated in 1934 training events of an average of 11 hours duration (Table 7). This represented a total investment of 483,000 person-hours of training. During the program implementation, participation by women in training activities increased slightly from 35% to 39%. Participants declared a high level of satisfaction (average score of 8.7 on a 10-point scale).

[66] In the RIS program, each organization selected three to six priority capacities that needed strengthening and the increase of these prioritized capacities was monitored during the support period.

Individual course evaluations reflect over 90% participant satisfaction. Eighty percent of participants perceived they had significantly increased their knowledge.

TABLE 7. NUMBER OF TRAINING EVENTS, PEOPLE TRAINED, NUMBER OF HOURS AND TOTAL AMOUNT OF PERSON-HOURS DURING ICAA II PROGRAMME (INDICATORS CAP-2 AND CAP-3)

	2012	2013	2014	2015	*Total*
Number of training events	152	367	737	678	1,934
Total number of participants	4,088	12,147	17,372	16,355	49,962
Female	35%	39%	36%	39%	*38%*
Male	65%	61%	64%	61%	*62%*
Average participants/event	27	33	24	24	26
Total number of training hours	1,814	4,261	6,697	7,743	20,515
Participant x hour	45,812	109,471	153,724	174,451	483,459

4.5. Increase indigenous people participation

ICAA II recognizes the centuries-long interaction of indigenous peoples' groups with the ecosystems of the Andean Amazon and their role as traditional wardens. Therefore, the ICAA II program recognizes indigenous peoples' organizations as the natural, legitimate and most adequate allies to promote local, national and regional initiatives to sustainably manage their natural resources. The program searched for close collaboration with indigenous peoples' organizations to increase participation of indigenous peoples in decision making and sharing of benefits from the program activities. Although the indigenous peoples' groups have a long history, the organizations that represent them are relatively young and do not count on a broad enough internal technical expertise. They have also encountered many challenges to access decision-making spaces so therefore, strengthening of these organizations is a transversal issue of ICAA II. This ranged from direct training for the strengthening of leadership, the development of by-laws and legal recognition of community based organizations (3.2.1 and 4.1) to inclusion of an indigenous peoples organization in the Regional Institutional Strengthening program (RIS, 4.3) and involvement of indigenous peoples' organizations as implementing partners of the program (see below).

Interaction with indigenous peoples' organizations happened at several levels. Most landscape-based activities were executed in indigenous territories in direct collaboration with native communities as main beneficiaries. For policy development and planning at regional, national and international level, ICAA II partners sought coordination with indigenous peoples' organizations, relevant for each level (e.g. FENAMAD and NOA'iKE) at the landscape level, OPIAC, CONFENAIE and AIDESEP at national level and COICA at international level). Several research activities focused on traditional knowledge of land and natural resource use and indigenous peoples' perceptions of environmental issues. Last but not least, ICAA II directly includes indigenous peoples' organizations as partners in project execution (COICA and NOA'iKE in the IL consortium, ORAU in the PM consortium). COICA also received specific grants and participated in the RIS program. This direct involvement as implementing partners, rarely seen in international development cooperation projects, strongly increased their administrative and organizational capacities, placed them at the same level as national and international NGO's and provided the program with more relevant grassroots work. Indigenous peoples' organizations have been more effective in community strengthening than other ICAA partners and contribute to scaling up activities. For example, ORAU works with 12 communities and can apply positive experiences from this region to all affiliated organizations in Ucayali and where the IL consortium had concrete field activities with two Cofán communities, its partner NOA'iKE works with all five communities. At international level, ICAA II

focused on three countries, but due to COICA institutional policies and plans (on climate change, REDD+ and other issues) were developed with their partners in nine countries.

A key achievement of ICAA II regarding indigenous peoples' participation has been their strongly increased access to important decision making levels. This has happened at landscape level in planning roundtables, titling exercises and environmental prosecution. At national level, ICAA II partners helped indigenous peoples' organizations to debate policies and legislation (e.g. Indigenous Territorial Planning System, SOTI and input to new forest and environmental services legislation in Peru). Also, the development and strengthening of the Vice Ministry for Interculturality in Peru has been an important ICAA II contribution. At international level, the increased participation of COICA in the global climate change debate is impressive.

Having included the theme of indigenous peoples as a cross-cutting theme implied that in all results areas there have been specific achievements for indigenous peoples. A cornerstone of the work in communities was the development of life plans. Different ICAA II consortia worked on its development and implementation in several communities, which not only helped the community to plan their territory and activities but also to have a strong tool to lobby with local governmental agencies. At regional level, COICA promoted the life plans as a key precondition for any investment (including economic incentives like REDD+) in indigenous territories. Based on different experiences from ICAA II partners and in coordination with the Peruvian Vice-Ministry for Interculturality, ISU developed a guide for life plan development, which will help governmental agencies to understand the importance of these plans and respect them as a fundamental territorial and social planning tool in indigenous territories.

Other elements that improved land and resource planning at the landscape level in indigenous territories, included improved protection for PIACI, respecting their rights while also improving protected area management (3.1.2 and 3.2.2), strengthening of the management of communal reserves (3.1.2), pacific resolution of conflicts about land among indigenous peoples' communities and between these communities and mestizo farmers or neighboring conservation units (3.2.1).

Gender was effectively mainstreamed in the activities targeting of indigenous peoples in ICAA II, evidenced by the adoption of a gender policy by COICA,[67] promotion of gender equity in life plans by ORAU, training (by IBC) to the network of indigenous communicators (REDCIP Ucayali) and the decision of NOA'iKE that all community members (men, women, youth) should participate equally in the benefit sharing of the Socio Bosque economic inventive.

The development and promotion of economic incentives in ICAA specifically targeted indigenous peoples. Most beneficiaries of the promotion of sustainable livelihood practices, including market access and the development of certification procedures of forest products, have been indigenous peoples' groups (3.3.1). Specific forest legislation promoting easier management of forest products with social and economic importance for indigenous peoples were developed and adopted, allowing for legal extraction and improved income. This included simplified Brazil nut management regulation, palm fruit extraction rules and fast growing trees management (3.2.3). Promotion of PES-like incentives benefited indigenous peoples directly, for instance in the Cumbaza watershed scheme (3.3.2) and AIDER's support (funded by an ISU grant) to indigenous communities in Ucayali for deforestation monitoring allowing access to REDD+ funding.[68] Together with COICA; the ISU established a specific Capacity Development Group on Economic Incentives for Conservation to specifically increase capacities of indigenous peoples' organizations of the three countries on climate change and REDD+ (3.3.2).

---

[67] Developed during the workshop "Elaboración de política y plan de acción de equidad entre hombres y mujeres para COICA - participación de lideresas indígenas en COP 20". Quito, August 2014

[68] ISU-IIE-003. Fortalecimiento de las comunidades nativas de la región Ucayali para el monitoreo de la deforestación de sus bosques comunales para REDD

5. LESSONS LEARNED

5.1. Program implementation and effectiveness

- Creating an information basis and a knowledge exchange activity at regional level helps different (neighboring) countries that share similar environmental challenges, to jump-start strategies to deal with these challenges. Examples for this approach from the ICAA II program are PIACI protection, illegal mining consequences, infrastructure impacts and implementation of a gender approach.
- Regional collaboration directly contributes to application of experience from one country to another, importing new approaches that support positive natural resource management. Examples are experiences with improvement of prosecution agencies, promotion and training of legal operators and collective improvement of sustainability of tourist services in protected areas.
- A focus at the landscape level is adequate when the program intervention is a response to a systematic analysis of the specific interrelationship of the different political, institutional, economic, social and cultural dimensions of the landscape in question and its connection to the larger scales (national, regional).
- As a result of the long-term commitment by the ICAA II partners with local, regional and national policy platforms, beyond their specific role and responsibility in the ICAA II program, they achieved the development and adoption of many policies, plans and laws supporting good natural resource management and land planning. Using a previously established, stable institutional relationship with governments at different level, combining ICAA II financed efforts with activities from other projects in their portfolio and collaborating in multi-stakeholder platforms were successful strategies these partners applied. This has resulted in policy outcomes of a quantity, quality and diversity that never could have been achieved without these partners' previous involvement with these policy platforms and their skill to use different funding sources to support long-term policy processes. A consequence of this situation is that achievements at policy level are not easily attributed specifically to ICAA II support.
- A comprehensive approach supporting communities integrally responds to a wide set of community needs and therefore creates a good social basis for the activities to be implemented. In many communities, support is required in such different areas as governance, legal and rights aspects, conservation of natural ecosystems, wise use of forest and river products and increasing income and food security. Also, promoting a series of activities in different themes ensures the supporting agency is frequently and during longer time in the community, and participation by different interest groups is promoted. In a comprehensive approach it is not easy to clearly attribute specific results to particular strategies (for instance, the development of life plans with communities' produces outputs such as good governance, planning of livelihood activities and conservation of natural ecosystems) and therefore, reporting against a results framework can be a challenge.
- Searching for a logical complementariness between different supported activities ensures that the achievement of one result helps to generate or sustain another result. For instance, ICAA II experiences in communities around the Tambopata Reserve and in Napo have shown that increasing governance helps to better manage land conflicts, which on its turn leads to formalized land tenure. Land tenure is a fundamental condition to access economic incentives both for conservation and for promotion of sustainable livelihood activities. Income from these incentives can be used for the conservation of natural forest areas.

- Through applying a multi-level strategy, targeting specifically indigenous peoples and their representing organizations, ensured that the program effectively benefited indigenous peoples and promoted their role as traditional wardens of Amazon ecosystems and biodiversity. At regional level, institutional strengthening of COICA improved international collaboration, exchange of experiences and access of Amazon indigenous peoples' to global platforms. At national level, participation of IP in decision-making and policy development was promoted. Locally, plans and regulations were developed to increase support to local communities and within these communities, land and resource use rights were promoted as well as sustainable livelihood practices.
- For the consolidation and good management of indigenous territories, strengthening the capacities of governmental agencies to respect and improve indigenous rights, governance and territorial planning is as important as training to indigenous peoples' organizations.
- Consolidation of indigenous territories through resolution of conflicts, improved tenure and formalization of indigenous peoples' organizations not only contributes to indigenous rights but also increases access to governmental support (projects and incentives). Resolving legal security and land tenure problems are prerequisites for a conservation action, especially when dealing with market based economic incentive schemes.
- Although the promoted sustainable livelihoods practices clearly targeted to become an economic incentive, before they actually produced better household income they already generated environmental (better resource use) and social (organization, gender) benefits.
- To ensure that sustainable livelihood practices become economically viable, a well-developed market access has to be in place. However, market access strategies should not only generate better economic conditions for the involved communities, but also target legality and sustainability of resource management, quality and added value of products, access to financial services, innovation, organizational strengthening (associativity), gender equity and fair benefit sharing.
- Complete development of successful Payment for Environmental Services (PES)-like incentive schemes during a relatively short period of time (3 years) is hardly possible. The ICAA II program showed that building on existing mechanisms (water in San Martin) and improving particular aspects (participation of stakeholders, distribution schemes) is an effective strategy to strengthen and upscale PES-like incentives.
- Public funded incentive schemes (PES or REDD+ - like, including Socio Bosque) are promising because of their expected long-term continuity and volume of funding. They do tend to have a top-down development with conditions and regulations centrally defined. Experiences with local application of economic incentives in ICAA II showed that early and fair (in terms of information provision and participation in decision making) involvement of the final beneficiaries in the definition, development and implementation of the scheme allows for more consolidated incentive programs and higher equity in benefit sharing.
- Added value is created when increased access for communities to incentives is accompanied by a good investment plan for the received funds: good examples were created where funds from the Socio Bosque conservation incentive and the Cumbaza watershed hydrological ecosystem services scheme were invested in sustainable production activities at communal level.
- Products from targeted research activities (technical reports, papers) need to be accompanied by a well-planned socialization and 'pitching' strategy to be taken up by decision makers and to achieve influence in policies and plans. The ICAA program's communication campaigns (AMAZONIAQUI, Cree en la Magia de Purus Manu) and its well-visited websites proved to be great tools to create public awareness. However, specific targeted communication (such as well-

planned participation in roundtables and working groups for development of laws) is required to ensure uptake by decision makers.

- Working through scales, combining management models and activities, creates sustained improvement the management of conservation units. ICAA II partners showed how different aspects of the management of a particular protected area need to be improved through changes at national level (development of regulations and management tools), regional level (alignment of the management of different conservation units) and local level (management of the zone itself). The work of ICAA II partners in and around Pacaya Samiria and Alto Purús National Parks showed how functional regional protected areas systems can be created through aligning the management of neighboring areas of different categories (state protected areas, communal reserves, private conservation areas, indigenous territories) while recognizing the differences in their management models and needs. This requires a combination of activities, ranging from education and training, control and surveillance, research and planning, conflict resolution and rights protection to promotion of sustainable resource use and agricultural production in buffer zones.

5.2. Program structure and efficiency

- Collaboration between consortia, both within a landscape and at regional level, is important to ensure any program impact beyond the individual consortia level. At the landscape level, collaboration and complementariness between consortia ensured that individual communities had access to a higher diversity of livelihood activities and were trained in more different themes. At subnational and national level, partners from different consortia effectively lobbied together to promote policies and to halt unsustainable activities (infrastructure, mining). And at regional level, the ICAA II partner meetings and thematic workshops were key events for experience exchange and development of tools and strategies.
- Including indigenous peoples' organizations as implementing partners has benefitted ICAA II program delivery. Participation of ORAU and NOA'iKE in two landscape consortia provided the program with more relevant grassroots work because these organizations have been more effective in community strengthening than other national partners and contribute to scaling up activities. As a result of COICA's participation in ICAA II, the program achieved a first-row seat and an authentic position at international environmental platforms.
- A well-managed centralized information management system for monitoring and reporting of program achievements (like ISIS) is useful to provide donors and partners with a continuously updated data on the program's progress and achievements. Provided that the different partners are well instructed and meticulously upload their information timely and correctly, such a system constitutes a near-real time and fully transparent platform for indicator data management and overall performance of the program.
- The ICAA II program applied creative mechanisms to contact different grantees (young professionals, NGO's and research institutions) that execute research: linking studies to on-going field projects, tutoring arrangements, sharing results and publications and face to face meetings in seminars and panels. This proved to be an effective and relatively cheap way to create a regional research network to enhance knowledge generation and input to policy makers after the ICAA program concludes.
- The termination of the cooperation agreement between the U.S. and Ecuador apparently formed a formal barrier for interaction of ICAA II partners with national government agencies and therefore, for the likelihood of creating positive impact in this country. However, ICAA II showed that there are many options to adapt program management to overcome this barrier. By focusing on local governments, working mostly through national partners and collaboration with

other initiatives, ICAA II partners created different, but certainly not less positive outcomes in Ecuador as in Peru.

- ICAA II has demonstrated that partnerships with governmental agencies beyond the strict environmental sector (culture, mining, law) are required to contribute to an overall enabling environment for improved natural resource management and land planning.
- ICAA partners have been successful in creating examples of positive change at the landscape level, among others because the selection of the communities and local partners was based on existing opportunities and an enabling environment for change. But these conditions are different elsewhere, which makes replication and up-scaling difficult. To ensure that a regional project like ICAA is more than the sum of parts (a large series of small scale impacts) several elements are required:
    - Continuous exchange of experience and information among partner organizations;
    - Effective collaboration of Amazon stakeholder (ICAA and others), with distinct skills and approaches, in similar landscapes;
    - Careful identification of the reasons beyond failure or success, in addition to the mere description of success;
    - Organizations working at local level should also be acknowledged for their contribution towards goals at national and regional level;
    - The need of a unit that has a coordinating role and can steer a regional vision.
- Although there is currently not one single organization that effectively impacts at the Andean Amazon level, ICAA II managed to generate policy impact at national level, particularly through excellent relationships of its national partners. At regional level, working relationships with international non-governmental organizations with an active program in the Amazon biome (WWF, IUCN and Articulación Regional Amazónica) resulted in several joint outcomes (trans-border conservation in the Putumayo area, development of gender and protected area policies and a regional threat analysis). These are worthwhile to pursue in the future and can form stepping-stones to more regional impact.
- Even though the ISU did not have a specific landscape responsibility, it effectively complemented and scaled up the impacts at landscape level through improved legal and policy reforms, increased knowledge through applied research and dissemination, and strengthening the capacities of indigenous peoples and NGO's.
- Technical support partners should be an integral part of program activities. Four organizations provided renowned global expertise in policy development, forest research, forest management and training and higher education to ICAA consortia. Their participation improved the quality of information used in the program and contributed to some outcomes. Optimal use of this expertise can be enhanced by fully aligning their activities with program partners' work and by focusing at the main program outcomes. For example, during the second phase of ICAA, DOI has created strong partnerships with the permanent dialogue table on infrastructure and the voluntary certification process of hydrocarbons. This provides excellent opportunities for organizations working at landscape level with these issues.

6. RECOMMENDATIONS

Based on the achieved results, the lessons learned during implementation and our understanding of the current context, we can offer practical solutions to the complex challenges of biodiversity conservation in the Amazon region. USAID is a welcome partner for diverse stakeholders in all Amazon countries and

occupies a clear niche in regional biodiversity conservation. Therefore, USAID can fulfill an effective role to foster these solutions. ICAA II has left a legacy consisting of a network of strong institutions, a wealth of knowledge, practical experience with biodiversity conservation and natural resource governance and ongoing, sustained processes of positive change. Building upon this legacy will consolidate success in the key landscapes and upscale positive change to a regional level. The future of USAID's initiative for the Amazon could be constructed with the following building blocks:

- **A regional context analysis based on scientific evidence**. Future action in the Amazon will respond to a careful analysis of the environmental, cultural, economic and political context. International research organizations and NGOs have developed a wealth of scientific information that can be pulled together to identify the actual status, threats, impacts and current responses. The result of such a scientific effort could be validated and further communicated by a group of opinion leaders in the Amazon. The resulting regional context analysis will provide a broadly accepted scientific evidence basis to allow for the identification of appropriate strategies and intervention areas.
- **A regional conservation vision for the Amazon, developed by multiple stakeholders**. A broadly accepted context analysis is an appropriate input to develop a regional vision for the Amazon, shared by an as broad as possible group of stakeholders. Therefore, a process could be facilitated among many stakeholders to create common understanding of emerging issues, the factors behind the threats and the barriers that impede their mitigation. This should result in consensus on intervention strategies, responsibilities and expected long-term outcomes.
- **Build on the created networks.** ICAA II has achieved considerable success by creating synergy between science, land and natural resource management, strengthening of capacities and the promotion of good governance and policies. This involved collaboration and trust-building among many stakeholders that previously were hardly on speaking terms. Accordingly, the created networks for local action, multi stakeholder roundtables, communities of practice of conservation practitioners and regional research networks all together form the 'ICAA family'. This institutional basis is an important asset for any future multi-scale conservation initiative in the Andean Amazon.
- **A regional focus for working with indigenous peoples' organizations.** Indigenous peoples' organizations are the natural, legitimate and most adequate allies to promote local, national and regional initiatives to sustainably manage the natural resources of the Amazon basin. Although every country has its own particular legal, political and social situation, the challenges and opportunities for indigenous peoples in the different countries are fairly similar. This implies that a regional, multi-level approach for promoting indigenous peoples' rights, strengthening their capacities and improving their access and participation to decision making is ethically correct, strategically pertinent and politically wise. This should be complemented with strengthening of the governmental agencies charged with developing and implementing indigenous peoples' plans and policies in every country.
- **A clearly defined niche and added value of USAID at regional level**. In an era of increasing donor attention to on-site deforestation reduction (for REDD+ like initiatives), the niche for supporting large-scale biodiversity conservation through creating resilience among forest communities is sub-occupied. From this niche, USAID can define its added value in pursuing the regional conservation vision. This includes an analysis of the strength of USAID and its partners compared to other regional stakeholders in dealing with emerging issues that really affect biodiversity and human wellbeing at a regional / transborder level (e.g. migrating species conservation, biodiversity trade and trafficking, illegal mining encroachment and mercury pollution, regional energy development policies, adaptation and mitigation of climate change, and management of transborder ecosystems).

- **A focus on replication and up-scaling**. USAID and its partners should consolidate its positive impact at landscape level through continued support to the ongoing experiences in the field. To attain regional level impact, it should increase its focus on replication and up-scaling local success through enhanced coordination and communication with the wealth of other initiatives in the region.
- **A network of likeminded initiatives**. USAID and its partners cannot deal alone with the complexity of threats to Amazon biodiversity. Networking with all organizations and programs that contribute to Amazon biodiversity conservation, mapping their activities and identify complementariness is a decisive ingredient to effectively pursue a joint regional conservation vision. There are several important initiatives of leading organizations that are open to collaboration and possibly willing to buy-in to a regional vision.
- **A regional program coordination unit or secretariat to stimulate the regional vision.** A regional program unit, established by USAID, is required to promote the regional vision and impact at international level. It should have the power to convene the regional institutional network and support a platform for information exchange and debate. It should have the technical capacity to constitute a knowledge and information hub, to map threats and impacts and to systematize the results of different initiatives at various levels. Finally, the role of this program unit is to monitor what is happening at regional level (continuous context analysis, updating initial analysis) and discuss with partners if "we are on the right track'. For example, the coordination unit for USAID's long term Central Africa Regional Program for the Environment (CARPE) might serve as a model to consider for the Amazon.
- **Improved environmental governance at various levels.** Multiple stakeholders in the regional institutional network should have the capacities to identify priorities for action and translate this into policy advice. The regional program secretariat should have a broker role to promote the implementation of these policies by governmental agencies and private sector at different levels.