



# UNITED NATIONS ENVIRONMENT PROGRAMME

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 Программа Организации Объединенных Наций по окружающей среде    برنامج الأمم المتحدة للبيئة

联合国环境规划署



## PROJECT DOCUMENT

### SECTION 1: PROJECT IDENTIFICATION

- 1.1 Project title:** Effective Implementation of the Access and Benefit Sharing and Traditional Knowledge Regime in Peru in accordance with the Nagoya Protocol
- 1.2 Project number:** GFL/  
PMS:
- 1.3 Project type:** FSP
- 1.4 Trust Fund:** GEF
- 1.5 Strategic objectives:**  
 GEF strategic long-term objective: BD3  
 Strategic programme for GEF VI: Programme 8
- 1.6 UNEP priority:** Ecosystem management (expected accomplishment c), Environmental Governance (exp accomplishment a and b)
- 1.7 Geographical scope:** National
- 1.8 Mode of execution:** External
- 1.9 Project executing organization:** Ministry of Environment (MINAM)
- 1.10 Duration of project:** 48 months  
 Commencing: January 2017  
 Technical completion: January 2021
- Validity of legal instrument:** months

<b>1.11 Cost of project</b>	<b>US\$</b>	<b>%</b>
<b>Cost to the GEF Trust Fund</b>	<b>2,190,000</b>	<b>19.7%</b>
<b>Co-financing</b>	<b>8,921,778.23</b>	<b>80.3%</b>
In-kind		
MINAM	2,340,000	
SERFOR-MINAGRI	350,000	
INIA	350,000	
SERNANP	3,160,595.76	
INDECOPI-DIN	350,000	
INDECOPI-CNBIO	250,000	
CENSI-INS MINSAs	300,006	
IIAP	1,000,000	
Cosmo Ingredients	471,176.47	
UNEP	350,000	

### **1.12 Project summary**

The objective of this project is to: "Strengthen national capacities for effective implementation of the access to genetic resources (ABS) and traditional knowledge (TK) regimes in accordance with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, contributing to the conservation of biodiversity and human well-being in the country."

The project seeks to establish (1) efficient functioning ABS mechanisms in accordance with the Nagoya Protocol (2) build capacity of various actors in relation to access to genetic resources and traditional knowledge and (3) implement pilot projects and initiatives on access and benefit sharing, contributing to the sustainable use of biological diversity in Peru. The project duration is 48 months, and will be implemented by UNEP and executed locally by MINAM.

The project is aligned with the GEF-6 Biodiversity strategy, Objective 3, Programme 8.

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### ACRONYMS AND ABBREVIATIONS

AAE	Administration & Management Authorities
ABS	Access and Benefit Sharing
BD	Biodiversity
CAM	Municipal Environmental Council
CAR	Regional Environmental Council
CBD	Convention on Biological Diversity
CC	Climate Change
CICCA	Center for Investigation and Farmer Training
EA	Executing agency
EEZ	Economic and Ecological Zoning
EU	European Union
FAO	Food and Agricultural Organization
GEB	Global Environmental Benefits
GEF	Global Environment Facility
GoP	Government of Peru
IA	Implementing Agency
INDECOPI	National Institute for the Defense of Competition and Protection of Intellectual Property
INERA	National Institute of Natural Resources
INIA	National Institute for Agricultural Innovation
LAC	Latin America and the Caribbean
MEC	Municipal Environmental Commissions
MEF	Ministry of Economy and Finance
M&E	Monitoring and Evaluation
MINAM	Ministry of the Environment
MINAGRI	Ministry of Agriculture
NGO	Non Governmental Organization
NP	Nagoya Protocol
NR	Natural resources
PMU	Project Management Unit
PIR	Project Implementation Review
POT	Territory Organization Plan
PSC	Project Steering Committee
REC	Regional Environmental Commissions
SENASA	National Service of Agrarian Security
SERFOR-MINAGRI	Forestry and Wildlife National Service from the Ministry of Agriculture
SERNANP	National Service of Natural Protected Areas
SNIP	National Public Investment System
UNCCD	United Nations Convention to Combat Desertification and Drought
UNEP	United Nations Environment Programme
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
VMP-PRODUCE	Vice-ministry of Fishing from the Ministry of Production

## SECTION 2: BACKGROUND AND SITUATION ANALYSIS (BASELINE COURSE OF ACTION)

### 2.1. Background and context

1. The third objective of the Convention on Biological Diversity (CBD), related to fair and equitable sharing of benefits derived from access and use of genetic resources and associated traditional knowledge (“Access and Benefit Sharing” or ABS), was conceived as a mechanism to establish a balance between the needs of countries to access and use genetic resources (in a scenario of facilitated access), and the needs and expectations of countries that have historically been providers of such resources, to ensure equitable distribution of monetary and non-monetary benefits that this access and the application of technologies could produce. At the same time, it was expected that this fair and equitable sharing would be an important incentive to direct resources and efforts to conservation and sustainable use of biological diversity (ecosystems, species and genes), and thus contribute to the CBD’s first and second objectives.
2. Genes are the basis from which biodiversity develops and evolves. The wealth in genetic resources (and cultural diversity associated with them), coincides with the wealth of megadiverse countries which concentrate at least 75% of biodiversity *in situ*. However, loss of biodiversity implies “genetic erosion”, which is a loss of diversity and of future possibilities to benefit from these resources in almost every aspect of human endeavor, from medicine and cosmetics development, creation of new cultivated plants and animal breeds, research on genes and compounds potentially useful for animal husbandry, to development of bio-remediation, amongst others. The case of Peru is particularly notorious because it is a megadiverse country and center of origin of key agricultural products and diversification of crops (for example, potatoes, maize, tomato, Andean grains, roots and tubers, etc.). Please refer to the threats described in Section 2.3 for further detail.
3. In 1994, the Andean Community and the Philippines became the first region and country, respectively, to initiate political and regulatory processes to develop the principles of “benefit sharing” within the CBD. The norms of access to genetic resources were formulated to “regulate” and control the flow of genetic resources, based mainly on provider country requirements, and with consideration to the generation of monetary and non-monetary benefits, as well as technology transfer.
4. The adoption of Andean Community Decision 391 on a common regime on access to genetic resources in 1996, set a milestone for member countries (Colombia, Ecuador, Peru and Bolivia), and compliance with this norm has developed independently in each country. In the case of Peru, a national ruling (DS 003-2009-MINAM), has been in force since 2009. This was preceded by the publication of two complementary laws: one on access to traditional knowledge (Law N° 27811 in 2002) and the other on identification and resolution in cases of illegal access to genetic resources and associated traditional knowledge (Law N° 28216 in 2004).
5. Thus, access and distribution of benefits derived from the use of genetic resources and associated traditional knowledge are regulated in Peru through several bylaws which establish jurisdiction for several state agencies: the Ministry of Environment (MINAM) as Responsible Authority, and the National Institute for Agricultural Innovation (INIA), the Forestry and Wildlife National Service from the Ministry of Agriculture (SERFOR-MINAGRI), and the Vice-ministry of Fishing from the Ministry of Production (VMP-PRODUCE) as administrative and legal authorities. Furthermore, the National Service of Natural Protected Areas (SERNANP) will provide legally binding opinion on access to genetic resources inside protected areas, and the National Institute for the Defense of Competition and Protection of Intellectual Property (INDECOPI), serves as the authority on matters of access to traditional knowledge and patenting at the national level, and the National Commission Against Biopiracy, at the international level. Section 2.4 provides further detail regarding the Institutional Context for ABS in Peru.
6. Given the different governmental agencies involved, the national system on access and distribution of benefits derived from the use of genetic resources and associated traditional knowledge in the country is complex, (henceforth ABS). It requires careful and dynamic inter institutional coordination to achieve

efficient implementation. This integration, as well as the development of unified criteria and tools for administrative procedures, is still a work in progress. This limitation has caused confusion during ABS contract negotiation and distribution of benefits, especially among providers such as indigenous and peasant communities, as well as users.

7. Furthermore, with the recent ratification of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing of the Convention on Biological Diversity (henceforth Nagoya Protocol for ABS) in 2014 comes the need to update existing national legislation (and the Andean framework) and adjust it to comply with the new vision embodied by the Protocol. This implies development of an adjustment process based on a continuous monitoring and assessment of procedures and necessary changes (legal and administrative), as needs arise.

## 2.2. Global significance

8. Peru is one of the world's 10 most "megadiverse" countries, for its rich diversity in ecosystems, species, genetic resources and culture. Peru hosts about 25,000 plant species (10% of the world total) with 30% endemism. Of these, 4,400 species have known properties and are used by the population. In terms of fauna, Peru is first in number of fish species (close to 2,000 species, 10% of the world total); second in bird fauna (1,736 species); third in amphibians (332 species); third in mammals (460 species); and fifth in reptiles (365 species). There are about 5,528 plant species and 760 animal species endemic to Peru. There are a total of 222 endangered species of which 31 are facing extinction, 89 are classified as vulnerable, 22 are rare and 80 have an indefinite status. Peru is also rich in ecosystem biodiversity with the major biomes being marine, mountain, forest, freshwater and agricultural ecosystems. It has 84 of the 104 life zones identified in the planet, the 4th largest area of tropical forest, the most extensive tropical mountain range, and 70% of tropical glaciers. Peru also has very high cultural diversity with 14 linguistic families and 44 distinct ethnic groups, of which 42 are found in the Amazon. These indigenous peoples hold invaluable traditional knowledge and practices related to the use and management of biodiversity and genetic resources.
9. In terms of agricultural genetic diversity, Peru is also one of the centers of origin of agriculture and a wide range of agricultural resources, including one of the four most important food crops: potatoes (*Solanum*). There are over 3,000 varieties of potatoes in Peru, largely maintained, conserved and developed by small, indigenous farmers throughout the Andes. The International Potato Center (CIP) is headquartered in Lima and holds the world's largest *ex situ* collection of potatoes and other Andean roots and tubers. Furthermore, Peru is a center of diversification for maize, tomatoes, quinoa and other important food crops. Additionally, what are often referred to as "underutilized crops" such as arracacha (*Arracacia xanthorrhiza*), olluco (*Ullucus tuberosus*), mashua (*Tropaeolum tuberosum*), tarwi (*Lupinus mutabilis*) and kiwicha (*Amaranthus caudatus*), have the potential of improving food security not only for Peruvian farmers and the wider population but for peoples around the world, given their proven nutritional values. These crops are mostly grown in the higher Andes. Peru is also home to unique Andean camelids such as alpaca (*Vicugna pacos*), vicuñas (*Vicugna vicugna*), llamas (*Lama glama*) and guanacos (*Lama guanicoe*) which have been ancestrally domesticated and used extensively by indigenous farmers in the higher Andes.
10. Ongoing and future basic and applied research will rely on the availability (both *in situ* and *ex situ*) of genetic resources of these crops and animals. In some cases, TK may serve to guide and orient initial phases of research processes. As such, national regulations on ABS and TK will need to be complied with by researchers, companies and any actor accessing and using these resources. Whether for basic, taxonomic or evolutionary studies or more advanced R&D for commercial or industrial purposes, ABS frameworks will come into play and shape research possibilities. Many international institutions such as the Smithsonian Institute, Missouri Botanical Gardens, Kew Botanical Gardens, Korea Institute of Biotechnology, to name a few, already collaborate with national universities and researchers to undertake genetic and molecular studies with important ABS implications – both nationally and international.

11. Peru is prioritizing the safeguarding of this globally-significant BD and its associated Traditional Knowledge and requests GEF support to strengthen and test the legal and institutional framework to ensure effective and efficient Access and Benefit-Sharing mechanisms to fully comply with the Nagoya Protocol.

### 2.3. Threats, root causes and barrier analysis

#### *Threats*

12. The main threats to biodiversity and associated traditional knowledge in Peru are (1) habitat loss and ecosystem transformation, (2) poaching, (3) biopiracy, (4) monoculture agriculture, (5) genetically modified crops, (6) limited valorization of genetic resources, (7) erosion of cultural diversity. These threats act directly on certain species over short and long terms, ultimately threatening the existence and diversity of globally-important genetic resources and their associated Traditional Knowledge.
13. Habitat loss and ecosystem transformation: In Peru, the rate of deforestation is approximately 261,000 hectares annually, mostly to agricultural expansion (including palm oil and agroindustrial agriculture), illegal logging and increasingly, and illegal alluvial (gold) mining in the Amazon. Since 2000, almost 9% of the humid Amazon forest in Peru has been lost or degraded. Peru has historically relied on extractive activities (mining, oil, fisheries, logging, etc.) as a means to increase its exports and GDP. However, these activities have almost invariably affected ecosystems, often occupied by indigenous peoples and communities. Contamination of water sources and rivers, soil erosion, loss of pristine forests and overfishing are examples of this. Migration from the Andes to the Amazon is often an underlying cause for land degradation and desertification. Mostly poor settlers undertake agricultural activities which erode pristine, natural forest areas in search of expanding cultivation land – in areas where soil is not necessarily the best for agriculture. Loss of ecosystems results in loss of valuable genetic diversity (seeds, specimens, microorganisms) with unknown values for humanity. Furthermore, environmental services are also put at risk as key ecosystem functions are disrupted through human intervention. Ultimately, the genetic resources contained in the affected species are threatened by this habitat and ecosystem destruction, degradation and fragmentation, resulting in the loss of genetic diversity as well as the loss of the culture and traditional knowledge associated with them.
14. Poaching: a difference should be made between illegal hunting of endangered species for commercial purposes (for example, birds, reptiles, amphibians, certain mammals and plants are of special interest) and the use of forest and wildlife resources for self-consumption by rural, particularly indigenous, inhabitants of the region. Long before the Spanish conquest, peoples of the Andes and Amazon have used numerous species of plants and animals for alimentary, medical, religious and other purposes. At present, many inhabitants of rural communities are still using these resources as firewood or to supplement their diet or exchange them for other goods, for example. Hunted animals include panthers (*Panthera onca*), small foxes (*Cebus sp*), vicuñas (*Saimiri sp*) and primates (*Saguinus sp*). This selective elimination of certain links of the plant and food chain has already had an impact on the rest of the flora and fauna communities. Areas and regions that are particularly susceptible to illegal poaching are Amazon regions such as Loreto, Ucayali and Madre de Dios. The main capital cities in these regions serve as an intermediate transit zone towards the capital Lima, where trade is on-going in markets such as the Mercado Central. The illegal trade in commercially valuable and rare flowers such as orchids (*Orchidaceae spp.*, for example: *Phragmipedium kovachii*<sup>1</sup>), where Peru rates as one of the most diverse countries worldwide, is also considerable. Data is scarce but a rare orchid may cost as much as USD \$150 per specimen; some rare species may cost up into the thousands. In some areas in the Upper Amazon, there is evidence of loss of orchid species.

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<sup>1</sup> While there are several species of orchids that are popular, this is the most exploited (emblematic species) and was recently at the brink of extinction.

15. **Biopiracy:** This is a phenomenon which has been studied and addressed through action by the National Commission Against Biopiracy, created by Law 28216 in 2004. Since its inception, at least 13 cases of illegal access or intended misappropriation of genetic resources of Peruvian origin have been successfully addressed. The majority of these refer to patents by US, European, Chinese and Japanese companies for questionable innovations using native plants including maca (*Lepidium meyenii*), yacon (*Smallanthus sonchifolius*) and sacha inchi (*Plukenetia volubilis*). The Commission has identified 30 species of plants and related patents which may involve cases of biopiracy. These cases have been presented as working and information documents during meetings of the CBD, WIPO and other regional and national forums.
16. **Monoculture:** For decades, governmental policies have focused on the need to expand intensive agriculture and, as a result of international trade, preference has been given to industrial crops, particularly but not exclusively in the Peruvian coastal areas. As an example, expansion of palm oil plantations in the Amazon and modern potato varieties in the Andes tend to displace and erode critically important genetic resources of traditional and native crops. Consumer preferences and market influence also have an indirect but clear effect on farmers' preferences for certain crops and uniformity in general.
17. **Genetically modified crops:** For the past two decades, commercial and industrial interests have been putting pressure on different governments to allow for the release and introduction of GMOs into agriculture. Their effects on rich wild and cultivated biodiversity are, for the most part, unknown. The increasing cultivation of GM crops has raised a wide range of concerns with respect to food safety, environmental effects and socio-economic issues. From the food and health perspective, the main concerns are related to possible toxicity and allergenicity of GM foods and products. Concerns about environmental risks include the impact of introgression of the transgenes into the natural landscape, impact of gene flow, effect on nontarget organisms, evolution of pest resistance and loss of biodiversity. Adoption of GM technologies has also evoked a range of social and ethical concerns about restricting access to genetic resources and new technologies, loss of traditions (such as saving seeds), private sector monopoly and loss of income of resource-poor farmers.<sup>2</sup> In light of these concerns, the government of Peru has enacted a 10 year moratorium on GMOs to warrant sufficient and adequate studies are undertaken to ensure risks and mitigation measures can be assessed and discussed with different actors, including small farmers throughout the country.
18. **Limited valorization of genetic resources:** There are many ways to value genetic resources, from consumer preferences to research trends. In general, Peru has overlooked and sidelined the importance of its biodiversity and genetic resources, as reflected in the lack of public and private investment in research of genetic resources. This may be changing with important initiatives by CONCYTEC to increasingly fund basic and applied research in biodiversity<sup>3</sup>. Slowly but steadily, a "gastronomic revolution" has also started to revive people's interest, awareness and value (especially in urban centers) of the importance of native crops, genetic resources and the contribution of small farmers and TK to conservation and sustainable use of these crops.
19. **Erosion of cultural diversity:** Indigenous peoples concentrate in areas of high biodiversity, both in the Andes and Amazon. Their culture and TK have been instrumental over the centuries in ensuring conservation, management and sound development of biodiversity and genetic resources. Cultural diversity is being affected in many ways: market influences, migration, modernization in general, are playing an important role in altering indigenous peoples livelihoods. Other factors such as climate change are also creating pressures. Although indigenous peoples have proven to be extremely resilient and resistant to many of these pressures, their effects are nonetheless being felt. These effects manifest themselves directly in terms of genetic erosion and continued loss of TK.

#### *Root causes*

<sup>2</sup> <http://www.fao.org/docrep/015/i2490e/i2490e04d.pdf>

<sup>3</sup> see the National Program for Investment in Innovation for the Valorization of Biodiversity 2015-2021: [https://portal.concytec.gob.pe/images/noticias/2015/diciembre/biodiversidads\\_concytec\\_completo\\_final.pdf](https://portal.concytec.gob.pe/images/noticias/2015/diciembre/biodiversidads_concytec_completo_final.pdf)



20. Root causes of habitat loss and ecosystem transformation: Ecosystems are lost to various causes including human induced factors such as extractive policies, market forces, territorial occupation, infrastructure development, etc. Although MINAM is seeking to revert certain historic tendencies (e.g. through the 2015 Compensation for Ecosystem Services Law, and land-use planning policies), capacity building and awareness raising is required among a wide range of actors including Regional Governments and civil society to fully comprehend the value and role ecosystems play in supporting life, both in rural and urban areas. The causes of deforestation, for example, are clearly distinguishable: (1) Expansion of pasture land and cattle grazing in the Amazon and certain parts of the Andes are putting pressure on primary and secondary forests; (2) Growth of urban centers like Tarapoto, Pucallpa and Madre de Dios in the Amazon is creating belts of deforested zones in their surroundings; and (3) Widespread clearing of small areas for agricultural and housing purposes in rural zones. In many cases, housing in these areas leads to continuously expanding shanty towns or “*pueblos juvenes*”, where basic services such as sewage or water facilities are non-existent. Disposal of waste is usually directly into rivers, resulting in serious pollution problems. Furthermore, clearing of areas for agriculture tends to occur where soils are nutrient-poor and thus productivity is low, leading to a vicious cycle of further clearing and expansion. As the agricultural practices focus on monocultures and less crop diversity (see below), some of the agricultural biodiversity that is endemic to Peru gets pushed aside in favor of commercially-recognized crops and eventually lost. Potatoes provide an emblematic case for this, with an estimated historical variety numbering more than 3000; however, at present, although diversity is still maintained, farmers are moving towards more commercially viable varieties and eroding the genetic base of native potato varieties. The expansion of mining activities often affects key agroecosystems as well as pristine forests. In certain areas of the Amazon (e.g. Madre de Dios and de Tambota Reserve), illegal mining is dramatically changing forest coverage, leading to irreversible deforestation and desertification, and contaminating water bodies and its ecosystems drastically.
21. Root causes of poaching: Hunting, fishing and firewood harvesting by rural inhabitants for self-consumption should not necessarily be considered as poaching. Nevertheless, there is evidence that these practices are increasingly having negative impacts on ecosystem equilibrium and biodiversity conservation. Root causes of such practices are poverty and food scarcity, combined with cultural traditions. Hence, strategies must be designed for improving livelihoods, for example awareness-building about the pernicious consequences of the loss of certain species for ecosystem services. With regard to illegal hunting and poaching of species with a high market value for commercial purposes, general security problems and weak law enforcement have created a favorable environment for such practices.
22. Root causes of biopiracy include insufficient awareness of ABS regulations, particularly by the academic and private sectors; limited institutional capacities by national competent authorities such as INIA or SERFOR to implement and enforce specific ABS measures; poor quality in patent examinations, particularly abroad, which do not take into account existing sources of information regarding traditional and known uses and applications of genetic resources in Peru; and an increased interest by industry in the potential of genetic resources and biodiversity as a source of useful components for a wide range of sectors, including cosmetics, pharmaceuticals and natural products in general – which is not accompanied with a similar interest in understanding often complex but necessary and binding ABS rules and regulations.
23. Root causes of monoculture: International trade, consumer preferences and market demands, new sale channels (e.g. big supermarket chains), are some of the main factors driving a trend towards monocultures. This is also coupled with a tendency of government policies to bet on agro-industrial farming as a means to development, and relegate key small farming which is seen as inefficient. Modern bred varieties, also entice small farmers which are then hooked to extension services which focus on supporting these modern varieties and obviate native crops.
24. Root causes of GMOs: Market demands and business models see GMOs as the key solution to food insecurity and development options, especially among small farmers. While some studies show support

for this theory in terms of immediate increases in short-term yields<sup>4</sup>, the medium- and long-term impacts are not necessarily favorable, and in some cases are proving to be detrimental. The scientific evidence concerning the environmental and health impacts of GMOs is still emerging, but so far there is no conclusive information on the definitive negative impacts of GMOs on health or the environment. Nevertheless, public perceptions about GMOs in food and agriculture are divided with a tendency toward avoiding GM food and products in many developed and developing countries. Indeed, experiences such as “Sierra Productiva”<sup>5</sup> have proven again and again, that small technological changes in agricultural and support to small farmers can be much more effective at dramatically increasing productivity without the need for GMOs.

25. Root causes of limited valorization of genetic resources: Historically, Peruvian society (especially in urban centers and decision makers) has overlooked the importance of genetic resources, even though they are the key contributing factor to both food security and primary health care among the poor. They have been taken for granted as something that has and always will be available. Apart from this, successive governments have paid limited attention to research, development, innovation and value adding processes regarding genetic resources. The lack of a thorough economic valuation of the contributions of genetic resources to the country’s GDP has hindered the ability of decision-makers to consider and account for it in policy decisions. Rather, the political and economic focus for “development” has traditionally been on extractive resources which generate tangible income and contributions to the GDP. Recently, this has gradually begun to change with initiatives by CONCYTEC, the gastronomic movement, social media, and certain public agencies such as MINAM and INDECOPI who have acknowledged the true potential of genetic diversity to stimulate development and innovation in a wide range of areas.
26. Root causes of erosion of cultural diversity: Indigenous peoples have oftentimes been marginalized and seen as an example of non-development. Customs, traditions, culture, practices and a unique “cosmovision” have to some extent been recognized as an important part of Peruvian heritage, but with a nostalgic reference to the past. However, over the past two decades, this perception has begun to change and diversity in general is gaining recognition as a value in itself. The role of indigenous peoples and farmers with regards to preserving biodiversity while simultaneously developing it and adapting their livelihoods to different external pressures is now perceived more and more as a valuable asset. Modernization, which was once regarded as complete change, is now better understood as a two-way process, to which indigenous peoples can also contribute through their own customs, TK and culture in general. This is particularly evident in the Law for the Prior Consultation of Indigenous Peoples (2011), which was enacted precisely to address the asymmetries and special situation of vulnerability which indigenous peoples face in the light of modernization and development.

#### *Barrier Analysis*

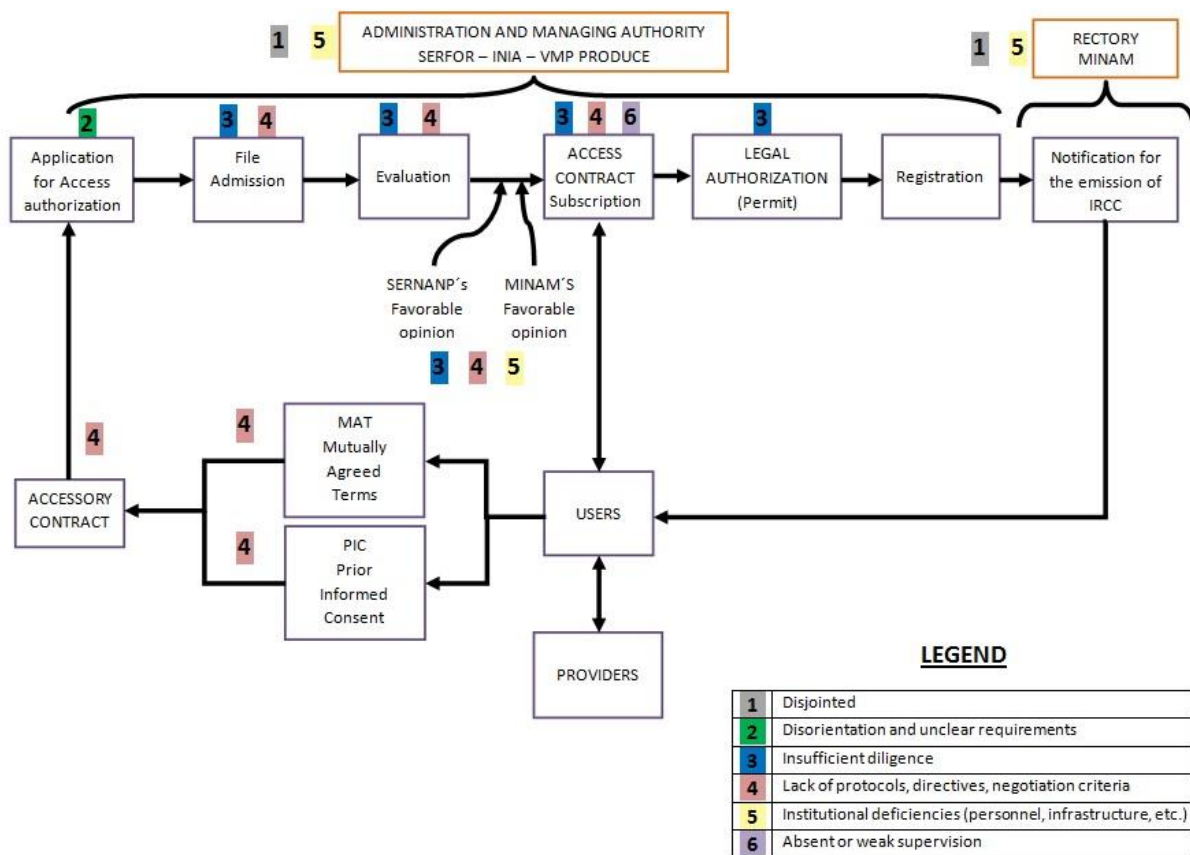
27. The long-term solution advanced by this project is to conserve biological and genetic resources of Peru in compliance with the Nagoya Protocol (NP). However, Peru must overcome the following three specific barriers that currently prevent the fulfilment of the proposed solution:
  - *Weak legal and institutional framework to manage ABS in accordance with the Nagoya Protocol (to be addressed by Component 1)*
  - *Scarce knowledge of relevant stakeholders on access and utilization of GR and Fair Benefit Sharing (to be addressed by Component 2)*
  - *Weak experience in applying ABS mechanisms to access and manage GRs and associated Traditional Knowledge (to be addressed by Component 3)*

<sup>4</sup> Qaim, Matin and Zilberman, David. “Yield Effects of Genetically Modified Crops in Developing Countries”. Science Vol. 299, Issue 5608, pp. 900-902. 07 Feb 2003.

<sup>5</sup> Sierra Productiva Web site: <http://www.sierraproductiva.org/>

*Weak legal and institutional framework to manage ABS in accordance with the Nagoya Protocol*

28. The national ABS framework does not fully comply with the Nagoya Protocol. The Nagoya Protocol on ABS has incorporated a series of obligations which need to be met through national regulatory measures. Though Decision 391 and the national regulation (DS 003-2009-MINAM) are not openly contrary to the Protocol, due to their approval *prior* to the Protocol, they do not necessarily address nor specifically regulate certain key aspects of the Protocol, which are key to ensuring national interests in ABS are adequately met.
29. In particular, the current framework tends to follow a control and restriction attitude toward access to genetic resources and does not include the necessary conditions to encourage and promote usage, transferring the load to users, and to control points. It neither includes proportional measures in case of non-compliance, nor procedures to update resources that were illegally accessed prior to the entering into force of the national regulation for access. Consequently, it is unable to assure benefit sharing and compliance with national regulations. MINAM is in the process of adopting a new national regulation on ABS and internal administrative manuals to facilitate access to genetic resources, in line with the CBD and the Protocol, whilst at the same time ensuring that the burden on users is balanced with (i) supportive action by national authorities, for example, through precise and timely technical guidance, (ii) standardized approaches in permitting by SERFOR, INIA, and PRODUCE, and (iii) expedited processing of access applications and ABS contract negotiations.
30. The current framework impacts on Peru's compliance with and implementation of the Nagoya Protocol, and, as depicted in the diagram below, it currently suffers from several deficiencies. Indeed, specific weaknesses are related to the lack of incorporation of access permits in the CBD's Clearinghouse Mechanisms on ABS, procedures regarding how to notify the CHM once incorporated, as well as the absence of certificates as main proof of legal access. With regards to control points and compliance measures, current check points (INDECOPI) and procedures for intellectual property are inadequate and in need of improvements and/or establishment of additional check points. Also, there has been no exchange with the Ministry of Public Health regarding current public health regulations and the possible inclusion of procedures in emergency situations for human health, plant or animal, or whether it will be necessary to introduce procedures in the national ABS by laws.



**Figure 1: Deficiencies in Peru's National ABS Framework**

Source: Draft consultancy report currently under review by MINAM: “Model System for Access to Genetic Resources and Benefit-Sharing - Base document” unpublished, 2016

31. The current national regulations - established independently and prior to the Nagoya Protocol - are not adequate to facilitate access for non-commercial, research purposes, and clearly define the distinction between basic research and bio prospecting (commercially oriented research) per NP terms. They also do not establish the time when change of usage may occur, that is, when to change from a basic research permit to a commercial one. Furthermore, institutional capacities need to be created and strengthened regarding ABS contract negotiations. National ABS authorities have explicitly voiced the need to better understand and receive training on how to negotiate and what type of criteria and conditions may be used to orient negotiations with academia, researchers and the private sector. Each initiative requires different forms of negotiations and therefore will need to adapt to market needs, consumer preferences, research and development potential, technological capacities and many other factors.
32. Indeed, the process and procedures for managing requests for authorizations are done in a disjointed manner between the competent national authorities, both between MINAM and the Administration & Management Authorities (AAE), as well as among the AAEs. Thus, the requirements, structure of records, procedures and formats of the established contracts vary from sector to sector. These are compounded by institutional weaknesses in regards to the role MINAM should play concerning guidance and policy. There are varying interpretations regarding the degree of diligence to be observed by MINAM in the procedures and monitoring of contract compliance, as well as the type of institutional organization to be established, such as the establishment of a specialized unit or office, with adequate staff and financial resources, to be able to work both at an intersectoral level and within each institution.

33. The consequences are two-fold: (i) only two cases of recent authorizations granted have the favorable opinion of MINAM, in its capacity as lead agency (per Article 14, subsection c of the Rules of GRs) - this situation should be standardized, as the Nagoya Protocol provides the obligation to notify MINAM of the authorizations granted to the Secretariat of the Convention on Biological Diversity since this is the only way the International Recognized Certificate of Compliance (IRCC) can be issued; (ii) the benefits garnered from the authorizations granted are very limited due to the lack of established criteria to guide the negotiations.
34. In short, the ABS system is in an initial stage of development, with different levels of progress in each sector. The absence of follow-up and monitoring of the utilization of accessed genetic resources, compliance with the conditions of the contract signed and benefit sharing, is of particular concern.
35. Given growing demands for genetic resources in different sectors and the need to cover not only ABS applications and regulatory and administrative procedures but also other aspects of ABS (i.e. reporting, participating in international negotiations, creating awareness among other social sectors, responding to indigenous peoples needs and interests in ABS), capacities are stretched and oftentimes inadequate, as explained in further detail below. At the same time, coordinating efforts among these entities involve considerable time and resources. This becomes critical as, often, ABS activities are on the limits and boundaries of more than one sector's competencies and therefore require coherent and harmonized responses.
36. Ultimately, there is a need to develop a truly integrated national ABS *system*, which: (i) incorporates specific *verification points* (when using, undertaking R&D, patenting or commercializing genetic resources); (ii) develops and implements an *international certificate of compliance* which accompanies legal access to genetic resources; (iii) strengthens and maintains an updated *ABS national clearing house mechanism* to contribute to transparency, legal certainty and information sharing; and (iv) facilitates continued coordination and interaction among relevant national competent ABS authorities, namely MINAM, INIA, SERFOR, PRODUCE and SERNANP.

*Scarce knowledge of relevant stakeholders on access and utilization of GR and Fair Benefit Sharing.*

37. As mentioned above, there is partial, uneven, and ineffective implementation of the national framework on ABS. Institutional capacities vary considerably among national competent authorities. In general, they are understaffed, with only one or at most two officials with certain knowledge and capacities to implement each ABS provision in national regulations. A rapid assessment of the number of officials with a degree of ABS reveals: MINAM (2 or 3); SERFOR (1 or 2); INIA (1 or 2); PRODUCE (1) and SERNANP (1). INDECOPI and the National Commission against Biopiracy are currently the better staffed (3 and 2 respectively), although in this particular case they are not specifically competent authorities but rather supporting institutions of the ABS system with regards to TK protection, as a verification point and in biopiracy prevention.
38. Sectorial authorities in charge of administration and management, as well as those in charge of procedures for intellectual property at the national (INDECOPI) and international level (National Commission Against BioPiracy), have demonstrated varying degrees of efficiency and consistency when applying ABS procedures. For example, while SERFOR-MINAGRI and INIA have granted access permits and agreements on material transfer, respectively, VMP-PRODUCE has yet to establish administrative procedures to implement ABS.
39. With regards to negotiating *Prior Informed Consent* (PIC) and *Mutually Agreed Terms* (MAT), there is confusion regarding when there is a need to explicitly request proof of each. For example, SERFOR-MINAGRI authority has had numerous cases of access permits relating to traditional knowledge from indigenous communities, and has always requested proof of PIC from such communities. However, it is generally assumed among all authorities that PIC is considered implied in the approval procedure, and is part of the final granting of the access resolution permit (“resolución de acceso”) and thus it is not always

explicitly requested. These authorities and other institutions that constitute the ABS national system lack an official established criteria as well as common registers and formats to foster efficient practices and streamlined procedures. The complete and efficient implementation of the national framework is a prerequisite for adequate control and use of genetic resources, both national and international.

40. The negotiation of benefits distribution is perhaps the weakest point in the management of authorizations granted. The contract format does not include a specific "Benefits" clause, rather there are "Obligations" clauses in which one can distinguish certain specifications that could be considered benefits.
41. In the case of SERFOR, the only consistent profits in all contracts is the "payment for extraction of specimens of wild flora or fauna" (corresponding to monetary benefit), which is not currently effective. On the other hand, in the letters of commitment and agreement between the applicant institution and the INA, other benefits are indicated as: "participation of national professionals in collection activities, research and data survey of genetic resources, their derivatives and associated intangible components" and "strengthening and development of the institutional capacity of the national support institution or provider of genetic resources, through, *inter alia*, training, provision of equipment and infrastructure."
42. In the case of INIA, few monetary and non-monetary benefits have been identified since there are no documents which specify the agreements made between the INA and the actual applicant institution.
43. Although efforts have been made over the past decade to create awareness among genetic resources users (particularly the private sector, academia and research institutions), these actors are far from knowledgeable in regards to what ABS means and implies – both in general terms and in particular to each of their more specific undertakings. Many workshops, forums and meetings have been organized internationally, nationally and locally with universities, companies, small entrepreneurs, indigenous communities, and individual researchers. One important lesson from these gatherings is the interest and will of these actors to engage and understand ABS. This has been expressed again and again over time. However, an important shortcoming throughout these processes has been the inability of MINAM, INDECOPI, IIAP and SPDA to respond to some of the more practical needs and queries by users of genetic resources. Basic information such as "what are the precise and detailed ABS procedures" has not been adequately provided, because of the ongoing shortcomings of the national ABS framework in terms of procedural aspects in particular (i.e. who receives ABS applications, who negotiates contracts and under what criteria, to what extent does MINAM intervene in negotiations, etc.).
44. In the case of indigenous peoples and TK, this also demands very specialized capacities to transmit messages and ensure a basic level of understanding among communities and groups which often speak only native languages and do not read nor write. It would be said however that there have also been effort by many institutions to provide indigenous peoples with some tools which at the very least enable them to understand the very basics of ABS and their rights over TK. These tools include manuals, courses and *in situ* training.

*Weak experience in applying ABS mechanisms to access and manage GRs and associated Traditional Knowledge.*

45. Access and sharing of benefits derived from use of genetic resources and associated traditional knowledge (ABS) in Peru is regulated by a number of norms, which establish the roles and responsibilities of national institutions. One of the key weaknesses in this regard relates to the inability of MINAM to fulfill the orientation and supervision competencies assigned by the national bylaws (approval of guidelines for access to genetic resources management, including development of formats and models for PIC, contracts and clauses, and the establishment of a registry of supporting national agencies). Consequently, there are cases where this situation is slowing down ABS implementation by sectorial authorities.
46. Currently, there is no common discussion space for inter institutional exchange and technical development regarding ABS, preventing effective and efficient implementation. The implementation of ABS regulations by administrative and managing sectorial authorities lacks clear and effective guidelines

and criteria. Specifically, there is no common/unified criteria for (i) access scope (cultivated or wild, clear delimitation between a biological resource and one derived from a genetic resource, etc.), (ii) monetary and non-monetary benefit negotiation, (iii) role of national supporting institutions, and (iv) regularization of illegal access, amongst others. Furthermore, there is no consistent coordination of joint actions between different authorities to manage and administer access, as well as use of genetic resources.

47. Consequently, while there is evidence that many institutions in Peru *do* undertake R&D activities with native genetic resources, they are or have been operating on the margins or limits of legality precisely because national ABS frameworks have not been effective. For example, Universidad Cayetano Heredia has a very modern molecular biology laboratory where research, knowledge and innovation is being generated over genetic resources such as cocoa, maca, *sangre de grado* and others; Hersil SA is a company which has over 50 years of research and production of natural medicines derived from native genetic resources including sacha inchi and maca; many international institutions and universities such as Washington University, Missouri Botanical Gardens, Kew Botanical Gardens, to name a few, have collected and undertaken research on Peruvian genetic resources. Most of these believe they have complied with what they understand to be their legal obligations, but many cases are in fact potentially outside the NP, depending on the interpretation of the criteria by individual institutions. This results in very limited experiences and examples of ABS and TK regulations actually being applied in practice. Bridging this gap is essential and requires both action by national authorities and compliance and efforts from users and institutions accessing genetic resources.
48. With regards to compliance with the minimum conditions for granting access authorization, major deficiencies include the following:
- Inaccuracy or lack in identifying the origin of the samples of biological or genetic resources accessed: In the case of authorizations granted by the INIA, in most cases the samples come from collections of INIA or CIP and do not provide documents with passport data of the samples.
  - Confusion regarding the roles played by requesting entities, National Support Institutions (INA) and the competent authority: In the authorizations granted by INIA, oftentimes INIA itself, in addition to fulfilling the function of “Evaluator”, also serves the function of INA and in many cases also serves as the “Applicant” and “Provider”. In other cases, it is the International Potato Center (CIP) which fulfills both roles (Applicant and Provider), although the end user, in all cases, is another institution. Therefore, the signed and accepted MAT are provided to CIP and INIA even though the institutions that make use of the access to genetic resources will be others. Meanwhile, in one of the authorizations granted by SERFOR, a natural person was considered and accepted as an INA, a role that can only be played by a legal entity.
  - Incomplete information regarding transfer of genetic material: The contract does not include the name of the institution to which genetic material will or could possibly be transferred, or any other documents regarding the specific conditions of such a transfer.
  - Inconsistent treatment of local/indigenous providers: For example, there is a case of authorization granted by SERFOR that involves obtaining TK as part of the evaluation, but the contract includes neither the “Provider” indigenous organizations nor the negotiated benefits.

#### **2.4. Institutional, sectoral and policy context**

49. In recognition of its abovementioned globally significant biodiversity and the threats and root causes that put it at risk, the Government of Peru has enacted numerous legal instruments to ensure the protection,

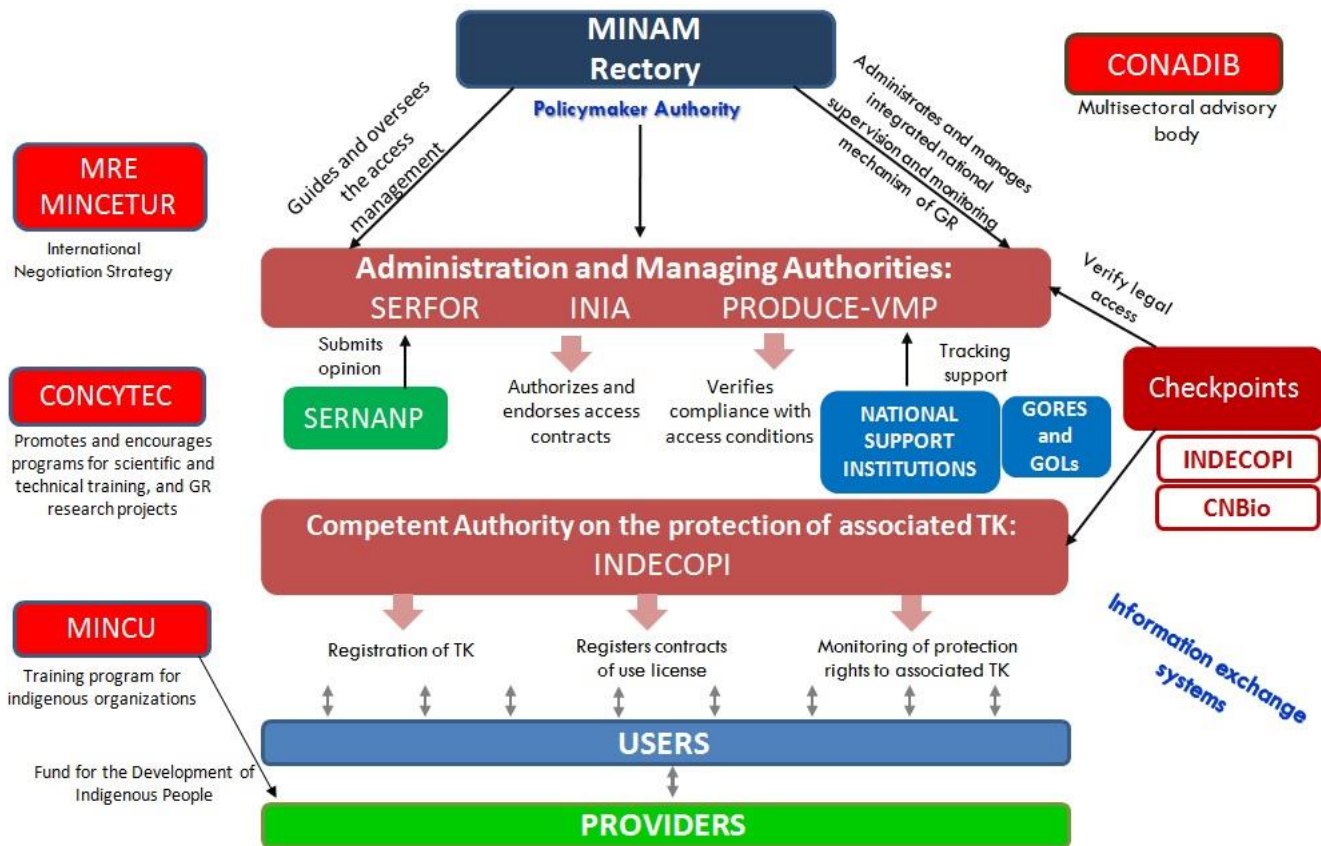
use and management of the environment, natural resources and biodiversity. In recent years, these mechanisms have undergone changes, adapting to the international tendencies on the conceptualization and policies on these issues, as well as to the commitments of international treaties to which the country is a signatory party.

50. Prior to the promulgation of the Political Constitution of Peru in 1979, environmental issues were addressed in a dispersed way in sectoral laws with different focuses and objectives; the exception was Art.123 that recognized the right of all to a healthy and ecologically balanced environment. This changed, however, with the Political Constitution of the Nation of 1993, which introduced the obligation of the State to promote the conservation of biological diversity and natural protected areas; the prioritization of agrarian development, recognizing the regime of communitarian land; and the recognition of indigenous and farming communities, as well as respect for their cultures given Peru's condition as a multicultural, pluri-ethnic and multilingual country. Likewise, the Code of the Environment and Natural Resources (Law Decree 613 of September 1990) established that the "natural heritage of the Nation is constituted by the ecological, biological and genetic diversity that resides within its boundaries", recognizing the species of flora and the variety of native domestic species, together with the ecosystems and landscapes, as the main manifestations of the nation's natural heritage. The state is responsible for safeguarding the necessary environments for the conservation of biodiversity, the promotion of its use in its place of origin, and the promotion of genetic resources research to provide accurate knowledge and sustained use of them in favor of present and future generations.
51. The Law of Conservation and Sustainable Use of Biological Diversity (Law #26839 of July 1997) makes explicit reference to the concept of agro-biodiversity and expresses the need to preserve native crops for the country's development. It also defines aspects like endemism, peculiarity or danger of extinction of the species, vulnerability of the ecosystems, adverse health effects, undesirable environmental impacts and danger of genetic erosion, among others; as the foundations to protect the biodiversity and to limit the access to genetic resources. This law recognizes the importance and value of the knowledge, innovations and practices of the farming communities in the conservation and sustainable use of biological diversity, establishes that this knowledge is a cultural heritage of these communities, and that therefore they have the right and faculty to decide its use. It is thus imperative to protect and preserve the biological resources as a tangible component of such heritage, including the cultivation of native potatoes, of the wild species related to them, and of other species of traditional cultivation. It also establishes the tutelary role of the State regarding genetic resources and defines the priority granted to the *in situ* preservation of the diversity as well as the need to protect the knowledge of the farming and native communities with regards to biodiversity. At the same time, this law protects other national norms like the Law of Protected Natural Areas, Law #26834, and establishes planning instruments like the National Strategy of Biological Diversity.
52. The National Strategy of Biological Diversity, promoted through Supreme Decree 102-2001 of September 2001, is a shared, consensual and strategic vision committed to national development, through which the importance of agricultural biodiversity is approved as a public policy; identifying and prioritizing its components: genetic resources, cultural factors, ecosystems and areas of high concentration of genetic resources (wild and cultivated) under the care of local populations. It is also committed to promoting *in-situ* conservation, recognizing traditional knowledge and the need to protect wild and domesticated relatives of some species with global and national economic importance; to support and stimulate conservation plans shared with the communities and farmers in zones of high concentration of genetic resources; and to identify and preserve areas that could support the objectives of conservation of the biological diversity of the system of protected natural areas.
53. The Regime of Protection of the Collective Knowledge of the Indigenous People related to Biological Resources (Law 27811 of August 2002) regulates the protection of traditional knowledge of indigenous and native communities. The regime tries to establish the legal framework to protect the access and use



of indigenous people's knowledge regarding the use of agricultural biodiversity, native crops and medicinal plants.

54. The General Environment Law #28611 of June 2005 has become a landmark in Peruvian environmental law by connecting the territorial dimension (planning and territorial ordering) to economic, social and environmental planning; and recognizing the strategic role of biological diversity and the cultural diversity related to it, for sustainable development. It also establishes the need to value, compensate and maintain protection services of hydrological resources; the need to protect biodiversity, mitigate gas emissions due to the greenhouse effect; and the need to preserve scenic beauty, focusing on the conservation of ecosystems, biological diversity and natural resources.
55. Furthermore, the Regional Strategies of Biological Diversity – derived from collective efforts and commitment of diverse regional stakeholders – serve as the management instruments that establish policies, measures and high priority actions at the regional level.
56. The MINAM was created through the Law of Creation, Organization and Functions of the Ministry of the Environment, (Legislative Decree 1013) of May 2008, as the ruling entity of the national and regional environmental policy. It includes the National System of Environmental Management that comprises the National System of Environmental Impact Assessment, the National System of Environmental Information and the National System of Natural Protected Areas. The MINAM is currently the institution in charge of natural resources management, biodiversity, climate change, and soil management.
57. The Regulation of Access to Genetic Resources (DS No. 003-2009-MINAM) establishes the Ministry of Environment (MINAM) as the governing body and, as such, is the regulatory authority on access to genetic resources and should guide and oversee the management of access to genetic resources. It also establishes three Administration & Management Authorities (AAE) responsible for responding to requests for access, issue resolutions for access and verify compliance with them according to their sectoral competence: the Ministry of Agriculture and Irrigation (MINAGRI) for continental wildlife, the National Institute for Agrarian Innovation (INIA) cultivated or domesticated continental species, and the Ministry of Production-Vice Ministry of Fisheries (PRODUCE- VM) for aquatic species. It also states that the National Service of Natural Protected Areas (SERNANP) must issue binding opinion prior to authorizations for access to genetic resources from protected areas.
58. It also states that as part of the functions of the National Monitoring Mechanism and Monitoring Integrated Genetic Resources to be created, it is important to maintain permanent contact with the Directorate of Inventions and New Technologies of the National Institute for the Defense of Competition and Protection of Property intellectual (DIN-INDECOPI), establishing information systems on the authorizations granted and intellectual property rights related to genetic resources and derivatives. This is accompanied by a semi-annual report of the National Commission Against Biopiracy of actions taken in the investigation and identification of illegal access/processing of genetic resources.
59. For its part, Law No. 27811 on the system of protection of collective knowledge associated with biological resources, establishes DIN-INDECOPI as the competent body, the creation of the Specialized Council on the Protection of Indigenous Knowledge and an Administrative Committee of the Fund for the Development of Indigenous Peoples (IPSF), consisting of two representatives of the Ministry of Culture (MINCU) and five representatives of indigenous peoples organizations.



**Figure 2: Institutional Roles and Responsibilities in Peru's National ABS System**

60. The National Support Institutions (INA) are commissioned to collaborate with MINAM in monitoring all activities of access to genetic resources or products derived from individuals or legally-recognized associations who have granted authorizations. In return, it was envisaged that these national institutions would be strengthened and supported through training and provision of equipment and infrastructure, among others. These INA consist of well-respected and widely recognized national research institutions such as the Natural History Museum (MHN), the Universidad Agrarian La Molina (UNALM), and the Institute for the Investigation of the Amazon (IIAP), among others. They represent the interest of the State in projects and activities related to ABS.
61. The current situation of this complex system is a disjointed performance and an initial state of implementation of management processes and monitoring of access and use of genetic resources and associated traditional knowledge. The processes and procedures in the main entities (rector and authorities of management and enforcement of access authorizations) are on average at an early stage of development, presenting differentiated advances by sector. In particular, the current Regulations' National Monitoring Mechanism for integrated monitoring of genetic resources will not be viable without the use of timely and reliable information provided by the different actors (in particular the administration and enforcement entities) as well as the development of monitoring and control of compliance with the terms of the contracts, and monitoring of the state of conservation of biological resources containing genetic resources. This is because, among other things, the formulation and adoption of additional procedural provisions detailing specific aspects and internal guidelines for operationalization within the AAE is still pending. Similarly, as constituted in Federal Law DS No. 029-2014-RE, there is a need to incorporate in these provisions those mechanisms required by the Nagoya Protocol related to monitoring compliance

and recognition of the origin of genetic resources, prior informed consent, mutually agreed terms, and the conditions of transfer of genetic materials.

62. While there is a procedural structure assigned for attending ABS issues, in practice, the management is separated by sectors. Consequently, one of the challenges and expectations for this GEF project is the establishment of a “one-stop-shop” to receive and process ABS-related requests.

## 2.5. Stakeholder mapping and analysis

63. The Project has been elaborated through a participative process involving a wide group of actors concerned with access to genetic resources, benefit-sharing and the protection of TK. All of them were consulted during different phases of the PIF elaboration, and are involved in undertaking certain tasks throughout the project. In some cases, these stakeholders may also be direct or indirect beneficiaries of the project. The following table provides a summary of the relevant stakeholders for this project and their current roles or functions with regards to GR, TK and ABS.

Institution	Sector/ actor	Current Role or Function
Ministry of Environment, General Directorate of Biological Diversity (MINAM-GDBD)	Public sector. Governing institution on access to genetic resources policy.	Governing body on environmental policies, biodiversity and genetic resources. Focal point for the CBD and NP. (*will also act as the project Executing Agency)
National Forestry and Wildlife Service (SERFOR)	Public sector. National administrative and managing authority for genetic resources of wild continental species.	Granting access and negotiating benefit sharing agreements with users of wild, continental genetic resources in public and private lands.
National Institute of Agriculture Innovation (INIA)	Public sector. National administrative and managing authority on genetic resources of domesticated continental species.	Granting access through material transfer agreements with users of ex situ and in situ domesticated or cultivated species' genetic resources.
Vice Ministry of Fishing from the Ministry of Production (VMP-PRODUCE)	Public sector. National administrative and managing authority on genetic resources of hydrobiological species	Granting access and negotiating benefit sharing agreements with users of hydrobiological genetic resources.
National Service for Natural State Protected Areas (SERNANP)	Public sector. Specialized public institution with competence in case the genetic resources are found within natural protected areas (ANP).	SERNANP has the responsibility of overseeing all activities and managing resources located in protected areas. SERNANP also have an active participation in defining viability of ABS activities within its jurisdiction in protected areas.
National Institute for the Defense of Competence and Protection of Intellectual Property (INDECOPI) – Directorate of Innovation and New Technologies (INDECOPI-DIN).	Public sector. Competent institution on protection of collective knowledge of indigenous people associated with biological resources.	INDECOPI has responsibilities related to the implementation of the national regime for the protection of TK. Among others, it oversees the registers for TK and also manages and implements the defensive protection regime – related to the IP (patent) granting regime. It coordinates closely with MINAM and sectorial authorities.
National Commission against Biopiracy, adjunct to Council of Ministers (PCM) and presided by INDECOPI.	Public sector. Inter institution platform for the protection of genetic resources and associated traditional knowledge as they relate to biopiracy.	The Commission is responsible for identifying and monitoring potential cases of biopiracy of Peruvian genetic resources and TK.
Directorate of Indigenous Policies of the Vice Ministry of Interculturality of the Ministry of	Public sector. Competent authority on issues relating to indigenous people and the Fund for Development of	MINCU is a relatively recent Ministry, created in 2010, and which although has a series of functions and competence related

Culture (VM Interculturalidad – MINCU)	Indigenous People.	to TK in particular, it is in the process of defining how its roles and functions will be undertaken.
National Center for Intercultural Health from Institute of Public Health of the Ministry of Health (CENSI-INS, MINSA).	Public sector. Technical and Legal body proposing policies and regulations on intercultural health and promoting integration of traditional medicine in the medical treatment of rural communities.	CENSI is one of various public institutions that have a national registry of medicinal plants and traditional knowledge. CENSI undertakes specific R&D in relation to medicinal plants and their use, especially by indigenous peoples.
Research Institute of the Peruvian Amazon (IIAP)	Public Sector. Academic and scientific institution in charge of researching the sustainable use of biodiversity in the amazon region.	The IIAP is currently researching the possible sustainable use of biodiversity and its derivatives as a factor for its valorization and conservation; in the same way, IIAP has engaged in the task of documenting traditional knowledge related to amazon biodiversity.
Institute of the Peruvian Sea (IMARPE)	Public Sector. Academic and scientific institution in charge of researching the sustainable use of hydrobiological diversity.	The IMARPE is currently researching the possible sustainable use of prioritized species and its derivatives; IMARPE is developing technology which would help to improve research and the commercial use of hydrobiological diversity.
Cooperativa NORANDINO	Private sector. Institution that groups stakeholders from several local communities that trade with biological resources, containing genetic resources.	Active participation in institutional capacity building process and functioning of national ABS system, on granting PIC and benefit negotiation, on trial research and projects.
Cosmo Ingredients	Private sector. Enterprise dedicated to research and development to innovate and commercialize in the perfumery and cosmetics industries	Cosmo is a private company which is engaging with national authorities to formalize its research and innovation projects with genetic resources of aromatic plants, in accordance with the national ABS system and Nagoya Protocol along the research and development value chain.
National Council of Science, Technology and Technological Innovation (CONCYTEC)	Public Sector. CONCYTEC is the head of ("institución rectora") the National Science and Technology and Technological Innovation (SINACYT), composed of state's Academy Research Institutes, business organizations, communities and civil society. Aims to regulate, direct, guide, promote, coordinate, monitor and evaluate the State's actions in the field of Science, Technology and Technological Innovation and promote and support its development through concerted action and complementarity between the programs and projects public institutions, academic, business and social organizations members of	CONCYTEC has many funding programs that aim to support innovative research in many fields, including the sustainable use of biodiversity and its derivatives. Furthermore, in cooperation with MINAM, this institution has developed a national program for the Valorization of biodiversity (VALBIO).

	SINACYT.	
Natural History Museum (MHN) - Universidad Nacional Mayor de San Marcos	Public Sector. Academic institution with taxonomy programs; one of the most important research centers; gathers many well - known researchers and top scientists.	The MHN holds one of the biggest collections of biological resources and in the last years have been collecting also genetic samples for research. It acts as user, provider (ex situ) and national support institution (INA) of biological and genetic resources.
Scientific University of the South (UNIVERSIDAD CIENTIFICA DEL SUR)	Private sector. Academic institution with environmental sciences and biology programs.	This university has developed great capacity building programs; it could lead the capacity component on ABS.
Technical Group of Indigenous Peoples (GTPI) of the Ministry of Culture	Public sector. Represents the seven most important indigenous representative organizations in the country.	The GTPI is a consultation body of MINCU which acts as an intermediary between the public sector and the indigenous organizations it represents. It also acts as a space to discuss issues which are raised in regards to a wide range of themes including land rights, draft regulations, participation, etc.
Promotion Fund of Protected Natural Areas of Peru (PROFONANPE)	Public sector. In charge of managing resources that contribute to the funding of biodiversity conservation in consensus to the economic and social development of Peru.	PROFONANPE promotes sustainable economic activities, among other activities, aiming to become a key factor in the promotion of sustainable management of the protected natural areas.
United Nations Environment Program (UNEP)	International private sector. Promotes the application of the sustainable use and development within the system frame of the United Nations.	UNEP is a key institution which works side by side with MINAM in order to elaborate the current project. (* will act as Implementing Agency of the project)
Territory and Environmental CATEDRA UNESCO	International private sector. Promotes the training, research and guidance of public and private sector about territory and environmental topics	The CATEDRA UNESCO has provided guidance for the elaboration of the PIF in previous stages.
Peruvian Society of Environmental Law (SPDA)	Private sector. Legal organization on proposing policies and regulations on environmental issues.	SPDA has historically supported national authorities and different stakeholders with legal and technical advice regarding ABS and TK. It is a national and regional hub of expertise in regards to these issues.
United Nations Conference on Trade and Development (UNCTAD)	International private sector. Supports developing countries to access the benefits of a globalized economy more fairly and effectively.	UNCTAD has a program that focuses on BioTrade and Environment. The BioTrade initiative refers to activities of collection, production, transformation, and commercialization of good and services derived from native biodiversity and is closely related to genetic resource access.
UNEP- Regional office for LAC	International organization	UNEP ROLAC office is responsible for assisting in the UNDAF process. Therefore through the UNDAF coordinator in ROLAC, and the task manager, the project

		<p>will procure synergies and cooperation, basically in area (iv) of the Peru 2012-16 UNDAF, which related to environment, climate change and disasters. This project will contribute to safeguard Peru's genetic resources through a functional system that will enable the process of issuing access contracts and monitoring.</p> <p>ROLAC was active part on the PPG, and will continue to provide support ensuring synergies with other initiatives through the project's TM, and the subprogramme coordinators of Ecosystem management and Env. Governance</p>
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## 2.6. Baseline analysis and gaps

64. In general, the baseline scenario with regards to access to genetic resources in Peru suffers from uneven application of the National ABS System; there are some ongoing initiatives being implemented in Peru which are directly or indirectly related to ABS and associated TK. However, these are sporadic and limited interventions in very specific areas concerning ABS. To date, the advances that have been made are related to *sui generis* protection of traditional knowledge, and the resolution of cases of illegal access. On the other hand, limited progress has been made with regards to the generation of benefits derived from access and just and equitable sharing of these benefits.
65. Indeed, as indicated in the pilot cases (Appendix 16), current agreements do not truly provide effective means for the distribution of benefits. INDECOPI and the National Commission on Biopiracy Prevention, in collaboration with SPDA, are looking to consolidate interventions regarding the registry of TK, through workshops and *in situ* work in communities. Their “defensive role” needs to be further strengthened in light of continued cases of illegal or unlawful rights being granted over indigenous peoples’ biodiversity and TK. SERFOR, through its forestry regulation, has been expediting the granting of access authorizations, especially for non-commercial research in genetic resources. However, recent commercial applications (at least 6 or 7 over the past months) require better and improved coordination with MINAM, particularly in regards to benefit sharing agreements, and INDECOPI, to ensure IP defensive protection conditions set in the law are taken into account. The CENSI has also historically undertaken research in the field of TK and ethnobotany. Although CENSI has internal guidelines and codes of conduct, these need to be regularized – as proposed through this GEF ABS project – in accordance with national ABS frameworks and the Nagoya Protocol in particular. The MINCU has also started to become active in its role of coordinating indigenous peoples’ policies. Its main effort over the past few months and in the near future involves activating the National Fund for the development of Indigenous Peoples (created through the TK protection law) and establishing the institutional mechanisms which will enable transparent and coherent management of this Fund.
66. The following sub-sections describe the baseline and opportunities for strengthening the national panorama. The first deals with legal and informational issues as they relate to current national regulations (and Andean regional legal framework) vis-à-vis the vision, measures and procedures of the Nagoya Protocol. The second relates to the degree of capacity to support and advance access management. The third relates to the institutional framework that supports access management and monitoring. The baseline investment for this project consists of approximately US \$ 12,970,000.

### *Legal and informational scenario*

67. The GoP will continue to support MINAM and the ABS Systems operation, including sectoral ABS units. These sectoral units act as National Regulatory Authorities and are responsible for reviewing and processing access requests and applications. These authorities include SERFOR, SERNANP, INIA and PRODUCE. INDECOPI is also relevant in terms of its role as IP authority and responsible for TK protection. GoP support will allow MINAM and the sectoral authorities and institutions with competence in access and benefit-sharing to continue to implement ongoing and new activities related to the implementation of Nagoya Protocol at the national level. Such activities include strengthening of institutional capacities to manage unified procedures for access to genetic resources, re-designing of the capacity building and awareness enhancing initiatives of different target groups in accordance with the strategic frameworks adopted in the COP-MOP 1 of the Nagoya Protocol, information sharing through the ABS-CH, and the establishing and functioning of ABS checkpoints. This has been estimated over four years at US\$ 521,300/per year.
68. Since 2010, MINAM has been undertaking capacity building activities on genetic resources and biosafety in the form of teaching modules on genetic resources and traditional knowledge for local actors that

includes content on the legal framework and principles of ABS. These teaching modules (consisting of presentations, work group and roundtables) have been developed in coordination with regional authorities and local universities from 9 Regions: Cusco, Arequipa, Piura, Cajamarca, Lambayeque, Junín, Puno, San Martín and Huánuco. During 2010-15, the program reached more than 400 participants including local state officials, private sector professionals, and university teachers and students. A new set of activities is under elaboration and expected to be implemented during the lifetime of the project with a baseline value of US\$ 260,000/per year.

69. Since 2015, DIN-INDECOPI has expanded beyond the member countries of the Andean Community to include parties of the Nagoya Protocol and CBD in the searches it performs in its role of national patent office as well as national authority of protection of traditional knowledge associated with biological resources. As such, it is incorporating a new approach in its *in situ* registry of traditional knowledge, looking for a significant increment in the amount of records per year. Furthermore, the institutional capacity of the National Commission against Biopiracy is being strengthened as part of its incorporation into the DIN office by INDECOPI. This baseline investment consists of an annual investment of approximately US \$ 80,000 of INDECOPI public funds in full time professionals working on TK and biopiracy prevention. INDECOPI officials are responsible for managing the TK databases, providing indigenous peoples with assistance in regards to legal aspects and preventing biopiracy (through the National Commission). INDECOPI spends around US \$ 30,000 in workshops and capacity building activities. As such, the estimated baseline for the project period is US \$440,000.
70. Meanwhile, SPDA is maintaining its on-line biopiracy prevention site ([www.biopirateria.org](http://www.biopirateria.org)) which has been a source of information for a wide range of actors interested in biopiracy since 2004. SPDA has a long-standing collaboration with INDECOPI and the National Commission, and is continuously providing technical assistance as part of its ongoing institutional projects, including through support from IDRC, the MacArthur Foundation and others. Its projects over the next 4 years add to approximately US \$ 30,000 annually, or \$120,000 during the lifetime of the project.
71. CONCYTEC has developed a National Program on Science, Technology and Valorization of Biodiversity 2015-2021. Under this project, COCYTEC plans to invest almost US \$ 60 million in support to research and development in hard sciences in biodiversity in a wide range of projects, including in infrastructure, capacity building, bioprospecting, development of gene banks, etc. Only a fraction of these investments, US \$ 6,000 is directed to IP and ABS issues. The different components of the project will require considerable legal/technical assistance from CONCYTEC's investments in genetic resources and biodiversity R&D.
72. Despite important efforts, and as depicted in the Diagram of Deficiencies in the Barriers Section, the national ABS framework requires a thorough revision to ensure certain *a priori* changes with respect to the Nagoya Protocol, as well as a change in focus from control and restriction of access to one of usage, transferring the responsibility to users and control points. There is also a need to establish proportional corrective measures in case of non-compliance, and put procedures in place to formalize illegally-accessed resources that date prior to the entering into force of the national regulation for access, thereby assuring benefit sharing and compliance with national regulations.
73. In general, the national legislation requires adjustment *vis-à-vis* the Nagoya Protocol for implementation and compliance. In particular, there is a need to simplify the procedures described above to facilitate the ABS process. This is a specific concern in the case of non-commercially oriented research. Main changes are related to incorporation of access permits in the CBD's Clearinghouse Mechanisms on ABS, procedures regarding how to notify the ABS-CH once incorporated, as well as the issuing of certificates as main proof of legal access, and the unification/simplification of standardized procedures. With regards to control points and compliance measures, current check points (INDECOPI) and procedures for intellectual property need improvements and/or strengthening through the establishment of additional check points.



74. In relation to procedures already established by national regulations, and independently from Nagoya Protocol, it is necessary to facilitate access for non-commercial research purposes, and clearly define the distinction between basic research and bio prospecting (commercially oriented research) per NP terms. Furthermore, there is a need to establish the time when change of usage may occur, that is, when it will need to change from a basic research permit to a commercial one.

#### ***Access management scenario***

75. In relation to access management, MINAM is responsible for coordinating the implementation of the Peruvian NBSAP to 2021, which was legally approved in November 2014. One of the NBSAP's strategic objectives seeks to implement the principles and commitments associated with the Nagoya Protocol to improve access to genetic resources and fair and equitable benefit-sharing. Consequently, MINAM's General Biodiversity Directorate is working on the Sixth National Biodiversity Report to the CBD, which includes an assessment of advances in ABS. It plans to invest approximately US \$50,000 in public funds and US \$20,000 from international cooperation over a period of 4 years for this purpose. MINAM is also developing a baseline report regarding centers of origin of native crops and wild relatives, for which it will invest US \$ 500,000 yearly. A further US \$ 1,300,000 is invested from EuroEcoTrade in value chain related activities coordinated from MINAM. Implementation of the GMO moratorium has a budget of \$1,250,000. Although this is not an ABS related activity *per se*, there are connections and synergies regarding management of genetic resources throughout the country.
76. The experiences of sectorial authorities in charge of administration and management, as well as those responsible for defensive protection procedures in intellectual property at the national level (INDECOPI) and biopiracy prevention at the international level (National Commission Against BioPiracy), have exposed the partial, uneven, and limited implementation and coordination of the national framework on ABS. SERFOR-MINAGRI is the national authority with the most experience, having granted 41 access contracts between 2008 and 2015 for research purposes on genetic resources of wild flora and fauna species. INIA has granted 39 agreements on transfer of materials for *ex situ* cultivated plant species banks between 2008 and 2015. Meanwhile, VMP-PRODUCE has yet to establish administrative procedures to implement ABS.
77. Between 2008 and November 2015, SERFOR and INIA granted a total of 80 authorizations for access.

AAE	Type of Genetic Resource	2008	2009	2010	2011	2012	2013	2014	2015	Total	%
SERFOR	Wildlife	---	---	---	---	---	11	22	8	<b>41</b>	<b>51</b>
INIA	Cultivated	1	8	1	10	7	8	3	1	<b>39</b>	<b>49</b>
PRODUCE	Hydrobiological	---	---	---	---	---	---	---	---	<b>0</b>	<b>0</b>
	<b>Total</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>10</b>	<b>7</b>	<b>19</b>	<b>25</b>	<b>9</b>	<b>80</b>	<b>100</b>

- Each of the authorizations for access to genetic resources of wildlife species had a National Support Institution (INA) designated; however, in the case of genetic resources of cultivated species, only 2 authorizations had the corresponding INA.
- Only 1 of the granted authorizations included access of TK, which was associated with 7 species of medicinal plants.

78. SERFOR's National Program for Inclusive Forest Development will work more directly with timber/biological resources comprising an annual investment of US\$31,250,000 in direct investments and economic activities in the Amazon. It is expected that certain aspects of SERFOR's activities in this field will indirectly touch upon ABS dimensions, equivalent to an approximate investment of US \$ 350,000 in ABS and TK related activities.

79. IIAP's Program on Research on Amazonian Biodiversity has an annual budget of US \$ 500,000, with projects spanning over the next four-year period. Likewise, its Program in Amazonian Cultural and Economic Research has an estimated budget of US \$ 150,000 annually. These two programs address ABS related issues in terms of direct work with genetic resources and activities with TK of indigenous peoples respectively, providing an estimated baseline of US \$2,600,000.
80. CENSI's investments in R&D in biodiversity research in medicinal genetic resources for 2016 total approximately US \$100,000 in the field of zoonosis and metaxenics. CENSI is also investing in research on nutritional valuable foods (often under-utilized crops) with an approximate value of US \$ 2,000,000 during 2016.
81. In relation to negotiating *Prior Informed Consent* (PIC) and *Mutually Agreed Terms* (MAT), SERFOR-MINAGRI has made the most progress. This authority has dealt with numerous cases of access permits relating to traditional knowledge from indigenous communities, and has always requested proof of PIC from such communities. On the other hand, all authorities indicate that PIC is considered implied in the approval procedure, and is part of the granting of final access resolutions. Law N° 27811 creates a Fund for the Development of Indigenous People, which is managed by an Administrative Committee made up of representatives of 5 indigenous organizations (among them, the *Confederación de Nacionalidades Amazónicas del Perú* – CONAP, the *Confederación Nacional Agraria* – CAN, and the *Confederación Campesina del Perú* - CCP) and 2 representatives of the Ministry of Culture (MINCU). Although not expressly cited in the national regulation, INDECOPI, in its role as administrative and management authority, is in charge of assuring compliance with regulations regarding access to traditional knowledge associated with genetic resources from indigenous and local communities, per Law N° 27811. In this regard, INDECOPI has been working with different authorities since 2009 to verify if certain cases of patent requests related to genetic resources have complied with access contracts.
82. The PROAMBIENTE initiative (supported by GIZ in partnership with MINAM), will conclude in early 2017, but leaves an important set of materials regarding the relationship between BioTrade and ABS and a FAQ publication for a broad set of actors interested in ABS and TK related issues. PROAMBIENTE has also provided initial contact and ongoing working relationship with Cosmo Ingredients Peru, a key partner in this GEF ABS project. Finally, a set of 5 regional workshops were organized with local and regional stakeholders (mainly private and academic sectors) to start raising awareness about new requirements under the Nagoya Protocol. PROAMBIENTE has invested approximately US \$80,000 during a three-year period for this effort which ends in early 2017.
83. Other civil society institutions such as ANDES Association in Cusco, are also sources of information and examples of initiatives dedicated to safeguarding collective rights and TK of indigenous communities, particularly in the Potato Park, in Pisac, Cusco. ANDES is also actively engaged in regional ABS related processes including coordinating the regional technical group on ABS, TK and Biopiracy, and in actions related to the GMOs moratorium. ANDES is supported by institutions such as NOVIB, IIED, among others. ANDES has projects totaling US \$ 50,000 over the next four years.
84. Cosmo Ingredients is a private company investing in bioprospecting in the search of useful products for fragrances and perfumes. As part of its ongoing investment portfolio, Cosmo is investing approximately US \$ 100,000 in ABS related activities.
85. Finally, a consistent request from the authorities and other institutions that constitute the national ABS system, is the need to unify criteria and have common registers and formats to accelerate and streamline procedures. Indeed, a recent Diagnostic Study<sup>6</sup> of managing access authorizations has revealed a number of shortcomings, as depicted in the Diagram of Deficiencies in the Barriers Section, among which are

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<sup>6</sup> Diagnosis of Management of Access Permits Granted to Genetic Resources for Research and Commercial Use, Nov 2015; and Draft consultancy report currently under review by MINAM: "Model System for Access to Genetic Resources and Benefit-Sharing - Base document" unpublished, 2016.

institutional disarticulations, delays in the execution of procedures, lack of standardization of procedures, enforcement problems in meeting minimum conditions of contracts, lack of trading strategies and the virtual absence of subsequent follow-up on the utilization of genetic resources accessed. The complete and adequate implementation of the national framework is a prerequisite for adequate control and use of genetic resources, both nationally and internationally.

***Institutional scenario vis-a-vis access management and monitoring***

86. As mentioned before, access and sharing of benefits derived from the use of genetic resources and associated traditional knowledge (ABS) in Peru is regulated by a number of norms which establish competences for national institutions. This has resulted in a complex ABS system and requires careful and dynamic inter institutional coordination to ensure efficient implementation. As mentioned before, one of the key challenges relates to the inability of MINAM to fulfill the orientation and supervision competencies assigned by the national bylaws (approval of guidelines for access to genetic resources management, including development of formats and models for PIC, contracts and clauses, and the establishment of a registry of supporting national agencies). This situation is hampering ABS implementation by relevant sectorial authorities.
87. There is a need for a common discussion space for inter institutional exchange and technical development regarding ABS, to foster adequate and consistent implementation. The implementation of ABS regulations by administrative and managing sectorial authorities requires clarification and development of numerous elements from ABS, such as common criteria of access scope (cultivated or wild, clear delimitation regarding what is a biological resource versus one derived from a genetic resource, etc.), monetary and non-monetary benefit negotiation, role of national supporting institutions, regularization of illegal access, amongst others. ABS regulations require MINAM to coordinate joint actions with different authorities to manage and administrate access, as well as use of genetic resources.
88. In March 2014, under the framework of the National Commission on Biological Diversity (CONADIB), MINAM created an Ad Hoc Group on Access to Genetic Resources and Benefit Sharing (Ad Hoc Group on ABS). This is an interinstitutional platform to orient, facilitate and provide technical assistance to the process of preparing to implement the Nagoya Protocol for ABS in Peru. This Ad Hoc group is composed of 17 institutions, including MINAM, national sectorial authorities, public institutions with direct competency in the matter, science and technology institutions, and representative organizations of indigenous people and peasant communities.
89. MINAM has committed to launching the first version of the online information platform called GENES-Peru (referring to “genes”) by the end of 2016. GENES-Peru will contain information provided by MINAM, the authorities, and other stakeholders involved in genetic resources and biosecurity. The information contained would be directed to generate public value and to strengthen institutional, organizational and general users’ capacities in the four modules identified: Biosecurity, Access to GRR, Information on GRR, and Conservation of GRR. The goal is to provide and share information between institutions in order to facilitate the management of biosecurity and the access to genetic resources and benefit distribution, ultimately contributing to enhanced decision making and sustainable use of the country’s genetic diversity. The elaboration of this platform for the next 4 years has been estimated at US\$115,000.00.
90. Furthermore, it is important to indicate that in recent years, participation of institutions and other actors has strengthened in two main aspects: a) progress in the integration of different sectors that comprise the ABS system and, b) inclusion of indigenous organizations to strengthen capacities on ABS, incorporating their perception on national ABS processes and building of national positions based on intercultural exchange. As such, there is a strong baseline upon which to build in terms of ABS access management and monitoring.

**2.7. Linkages with other GEF and non-GEF interventions**

91. The project will build on and complement a number of GEF-funded projects aimed at strengthening biodiversity conservation in Peru, which include aspects of community development, indigenous management and sustainable use.

92. At the regional level, the project incorporates lessons learned from the GEF-IUCN-UNEP project *“Strengthening the Implementation of Access to Genetic Resources and Benefit Sharing Regimes in Latin America and the Caribbean”*, implemented from 2011 to 2014 in cooperation with UNEP and under coordination of IUCN-South. Peru was one of eight Latin American countries that participated in this project (besides Cuba, Costa Rica, Dominican Republic, Panama, Guyana, Colombia and Ecuador). The experiences from this initiative provide valuable lessons from the exchange of information and contributions to strengthening the national capacities for the development of regulatory frameworks, such as tools for Prior Informed Consent and the fair and equitable sharing of benefits. In the case of Peru, this project facilitated activities such as:

- Coffee and Knowledge Workshop on: “Biopiracy: definitions, techniques and legal issues. Causes and consequences”. Lima, May 3, 2012.
- Workshop: “Capacity building on contract negotiation for ABS” by the Cátedra UNESCO de Territorio y Medio Ambiente de la Universidad Rey Juan Carlos Lima, May 23-24 of 2013.
- Consultancy: “Analysis of legal framework for the implementation of Nagoya protocol on ABS”. August 2013
- National Workshop: Legal and Institutional Analysis relating to ABS access and benefit sharing. Lima, 28-30 April 2014.
- Consultancy: “Advances in maintenance of Traditional Knowledge Associated with Genetic Resources and Benefit-Sharing in Peru” (2013), with the following outputs:
  - Participation of indigenous organizations in the elaboration of the first national progress report regarding Article 8j.
  - Intercultural Workshop on ABS system and benefit sharing aimed at leaders of local and indigenous communities in the country, with emphasis on traditional knowledge of indigenous communities.
  - Proposal of teaching materials to facilitate the appropriation of the ABS system by indigenous organizations.
  - Publication: “Traditional Knowledge and Rights of Local and Indigenous Communities. Teaching module on Nagoya Protocol for ABS aimed at organizations from native and peasant communities in Peru”.

93. It is also worth mentioning the recent experience derived from the project *“Regional Capacity Building Plan on Access to Genetic Resources and Protection of Traditional Knowledge”*, sponsored by BioCAN and the Embassy of Finland. This initiative aimed at providing support for regional awareness, incidence and research on genetic resources and traditional knowledge. This project was developed during years 2013-2014, under the coordination of SPDA.

94. Other UNEP initiatives include:

- *“Access to and Benefit Sharing and Protection of Traditional Knowledge to Promote Biodiversity Conservation and Sustainable Use”* in Guatemala. The project’s objective is to develop policy and legal frameworks and institutional mechanisms for access and benefit sharing (ABS), in order to strengthen biodiversity conservation, promote rural development and support climate change adaptation.

- “*Strengthening Access and Benefit Sharing (ABS) in the Bahamas*” This project’s objective is to create and apply the enabling conditions for fair and equitable access and effective benefit sharing. This project will also have pilot cases with which to share experiences during project implementation.
  - “*Advancing the Nagoya protocol in the countries of the Caribbean*” This project seeks to create basic ABS related capacity in various Caribbean countries with the aim of advancing their actions towards the eventual ratification of the Nagoya protocol.
95. The experiences generated by Ecuador’s GEF/UNDP project “*Conservation of Ecuadorian Amphibian Diversity and Sustainable Use of its Genetic Resources*” can provide important lessons regarding the creation of national and local capacities to apply ABS instruments as well as negotiate PIC and MAT.
96. Within Peru, the project will build on the achievements of the regional GEF/UNDP project on “*Biodiversity Conservation in Coffee*” (2371), which has succeeded in promoting uptake of BD-friendly shade coffee in the *yungas* ecosystem, through supporting producers’ insertion into global markets that reward sustainability. It will also exchange lessons learned with the GEF/IFAD Full-Sized Project (4773) on “*Conservation and Sustainable Use of High-Andean Ecosystems through Compensation of Environmental Services for Rural Poverty Alleviation and Social Inclusion in Peru*”.
97. On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), GIZ is implementing the Program “*Contribution to the environmental objectives of Peru*” (ProAmbiente-GIZ), with an overall term of three years, from 2014 to 2017. As part of its objective to support Peruvian authorities to accomplish selected national and regional objectives referred to the sustainable use of ecosystems, the conservation of biodiversity and the capacity to reduce greenhouse gases and adapt to climate change, ProAmbiente-GIZ is developing several initiatives related with access and benefit-sharing, emphasizing Nagoya Protocol as a transversal component of sustainable use of genetic resources, that will continue until 2017. While this initiative will close within the first few months of the project’s implementation, the project will coordinate with ProAmbiente-GIZ to ensure lessons learned during the program’s execution contribute to the project’s interventions. The ProAmbiente-GIZ initiatives comprise of:
- development of a database of publications, norms and permissions, to contribute with the ABS-CH.
  - design of a training module about ABS and intellectual property, including the elaboration of a guide; that will be presented in 6 Regions.
  - design of a course about ABS and biotrade, including the elaboration of a guide, oriented to entrepreneurs and innovators.
  - advise selected enterprises to carry out their research and development projects based on the utilization of resources genetic and/or associated traditional knowledge, according to the procedures of access and benefit-sharing established in the national legislation and the Nagoya Protocol. This activity will include two or three cases, and the experience will be systematized during the term of the Program.
  - study cases of utilization of cocoa genetic resources that comprise ABS and intellectual property.
98. The global *Biodiversity Finance Initiative* (BIOFIN), “*Building Transformative Policy and Financing Frameworks to Increase Investment in Biodiversity Management*,” in Peru in collaboration with MINAM, Ministry of Economy and Finance (MEF), UNDP/EU/ Governments of Germany and Switzerland, is developing a tool to guide and assess the needs and resource mobilization to finance biodiversity. BIOFIN has supported the introduction of policy guidelines into the National Public Investment System that facilitates public investment in biodiversity conservation and sustainable use, as well as ecosystem

restoration. BIOFIN will design pilot public investment projects to apply the new policy guidelines as well as generate lessons learned. It is expected that this tool would help to define the costs of the strategies identified in the NBSAP for incorporating biodiversity considerations in the development, protection, restoration and access and benefit-sharing.

99. MINAM will facilitate coordination between this project and the upcoming FAO/GEF initiative in agrobiodiversity, “*Sustainable management of agro-biodiversity and vulnerable ecosystems recuperation in Peruvian Andean regions through Globally Important Agricultural Heritage Systems (GIAHS) approach*” (9092). The objective of the FAO initiative is to conserve *in-situ* and to sustainably use globally-important agro-biodiversity through the preservation of traditional agricultural systems, the integrated management of forests, water, and land resources, and the maintenance of the ecosystem services in selected Andean regions. The project will ensure coordination of activities to maximize synergies and foster the exchange of lessons learned.

### SECTION 3: INTERVENTION STRATEGY (ALTERNATIVE)

#### 3.1. Project rationale, policy conformity and expected global environmental benefits

100. As described in the previous sections, there are a number of gaps in the baseline scenario that prevent Peru from fully implementing and complying with the Nagoya Protocol on Access and Benefit Sharing of Genetic Resources. As such, the rationale for GEF support is to provide incremental resources to support the integration of strategic elements that establish and reinforce the institutional, regulatory, policy and operational framework to create a robust system that enables proper implementation and compliance with the NP and fulfill its objectives at the national level.
101. Furthermore, the participative process throughout the project’s conception and design has ensured strong “appropriation” of the project’s objectives and has fostered consensus among different national actors. The multiplicity of actors and disciplines involved in the definition of priorities and basic content of the project, guarantees an effective execution from different fronts, with emphasis on efficiency and efficacy of the ABS system.
102. GEF support is also fundamental for leveraging co-financing in short and medium-term timeframes. The project is coordinating with ongoing and upcoming programs to foster proper support and synergies with complementary activities. As such, the project will generate sustained support over time that will benefit and facilitate the different planned activities, ultimately ensuring Peru’s compliance with the Nagoya Protocol over the long-term.
103. The project complies fully with the GEF-6 BD-3 Objective: Sustainably use biodiversity, through Programme 8 (Implement the Nagoya Protocol of ABS). Specifically, GEF support will result in the establishment and reinforcement of legal and regulatory frameworks, and administrative procedures that enable access to genetic resources and benefit sharing in accordance with the provisions of the Nagoya Protocol, as stipulated in the GEF-6 Biodiversity strategy. Furthermore, the project is also aligned with national policy related to Biodiversity and ABS, as described below in Section 3.6.
104. The project is expected to generate a number of Global Environmental Benefits (GEBs). To begin with, the project will reinforce Peru’s efforts to maintain and preserve genetic resources, of particular importance to this megadiverse country and center of origin and diversification of native breeds and cultivars. As such, it represents a service and support to a long list of historical contributions derived from the use of biodiversity resources and products (i.e. quinine, potato which serves as one of four staple foods important for global consumption, rubber provided the base for the development of the automotive industry during the 20th century, to cite a few). In particular, the project will help emphasize the value of genetic resources (based on a properly-working ABS regime) and link their access, use and benefit actions to conservation, thereby deriving value-added from R&D processes. This is particularly relevant

for megadiverse countries which have the enormous privilege, but also a greater responsibility, of being depositories of the most important gene banks on the planet. In this context, an effective and efficient access regime to genetic resources and just and equal benefit sharing will constitute a major impulse for conservation, research and development of biodiversity and genetic resources.

105. Second, the project will facilitate the flow of articulated legal processes on genetic resources for research and development, supporting the establishment and implementation of specific support and legal services to a variety of activities and industries, ranging from pharmaceutical to cosmetics. In the case of genetic resources for food and agriculture, as a center of origin and diversification (i.e. potato, quinoa, kiwicha, arracacha, olluco, maize), it is also absolutely critical to maintain a dynamic exchange system to guarantee food security both locally and nationally, but also globally as Peru is net provider of these resources and germplasm for plant breeding programs and research in general. The role of the International Potato Center (CIP), for example, is critical, as well as of global importance. It is necessary that access rules do not impose unnecessary restrictions to the provision of seeds and resources. Therefore, it is necessary for national legislation regarding ABS to be clear and transparent.
106. Thirdly, the project will bolster efforts related to prevention against biopiracy and illegal appropriation. It is crucial that the international community clearly and specifically understand the challenges and difficulties that this phenomena implies, and how adjustments and modifications in policies and international regulations on intellectual property (i.e. improving search systems for patents, establishing requirements for source and legal origin, protecting traditional knowledge) are essential for the sustainable use, access and benefit sharing of globally-important biodiversity and associated traditional knowledge. In this regard, the project is in a prime position to generate globally-significant contributions, both directly and indirectly.

### **3.2. Project goal and objective**

107. The objective of this project is to: "Strengthen national capacities for effective implementation of the access to genetic resources (ABS) and traditional knowledge (TK) regimes in accordance with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, contributing to the conservation of biodiversity and human well-being in the country."
108. The project seeks to establish (1) efficient functioning ABS mechanisms in accordance with the Nagoya Protocol (2) build capacity of various actors in relation to access to genetic resources and traditional knowledge and (3) pilot projects and initiatives on access and benefit sharing, contributing to the sustainable use of biological diversity.

### **3.3. Project components and expected results**

109. The expected scenario resulting from the present project is for Peru to be better suited for access control, and just and equal benefit sharing from the use of genetic resources and associated traditional knowledge. The country would be taking an important step towards compliance, not only with the third objective of CBD, but also with Aichi Biodiversity Targets, in particular Target 16 related to effective implementation of the Nagoya Protocol, and Target 18, related to respect for traditional knowledge, innovations and practices, as well as consuetudinary use of biological diversity according to national legislation.
110. With regards to the legal and institutional framework for ABS, the expected scenario comprises clear, concordant and fluid access norms, measures and procedures. It ensures that management of access and derived benefits will be applied in an integrated manner by the governing party (MINAM), national authorities (INIA, SERFOR and VMP-PRODUCE), and other institutions with direct competence in ABS (SERNANP, INDECOPI, MINCU and National Commission Against Biopiracy). It is expected that governmental officials in charge of granting access contracts for commercial or non-commercial purposes, as well as the users seeking access, will have the capacity to negotiate benefits derived from the

use of genetic resources and associated traditional knowledge. Crucial to this is the availability of clearer management procedures and negotiation capacity for users and providers of genetic resources and associated traditional knowledge (especially indigenous peoples).

111. With respect to access management for research purposes and development, it is expected that national legislation will incorporate the main adjustments required by the Nagoya Protocol, which make references to access permit; notification procedure for ABS-CH; verification points; measures in case of non-compliance; and regularization processes for illegally accessed genetic resources and associated traditional knowledge. In addition to the adjustments required by the Nagoya Protocol, the national legislation is also expected to result in a simpler and automatic procedure in cases of access for non-commercial research purposes, especially in the case of taxonomic determination and species and varieties characterization using DNA methods or genetic expression products (genomic, molecular, biochemical, agronomic, etc.).
112. Part of this scenario would be the experience gained by government officers, researchers, universities, indigenous organizations and local communities on building strategic alliances for research and bioprospecting of genetic resources, and applying national access regulations. This would help ensure future actions to promote public and private participation, national and foreign, in the further development of biotechnology, prioritizing the use of identified strategic genetic resources.
113. The following narrative describes the three components of the proposed project:

**Component 1. Effective functioning of national ABS system, in agreement with Nagoya Protocol**

114. The first component seeks to achieve an efficient and integrated national access system for ABS that operates in a coordinated manner, based on full compliance and integration of functions of the governing entity, national authorities and institutions with competence in the matter. The project will elaborate tailored guidelines towards unified criteria, improvement of administrative procedures, and participatory construction and/or adaptation of already existing tools for management procedures to be aligned with the Nagoya Protocol (forms, models, guides, model contractual clauses, etc.). The purpose is to strengthen legal and institutional capacities to guarantee judicial security in negotiation between users and providers, throughout the access chain for research and development: granting of prior informed consent, mutually agreed terms for product negotiation, granting of permits for access, international certification, establishment of verification points, fair benefit sharing, as well as capacity building on defense strategies in case of unlawful access to genetic resources and associated traditional knowledge.

*Output 1.a.1.: Fully functional and coordinated ABS system using updated or new documentation and procedures adequate to the Nagoya Protocol (including PIC and MAT), including guides for users and providers, and exchanging information through the national ABS information platform and the ABS-CHM.*

115. To achieve this output, the project will base its interventions on an assessment of the legal, institutional and administrative capacities of the current ABS related system that is currently under review by MINAM<sup>7</sup>. This assessment identified gaps such as the need for a coordinated approach in the management of ABS related issues, with clear definition of roles for local institutions (see the Figure on p. 12 of this document). There is a need to map how the various institutions participate in access and benefit sharing processes in the country, and the tools that they have for this (e.g. administrative procedures, legal documents, etc). Thus, an assessment of these capacities is proposed based on the abovementioned analysis of the current capacities and the prevailing needs to ensure that the project has an impact in the areas where intervention and support is needed.
116. For example, processing times for Collection Permits and Access Contracts currently average 180-720 working days. The project will support a streamlined process to reach a maximum 60 working days for

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<sup>7</sup>“Model System for Access to Genetic Resources and Benefit-Sharing - Base document” unpublished, 2016



permit (once a dossier is complete); and 60 working days for contract (once a permit is authorized). To bridge this gap, it will be necessary to update guidelines and standard procedures for access management in accordance with national regulations and the Nagoya Protocol, as well as adapt sectorial procedures to these updated standard procedures.

117. The project will support the updating and launch of a national access platform, including a virtual pilot application of standard procedures for its validation. GENES-Peru will be established at the end of 2016 and will host records divided into 4 modules: Biosecurity, Access to GRR, Information on GRR, and Conservation of GRR. Baseline investments have ensured the platform is ready to launch its trial version in 2016. The project will support the improvement of this initial version, with the expectation of launching version 02 by 2018 with 50-70% inter-operability between institutions. By 2020-21, version 03 will be launched with 100% inter-operability between institutions. MINAM will be fully responsible for the continual update and maintenance of the system after the project ends. This integrated ABS System will provide a strong link with the ABS-CH, and will also collect and make available important information concerning the access and benefit sharing processes, the national mechanism for monitoring, and other important issues related to ABS in the country. The project will support the careful integration of access management and information within the ABS-CH, generation of information on strategic genetic resources, associated traditional knowledge, and ongoing research processes. This will increase the capacity to implement a strategy(s) for benefit sharing (monetary and non-monetary). ABS Guidelines will be developed for officials, users and suppliers, with emphasis on the PIC and MAT. These will be complemented by the development of intercultural guidelines on access to traditional knowledge associated with GR and benefit sharing, including in native languages (Quechua, Aymara, Ashaninka and Awajún).
118. Furthermore, the project will support the articulation of interagency and community efforts to boost the documentation of TK associated with genetic resources. This will facilitate a legal - technical diagnosis for the regularization of cases of genetic resources and associated traditional knowledge use with access purposes, which do not have proper authorization. With regards to institutional capacity, the project will encourage participation in national, regional (CAN) and international training to strengthen the functionality of the national ABS system. Finally, a key element to enabling the full implementation and compliance with the NP is the official translation and distribution of regulations, general guidelines, and national guidelines for access into English and making them available in the CHM.

*Output 1.a.2 Checkpoints set up along the different stages of the use of GRs and associated TK, and corresponding manuals prepared for these points*

119. The project will work with relevant institutions to identify and analyze the functions and capabilities of institutions to become new checkpoints along the value chain of the utilization of genetic resources and associated traditional knowledge. Currently, 2 check points exist - DIN-INDECOPI and CNBIO – thus, the project will consider CONCYTEC and possibly others as new check point(s) to be included in the ABS-CH. To facilitate this, the project will adapt tools for collecting and reporting information relevant for the monitoring that corresponds to the checkpoints. It will also support MINAM in its efforts to exchange and systematize experiences and good practices of the checkpoints.

*Output 1.a.3 Cases of illegal access to wild, cultivated and hydrobiological genetic resources, including associated TK, prioritized and registered by the National Commission against Biopiracy, as part of the measures of monitoring the utilization of genetic resources established by the Nagoya Protocol (Art. 17°)*

120. The project will ensure the National Mechanism for Integrated Monitoring and Supervision (MNSSI-ABS) is fully established in accordance with the national regulations and NP, including verification points and measures for regularization of illegal access. To facilitate this, the project will develop a methodology and obtain software support for expanding the identification and assessment of illegal access cases to wild, cultivated and hydrobiological genetic resources, including associated traditional knowledge. In

parallel, the project will support the design of defense strategies against such acts of illegal access to genetic resources and traditional knowledge, taking into account the particular characteristics of each case. Relevant experiences and best practices on the identification of illegal access cases and the application of defense strategies on emblematic cases will be systematized and ultimately, any approved cases will receive an International Recognized Compliance Certificate (IRCC) and notification will be sent to the ABSCH.

121. Under Outcome 1.b, the national ABS system will comprise reliable, timely and relevant information for benefit sharing negotiation strategies (monetary and non-monetary) for access to national genetic resources, for the purpose of research and development, and ultimately safeguarding biodiversity from the risks of genetic erosion. To achieve this, the project will work, through the following outputs:

*Output 1.b.1 Information on species (wild, cultivated and hydrobiological) containing genetic resources with potential for research and development activities, compiled and systematized in the platform Peru Gen, including distribution and conservation status.*

122. Currently, there are at least 4 lists of biological resources (CENSI, PRODUCE, INIA, SERFOR), but these do not prioritize or analyze their use and potential for R&D. Thus, the project will establish a methodology for the systematization of information on the potential use in research and development of genetic resources of priority species and associated traditional knowledge, and then spearhead efforts to compile, analyze and systematize this information. The systematization of information will be done in agreement with research institutions and universities that generate scientific knowledge about national flora, fauna and microorganisms, and will be carried out through a selection and analysis of existing catalogues, compendia and databases. By project end, at least 10 prioritized species (wildlife, cultivated, hydrobiological) will have been fully analyzed regarding their use and potential for R&D, and this information will be stored in databases and available in MINAM's Genetic Resources and Biosecurity platform (GENES-Peru). To complement this, the project will publish a document on the potential use of genetic resources and associated traditional knowledge of prioritized species for R & D activities. The purpose of this is to ensure that the competent authorities, including those that have monitoring functions, will have an important information base for both negotiation and for monitoring these species; it will provide a starting point that the country will continue to build upon. An initial analysis conducted during the PPG resulted in the identification of the following priority species:

<b>Species/Taxon/Group</b>	<b>Origin</b>	<b>Preliminary inclusion criteria</b>
Cacao ( <i>Theobroma cacao</i> )	Native	Of the most sought after in the Access system. Widely used projects I&D + in recent years. It is present in a large number of patent documents
Potatoes ( <i>Solanum</i> spp.)	Native	Of the most sought after in the Access system Widely used projects I&D + in recent years It is present in a large number of patent documents
Chilis ( <i>Capsicum</i> sp)	Native	Of the most sought after in the Access system Widely used projects I&D + in recent years It is present in a large number of patent documents
Quinoa ( <i>Chenopodium quinoa</i> )	Native	Of the most sought after in the Access system Widely used projects I&D + in recent years It is present in a large number of patent documents
Palms	Native	Widely used projects I&D + i in recent years It is present in a large number of patent documents
Algae	Native	Widely used projects I&D + in recent years It is present in a large number of patent documents Sectoral and taxonomic inclusion
Coffee ( <i>Coffea arábica</i> )	Naturalized	Widely used projects I&D + in recent years It is present in a large number of patent documents
Flounder	Native	Widely used projects I&D + in recent years

		Taxonomic and sectoral inclusion
Paiche	Native	Widely used projects I&D + in recent years
Camelids ( <i>Llama</i> sp and <i>Vicuña</i> )	Native	Widely used projects I&D + in recent years Taxonomic and sectoral inclusion
Sacha inchi	Native	Of the most sought after in the Access system Widely used projects I&D + in recent years It is present in a large number of patent documents
Potato virus	Native	It is the most requested in the access system
Cochinilla	Native	Taxonomic inclusion
<b>Note:</b> SERFOR has identified a set of priority forest species which may also be considered during project implementation.		

*Output 1.b.2. Benefits derived from use of genetic resources and associated TK in on-going research and development projects, identified, classified and assessed, strengthening the expertise of national authorities in this respect, and setting basis for future negotiations.*

123. In addition to the potential use of prioritized species, the project, through Output 1.b.2, will identify, classify and assess the benefits derived from the use of genetic resources and associated TK in on-going research and development projects, thereby providing important information to the national authorities and decision-makers of relevant sectors *vis-à-vis* their access and use, comprising the basis for future negotiations. To achieve this, the project will carry out a study on negotiations, fair and equitable participation, as well as the impact on the profits of ongoing R & D projects, based on interviews and surveys to researchers, companies and suppliers. Crucial to this will be the identification and analysis of 4 ongoing initiatives / projects / entrepreneurship related to access to GRs and their impacts on the area of benefits distribution. The 4 initiatives that have been identified (snake venom, Takiwasi, ICBG, and Museum of Natural History) have MAT that include distribution of benefits and could therefore provide important experiences for this Output. As such, the project will identify and analyze the potential benefits to negotiate for the use of genetic resources and associated traditional knowledge of prioritized species on the basis of their potential use and value. Based on the results of this analysis, the project will develop a document of good practices for negotiation and benefits sharing, which will serve as support to the establishment of the strategic framework for benefit negotiation.

### **Component 2. Capacity building of relevant actors in relation to Access to genetic resources and traditional knowledge**

124. The second component seeks to generate and strengthen awareness of society regarding the importance of the Nagoya Protocol and national legislation on access of genetic resources and associated traditional knowledge, as an integral part of the country's natural and cultural heritage, and as a mechanism to combat biopiracy. As mentioned in the barriers section, there is scarce knowledge of relevant stakeholders on access, utilization and fair benefit sharing of GR and associated TK. As such, the project seeks to strengthen capacity of key actors (government officials, academics, researchers, innovators, entrepreneurs and indigenous people) in relation to access to genetic resources and associated traditional knowledge, and to develop skills in the use of procedures and tools from the national ABS system. In the case of public sector and national authorities, capacity building efforts will be focused on increasing their understanding of the Nagoya Protocol as well as their adequate application of national regulations. Capacity building on access negotiation and benefit distribution will target providers and users of 3 ongoing initiatives under negotiation (Cacao: *Theobroma cacao*, Quina: *Cinchona officinalis*, Doncella: *Pseudoplatystoma fasciatum*). In the case of users and providers, capacity building activities will be focused on generating/strengthening their understanding of procedures required for access to genetic resources and associated traditional knowledge, be it for non-commercial research, bioprospecting, industry or marketing. In the case of providers, capacity building will be oriented towards prior informed

consent and benefit negotiation (monetary and non-monetary). In case of users, focus will be on legal certainty for access contracts. In addition, the project will offer *in-situ* support by taking advantage of ongoing experiences to offer technical support to bolster negotiating skills to achieve ABS agreements.

125. The capacity building activities will take into account the Strategic Framework of building and development of capacities, adopted at the last COP MOP 1 for Nagoya Protocol (Decision NP-1/8, 2014). Thus, the outputs of this component include information materials tailored for different stakeholders. It is however worth mentioning, that whenever possible, the project will make use of existing materials in order to avoid duplication and ensure that resources are used where they are most needed, adjusting or creating *de novo* those materials necessary to fulfill the local needs and reality.

126. Under Outcome 2.a, relevant actors from public, private, academic/scientific/ technical, society, and indigenous people will be made aware and trained on access to genetic resources and benefit sharing.

*Output 2.a.1. Awareness raising activities (using existing informative materials, and new ones when needed) on the Nagoya Protocol directed towards government officials, academics, researchers, society, communicators and general public.*

127. This output considers the development of awareness raising activities (using existing informative materials, and new ones when needed) on the Nagoya Protocol, with a consideration for various audiences, including government officials, academics, researchers, society, communicators and the general public. Currently, there are sporadic training courses that do not satisfy the needs of the institutions responsible for managing ABS. As such, the project will design a communication strategy, including an integral ABS awareness campaign directed to the target sectors that includes tools to measure impacts (surveys to be applied at project inception and end). This campaign will comprise of materials for dissemination (banners, brochures, posters, info graphics, video, radio spots) in Spanish and native languages (Quechua, Ashaninka, Aymara and Awajun), and will be complemented by events to raise awareness about the importance of GRs and ABS in Peru. Furthermore, the project will design, launch and maintain a website for project activities, and consider other social media outlets as appropriate and available.

128. The project will coordinate with the closing ProAmbiente-GIZ initiative, especially with regards to its approach to local actors, both authorities and civil society. In particular, it will build on lessons learned related to value chains. Cases such as the use of aromatic plants in perfumery or the development of legal certainty for genetic resources of cacao, will benefit from ProAmbiente-GIZ's facilitation and strengthening of certain links in the chain, with the aim to increase the sustainability of the resource and to diminish the pressure on the Amazonian forest. In this respect the project is expected to add value to current efforts undertaken by GIZ and the local authorities, and cooperate in the achievement of the inclusion of ABS provisions.

*Output 2.a.2. Interactive training modules on management of access to genetic resources and associated TK, based on the national law and the Nagoya protocol, each one designed and directed towards a specific target group: government officials, academic researchers and entrepreneurs.*

129. Through this output, the project will help bring to light the expectations and demands of officials, researchers and entrepreneurs with respect to ABS. An academic committee will be conformed to guide the development of pedagogically sound training modules that take into account these expectations/demands, resulting in a training program on ABS regime and NP (syllabus, methodology, teaching materials and thematic modules). Through this Committee and other fora, the project will establish alliances with selected academic institutions, one national and 3 regional, in order to provide the training program on ABS and impart the first course by the project's mid-term. Course 2 would provide hands-on training for pilot cases and application of National ABS Procedures, imparted by project end. These interactive modules would focus on legal and procedural aspects of the ABS and on fair and equitable benefits negotiation.

130. It is envisioned that this ABS training program would be available both in-person and via a virtual platform, to be designed and launched by the project in coordination with the Scientific University of the South (Universidad Científica del Sur) a national academic institution. Once launched, this ABS training program would be provided annually, once at the national level and 3 times at macro-regional level - a specific teaching module for researchers and innovators will be designed and presented in at least two Regions. The module will include the use of existing guidelines on ABS and the elaboration of a model (guideline) about the relation between ABS and biotrade. The purpose is for researchers and innovators to acquire the capacities to guarantee that the results of their research and innovative products comply with the ABS regulation. In parallel, the online training program would be made available (which includes thematic modules), thereby extending the opportunity for educating more distant/isolated audiences with access to internet but limited resources to travel in for in-person courses.

*Output 2.a.3 Intercultural training program oriented towards indigenous communities regarding ABS and TK, including gender equity criteria.*

131. The ABS training program established through Output 2.a.2 will be complemented by Output 2.a.3's intercultural training program on GR, TK and ABS oriented towards indigenous communities and including gender equity criteria. In order to develop a comprehensive program, the project will prepare a diagnosis of the expectations and demands of indigenous peoples and peasant communities regarding ABS of traditional knowledge. This will be assisted by the conformation of an intercultural training team that will support the design and implementation of the training program in intercultural valuation of traditional knowledge associated to GRs (content, intercultural guidelines for dialogue and intercultural training module). Once developed, the project will conduct consultation workshops (2) to socialize and adjust the intercultural valuation training program. Crucial to this will be the development of an intercultural module for the training program that focuses on intercultural valuation of TK associated with genetic resources, and integrating gender elements with particular emphasis on the role of women in the TK associated with medicinal and other uses of GR.

132. The training program in intercultural valuation of TK associated to GRs (including intercultural module basis) will be launched in national and community organizations of indigenous people. It will be provided annually, once at the national level and 3 times at the macro-regional level. The project will continually work to involve vulnerable local groups, who are strongly linked to biological resources (non-wood forest concessions, organized native communities, associations of settlers, etc.) and to genetic resources in particular (primary transformers of native plants and/or enterprise users). These groups will receive special didactic technical advice focused on the scope or effects of ABS, the limits of the innovation process and the real expectations of benefit-sharing. It will be essential to coordinate this with the modules of Output 2.a.2 to ensure users are also aware.

133. Particularly, in the case of indigenous people, three modules will be developed for intercultural capacity building focused on access and fair & equitable benefit-sharing for the use of associated traditional knowledge. It will also include training on *sui generis* protection regime of traditional knowledge, as an alternative to the system of protection of intellectual property. The design of these modules will be done in coordination with MINCU and INDECOPI, and with the participation of the National Center for Intercultural Health from the National Institute of Public Health (CENSI-INS) of the Ministry of Health (MINSa). Capacity building for indigenous communities will consider current organizational structures, such as community forest management; and activities will be undertaken in consultation and collaboration with major groups such as national indigenous organizations of native and peasant communities (for instance, CCP and CONAP), female indigenous organizations (for instance, ONAMIAP), communal associations (like the one created by the Amazonian native communities of Ishishihui and Kawana Sisa), among others. The intercultural teaching material on Nagoya Protocol targeted for indigenous and local communities of Peru, prepared with support from the GEF UNEP IUCN Regional Project ABS LAC, will be enhanced, and new teaching material will be prepared regarding specific subjects on ABS for

traditional knowledge. As in Output 2.a.2, this intercultural training program and module will be posted online on the training program platform.

*Output 2.a.4 Assistance for providers to promote and facilitate their negotiation capacity and for users to promote and achieve legal certainty in ABS contracts, in 3 ongoing initiatives under negotiation (Cacao, Quina, Doncella)*

134. Finally, this output will ensure assistance for providers to promote and facilitate their negotiation capacity and for users to promote and achieve legal certainty in ABS contracts, in 3 ongoing initiatives under negotiation (Cacao, Quina, Doncella) to ensure they have a MAT negotiated for ABS by project end. To achieve this, the project will form a technical support team for the pilots. This will be essential to guide the users of each selected initiative about the requirements and procedures to comply for completing the access authorization application. The project will thus guide and accompany users and providers of each initiative in the process of obtaining PIC. Furthermore, the project will guide providers in the valorization of genetic resources and / or traditional knowledge to be accessed and the potential benefits to negotiate under fair and equitable conditions. Finally, the project will guide the accessory contract negotiation to be subscribed between users and providers of each initiative, leaving open the possibility of incorporating additional benefits in the contracts. To encourage replications, the project will systematize and publish the experiences acquired during these undertakings. The GEF Tracking Tool for ABS will provide a means of showing the impact of these efforts on Peru's overall capacity to conduct ABS in accordance with the Nagoya Protocol. As provided in the project framework, the TT Scores from Section 1 Indicators are as follow:

- 11: Currently, Peru has a score of 1 but expect to improve to 3
- 12: Currently 0, aims for 2
- 13: Currently 0, work towards 2
- Section 2 Indicator 2: currently 0, expects to achieve 2

### **Component 3. Projects and initiatives on ABS contributing to conservation and sustainable use of biological diversity**

135. In Peru, there are several researchers and enterprises that carry out research and development projects based on the use of native genetic resources and associated traditional knowledge, with non-commercial and commercial purposes. A small group counts with the respective access authorization or is in the process of obtaining it; a second group is initiating the process to regularize their projects; and a third (and without doubt the more extensive) group is not interested in initiating any process, either because it is discouraged by the complexity of the procedures or because of the lack of awareness regarding the requirements of the national and international ABS system. Consequently, as of today, benefit-sharing for the utilization of native genetic resources and associated traditional knowledge is limited to a few authorized projects.

136. Likewise, despite the establishment of a National Integrated Mechanism of Supervision and Monitoring of Genetic Resources in the national legislation of Peru (D.S. N°003-2009-MINAM), none of the authorized projects is actually being monitored to ensure compliance. Consequently, at the moment, there is uncertainty regarding which, if any, projects have made a change of use of the genetic resources accessed, or if any benefit-sharing, monetary or non-monetary, is occurring.

137. In this context, the third component, through Output 3.a.1, seeks to encourage research and innovation projects and initiatives based on native genetic resources and associated traditional knowledge (the pilot for this is perfumery and cosmetics), to comply with national ABS legislation and the Nagoya Protocol throughout the chain of research and development. It also completes the cycle via Output 3.a.2, by

putting to test the national ABS monitoring system by analyzing/monitoring at least two on-going research projects (CosmoPeru-Molle fragrance and U of Copenhagen-Mauka), serving as a learning experience for government officials.

*Output 3.a.1. Ongoing research and innovation project (perfumery and cosmetics) based on native genetic resources and associated traditional knowledge, supported by the project to comply with national ABS legislation and the Nagoya Protocol throughout the chain of research and development.*

138. This process will be based on a clear identification of the existing limitations or difficulties during the process of negotiation, as well of the respective corrective measures, based on a thorough and participative analysis of the access authorizations granted by the national authorities, currently under review by MINAM<sup>8</sup>. As part of Output 3.a.1, users of the pilot project will receive training to update their knowledge of the ABS regulatory framework, procedures to be followed and documents to be submitted for requesting access authorization. The project will guide and accompany users in the compilation and submission of the documents required for the process of access authorization, including National Support Institutes, to guarantee the application of improved ABS criteria, procedures and tools (manuals and guides). This includes obtaining prior informed consent and establishing mutually agreed terms for the signing of access contracts, resulting in an internationally recognized certificate of compliance issued through the ABS-CH, and ultimately enabling users to request a patent in the future. To strengthen the processing of these documents, the project will provide support to the staff in the evaluation of dossiers and field visits to the locations where initiatives are located. It will guide users of the pilot project through the process of addressing observations made to the access request by the AMA, SERNANP and / or MINAM. The expectation is that this pilot intervention will serve as an example for future actions during and beyond the project's lifetime.
139. The project will also provide support to the competent authorities' officials in the valorization of genetic resources and / or associated traditional knowledge to be accessed, and on the potential benefits to negotiate under fair and equitable conditions, according to the purposes of the pilot project. As such, the project will facilitate the process of negotiating access agreements to be signed between the pilot users and officials from the AMA, leaving open the possibility of incorporating additional benefits during project implementation. Monitoring will be required of the subscription of the access contract and its addendums. The project would then evaluate the experience and lessons learned for the development of a guidance document with proposals for improving negotiation procedures and the benefits of future cases.
140. The pilot experience will be undertaken with Cosmo Peru, an enterprise dedicated to research and development to innovate and commercialize in the perfumery and cosmetics industries. This enterprise is interested in regularizing their R&D projects in accordance with the ABS national legislation. At present, Cosmo Peru has a number of ABS applications presented to SERFOR and INIA regarding a series of native crops such as molle, camucamu, and others. These are awaiting formal technical approval – with the technical opinion of MINAM. Cosmo Peru has been advised by ProAmbiente-GIZ since 2014, identifying providers, designing the project and in legal aspects. Cosmo Peru is working with aromatic native plants and associated traditional knowledge that will be provided by collective non-wood forest concessionaires to develop perfumery and cosmetics innovations that need to be implemented as soon as possible, in accordance with the national access and benefit-sharing legislation and Nagoya Protocol. These concessionaires possess qualifying or enabling titles granted by the government that permit them to manage and to receive benefits of the biological resources from the concessioned place, within the limits established in those titles. The activity of this enterprise is located in San Martin Region. During the PPG phase, negotiations with Cosmo ingredients and local stakeholders were finalized to enable the establishment of the pilot described in Appendix 16.

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<sup>8</sup>“Model System for Access to Genetic Resources and Benefit-Sharing - Base document” unpublished, 2016

141. This component also seeks to provide a hands-on case study to the authorities to supervise and monitor a selected group of authorized projects, with the aim to determine if a change in use of genetic resources has taken place since the access authorization was granted; and how benefit-sharing is occurring. This will permit to initiate the implementation of the National Integrated Mechanism of Supervision and Monitoring of Genetic Resources mentioned above. This activity will be developed using on-going cases organized in two groups: one of research projects involving genetic resources from wild species, and the other of research projects involving genetic resources accessed from *ex situ* banks. These research projects were authorized by SERFOR and INIA, respectively.

*Output 3.a.2. At least two on-going research projects (CosmoPeru-Molle fragrance and U of Copenhagen-Mauka) will be analyzed/monitored as a test for the national ABS monitoring system, serving as a learning experience for government officials.*

142. Through this output, at least two on-going research projects (CosmoPeru-Molle fragrance and U of Copenhagen-Mauka) will be analyzed/monitored as a test for the national ABS monitoring system, serving as a learning experience for government officials. To facilitate this, the project will develop and validate in a participatory manner a guide for supervision and monitoring (use traceability, impact on the conservation of genetic resources and / or TK, breach of contractual terms, etc.). It will apply supervision and monitoring guidance in on-going cases of Cosmo Peru and other cases, including field visits to project locations. Based on the experience and feedback of the cases, adjustments would then be made to the monitoring and tracking guidance and process. The project would publish the supervision and monitoring guidance and hold one (1) meeting for socializing the results with competent authorities and institutions linked to ABS to share experiences. These activities are not intended to penalize any action or lack thereof; rather they will be used only as models to learn about aspects that are important for monitoring purposes.

143. Finally, it is important to highlight that the three project components are not independent; they will reinforce each other, and together will contribute to an operational and more complete national ABS system for genetic resources in Peru.



### Intervention logic and key assumptions

144. The project has been developed in an integrative and comprehensive manner, with consideration for all relevant sectors and stakeholders involved in and affected by access and benefit-sharing of genetic resources and associated traditional knowledge. The added value of the proposed project for Peru is to address the entire chain of actors and activities on ABS matters, instead of a more partial and segmented approach. Additionally, it is expected that lessons learned derived from project implementation would have an immediate, although indirect, effect on regional (Community of Andean Nations - CAN) and international efforts.

145. The intervention logic of the proposed project is founded on the identification of three major barriers for access and benefit sharing of genetic resources and associated traditional knowledge in Peru:

*Weak legal and institutional framework to manage ABS in accordance with the Nagoya Protocol (to be addressed by Component 1)*

*Scarce knowledge of relevant stakeholders on access and utilization of GR and Fair Benefit Sharing (to be addressed by Component 2)*

*Weak experience in applying ABS mechanisms to access and manage GRs and associated Traditional Knowledge (to be addressed by Component 3)*

146. Derived from this assessment, the project intervention logic consists in removing these barriers working along three lines or components whose expected results or outcomes are:

Component 1: Efficient functioning of ABS system in accordance with the Nagoya Protocol

*Outcome 1.a: The ABS national mechanism operates in a coordinated manner, following unified criteria and taking into account monitoring and supervision.*

*Outcome 1.b: The national ABS system has reliable, timely and relevant information for benefit sharing negotiation strategies.*

Component 2: Capacity building of relevant actors in relation to access to genetic resources and associated traditional knowledge

*Outcome 2.a. Relevant actors from public, private, academic/scientific/ technical, society, and indigenous people, aware and with training on access to genetic resources and benefit sharing*

Component 3: Projects and initiatives on ABS, contributing to conservation and sustainable use of biological diversity

*3.a. Conservation and sustainable use of local biodiversity is improved through interventions that will lead to a better and more efficient application of ABS measures in the country.*

147. An essential element in the intervention logic of the proposed project is that achieving the project objective will *contribute* to realize the strategic objective of sustainably conserving biodiversity (BD) and ecosystem services (ES) while at the same time improving quality of life for communities in Peru. The extent of this contribution is difficult to assess, as external factors to the project can intervene, supporting or impeding the achievement of the project's strategic objective. Such external factors or risks include:

- i. *Some outputs may suffer delays. For example, capacity building proposals in the framework of the National ABS System may depend on internal conditions (re-organization, rotation of public officers, budget cuts, among other) affecting some institutions and actors.*
- ii. *It is possible that some situations considered "risks" may have to do with actual contract contents, in particular with clauses on benefit sharing, change of use, and intellectual property.*

- iii. *Inability to reach consensus to define unified criteria or make the necessary legal adjustments, above all, those beyond the purely technical and more dependent on political will of higher level officials, or states, as in the case of Decision 391.*
- iv. *Possible changes in timing of case studies and pilots could affect project flow, implementation and time frame of key deliverables*
- v. *Lack of sufficient local experts on ABS and TK*
- vi. *Lack of support for project activities from indigenous and local communities as well as key stakeholders*
- vii. *Not obtaining the access permit required for the implementation of the pilots*
- viii. *Low interest in the project by newly-elected government officials*

148. In recognition of the above risks, the achievement of the project's outcomes will depend heavily on the willingness of key actors in the relevant institutions, as well as those present in the target areas, to fully participate in the project. To strengthen this, during the project preparation phase (PPG), great care was given to engaging key stakeholders through group and individual consultations to ensure their input and ownership of the project. Project activities partially reflect the commitment of key actors, while the submission of endorsement letters and co-finance letters further consolidates the enabling environment required for the successful implementation of the project.

149. Key assumptions for the project are:

- a. *Counterpart organizations are willing to share information and recognize the usefulness of the data to be produced and knowledge to be generated.*
- b. *National institutions prioritize policy formulation as an essential first step and stakeholders and decision-makers are receptive to incorporating project results into policy formulation processes and value the importance of inter-institutional coordination for policy success.*
- c. *Project stakeholders embrace the online platform – GENES-Peru - as a user-friendly, interactive and effective means of information exchange.*
- d. *Key academic and institutional entities contribute to the strengthening of capacity of key actors (government officials, academics, researchers, innovators, entrepreneurs and indigenous people) in relation to access to genetic resources and associated traditional knowledge.*
- e. *Scientists and researchers volunteer to participate in discussions on ABS and bio- prospecting.*
- f. *Local communities and indigenous peoples take an interest in ABS, trust the awareness- raising message and embrace its content.*
- g. *Peru fully embraces the outputs of the project and institutionalizes the required processes and strategies in all ABS related activities, including facilitation of personnel participation in training and capacity building opportunities.*
- h. *Relevant institutions take steps to institutionalize postings and updates of all ABS matters on ABS CH and institutional web pages as part of a permanent internal activity geared towards information exchange.*

### **3.4. Risk analysis and risk management measures**

150. Project risks on expected results and products are fairly low because project proposal has been prepared through the collaboration and active participation of involved actors, which have demonstrated interest and compromise in the actions to be developed. Also, it is important to note that most activities are under

direct responsibility of institutions with competency on the matter, in particular MINAM and administrative and management authorities. This is an assurance and implies a drastic reduction of associated risks.

Project risks				
Description	Type	Impact & Probability [on a scale from 1 (low) to 5 (high)]	Mitigation Measures	Owner [Who has been appointed to keep an eye on this risk]
Some outputs may suffer delays. For example, capacity building proposals in the framework of the National ABS System may depend on internal conditions (re-organization, rotation of public officers, budget cuts, among other) affecting some institutions and actors.	Operational	P = 2 I = 3	This risk will be minimized by constant awareness raising activities by the project to ensure that its importance is perceived at all levels. A series of activities will be promoted by the project in order to engage local authorities, along with concerned citizen groups, to increase awareness and empowerment with the issues surrounding ABS. Likewise, annual work plan and budget revisions will allow the project team to implement adaptive management measures to secure the necessary support and ensure project progress.	Project Management Unit (PMU)
It is possible that some situations considered “risks” may have to do with actual contract contents, in particular with clauses on benefit sharing, change of use, and intellectual property.	Operational	P = 2 I = 2	These risks will be reduced through capacity building on negotiation and legal support considered as part of the proposal.	PMU
Inability to reach consensus to define unified criteria or make the necessary legal adjustments, above all, those beyond the purely technical and more dependent on political will of higher level officials, or states, as in the case of Decision 391.	Political	P=1 I=2	This is not an obstacle to effective implementation of access in accordance to Nagoya Protocol, but a limitation at a given time which, as conditions change, will be overcome.	PMU
Possible changes in timing of case studies and pilots could affect project flow, implementation and time frame of key deliverables (see Appendix 6)	Operational	P= 2 I=3	During the PPG, a Plan B was identified for initiatives related to Components 2 and 3. Part of the adaptive management approach of the project will include monitoring of the pilots’ pace to determine if Plan B should be enacted.	PMU, MINAM, UNEP

Lack of sufficient local experts on ABS and TK	Operational	P=3 I=3	The project will consider opening positions to regional and international candidates	PMU, MINAM, UNEP
Lack of support for project activities from indigenous and local communities as well as key stakeholders	Political	P=1 I=3	<ul style="list-style-type: none"> <li>- Communication strategy will be a key instrument for garnering support from key actors</li> <li>- Competent authorities will provide support in socializing the project among the constituents.</li> <li>- Training modules will be elaborated in relevant languages for the needs of identified sectors/ audiences.</li> <li>- During the PPG elaboration, the presence and participation of the Technical Group of Indigenous Peoples representatives was an important achievement; a full explanation of the project's objectives was performed, obtaining their support.</li> </ul>	PMU, MINAM, MINCU
Not obtaining the access permit required for the implementation of the pilots	Operational	P= 2 I= 3	- During the PPG a Plan B was identified which could be applied if deemed necessary.	PMU, MINAM
Low interest in the project by newly-elected government officials	Political	P= 1 I= 3	<p>The project will undertake activities for positioning the project as a strategic initiative for the country.</p> <p>Furthermore, the new vision of the Ministry of the Environment encourages the sustainable use of natural resources, conserving the environment while conciliating the economic development with environmental sustainability for the people's benefit.</p>	PMU, MINAM
Since ABS and Biosafety are currently considered new terms for indigenous people, confusion can occur regarding the meaning and application of each of them. This misunderstanding or lack of knowledge regarding both could lead to the rejection of their implementation.	Operational	P=5 I=3	Constant training on ABS with intercultural focus will be provided to indigenous people. If necessary, a small portion of Biosafety topics could be referenced in order to differentiate them.	PMU, MINAM, MINCU

### 3.5. Consistency with national priorities or plans

151. The Project is consistent and falls within the framework of policies, strategies and national legislation in matters of biodiversity and genetic resources, in particular.

152. Since the adoption of the Code on the Environment (Decree Law N° 613 of 1990), and even before the signature of CBD, the importance, value and need to protect genetic resources has been recognized, as part of Peru's heritage. The Biological Diversity Law (law N° 26839 of 1997) and regulations (Supreme Decree N° 068-2001-PCM of 2001) further reiterate the State's commitment to biodiversity and genetic resources. Since 2000, a series of norms have been published on strategies and planning relating to sustainable use of biodiversity and its main components. Of particular relevance are the National Strategy on Biological Diversity (approved by Supreme Decree N° 102-2001-PCM of 2001), and Regional Strategy for Biological Diversity for Countries in the Andean Community (Decision 523 of CAN of 2003). These strategies define, precisely, the type of actions and applicable strategies to implement and develop specific norms relating to biodiversity and genetic resources.
153. The creation of the Ministry of Environment (Legislative Decree N° 10103 of 2008) assigned MINAM the responsibilities of coordinating and defining environmental policies, including matters on biodiversity and genetic resources. MINAM is also the focal point of the CBD, and directs the National Commission on Biological Diversity. This is an interinstitutional space where proposals are defined, recommendations are proposed, and opinions are expressed regarding general policy and strategy in relation to Biodiversity. Of special relevance is the Policy Axis 1 on Conservation and Sustainable use of Natural Resources and Biological Diversity, of the National Policy for the Environment (Supreme Decree N° 012-2009-MINAM), which includes guidelines regarding genetic resources. It establishes the need to promote participation, public and private, national and international, as well as strategic alliances, research, conservation and use of genetic resources in the framework of extant national regulations.
154. As indicated earlier, Decision 391– Common Regime for Access to Genetic Resources establishes the base for a legal and institutional framework for access to genetic resources and fair and equal benefit sharing. Peru's application of Decision 391 occurs through regulations on access to genetic resources (Supreme Decree N° 003-2009-MINAM), which define the institutional framework composed of the Ministry of Environment and Administrative & Management Authorities (AAE), charged with the sectorial application of access regulations.
155. There are also a series of norms and mandates that emphasize the need to revalue and strengthen conservation activities and sustainable use of biodiversity and genetic resources. These include a National Plan on Agro-biodiversity (elaborated by the National Council on Biological Diversity – CONAM - in 2005), and the National Potato Registry of Native Cultivars (Ministerial Decree N° 0533-AG- 2008 of 2008), among other policy instruments.
156. Furthermore, since 2004, the National Commission Against Biopiracy, created by Law N° 28216 of 2004, monitors activities of possible cases of biopiracy on a subset of native genetic resources and traditional knowledge. The effectiveness of this Commission is amply recognized both nationally and regionally. However, the Commission needs support to work on a positive agenda, providing informational documents, awareness on the experience gained by the Commission, technical assistance, etc., all of which is contemplated in the project.
157. Within this context, the project is also aligned with Law ° 27811, Law on Protection of Collective Knowledge of Indigenous People Relating to Biodiversity, to ensure the protection of traditional knowledge associated with biodiversity. In this institutional framework, INDECOPI acts as competent authority and is in charge of its application. As such, the project will endeavor to establish clear coordination with INDECOPI to ensure compliance and proper application in the pilot cases.
158. The project will also coordinate with INDECOPI regarding Decision 486 on the Common regime for Industrial Property. This is the norm under which INDECOPI responds to patent requests at the national level, as well as within the Andean Community, and verifies lawful or unlawful access to genetic resources and associated traditional knowledge. This, too, will be crucial to the pilot cases to be engaged by the project.

159. The project is aligned with a series of recent national policy tools including the National Biodiversity Strategy (2015-2021), adopted in 2015. This Strategy seeks to provide overall guidance on policies which support sustainable use of genetic resources and genetic heritage in general through sustainable investment and R&D. The Project will support Peru's efforts to achieve Objective 2 of its NBSAP. In particular, it will contribute to the established target of 30% implementation of the regulatory framework related to the Nagoya Protocol by 2018, as well as the implementation of associated norms. This is in conjunction with the National Program on Science and Technology for the Valorization of Biodiversity (CONCYTEC, 2015), which establishes the national policy for public spending on biodiversity-related R&D.
160. The project will complement Peru's efforts to fulfill Aichi Targets 16 and 18. Under Target 16, the project will provide direct inputs to Peru's commitment to fully implement ABS in accordance with national legislation and the Nagoya Protocol by 2021. The framework established through the project will also contribute to Peru's efforts to achieve its goal under Target 18 to have improved by 2021 the protection, maintenance and recovery of traditional knowledge and techniques related to biodiversity of indigenous peoples and local communities, within the framework of effective participation and consent.
161. Finally, the project contributes to Peru's efforts to catalyze investment to achieve the SDGs. Specifically, it contributes to 2 (2.3, 2.5, 2.a), 14 (14.4, 14.a), 15 (15.6, 15.7), and 17 (17.14).

### **3.6. Incremental cost reasoning**

162. Incremental financial support from the GEF is necessary to ensure effective changes in the institutional and political framework as well as capacity levels (amongst different project participants) in terms of access and benefit sharing. Current baseline efforts being made by the national Government and institutions require support to reach a wider target audience and to ensure a harmonized application of ABS measures at a national level. GEF support will complement these efforts and will allow the country to increase its capacity to deal with ABS related matters in alignment with the Nagoya Protocol.
163. Currently, other organizations, such as GIZ, are investing resources in creating capacity towards the implementation of ABS systems in the country; however, these efforts are not enough and should be complemented with additional support from relevant institutions involved in ABS within the national government, as well as other organizations. The GEF project is expected to build upon ongoing efforts, and contribute to a better application of ABS regulations and procedures amongst various stakeholders. Likewise, private companies and research institutions are also taking actions towards the application of basic ABS provisions. Nonetheless, without GEF support, the possibilities of the national authorities to effectively address all the issues related to ensuring proper access to genetic resources and fair and equitable distribution of its derived benefits, are limited.
164. The current project has been designed in a manner such that GEF resources will complement existing efforts, ensuring a cost-effective approach and a coherent intervention strategy to maximize the accomplishments of the expected outcomes. Indeed, with GEF support, the proposed adjustments to the Baseline scenario will have an effective and positive impact on the implementation of ABS principles in Peru (stemming from the CBD and Nagoya Protocol). The Peruvian experience could eventually benefit other countries, especially other members of CAN, where neighboring countries share similar difficulties and challenges as Peru.
165. Experience and results from this GEF-supported project will inform of the national performance in forums where ABS is being discussed, such as the discussion within the Andean Community and the ongoing review of Decision 391. Furthermore, this will help current efforts by MINAM to update and adjust the overall legal framework of ABS and coordination with relevant national institutions on the matter.

### **3.7. Sustainability**

166. This project offers the possibility for available resources to be used in an integrated manner, and with the direction and coordination of MINAM's GDBD towards actions for capacity building and verification of tangible benefits deriving from access and use of genetic resources in Peru.
167. The innovative part, which truly responds to principles and policies in practice by actors involved with access to genetic resources for several years now, is the existence of a nucleus of highly involved institutions (from different sectors and levels of competence), coinciding and by consensus, that have defined a number of measures and activities necessary to generate a substantive improvement in the access regime to genetic resources, making it operational. The project openly addresses the issue of biopiracy and seeks to combat it effectively through identification of cases and design of strategies for due penalization. This is a fresh and innovative approach and will allow the project to attain results beyond mere documents and agreements. Moreover, the project is considered innovative due to its holistic approach, which fosters the development of technical and practical experiential-based capacity throughout the different steps of the ABS process. Indeed, the pilot cases identified during the PPG will provide an innovative opportunity to implement ABS provisions and thereby develop important know-how among authorities, providers and users, alike.
168. In relation to sustainability, through strong co-financing and key alliances with major stakeholders and other relevant institutions, the project guarantees the necessary actions and human resources to initiate and maintain activities through the project's life and beyond. Additionally, MINAM and other local authorities as well as major players in the ABS arena in Peru (such as GIZ) will be undertaking ABS-related activities to support and strengthen the national system. This means that the project outcomes have strong potential to be sustainable over time due to the fact that the local authorities have prioritized ABS matters, are investing simultaneously in ABS and have also forecasted ABS actions.
169. Moreover, since the project includes activities that are oriented to strengthen the ABS capabilities of the public institutions with legal competence in the matter, and these activities will be carried out with the active participation of these institutions, not only the maintenance but also the improvement of the national ABS system is guaranteed beyond the project. This is reinforced by the fact that one of the Peruvian national environmental policies, regarding the conservation and sustainable use of biodiversity, establishes conditions for controlled access to native genetic resources and the fair and equitable benefit-sharing arising from its value. In this regard, the sectors involved, mainly national authorities competent in ABS, have the mandate to include resources in their institutional budget to maintain the effective operation of the national access and benefit sharing system.
170. Furthermore, Peru is one of the countries that is participating in the Global Initiative Funding for Biodiversity – BIOFIN, the objective of which is to develop a tool to guide and assess the needs and resource mobilization to finance biodiversity in pilot countries, before being widely applied. The process of implementation of BIOFIN in Peru consists of a team of members from MINAM, Ministry of Economy and Finance (MEF) and UNDP, and it is expected that the strategy for resource mobilization will be finished in 2016. The tool developed in the project would help to define the costs of the strategies identified in the NBSAP for incorporating biodiversity considerations in the development, protection, restoration and access and benefit-sharing, so that the two processes (NBSAP and BIOFIN) are complementary. It should be noted that one of the strategic objectives of the Peruvian NBSAP to 2021 (legally approved in November 2014) seeks to implement the principles and commitments associated with the Nagoya Protocol to improve access to genetic resources and the fair and equitable benefit-sharing.
171. Upon project completion, the project's continued success requires follow up of most project activities, which is assured through an implicit agreement that the General Directorate on Biological Diversity (GDBD) will coordinate and share responsibilities and activities in terms of expertise and capabilities of each participating institution. In the case of MINAM, the GDBD is responsible for fostering activities and national projects in matters of ABS. GDBD has been working for quite some time together with other competent authorities on genetic resources, including INIA, SERNANP, SERFOR, INDECOPI, and the

Vice Ministry of Fishing. This project reflects a consensus reached through almost two years of coordinated work by MINAM with these authorities. Although the project has been elaborated by MINAM's GDBD, it is supported by the involvement of several institutions (including competent authorities) and actors truly involved in ABS. This is reflected in the participation of the National Commission Against Biopiracy, amongst others, with competencies or interest in genetic resources and associated traditional knowledge. In this regard, the project includes the purchase of a license for a specific software used for searching and detecting illegal access to specific genetic resources and associated traditional knowledge so as to provide an important tool to the local authority. This will help the project partners obtain a deeper knowledge of the conservation of GR and aTK in the international context and ultimately serve as a basis for a strategy towards conservation of the biodiversity associated with these GR and aTK. With this focus, it is envisioned that INDECOPI would acquire additional funds from the government in order to assure financial sustainability to cover the costs of maintaining the software license after the project ends.

172. The Project will spur the identification and access of complementary resources to help consolidate results, impacts, and define future activities. Indeed, talks have been initiated with GIZ relating to activities on ABS for its national program for years 2014-2019. This program has, as one of its four key axis, work and activities related to technology, biodiversity, and ABS. Some of these activities are expected to be aligned with those of the project – given the case, this could also be translated in co-financing.
173. Ultimately, this GEF project provides the stepping stones from which to launch mid-to long-term activities that create and sustain an integral national ABS system in Peru.

### **3.8. Replication**

174. Regarding scaling-up and replicability, one of the key advantages of the project relates to its national scope, that can provide support and *knowhow* to similar implementing processes in neighboring countries as Ecuador, Colombia and Bolivia, countries facing similar challenges and with similar opportunities relating to the access systems to genetic resources and protection of traditional knowledge. At national level, GEF project will contribute to the de-centralization process in matters of ABS which, in a way, is considered as part of national Government policies.
175. The outcomes of the project will be made available for replication through the systematization and dissemination of project results, lessons learned and experiences in the implementation of ABS activities in Peru. Successful examples of processes employed in the development of ABS agreements such as MAT and PIC inclusive of the participation of ILCs will be extremely useful for countries and regions around the world that are in the process of or are yet to develop their ABS implementation systems. This will be achieved by making project information available through the project's website, the websites of the project's Focal Point Ministries, regional CHMs and Informative Media Programs for researchers and scientists, through participation in international which will be identified during project implementation and with cooperation of the expert's task force group. Geographically, the project's best practices and lessons learned can be easily extrapolated to the wider Andean region, and the wide LAC through alliances and partnerships with other key players active in ABS in the region, through bilateral agreements between individual governments, or through regional integration mechanisms such as the Andean Community (CAN). Moreover, because of the holistic approach of the project, where various issues related to policy and regulatory frameworks development, strategic planning and coordination, capacity building, amongst other; the project could serve as a model not only for future ABS intervention, but for other projects on different areas that may benefit from a similar approach. For instance, implementation of biosafety frameworks, creation of regional strategies, and compliance with other CBD elements.



### 3.9. Public awareness, communications and mainstreaming strategy

176. The project includes knowledge management initiatives through networking with similar projects in the region (e.g. Ecuador UNDP-GEF, Guatemala UNEP-GEF ABS, Regional Caribbean UNEP-GEF ABS) and also by sharing important lessons generated by the project itself with the participating institutions and associated projects. In this sense, UNEP as implementing agency will play a key role by promoting interaction between the project and similar initiatives in the region. Likewise, as mentioned in the project design, interaction with countries members of the *Comunidad Andina de Naciones* (CAN) will occur at various levels and because there is a common regional regimen of ABS (Decision 391); the project will share important lessons with the CAN community.
177. The training and awareness activities of Component 2, for example, are envisioned as a 2 tier approach to communication/awareness: (1) direct capacity building of target sectors and then (2) the participants take material and knowledge back to their communities/colleagues, thereby ensuring a second round of awareness. A communication strategy for ABS will be developed during Year 1 to establish the base from which the project will launch all of its awareness and mainstreaming efforts. In particular, the awareness raising activities associated with this strategy will use existing informative materials, and new ones when needed, on the Nagoya Protocol, directed towards government officials, academics, researchers, civil society, communicators and the general public. Some of the materials that will be developed for this purpose are: banners, brochures, posters, info graphics, video, and radio spots in Spanish and native languages (Quechua, Ashaninka, Aymara and Awajun). The project's communication and awareness strategy includes open-festive events for the general public, such as the national day on ABS. In addition, tailor-made materials for target audiences will be produced with the intention to sensitize various ABS actors and create capacity. Key partners in the communication and awareness campaign will be local universities and the Ministry of Culture.

### 3.10. Environmental and social safeguards

178. This project is expected to achieve positive environmental and social impacts by effectively integrating ABS implementation mechanisms within government policies and plans, and no unintended negative impacts to people and the environment are foreseen from the implementation of proposed project activities. Increased ABS capacity building of key staff in relevant institutions and local communities will ensure that best practices which reflect the fundamental principles of the NP are adhered to in all approaches addressing the use of biological resources in Peru. The participation of local communities in the PIC processes and in the negotiation of ABS agreements will ensure fair and equitable sharing of benefits deriving from the use of genetic resources and traditional knowledge, and thus the accrual of economic and social benefits at the local level. Biodiversity conservation will benefit from a new and enhanced understanding of environmental goods and services as expressed through the ABS pilots which will serve as an example of how ABS arrangements could be done, and which will bring benefits to the country and local communities. There will be a much stronger argument in favor of biodiversity conservation and a new level of understanding to support ABS policy formulation and the creation of evolving mechanisms for ABS implementation in the region.
179. The monitoring and evaluation of project impacts will enable the Project Management Team to reassess project intervention strategies and make revisions as needed to strengthen environmental and social outcomes.

## SECTION 4: INSTITUTIONAL FRAMEWORK AND IMPLEMENTATION ARRANGEMENTS

180. Institutional framework: Project internal and external structure diagrams are presented in detail in Appendix 9. The overall project supervision will be responsibility of UNEP; and project execution at a national level will be responsibility of MINAM as the project's EA. Along the same lines, UNEP's TM

will provide support and work closely with EA's personnel, who will carry out all project management related issues.

181. The Task Manager for this project is stationed in Panama and will remain in constant communication with the PM and the project team during its execution period. Moreover the UNEP TM will also be in contact with other project partners through steering committee meetings. The project management unit will be based in MINAM's office, in Lima, where local personnel possess great experience in ABS interventions, which is an asset for proper project implementation and backstopping.
182. Implementation arrangement: Project internal and external structure diagrams are presented in Appendix 9. Project Headquarters (PH) will be located in Lima. Staff working from that office includes the National Project Coordinator (NPC), project assistant (PA), and MINAM's local ABS team, who will provide technical support and backstopping to the project staff. Local and international consultants will be hired to support project execution.
183. The Steering Committee (SC): In practical terms the SC is responsible for ensuring that the project meets goals announced in the Project Result Framework by helping to balance conflicting priorities and resources. Conclusions and recommendations produced by the SC will be taken into consideration by UNEP and the PM to improve implementation strategies, annual work plans and resources allocation budget and, when necessary, to adjust the project's Result Framework. This committee will meet every six months, either physically or virtually.
184. In addition, the conformation of an expert task force has been considered for this project. This group will be expected to provide technical support on particular topics and to facilitate project interaction with other ABS initiatives that could be taking place in the region or at a national level. The expert task force will provide technical advice to the project team when needed. This group will meet once a year and if possible this meeting will be coordinated back to back with one of the annual SC meetings. The conformation of the group will be defined during the project inception workshop; however it's been envisage that UNEP's personnel from the regional office for Latin America and the Caribbean (ROLAC) could be invited, as well as other Task managers of similar ABS projects in the region. Likewise, local experts in the area of ABS and coordinators of similar projects are expected to be part of this group.
185. A decision-making flowchart and organizational scheme is presented in Appendix 9.

#### **SECTION 5: STAKEHOLDER PARTICIPATION**

186. Stakeholders participated in the identification of project priorities and in the definition of planned outputs and outcomes during interviews, consultations and meetings. Local authorities had the opportunity to review and comment on proposed project activities and to provide specific inputs to the project formulation process.
187. The seven indigenous organizations that represent the indigenous population in the project's implementation form, together with two representatives of the Ministry of Culture, the Technical Group of Indigenous Peoples (GTPI), which was formally created as a working group of permanent nature in November 2014 by Ministerial Resolution No. 403-2014-MC. The inclusion of these indigenous organizations was a result of the agreement reached by the indigenous peoples themselves. The seven indigenous organizations have national representation, grouping various indigenous ethnic groups that settle in coastal, Andean and Amazonian areas of the country, several of them have an important historical trajectory and two of them specifically representing indigenous women. The GTPI meets the objective of allowing dialogue between indigenous peoples and the Executive Branch; indigenous peoples can propose and monitor public policies that involve and require an intercultural approach.
188. In this context, during the PPG, the Ministry of Culture specialists who work closely with members of the GTPI provided valuable comments and recommendations to the project. The PPG team actively sought to integrate the intercultural vision that indigenous peoples have on the topics covered; the

document was presented to members of the GTPI so they could provide their comments and suggestions directly.

189. During the presentation of the project, members of the GTPI were informed that while the work of some activities would be developed with specific communities and indigenous peoples (per the cases of Component 3), the activities of Component 2 will be directed to indigenous peoples in general. While there is a vast number of villages, the selection of the places where they carry out the activities of Component 2 will be conducted in coordination with the GTPI.
190. Therefore, during the design phase, the project worked with the GTPI in guidance and validation of an intercultural project approach, seeking to meet the main needs of indigenous peoples in accordance with the guidelines of the project. It is expected that once the project starts, the GTPI will serve as an intermediary between public institutions and indigenous peoples so as to facilitate access to villages that require visits, facilitate dialogue and the introduction of training courses, among others.
191. As a result of the abovementioned consultations, the project is characterized with a consolidated intercultural orientation.
192. During project implementation, stakeholder participation will include the provision of co-financing, participation of technical staff in workshops, training, and tools development, the facilitation of project events and processes, the provision of project oversight through participation on the SC, as data sources and technical expertise relevant for bioprospecting and broader ABS policy formulation, in institutionalization of project results and lessons learned to allow for upscaling, replication and sustainability.
193. Local communities have been identified as major stakeholders, due to their knowledge about the use of local genetic resources and their potential. In this sense, the project has envisaged consultative meetings where these communities or groups will be invited. Their participation will be in particular important for the development of the pilots.
194. The following groups or communities have been identified as key stakeholders for this project:

<b>Institution</b>	<b>Sector/ actor</b>	<b>Role or Function in Project</b>
Ministry of Environment, General Directorate of Biological Diversity (MINAM-GDBD)	Public sector. Governing institution on access to genetic resources policy.	Focal point for the CBD and ABS. General coordinating office for the project (through the GDBD) and responsible for the project implementation. Leads and participates actively in all activities. (*will also act as the project Executing Agency)
National Forestry and Wildlife Service (SERFOR)	Public sector. National administrative and managing authority for genetic resources of wild continental species.	SERFOR will participate in the interinstitutional coordination activities; it will also participate in the institutional capacity building process and development of the national ABS monitoring. SERFOR will also be involved in the Academic Committee responsible for developing the capacity building program on ABS. SERFOR will be part of the “testing” of the ABS system through the pilot cases identified (in the case of molle).
National Institute of Agriculture Innovation (INIA)	Public sector. National administrative and managing authority on genetic resources of domesticated continental species.	INIA will participate in the interinstitutional coordination activities; also will participate in the institutional capacity building process and development of the national ABS monitoring. INIA will

		be part of the “testing” of the ABS system through the pilot cases identified (in the cases of cacao and quina).
Vice Ministry of Fishing from the Ministry of Production (VMP-PRODUCE)	Public sector. National administrative and managing authority on genetic resources of hydrobiological species	PRODUCE will participate in the interinstitutional coordination activities; also will participate in the institutional capacity building process and development of the national ABS monitoring. PRODUCE will be part of the “testing” of the ABS system through the pilot cases identified (in the cases of doncella fish).
National Service for Natural State Protected Areas (SERNANP)	Public sector. Specialized public institution with competence in case the genetic resources are found within natural protected areas (ANP).	SERNANP will participate in the institutional capacity building process, specifically in regards to ABS activities undertaken in national protected areas.
National Institute for the Defense of Competence and Protection of Intellectual Property (INDECOPI) – Directorate of Innovation and New Technologies (INDECOPI-DIN).	Public sector. Competent institution on protection of collective knowledge of indigenous people associated with biological resources.	INDECOPI will participate in capacity building activities related to traditional knowledge and “biopiracy” in particular. INDECOPI is a check point within the national ABS and will have an active role in supporting activities to streamline procedures and facilitate granting of intellectual property rights.
National Commission against Biopiracy, adjunct to Council of Ministers (PCM) and presided by INDECOPI.	Public sector. Inter institution platform for the protection of genetic resources and associated traditional knowledge as they relate to biopiracy.	The Commission will participate in institutional capacity building regarding biopiracy. The Commission will also identify, report and assess cases of illegal access to genetic resources and associated traditional knowledge.
Directorate of Indigenous Policies of the Vice Ministry of Interculturality of the Ministry of Culture (VM Interculturalidad – MINCU)	Public sector. Competent authority on issues relating to indigenous people and the Fund for Development of Indigenous People.	The Directorate is the intermediary between the project and the technical Working Group of Indigenous Peoples and will participate in training and capacity building activities, particularly in the realm of traditional knowledge and indigenous peoples.
National Center for Intercultural Health from Institute of Public Health of the Ministry of Health (CENSI-INS, MINSA).	Public sector. Technical and Legal body proposing policies and regulations on intercultural health and promoting integration of traditional medicine in the medical treatment of rural communities.	CENSI is one of the chosen partners for the pilot cases. CENSI will develop its internal ABS procedures and guidelines according to the technical and legal advice provided by the project. CENSI will adjust its actions to the current ABS and TK related frameworks and ensure it complies with their principles and provisions, including, PIC and benefit sharing.
Research Institute of the Peruvian Amazon (IIAP)	Public Sector. Academic and scientific institution in charge of researching the sustainable use of biodiversity in the amazon region.	IIAP will be one of the institutions which will participate with a pilot case in regards to research in genetic resources in the “doncella” fish species in the Amazon. The project will assist IIAP in complying and fulfilling its ABS obligations in the

		national ABS regime.
Institute of the Peruvian Sea (IMARPE)	Public Sector. Academic and scientific institution in charge of researching the sustainable use of hydrobiological diversity.	IMARPE will participate as plan "B" with a pilot case in regards to research in genetic resources in the "anchoveta" fish found in the Peruvian Sea. The project will assist IMARPE in complying and fulfilling its ABS obligations in the national ABS regime.
Cooperativa NORANDINO	Private sector. Institution that groups stakeholders from several local communities that trade with biological resources, containing genetic resources.	NORANDINO will be provided with technical assistance to celebrate an "accessory contract" with Cosmo to ensure its products are covered and under the scope of national ABS regulations and the Nagoya Protocol provisions (regarding derivatives).
Cosmo Ingredients	Private sector. Enterprise dedicated to research and development to innovate and commercialize in the perfumery and cosmetics industries	Cosmo Ingredients is a key participant in the project. It will receive technical and legal guidance from the project to ensure that its ABS activities in cosmetics and perfumery comply with national procedures and principles. It will also offer the possibility of testing the national monitoring system, through a specific project it has in regards to bioprospecting in perfumery and cosmetics. Cosmo will provide real case information and situations under which genetic resources are used and flow along different value chains. The project's Communication Strategy will specifically include activities to document and present the Cosmo experience through workshops and short briefs. These will be presented and disseminated among, in particular, private sector associations such as the Peruvian Natural Products Institute and the National Confederation of Private Business Institutions (CONFIEP).
National Council of Science, Technology and Technological Innovation (CONCYTEC)	Public Sector. CONCYTEC is the head of ("institución rectora") the National Science and Technology and Technological Innovation (SINACYT), composed of state's Academy Research Institutes, business organizations, communities and civil society. Aims to regulate, direct, guide, promote, coordinate, monitor and evaluate the State's actions in the field of Science, Technology and Technological Innovation and promote and support its development through concerted action and complementarity between the programs and projects	The CONCYTEC will be provided with guidance as to how to fulfill its role as a check point within the ABS regime and Nagoya Protocol obligations. CONCYTEC will also be provided with capacity building to ensure the programs it funds comply with and meet national ABS standards and provisions.

	public institutions, academic, business and social organizations members of SINACYT.	
Natural History Museum (MHN) - Universidad Nacional Mayor de San Marcos	Public Sector. Academic institution with taxonomy programs; one of the most important research centers; gathers many well - known researchers and top scientists.	The MHN will participate in different activities as users, providers and INA, especially those regarding the training and capacity building activities, including those related to traditional knowledge and indigenous peoples.
Scientific University of the South (UNIVERSIDAD CIENTIFICA DEL SUR)	Private sector. Academic institution with environmental sciences and biology programs.	The Universidad Científica del Sur will provide with the institutional support for the capacity building program. It will provide with infrastructure, methodologies, official recognition of courses and other support to both the ABS program and the TK program.
Technical Group of Indigenous Peoples (GTPI) of the Ministry of Culture	Public sector. Represents the seven most important indigenous representative organizations in the country.	The Group will possibly be a part of the Academic Committee to support the development of the TK related capacity building program and responsible for articulating activities and selecting participants to courses and workshops.
Promotion Fund of Protected Natural Areas of Peru (PROFONANPE)	Public sector. In charge of managing resources that contribute to the funding of biodiversity conservation in consensus to the economic and social development of Peru.	PROFONANPE will be the institution in charge of managing the funds provided for this project.
United Nations Environment Program (UNEP)	International private sector. Promotes the application of the sustainable use and development within the system frame of the United Nations.	UNEP will act as the project Implementing Agency, providing technical and administrative support for the appropriate completion of the project.
Peruvian Society of Environmental Law (SPDA)	Private sector. Legal organization on proposing policies and regulations on environmental issues.	SPDA will provide with technical and legal assistance to the different actors and coordinating institution of the project (the GDBD of MINAM).
United Nations Conference on Trade and Development (UNCTAD)	International private sector. Supports developing countries to access the benefits of a globalized economy more fairly and effectively.	UNCTAD will probably provide important information about the activities concern under the BioTrade program. This information might be useful for the purposes of the project.

195. Furthermore, gender considerations have been taken into account when developing the project proposal and are planned for its implementation. In small communities, the roles of men and women are differentiated and complementary; both engage in activities related to harvesting, knowledge and application of medicinal plants, sowing techniques, management of the agricultural plot and genetic resources, among others. In the Andes, for instance, men dedicate themselves to cultivation and preparing the land; men and women decide on what seeds to use for future cultivation and which to consume directly; women on the other hand are responsible for selecting the best seeds for commercialization. In the case of the Amazon, men are more inclined to hunting, gathering, fishing and

building, whilst women take care of food preparation and nurturing small home gardens. Men also tend to act as “shamans” or healers when it comes to identifying and using medicinal plants. Women are more inclined to using and applying plants for other uses such as facial creams or for taking care of family food needs. As such, the role of women in the conservation and sustainable use of genetic resources and the associated traditional knowledge is acknowledged and will be identified and considered for the development of the ABS system in order to ensure the fair and equitable sharing of benefits for this group.

196. Women play a critical role in the conservation of biodiversity and genetic resources, especially in small farming communities in the Peruvian Amazon and Andes. For example, with regards to the pilot case for cacao, the NORANDINO association is made up of 7,000 farming families working in 6 different provinces; approximately 1000 families are settled in Piura and work with Cacao, of which 50% of its members are women. In working with communities in the upper highlands of Piura (as part of the NORANDINO association), the project will document the specific role women play in supporting the cacao cultivation and processing chain, to identify where capacities should be strengthened and enhanced. In regards to activities with CENSI in the communities in Cajamarca, the plan is to work with at least two districts from San Ignacio province (with approximately 600 families) and two districts from Jaen province (with approximately 500 families); altogether, around 60% of the members of these families are women. In these areas, women members of the communities are holders of specific knowledge regarding certain uses and applications of the *quina* plant (*Cinchona officinalis*). The project will serve to document these roles and assess how women can participate in decision making processes regarding, for example, the negotiation of the accessory contracts as Providers of genetic resources and/or associated traditional knowledge for R&D by CENSI. The project will also work with CENSI to develop or include in its institutional guidelines for collection and access to biological materials, specific guidelines concerning female community members’ participation and involvement in benefit sharing, in particular.
197. Among the activities designed for the project, one has been elaborated to ensure a direct impact on the integration of gender issues; this activity has been assigned USD \$57,440. Furthermore, the activities of Output 2.a.3 are envisioned to have a positive impact on gender equality and participation through the development and inclusion of specific criteria in the capacity building modules and pilot cases (e.g. ensure consideration and participation in the negotiation of PIC and MAT). These activities are assigned a total of USD \$186,440.

#### **SECTION 6: MONITORING AND EVALUATION PLAN**

198. The project will follow UNEP standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarized in Appendix 8. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by the executing agency and UNEP.
199. The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Appendix 4 includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Appendix 6 will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Appendix 6. Other M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget.
200. The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the

responsibility of the Project Coordinator to inform UNEP of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

201. The project Steering Committee will receive periodic reports on progress and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility to the Task Manager in UNEP-GEF. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.
202. Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits will be assessed with the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.
203. A mid-term management review or evaluation will take place in the first quarter of Year 3 of the project as indicated in the project milestones. The review will include all parameters recommended by the GEF Evaluation Office for terminal evaluations and will verify information gathered through the GEF tracking tools, as relevant. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. Such parties were identified during the stakeholder analysis (see section 5 of the project document). The project Steering Committee will participate in the mid-term review and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented.
204. An independent terminal evaluation will take place at the end of project implementation. The Evaluation and Oversight Unit (EOU) of UNEP will manage the terminal evaluation process. A review of the quality of the evaluation report will be done by EOU and submitted along with the report to the GEF Evaluation Office not later than 6 months after the completion of the evaluation.
205. The GEF tracking tools are attached as Appendix 15. These will be updated at mid-term and at the end of the project and will be made available to the GEF Secretariat along with the project PIR report. As mentioned above the mid-term and terminal evaluation will verify the information of the tracking tool.

## **SECTION 7: PROJECT FINANCING AND BUDGET**

### **7.1. Overall project budget**

206. The overall project budget is presented in detail in Appendix 1 (budget by project components, by year and UNEP budget lines) and Appendix 2 (co-financing by source and UNEP budget lines).

Cost to the GEF Trust Fund	2,190,000	19.7%
Co-financing	8,928,772.23	80.3%
Total budget (USD):	11,118,772.23	100%

### **7.2. Project co-financing**



207. Co-financing by project budget lines is presented in Appendix 2.

### **7.3. Project cost-effectiveness**

208. The cost-effectiveness of this project is based on maximizing technical and financial complementarities and leverage in order to improve the impact of current investments while attending national priorities on ABS.

209. The project is expected to be cost-effective, in the first instance, as a result of its ability to bring together various partners from the environment, education, capacity building and national economic development sectors. These sectors bring their own unique perspectives, experiences and skills to the Project and their collaboration will ensure that the ABS agenda is addressed in ways that reflect the experience, interests and concerns of the widest possible range of stakeholders.

210. The promotion of the Prior Informed Consent (PIC) approach and participatory methods (country and community based) will ensure that the outputs reflect the realities on the ground and are not simply a routine response to national policies and regulations. Likewise, the cost-effectiveness of the investment by the Project will be supported through the development of a set of proposed policies and regulations, which consider the perspectives of the different stakeholders involved in execution, and will be developed in a collaborative way with the support of the project personnel, the national consultants and MINAM.

211. The Project will learn from and incorporate methods and approaches developed in similar projects that have been executed in the Andean Community, Caribbean and elsewhere. This will reduce repetition of certain actions and will allow for the adjustment of relevant methods to local circumstances, thereby greatly adding to the cost-effectiveness of the Project.

212. Furthermore, the implementation of pilot cases throughout various outcomes, fosters a cost-effective manner to test and adjust different tools and elements of the updated National ABS System – small-scale initiatives offer large-scale returns and lessons for replication at the national scale. Furthermore, by generating social awareness in the indigenous/local communities and other stakeholders on the conservation and sustainable use of biodiversity, genetic resources and traditional knowledge associated with these, this project would help reduce the asymmetry between provider and user (social conditions) in the negotiation of mutually-agreed terms for the sharing of benefits derived from access and use of traditional knowledge associated with GR.

213. Finally, cost-effectiveness is ensured through a prescribed project management process that will seek the best-value-for-money. UNEP rules as well as MINAM rules employ a transparent process of bidding for goods and for services based on open and fair competition and selection of best value and best price alternatives.

**APPENDICES**

- Appendix 1: Budget by project components and UNEP budget lines** (separate file)
- Appendix 2: Co-financing by source and UNEP budget lines** (separate file)
- Appendix 3: Incremental cost analysis**
- Appendix 4: Results Framework**
- Appendix 5: Workplan and timetable**
- Appendix 6: Key deliverables and benchmarks**
- Appendix 7: Costed M&E plan**
- Appendix 8: Summary of reporting requirements and responsibilities**
- Appendix 9: Decision-making flowchart and organizational chart**
- Appendix 10: Terms of Reference**
- Appendix 11: Co-financing commitment letters from project partners** (separate file)
- Appendix 12: Endorsement letters of GEF National Focal Points** (same as PIF)
- Appendix 13: Draft procurement plan** (separate file)
- Appendix 14: Checklist for Environmental and Social issues**
- Appendix 15: Tracking Tools** (separate file)
- Appendix 16: Pilot Experiences as well as Alternative Pilots for Plan B**
- Appendix 17: Prioritized Genetic Resources of Peru**
- Appendix 18: Indigenous People action plan for the project**

**Appendix 1: Budget by project components and UNEP budget lines**

See separate excel file

**Appendix 2: Co-financing by source and UNEP budget lines**

See separate excel file

**Appendix 3: Incremental cost analysis**

BASELINE	ALTERNATIVE	INCREMENT
(B)	(A)	(B) – (A)
<b>COMPONENT 1: Efficient functioning of ABS system in accordance with the Nagoya Protocol</b>		
<p><u>Outcome 1.a:</u> Without the GEF intervention, the national ABS mechanism will continue to operate in a disjointed and inefficient manner.</p>	<p>An articulated and coordinated National ABS System will enable efficient implementation, including improved processing times for collection permits and access contracts, as well as adequate checkpoints.</p>	<p>Updated or new documentation and procedures established in accordance with the Nagoya Protocol (including PIC and MAT), including guides for users and providers; information Exchange through the national ABS information platform and the ABS-CHM; checkpoints established</p>
<p><u>Outcome 1.b:</u> The lack of reliable, timely and relevant information regarding genetic resources and associated traditional knowledge will continue to hinder benefit sharing negotiations</p>	<p>Availability of information on species (wild, cultivated and hydrobiological) containing genetic resources with potential for research and development activities and experiences in benefit-sharing from ongoing initiatives will set the basis for future negotiations.</p>	
<b>COMPONENT 2: Capacity building of relevant actors in relation to access to genetic resources and associated traditional knowledge</b>		
<p><u>Outcome 2.a:</u> Without the GEF intervention, relevant actors will not fully understand the critical legal, institutional and capacity development steps that must be fulfilled to ensure proper access to genetic resources, associated traditional knowledge, and benefit-sharing. Without key awareness raising and training interventions, staff of key institutions, researchers, scientists, and indigenous peoples will continue to lack the level of awareness/capacity required to facilitate their participation for successful ABS implementation.</p>	<p>Support to develop and implement a series of awareness raising interventions on the Nagoya Protocol will bridge the awareness and knowledge gap of stakeholders that are crucial to successful ABS implementation, including government officials, academics, researchers, civil society, communicators and general public. These interventions include media</p> <p>Capacity to manage and access genetic resources and associated traditional knowledge will be generated by interactive training modules designed for specific target groups.</p> <p>Assistance to 3 ongoing initiatives will provide hands-on experience to relevant institutional actors with regards to putting the ABS system into practice.</p>	<p>Knowledge gap of relevant stakeholders regarding the legal, institutional and capacity needs for effective implementation of the NP is addressed and ongoing initiatives under negotiation receive assistance.</p>

BASELINE	ALTERNATIVE	INCREMENT
(B)	(A)	(B) – (A)
<b>COMPONENT 3: Projects and initiatives on ABS, contributing to conservation and sustainable use of biological diversity</b>		
<p><u>Outcome 3.a:</u> Without GEF support, there is a substantial lack of support and monitoring of ongoing initiatives to ensure the effective application of ABS policy on the ground.</p>	<p>Conservation and sustainable use of local biodiversity is improved through interventions that will lead to a better and more efficient application of ABS measures in the country.</p>	<p>An enabling environment is created which will lead to the implementation of the basic provisions of the Nagoya Protocol and will place Peru on a solid path towards consolidating its National ABS System.</p>

#### Appendix 4: Results Framework

<b>Project objective: Strengthen national capacities for effective implementation of the access to genetic resources (ABS) and traditional knowledge (TK) regimes in accordance with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, contributing to the conservation of biodiversity and human wellbeing in the country.</b>						
<b>Project component 1: Efficient functioning of ABS system in accordance with the Nagoya Protocol</b>						
<b>Outcome</b>	<b>Indicators</b>	<b>Baseline conditions</b>	<b>Mid-term targets</b>	<b>End of Project targets</b>	<b>Means of verification</b>	<b>Assumptions</b>
1.a The ABS national mechanism operates in a coordinated manner, following unified criteria and taking into account monitoring and supervision	# of Technical ABS Interinstitutional Coordination Mechanism established by GoP to articulate and monitors ABS	0 mechanism	1 mechanism	1 mechanism	Acts/documents from coordination mechanism meetings with ABS authorities	All ABS competent authorities are willing to collaborate in an effort to streamline processes and monitor legal and illegal access.
	# of working days to process Collection Permits and Access Contracts	180-720 working days.	180 working days	60 working days for permit 60 working days for contract	Reports on illegal cases	Negotiations are plausible within the established timeframes
	% approved cases with International Compliance Certificate (ICC) notified in ABS-CHM	0% cases notified	100% approved cases notified	100% approved cases notified	Records on timing of processing new requests	Publishing Authority updates ABS-CHM
	# of check points established and registered in ABS-CHM	2 check points	3 check points	4 check points	National Registry in ABS-CHM	Institutions interested in serving as check point
1.b The national ABS system has reliable, timely and relevant information for benefit sharing negotiation strategies	# of strategic species that contain GR have systematized information regarding their potential for R&D	0	10 Preliminary analyses	10	Species reports included in GENES-PERU	Competent ABS Institutions agree on selected strategic species
	# of initiatives analyzed and evaluated regarding the impacts of the distribution of benefits	0 analysis	4 Draft analyses	4: Final analysis with lessons learned and recommendations	Report Field visits Interviews with relevant stakeholders	Stakeholders are willing to share information for analysis and possible publication.
<b>- Outputs for Component 1:</b>						
-1.a.1. Fully functional and coordinated ABS system using updated or new documentation and procedures adequate to the Nagoya Protocol (including PIC and MAT),						

<p>including guides for users and providers, and exchanging information through the national ABS information platform and the ABS-CHM</p> <p>- 1.a.2. Check points established along the different stages of the use of genetic resources and associated traditional knowledge, and corresponding Operation Manuals elaborated for these check points</p> <p>- 1.a.3. Cases of illegal access to wild, cultivated and hydrobiological genetic resources, including associated traditional knowledge, prioritized and registered by the National Commission against Biopiracy in a Database, as part of the measures of monitoring the utilization of genetic resources established by the Nagoya Protocol (Art. 17°).</p> <p>-1.b.1. Information on species (wild, cultivated and hydrobiological) containing genetic resources with potential for research and development activities is compiled and systematized in the GENES-Peru Platform, including distribution and conservation status.</p> <p>- 1.b.2. Benefits derived from use of genetic resources and associated TK in on-going research and development projects (4) are identified, classified and assessed, strengthening the expertise of national authorities in this respect, and setting the basis for future negotiations.</p>						
<b>Project component 2: Capacity building of relevant actors in relation to access to genetic resources and associated traditional knowledge</b>						
<b>Outcome</b>	<b>Indicators</b>	<b>Baseline conditions</b>	<b>Mid-term targets</b>	<b>End of Project targets</b>	<b>Means of verification</b>	<b>Assumptions</b>
2.a. Relevant actors from public, private, academic/scientific/technical, society, and indigenous people, aware and with training on access to genetic resources and benefit sharing	% of target groups <sup>9</sup> exposed to awareness program on ABS, differentiating gender and youth	TBD in Year 1	At least 50%	100% target groups (mentioned in outcome) informed of ABS	Survey/questionnaire at project start and end  Minutes/reports of events  Participants list disaggregated by gender and target group	Interest of the target groups identified.
	% of participants in online course and interactive modules disaggregated by gender achieving the minimum mark in the capacity survey	0	80% Course 1	80% Course 2	List of participants  Agendas from training events  Surveys of capacities	Interest and demand for training by stakeholders.  Stability of personnel to retain ABS capacity.
	# national indigenous organizations (as per Law 27811) contributing in ABS via intercultural training program, with emphasis on gender-based traditional	0	3	7	Minutes from events  List of participants disaggregated by gender	Interest and demand for training by stakeholders.  Equal gender distribution among target groups.

<sup>9</sup> Target groups represented by at least 3 institutions/organizations per type of target group per event.

	knowledge and application				Training material and modules	
	# of users and providers from ongoing initiatives scoring at least 2 TT Score Section 1 and Section 2	0	At least 3 initiatives have a draft MAT for ABS	At least 3 initiatives have a MAT negotiated for ABS	Draft agreement (MAT)  GEF Tracking tool at start and end of project	Interest and willingness of users and providers to negotiate.
		TT Scores Section1 Indicators <sup>10</sup> : 11: 1 12: 0 13: 0 and Section 2 Indicator 2: 0	TT Scores Section1 Indicators: 11: 2 12: 1 13: 1 and Section 2 Indicator 2: 1	TT Scores Section1 Indicators: 11: 3 12: 2 13: 2 and Section 2 Indicator 2: 2		

**- Outputs for component 2:**

- 2.a.1. Awareness raising activities (using existing informational materials, and new ones when needed) on the Nagoya Protocol directed towards government officials, academics, researchers, civil society, communicators and general public.
- 2.a.2. Interactive training modules on management of access to genetic resources and associated traditional knowledge, based on the national law and the Nagoya protocol, each one designed and directed towards a specific target group: government officials, academic researchers and entrepreneurs.
- 2.a.3. Intercultural training program oriented towards indigenous communities regarding ABS and TK, including gender equity criteria [(4) based on the national law (mainly, referred on sui generis protection regime of traditional knowledge) and the Nagoya Protocol].
- 2.a.4. Assistance for providers to promote and facilitate their negotiation capacity and for users to promote and achieve legal certainty in ABS contracts of 3 ongoing initiatives under negotiation (Cacao, Quina, Catfish-Doncella).

**Project component 3: Projects and initiatives on ABS, contributing to conservation and sustainable use of biological diversity**

Outcome	Indicators	Baseline conditions	Mid-term targets	End of Project targets	Means of verification	Assumptions
3.a. Conservation and sustainable use of local biodiversity is improved through	# of Access Contracts with International Compliance Certificate (ICC)	0	1 Draft ABS access contract	1 ABS Access contract with ICC in compliance with national ABS	ABS Access Contract  ICC	ABS authorities apply the standardized procedure for ABS

<sup>10</sup> GEF Tracking Tool Indicators:

Section1: 11) Are there clear procedures or model contractual clauses to obtain Prior Informed Consent (PIC) for the utilization of genetic resources and associated Traditional Knowledge (TK)?

12) Are there minimum requirements for Mutually Agreed Terms (MAT) to secure fair and equitable sharing of benefits arising from the utilization of TK associated with genetic resources?

13) Are there model contractual clauses for benefit-sharing arising from the utilization of TK associated with genetic resources?

Section 2: 2) Are there Mutually Agreed Terms (MAT) between users and providers of genetic resources?



interventions that will lead to a better and more efficient application of ABS measures in the country.				regime and NP	Registry in ABS-CHM	The company maintains interest in pursuing access contract.
	# of initiatives comply with the conditions stipulated in the contracts/ agreements in accordance with the National ABS Monitoring System	0	1	2	ABS monitoring system criteria Methodology	ABS authorities apply the ABS monitoring system There are on-going initiatives available for monitoring
<b>- Outputs for component 3:</b> 3.a.1. Ongoing research and innovation project (cosmetics and fragrance) based on native genetic resources and associated traditional knowledge, supported by the project to comply with ABS national legislation and Nagoya Protocol throughout the chain of research and development. 3.a.2. At least two on-going research projects (CosmoPeru-Molle fragrance and U of Copenhagen-Mauka) will be analyzed/monitored as a test for the national ABS monitoring system, serving as a learning experience for government officials.						

## Appendix 5: Workplan and Timetable:

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Outcome 1:</b> <b>Effective functioning of ABS system in accordance with the Nagoya Protocol</b>	Output 1.a.1. Fully functional and coordinated ABS system using updated or new documentation and procedures adequate to the Nagoya Protocol (including PIC and MAT), including guides for users and providers, and exchanging information through the national ABS information platform and the ABS-CHM.																
	Update guidelines and standard procedures for access management in accordance with national regulations and Nagoya Protocol		x	x													
														x	x		
		x	x											x	x		
	Adapt sectorial procedures to updated standard procedures.			x	x										x	x	
				x	x										x	x	
					x											x	
	Update, launch and improve national access platform (GENES-Peru), including a virtual pilot application of standard procedures for its validation.			x	x	x									x	x	
						x										x	
						x	x								x	x	
							x										x
	Develop guidelines for officials, users and suppliers, with emphasis on the PIC and MAT.			x	x												
					x												
					x												
	Design a methodology for the development of intercultural guides of access to traditional knowledge and benefit sharing	x	x														
				x													
	Develop intercultural guides of access to traditional knowledge, in native languages (Quechua, Aymara, Ashaninka and Awajún )			x	x												
				x													
				x													
Articulate interagency and community efforts to		x		x		x		x		x		x		x			

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	boost the recording of TK associated with genetic resources.		x		x		x		x		x		x		x		
	Conduct a legal - technical diagnosis for the regularization of cases of genetic resources and associated traditional knowledge use with access purposes, which do not have proper authorization.							x	x	x							
								x	x	x							
											x						
	Participate in national, regional (CAN) and international training to strengthen the functionality of the national ABS system			x				x				x				x	
				x				x				x				x	
				x				x				x				x	
				x				x				x				x	
	Translate officially regulations, general guidelines, and national guidelines for access into English and make them available in the CHM					x	x										
							x	x									
	Output 1.a.2 Checkpoints set up along the different stages of the use of GRs and associated TK , and corresponding manuals prepared for these points																
	Identify and analyze the functions and capabilities of institutions to become new checkpoints, along the value chain of the utilization of genetic resources and associated traditional knowledge			x	x												
							x										
					x												
	Adapt tools for collecting and reporting information relevant for the monitoring that corresponds to the checkpoints				x	x											
							x	x									
							x										
	Exchange and systematize experiences and good practices of the checkpoints, led by the governing body				x												
							x										
							x										

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
					x			x				x				x	
	Output 1.a.3 Cases of illegal access to wild, cultivated and hydrobiological genetic resources, including associated TK, prioritized and registered by the National Commission against Biopiracy, as part of the measures of monitoring the utilization of genetic resources established by the Nagoya Protocol (Art. 17°)																
	Develop a methodology and obtain software support for expanding the identification and assessment of illegal access cases to wild, cultivated and hydrobiological genetic resources, including associated traditional knowledge.	x				x				x				x			
				x			x				x				x		
	Document and report cases of identified and assessed illegal access to genetic resources and associated traditional knowledge		x	x	x	x			x	x	x	x	x	x	x	x	
					x				x				x			x	
					x				x				x			x	
	Design defense strategies against acts of identified and assessed illegal access to genetic resources and traditional knowledge, taking into account the particular characteristics of each case			x	x	x			x	x	x	x	x	x	x	x	
									x				x			x	
				x	x				x	x			x	x			x
	Systematize experiences and best practices about the identification of illegal access cases and the application of defense strategies on emblematic cases.					x											
									x								
						x											
							x										
					x	x											
	Output 1.b.1 Information on species (wild, cultivated and hydrobiological) containing genetic resources with potential for research and development activities, compiled and systematized in the platform GENES-Peru, including distribution and conservation status.																
	Establish a methodology for the systematization of information on the potential use in research and development of genetic resources of priority species and associated traditional knowledge			x	x												
					x	x											
					x									x			

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
				x	x													
				x														
					x			x										
								x										
								x	x									
									x									
								x	x	x								
										x								
								x	x	x								
										x								
						x		x										
								x										
								x	x									
									x									
		Compile, analyze and systematize information on the potential use of genetic resources and associated traditional knowledge, of prioritized species, in research and development activities.																
		Generate databases and incorporate the analysis results of the potential use for R & D of genetic resources and associated traditional knowledge of prioritized species in national information platform																
	Publish a document on the potential use of genetic resources and associated traditional knowledge about prioritized species for R & D activities. (2 documents)																	
	Output1.b.2. Benefits derived from use of genetic resources and associated TK in on-going research and development projects, identified, classified and assessed, strengthening the expertise of national authorities in this respect, and setting basis for future negotiations.																	
	Carry out a study on negotiation, fair and																	

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	equitable participation, besides the impact on the profits of ongoing R & D projects, based on interviews and surveys to researchers, companies and suppliers.								x								
										x							
	Identify and analyze 4 ongoing initiatives / projects / entrepreneurship related to access to GRs and their impacts on the area of benefits distribution		x	x													
				x													
	Identify and analyze the potential benefits to negotiate for the use of genetic resources and associated traditional knowledge of prioritized species on the basis of their potential use and value							x	x								
								x	x								
									x								
	Develop a document of negotiation and benefits sharing's good practices based on the studies conducted, which will serve as support to the establishment of the strategic framework for benefit negotiation.											x	x				
												x					
												x					
<b>Outcome 2:</b>  <b>Capacity building of relevant actors in relation to access to genetic resources and associated traditional knowledge</b>	Output 2.a.1. Awareness raising activities (using existing informative materials, and new ones when needed) on the Nagoya Protocol directed towards government officials, academics, researchers, civil society, communicators and general public.																
	Design communication strategy	x	x														
	Design corporate image of the project (logo, slogan, etc.)	x	x														
	Design ABS awareness campaign directed to the sectors identified in section 2.a.1 that includes tools to measure impacts ( surveys)		x	x					x				x				x
				x					x				x				x
	Develop materials for dissemination campaign (banners, brochures, posters, info graphics, video, radio spots) in Spanish and native		x			x				x				x			
			x			x				x				x			

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	languages (Quechua, Ashaninka, Aymara and Awajun)		x														
	Organize events to raise awareness of importance of GRs and ABS		x		x				x		x		x		x		x
				x				x				x				x	
	Design, launch and maintain a website for the project		x	x													
				x													
				x	x	x		x	x	x	x	x	x	x	x	x	x
					x				x				x				x
	Output 2.a.2. Interactive training modules on management of access to genetic resources and associated TK, based on the national law and the Nagoya protocol, each one designed and directed towards a specific target group: government officials, academic researchers and entrepreneurs.																
	Deepen the identification of officials, researchers and entrepreneurs' expectations and demands related to ABS		x	x													
				x													
			x	x													
	Conformation of the Academic Committee	x	x			x				x				x			
	Design a training program on ABS (syllabus, methodology, teaching materials and thematic modules)			x	x												
					x												
					x				x				x			x	
	Make alliances with selected academic institutions, one national and 3 regional, in order to provide the training program on ABS					x											
									x								
	Develop an interactive module on legal and procedural aspects of the ABS and an interactive module on fair and equitable benefits negotiation					x											
						x											
	Design the virtual platform for the training program in ABS					x											

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Launch the in-person / virtual training program (which includes interactive modules) in the national academic institution							x	x								
	Provide annually the training program in ABS, one at national level and 3 at macro-regional level											x	x			x	x
	Launch the online training program platform (which includes thematic modules )											x					x
	Output 2.a.3 Intercultural training program oriented towards indigenous communities regarding ABS and TK, including gender equity criteria.																
	Prepare a diagnosis of the expectations and demands of indigenous peoples and peasant communities regarding ABS of traditional knowledge		x	x													
	Conform intercultural training team			x	x												
	Design the training program in intercultural valuation of traditional knowledge associated to GRs (content, intercultural guidelines for dialogue and intercultural training module)			x	x												
	Conduct consultation workshops (2) for socialization and adjust the intercultural valuation training program.				x	x											
	Develop intercultural module for the training program on intercultural valuation of TK associated to genetic resources, integrating gender elements					x											
	Launch the training program in intercultural valuation of TK associated to GRs (including intercultural module basis) to national and							x	x								



Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
	community organizations of indigenous people.									x		x						
	Provide annually the training program in intercultural valuation of TK associated with genetic resources, one at national level and 3 at macro-regional level											x	x					
									x	x	x	x	x	x	x	x		
												x	x	x				
	Post intercultural training program and module on the online training program platform								x		x		x		x		x	
	Output 2.a.4 Assistance for providers to promote and facilitate their negotiation capacity and for users to promote and achieve legal certainty in ABS contracts, in 3 ongoing initiatives under negotiation (Cacao, Quina, Doncella)																	
	Conform technical support team for pilots		x	x														
	Guide users of each selected initiatives on the requirements and procedures to comply for completing the access authorization application.				x	x												
							x											
	Guide and accompany users and providers of each initiative in the process of obtaining PIC							x	x									
Guide providers in the valorization of genetic resources and / or traditional knowledge to be accessed and the potential benefits to negotiate under fair and equitable conditions.									x	x								
Guide in accessory contract negotiation to be subscribed between users and providers of each initiative, leaving open the possibility of incorporating additional benefits in the contracts during project implementation											x	x						
Systematize and publish experiences										x		x		x		x		
<b>Outcome 3: Projects and</b>	Output 3.a.1.Ongoing research and innovation project (fragrance and cosmetics) based on native genetic resources and associated traditional knowledge, supported by the project to comply with national ABS legislation and the Nagoya Protocol throughout the chain of research and development.																	
	Train users of the pilot project for updating their			x	x													

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year					
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
<b>initiatives on ABS, contributing to conservation and sustainable use of biological diversity</b>	knowledge of the ABS regulatory framework, procedures to be followed and documents to be submitted for requesting access authorization				x	x													
				x	x														
				x	x	x													
	Guide and accompany users in the compilation and submission of the documents required for the process of access authorization, including National Support Institutes.					x													
						x	x												
						x	x												
	Provide support to the staff in the evaluation of dossiers and field visits to the location where initiatives are located				x	x													
						x	x												
					x	x													
					x	x													
	Guide users of each pilot project on addressing observations made to the access request by the AAE, SERNANP and / or MINAM					x													
						x	x												
						x	x												
	Provide support to the competent authorities' officials in the valorization of genetic resources and / or traditional knowledge to be accessed and on the potential benefits to negotiate under fair and equitable conditions, according to the purposes of each pilot project.					x		x											
						x	x	x											
						x	x	x											
Facilitate the process of negotiating access agreements to be signed between each pilot users and officials from the AAE, leaving open the possibility of incorporating additional benefits during project implementation							x	x											
								x	x	x									
								x	x	x									
									x										
Monitor the subscription of the access contract and its addendums								x	x	x	x								
								x	x	x	x								
Evaluate the experience and lessons learned for													x	x	x				

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	the development of a guidance document with proposals for improving negotiation procedures and the benefits of future cases.													x			
														x			
	Output 3.a.2. At least two on-going research projects (CosmoPeru-Molle fragrance and U of Copenhagen-Mauka) will be analyzed/monitored as a test for the national ABS monitoring system, serving as a learning experience for government officials.																
	Develop and validate in a participatory manner a guide for supervision and monitoring (use traceability, impact on the conservation of genetic resources and / or TK, breach of contractual terms, etc.)			x	x												
					x												
	Apply supervision and monitoring guidance in on-going cases of Cosmo Peru and other cases, including field visits to project locations					x	x										
						x	x										
						x	x										
	Make necessary adjustments to the monitoring and tracking guidance and process (feedback) based on the experience of the cases.						x	x									
							x	x									
						x	x										
							x	x									
Publish the supervision and monitoring guidance and hold one (1) meeting for socializing the results with competent authorities and institutions linked to ABS to share experiences.								x									
								x									
								x									
COORDINATION, MONITORING Y EVALUATION	Hiring project team : Coordinator + technical assistant + administrative assistant	x	x														
	Initial workshop	x															

Outcome	Outputs and activities	Project Year				Project Year				Project Year				Project Year			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Management Committee	x				x				x				x			x
	Installation of the project unit (Enable offices, purchase equipment, etc.)	x	x														
	Coordination and monitoring	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Annual evaluation of each product accomplishment				x				x				x				x
	Midterm evaluation								x								
	Midterm meeting								x								
	Final evaluation															x	
	Final meeting															x	
	Closing event																x

## Appendix 6: Key deliverables and benchmarks

Component	Deliverables	Benchmarks
<b>Component 1. Efficient functioning of ABS system in accordance with the Nagoya Protocol</b>		
<b>Outcome 1.a</b> The ABS national mechanism operates in a coordinated manner, following unified criteria and taking into account monitoring and supervision	<ul style="list-style-type: none"> <li>A coordinated and integrated ABS national mechanism to be developed, taking into account monitoring and supervision</li> </ul>	<ul style="list-style-type: none"> <li>Unified guidelines and standard procedures for access management in accordance with national regulations and Nagoya Protocol</li> <li>The coordinated ABS national mechanism receives its first ABS applications which are processed in established time limits.</li> <li>A first monitoring and supervision intervention is undertaken by MINAM.</li> </ul>
<b>Output 1.a.1.</b> Fully functional and coordinated ABS system using updated or new documentation and procedures adequate to the Nagoya Protocol (including PIC and MAT), including guides for users and providers, and exchanging information through the national ABS information platform and the ABS-CHM	<ul style="list-style-type: none"> <li>A national ABS system which incorporates the national ABS information platform and ABS CHM to become operational.</li> </ul>	<ul style="list-style-type: none"> <li>The National Project Coordinator (NPC) is contracted and the project team established.</li> <li>Updated guidelines and standard procedures for access management in accordance with national regulations and Nagoya Protocol</li> <li>Guidelines for officials, users and suppliers, with emphasis on the PIC and MAT</li> <li>Guides for users and providers made available as part of the national coordinated ABS system.</li> <li>GENES-Peru information platform launched</li> <li>Virtual pilot application in GENES-Peru of standard ABS procedures.</li> <li>ABS information platform operates within GENES-Peru and provides relevant information to users and providers.</li> <li>Intercultural guides on access to traditional knowledge available in native languages (Quechua, Aymara, Ashaninka and Awajún )</li> <li>Regulations, general guidelines, and national guidelines for access available in English and in the ABS-CH</li> </ul>
<b>Output 1.a.2.</b> Check points established along the different stages of the use of genetic resources and associated traditional knowledge, and corresponding Operation Manuals elaborated for these check points	<ul style="list-style-type: none"> <li>Check points in selected organizations established to identify moments of use of genetic resources and TK.</li> <li>Guides and manuals to be developed for these checkpoints.</li> </ul>	<ul style="list-style-type: none"> <li>Organizations (e.g. SUNAD -customs- or SENASA -sanitary authorities- or CONCYTEC – research council) develop internal adjustments to act and operate as checkpoints.</li> <li>At least one set of guides and manuals available for selected organizations which will act as checkpoints.</li> </ul>
<b>Output 1.a.3.</b> Cases of illegal access to wild, cultivated and hydrobiological genetic	<ul style="list-style-type: none"> <li>New cases of illegal access access to wild, cultivated and hydrobiological genetic resources, including associated traditional knowledge, based on selected and</li> </ul>	<ul style="list-style-type: none"> <li>Software acquired and installed for expanding the identification and assessment of illegal access cases</li> <li>Defense strategies designed</li> </ul>

Component	Deliverables	Benchmarks
resources, including associated traditional knowledge, prioritized and registered by the National Commission against Biopiracy in a Database, as part of the measures of monitoring the utilization of genetic resources established by the Nagoya Protocol (Art. 17°).	prioritized species identified and plans for action developed for these cases.	<ul style="list-style-type: none"> <li>• At least 3 cases of illegal access addressed and confronted (acted upon) by the National Commission during year 2 of the project.</li> <li>• At least 3 additional cases confronted by the end of the project.</li> <li>• All cases documented and available in the Commissions database.</li> </ul>
<b>Outcome 1.b</b> The national ABS system has reliable, timely and relevant information for benefit sharing negotiation strategies	<ul style="list-style-type: none"> <li>• Useful, timely and reliable information is available to MINAM and national authorities to negotiate benefit sharing agreements.</li> </ul>	<ul style="list-style-type: none"> <li>• Relevant documents and materials to support benefit sharing negotiations identified and selected.</li> <li>• Key lessons distilled from relevant documents and materials to support and guide MINAM and national authorities in negotiation processes.</li> </ul>
<b>Output 1.b.1.</b> Information on species (wild, cultivated and hydrobiological) containing genetic resources with potential for research and development activities is compiled and systematized in the GENES-Peru Platform, including distribution and conservation status.	<ul style="list-style-type: none"> <li>• A systematized and organized data base with information on species (wild, cultivated and hydrobiological) containing genetic resources with potential for research and development activities is compiled developed through the GENES-Peru Platform.</li> <li>• Publication of document on potential use of GR and aTK of prioritized species for R&amp;D activities</li> </ul>	<ul style="list-style-type: none"> <li>• Methodology for systematization of information.</li> <li>• Initial list of 10 species consolidated and complemented with supplementary information and data.</li> <li>• List of 10 species and related information and data completed and incorporated into GENES-Peru.</li> </ul>
<b>Output 1.b.2.</b> Benefits derived from use of genetic resources and associated TK in on-going research and development projects (4) are identified, classified and assessed, strengthening the expertise of national authorities in this respect, and setting the basis for future negotiations	<ul style="list-style-type: none"> <li>• Benefit sharing mechanisms in 4 R&amp;D projects using genetic resources and related TK identified and evaluated, and lessons identified.</li> <li>• Document of negotiation and benefits sharing's good practices based on the studies conducted</li> </ul>	<ul style="list-style-type: none"> <li>• Results of study on negotiation, fair and equitable participation</li> <li>• A report of benefit sharing mechanisms in 2 R&amp;D projects using genetic resources and related TK elaborated and discussed among MINAM and national authorities during year 2 of the project.</li> <li>• A second report of benefit sharing mechanisms in remaining 2 R&amp;D projects using genetic resources and related TK elaborated and discussed among MINAM and national authorities during years 3 and 4 of the project.</li> </ul>
<b>Project component 2: Capacity building of relevant actors in relation to access to genetic resources and associated traditional knowledge</b>		
<b>Outcome 2</b> Relevant actors from public, private, academic/scientific/technical, society, and indigenous people,	<ul style="list-style-type: none"> <li>• ABS Communication Strategy</li> <li>• Key actors involved in ABS receive training in ABS and benefit sharing in particular.</li> </ul>	<ul style="list-style-type: none"> <li>• Training activities and materials developed and provided to a broad set of ABS actors including researchers, academics, and indigenous peoples.</li> </ul>

Component	Deliverables	Benchmarks
aware and with training on access to genetic resources and benefit sharing		
<u>Output 2.a.1</u> Awareness raising activities (using existing informational materials, and new ones when needed) on the Nagoya Protocol directed towards government officials, academics, researchers, civil society, communicators and general public	<ul style="list-style-type: none"> <li>• ABS Communication Strategy in Spanish and native languages</li> <li>• Workshops and other training methods implemented to strengthen the capacities and understanding of ABS by government officials, academics, researchers, civil society, communicators and general public</li> </ul>	<ul style="list-style-type: none"> <li>• Launch of ABS awareness campaign</li> <li>• ABS workshops and training activities held in key cities in Peru.</li> </ul>
<u>Output 2.a.2</u> Interactive training modules on management of access to genetic resources and associated traditional knowledge, based on the national law and the Nagoya protocol, each one designed and directed towards a specific target group: government officials, academic researchers and entrepreneurs.	<ul style="list-style-type: none"> <li>• Interactive training modules on management of access to genetic resources and associated traditional knowledge, based on the national law and the Nagoya protocol for government officials, academic researchers and entrepreneurs to be developed and implemented.</li> </ul>	<ul style="list-style-type: none"> <li>• Formal alliance with the Universidad Científica del Sur and other institutions established to design and scale up interactive training modules.</li> <li>• Training materials identified and selected by MINAM and partner academic institutions.</li> <li>• Virtual platform launched for the ABS training program</li> <li>• At least 2 modules for two key sectors implemented during years 2/3 of the project.</li> <li>• Remaining module implemented during year 4 of the project</li> </ul>
<u>Output 2.a.3</u> Intercultural training program oriented towards indigenous communities regarding ABS and TK, including gender equity criteria.	<ul style="list-style-type: none"> <li>• Intercultural training program oriented towards indigenous communities (in TK protection and the Nagoya Protocol) developed and implemented.</li> </ul>	<ul style="list-style-type: none"> <li>• MINAM and MINCU co-develop an intercultural training module on TK protection and the Nagoya protocol.</li> <li>• Members of at least 10 different indigenous peoples' groups participate in intercultural module training.</li> <li>• At least two sessions of the intercultural training module on TK protection and the Nagoya protocol implemented throughout the project.</li> </ul>
<u>Output 2.a.4</u> Assistance for providers to promote and facilitate their negotiation capacity and for users to promote and achieve legal certainty in ABS contracts of 3 ongoing initiatives under negotiation (Cacao, Quina, Catfish-Doncella).	<ul style="list-style-type: none"> <li>• Providers and users have tools and instruments available to ensure their negotiation interests in ABS agreements.</li> </ul>	<ul style="list-style-type: none"> <li>• Technical support team conformed for pilots</li> <li>• Reports of technical advice provided to providers of genetic resources and TK (in the case of cacao).</li> <li>• Reports of technical advice provided to users of genetic resources and TK (in the case of quina).</li> </ul>
<b>Project component 3: Projects and initiatives on ABS, contributing to conservation and sustainable use of biological diversity</b>		

Component	Deliverables	Benchmarks
<p><b>Outcome 3:</b> Conservation and sustainable use of local biodiversity is improved through interventions that will lead to a better and more efficient application of ABS measures in the country.</p>	<ul style="list-style-type: none"> <li>Local biodiversity and its components conserved and sustainably used as part of ABS R&amp;D value chains and R&amp;D processes.</li> </ul>	<ul style="list-style-type: none"> <li>Report on conservation status of molle and mauka developed and made public.</li> </ul>
<p><b>Output 3.1</b> Ongoing research and innovation project (cosmetics and fragrance) based on native genetic resources and associated traditional knowledge, supported by the project to comply with ABS national legislation and Nagoya Protocol throughout the chain of research and development.</p>	<ul style="list-style-type: none"> <li>ABS contracts signed between national authorities and users of genetic resources for the cosmetics and fragrances sectors.</li> </ul>	<ul style="list-style-type: none"> <li>Applications to appropriate ABS authorities submitted by users of genetic resources.</li> <li>ABS contracts loaded to the national ABS platform and international recognized certificate of compliance (IRCC) issued by MINAM.</li> </ul>
<p><b>Output 3.2</b> At least two on-going research projects (CosmoPeru-Molle fragrance and U of Copenhagen-Mauka) will be analyzed/monitored as a test for the national ABS monitoring system, serving as a learning experience for government officials.</p>	<ul style="list-style-type: none"> <li>Guide for supervision and monitoring (use traceability, impact on the conservation of genetic resources and / or TK, breach of contractual terms, etc.)</li> <li>Key usage points along the value chain for genetic resources of molle and mauka identified by MINAM and use conditions verified.</li> <li>1 meeting held for socializing the results with competent authorities and institutions linked to ABS to share experiences</li> </ul>	<ul style="list-style-type: none"> <li>Guide developed for supervision and monitoring (use traceability, impact on the conservation of genetic resources and / or TK, breach of contractual terms, etc.)</li> <li>Molle case assessed by MINAM and usage point identified by years 3 and 4 by the project.</li> <li>Mauka case assessed by MINAM and usage point identified by years 3 and 4 of the project.</li> </ul>



**Appendix 7: Costed M&E plan**

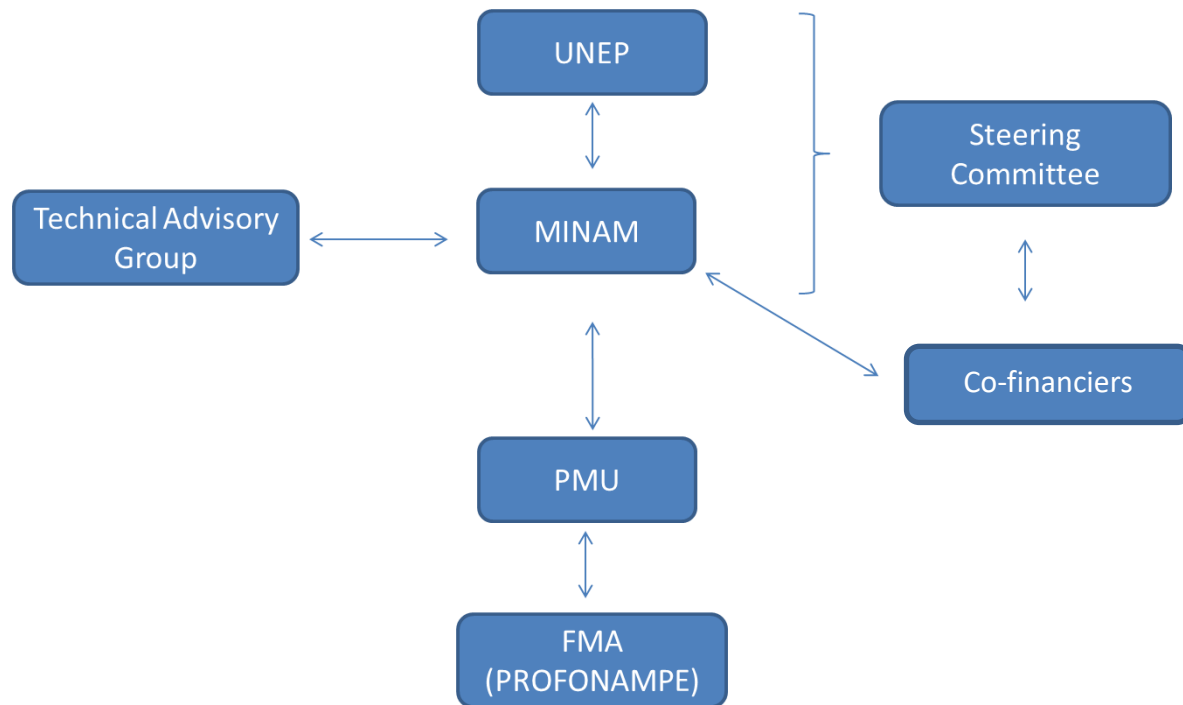
<b>M&amp;E activity</b>	<b>Responsible Parties</b>	<b>Approx. Budget from GEF (US\$)</b>	<b>Budget co-finance</b>	<b>Time Frame</b>
Inception Workshop	Project Management Unit (PMU) UNEP	10,000	8,000	Within 2 months of project start-up
Inception Report (translation cost)	PMU	1,000	500	1 month after project inception meeting
Measurement of project indicators (outcome, progress and performance indicators, GEF tracking tools) including baseline data collection	Project Coordinator PMU/ Project team Consultants	8,000	15,000	Outcome indicators: Start, mid and end of project Progress/performance indicators: Within 1 month of the end of reporting period i.e. on or before 31 January and 31 July (through progress reports) Baseline data collection: within the 1 <sup>st</sup> year
Project Steering Committee (SC) meetings	Project Coordinator PMU UNEP	24,000	3,000	Twice a year Minimum
Reports of SC meetings	Project Coordinator with inputs from partners	2,000	3,000	
PIR (translation cost)	Project Coordinator PMU UNEP	3,000	2,000	Annually
Monitoring visits to field sites and areas where project is active	Project Coordinator PMU UNEP	7,000	5,000	
Mid Term Review	UNEP TM/ UNEP Evaluation Office PMU	25,000	8,000	At mid-point of project
Terminal Evaluation	UNEP TM/ UNEP Evaluation Office PMU	35,000	10,000	At project end
Financial audits	CONAP/CATIE	10,000	2,000	Every year
<b>Total M&amp;E Plan Budget</b>		<b>125,000</b>	<b>54,500</b>	

**Appendix 8: Summary of reporting requirements and responsibilities**

<b>Reporting requirements</b>	<b>Due date</b>	<b>Format appended to legal instrument as</b>	<b>Responsibility of</b>
Procurement plan (goods and services)	2 weeks before project inception meeting	N/A	Project Coordinator
Inception Report	1 month after project inception meeting	N/A	Project Coordinator
Expenditure report accompanied by explanatory notes	Quarterly on or before 30 April, 31 July, 31 October, 31 January	<b>Annex 11</b>	Project Coordinator
Cash Advance request and details of anticipated disbursements	Quarterly or when required	<b>Annex 7B or in anubis</b>	Project Coordinator
Progress report	Half-yearly on or before 31 January	<b>Annex 8</b>	Project Coordinator
Audited report for expenditures for year ending 31 December	Yearly on or before 30 June	N/A	Executing partner to contract firm
Inventory of non-expendable equipment	Yearly on or before 31 January	<b>Annex 6 or in anubis</b>	Project Coordinator
Co-financing report	Yearly on or before 31 July	<b>Annex 12 or in anubis</b>	Project Coordinator
Project implementation review (PIR) report	Yearly on or before 31 August	<b>Annex 9</b>	Project Coordinator, TM, DGEF FMO
Minutes of steering committee meetings	Yearly (or as relevant)	N/A	Project Coordinator
Mission reports and “aide memoire” for executing agency	Within 2 weeks of return	N/A	TM, DGEF FMO
Final report	2 months from project completion date	<b>Annex 10</b>	Project Coordinator
Final inventory of non-expendable equipment		<b>Annex 9</b>	Project Coordinator
Equipment transfer letter		<b>Annex 10</b>	Project Coordinator
Final expenditure statement	3 months from project completion date	<b>Annex 11</b>	Project Coordinator
Mid-term review or Mid-term evaluation	Midway through project	N/A	TM or EOU (as relevant)
Final audited report for expenditures of project	6 months from project completion date	N/A	Executing partner to contract firm
Independent terminal evaluation report	6 months from project completion date	Appendix 9 to Annex 1	EOU

## Appendix 9: Decision-making flowchart and organizational chart

This project will be operated under the supervision of UNEP as Implementing Agency (IA), and MINAM as Executing Agency (EA) with guidance and inputs from the Project Steering Committee (PSC) and Technical Advisory Group, as depicted in the project's governance structure below.



*Fig. Project organization arrangements.*

### **Roles and responsibilities of each institution:**

#### **UNEP's Division of Environmental Policy Implementation (DEPI)**

- Provide consistent and regular Project oversight to ensure the achievement of Project objectives
- Liaise between the Project and the GEF Secretariat,
- Ensure that both GEF and UNEP policy requirements and standards are applied to and are met (reporting obligations, technical, fiduciary, M&E)
- Ensure timely disbursement/sub-allotment of funds to the Fund Management Agency (FMA) – PROFONANPE (EA), based on the agreed legal documents
- Approve budget revision, certify fund availability and transfer funds
- Organize mid- and end-term evaluations and audit

- Provide technical support and assessment of the execution of the Project
- Provide guidance if requested to main TORs/MOUs and subcontracts issued by the Project
- Follow-up with EA for progress, equipment, financial and audit reports
- Certify project operational completion
- Member of the Project Steering Committee (PSC)

**MINAM – Dirección General de Diversidad Biológica (GDBD):**

MINAM-GDBD will assign from its staff a National Project Director (DNP) to perform the following functions on its behalf:

- Oversee Project execution in accordance with the project results framework and budget, the agreed work plan and reporting tasks.
- Support the Project Management Unit (PMU) in coordinating project activities at national and local levels.
- Provide technical expertise through its personnel and networks.
- Ensure technical quality of products, outputs and deliverables, including reports to UNEP.
- Provide guidance and coordination to the PMU and Peruvian stakeholders.
- Facilitate access to sites and locations.
- Support logistical issues, e.g. through organization of meetings and provision of relevant facilities.
- Support the PMU in regular Project reporting, incl. progress, financial and audit reporting to IA.
- Chair the project steering committee.

**The Project Management Unit (PMU) will be located at MINAM** and will consist of:

- The National Project Coordinator (NPC)
- The Project Administrative Assistant (PAA)
- MINAM staff ABS-Team
- Representative from fund management agency (FMA) PROFONANPE (located at the FMA office)

PMU roles comprise:

- Ensure Project execution, including all technical aspects

- Ensure Project governance and oversight of the financial resources from the GEF investment in collaboration with the third party who will manage the project funds locally (PROFONANPE)
- Provide staff time and expertise in guiding and advancing the project. (at least one person half-time staff dedicated to the project and administrative support)
- Provide Project reporting according to the supervision plan in collaboration with the FMA
- Share all achievements and products of the project with all relevant stakeholders
- Ensure that consultants and project partner organizations deliver against their contracts and in time
- Organize the Steering Committee meetings and serve as its secretariat
- Overall management and implementation of the Project M&E framework to evaluate project performance
- Management of the flow of information from the field to the Project collaborators, and producing periodic monitoring reports

**Fund Management Agency – FMA (PROFONANPE):**

- Prepare and manage ToR, contracts and MoU with consultants and project partners using appropriate legal instruments. ToR and selection process will be done in consultation with the PMU (clearance), and according with the project’s work plan and budget. ToRs will be cleared by UNEP as well.
- Do all payments related to the project as per request and coordination with the EA and the project work plan and approved budget.
- Provide data for the project expenditure reports as per UNEP templates, and provide support to the project coordinator in the elaboration of periodic expenditure reports.
- Undertake procurement of goods and services for the project and keep an updated inventory as per UNEP templates
- Ensure that consultants and project partner organizations deliver against their contracts and in time (in collaboration with PMU)
- Provide support to the Project M&E activities.
- Participate in the PSC meetings

**Project Steering Committee (PSC)**

- Its mission is to assess compliance with the objectives and results of the project, orienting toward sustainability thereof.
- In practical terms the PSC is responsible for ensuring that the project meets goals announced in the Project Result Framework by helping to balance conflicting priorities and resources. Conclusions

and recommendations produced by the PSC will be taken into consideration by UNEP and the PM to improve implementation strategies, annual work plans and resources allocation budget and, when necessary, to adjust the project's Result Framework. This committee will meet every six months, either physically or virtually.

- Overall coordination of the PSC will be the responsibility of MINAM and will involve representatives of MINAGRI, PRODUCE, INDECOPI. There will also be a representative of users and a representative of local communities, to be convened by MINAM.
- The first meeting of the PSC will serve to define the specific details of the rules of procedure of the Committee.
- This will be reflected in a regulation or guideline that establishes criteria and procedures related to the internal functioning of the committee, including the definition of the rules under which group decision-making and actions to be carried out will be governed. This could include the following:
  - Formal designation of the main and alternate representatives of each Institution.
  - Approval of the functions and duties that the members of the Committee may have regarding the work to be done.
  - The number of sessions to be held per year, with MINAM as the responsible institution to take the lead in calling for and establishing the time/dates of such meetings.
  - Consider active any session which has the presence of half plus one of the members or alternates.
  - The decision will be made by voting. In case of a tie, the President will have the deciding vote.
- The detailed rules and procedures will be established in coordination with UNEP at project start.

#### **Technical Advisory Group**

- This group provides advice on request by MINAM-GDBD regarding important issues that are highly specialized.
- It is convened by the MINAM-GDBD with specialists from institutions, organizations or independent experts, foreign or national.

#### **Co-financing entities**

- Assist in the implementation of the project according to its thematic areas and products and activities identified in the PRODOC.

#### **Project Headquarters**

- The project headquarters will be located in the Ministry of Environment (MINAM) - General Directorate for Biodiversity (GDBD)

## Appendix 10: Terms of Reference

The following are indicative terms of reference for key project personnel and will be finalized at project inception:

### National Project Coordinator

This is a full time position. The NPC will be based at MINAM offices, under the supervision of MINAM.

#### Profile:

Person should have a degree in social or natural sciences; with proven advanced knowledge and experience on ABS and related issues, in the context of the CBD, Nagoya Protocol and national legislation. At least 5 years of technical experience in ABS and in project management is required. The responsibilities of the NPC will be of technical and administrative nature. The following table describes the main duties and the outputs expected.

Main Duty	Output	Timing
<b>Administrative duties (20 % of the time)</b>		
Prepare a specific work plan and time table that includes the methodology to achieve the expected results (outcomes) and products (outputs) of the current Project, under the supervision of MINAM. This work plan must be based on the project work plan and time table and will be revised annually. This work plan will indicate technical aspects to consider when undertaking the activities, selecting candidates for positions, amongst others.	Detailed work plan and time table	Activities will be realized during the 4 years of project management and in accordance with the provisions of the project work plan.
Maintain close communication and coordination directly with MNAM project coordination as well as all subcontracted consultants. Provide technical advice and supervision to consultants and project's activities.	Work plan executed according to timeframes and requested details	Idem
Establish, coordinate and maintain effective communication with different sectors, stakeholders and National Competent authorities (Governmental entities, non- governmental entities, academic sectors, private sector, and civil society and especially SERFOR, INIA, PRODUCE, INDECOPI and SERNANP) to facilitate the achievement of project objectives and outcomes and create synergy among sectors.	Work plan executed according to timeframes and requested details	Idem
Explore and promote synergies with other relevant existing ABS initiatives.	MoU's, Letters of Intent, Strategic Alliances / Partnerships, Informal Communications.	Idem
Draft TOR's and interview local /regional consultants according to the project procurement plan.	Consultancy contracts, services and acquisitions.	Idem
Coordinate for the execution of all work plan activities to ensure timely and smart implementation of the project components according to the project M&E.	Activities efficiently executed according to the project M&E plan	Idem

Main Duty	Output	Timing
Coordinate and lead high level meetings with politicians and decision-makers to seek their support to the project and to promote project outputs.	Meetings held and minutes developed.	Idem
Organize Steering Committee (SC) meetings and act as SC's secretary	SC's meetings, <i>aide-mémoire</i> .	Idem
Present technical and financial progress reports at different stages of the Project (according to UNEP and GEF formats), based on the products specified and on the expected dates. All reports are subject to revision and are not considered final until any comments and observations are incorporated and reports approved by MINAM. Reports include, but not are limited to these outputs. All financial and administrative processes, plans and reports must be coordinated with MINAM in line with the Project document and the respective agreements signed with UNEP.	Procurement plan; Inception Workshop Report; Quarterly expenditure report accompanied by explanatory notes; Quarterly cash advance request and details of anticipated disbursements; Half yearly progress report; Yearly audited report for expenditures; Yearly inventory of non- expendable equipment; Yearly co-financing report; Yearly project implementation review (PIR) report; Quarterly minutes of steering committee meetings; Final report; Final inventory of non- expendable equipment; Equipment transfer letters; Final expenditure statement; Mid-term review or Mid-term evaluation; Final audited report for expenditures of project; Independent terminal evaluation.	Idem
<b>Technical tasks (80 % of the time)</b>		
Provide technical advice and supervision to consultants and project's activities. The NPC will revise all technical products produced by consultants to ensure alignment with project objectives and quality standards.	Finalized and approved technical products	Idem
The NPC will be key as a technical facilitator of the process and to promote the acceptance of project technical outputs by NCAs and other partners.	Finalized and approved technical products	
Technical expertise of the NPC will be mandatory to promote synergies of this project with other initiatives as well as to successfully identify key information or materials that have been generated by other initiatives and that could be beneficial for this project.	MoUs, Letters of Intent, Strategic Alliances / Partnerships	Idem



<b>Main Duty</b>	<b>Output</b>	<b>Timing</b>
Technical leader facilitator of the project components. He/she will be in charge of specific technical products based in his/her professional experience.	Technical lead of project activities for all components; including guidance to finalized and approved Outputs under Components 1, 2 and 3 of the project – in coordination with consultants and other project participants.	Idem

### **National Project Assistant**

This is a full time position. The NPA will be based at MINAM offices, under the supervision of MINAM and the NPC.

#### **Profile:**

Person should have a degree in natural or social sciences; with knowledge of ABS and related issues, in the context of the CBD, Nagoya Protocol and national legislation. At least 2 years of experience in project management is required. The responsibilities of the assistant will mainly be administrative in nature. The following table describes the main duties and the outputs expected.

<b>Main Duty</b>	<b>Output</b>	<b>Timing</b>
<b>Administrative duties (50 % of the time)</b>		
Assist the NPC in preparing a specific work plan and time table that includes the methodology to achieve the expected results (outcomes) and products (outputs) of the current Project, under the supervision of MINAM. This work plan must be based on the project work plan and time table and will be revised annually.	Draft work plan and time table	Activities will be realized during the 4 years of project management and in accordance with the provisions of the project work plan.
Collaborate with the NPC in establishing, coordinating and maintaining effective communication with different sectors, stakeholders and National Competent authorities (Governmental entities, non- governmental entities, academic sectors, private sector, and civil society and especially SERFOR, INIA, PRODUCE, INDECOPI and SERNANP) to facilitate the achievement of project objectives and outcomes and create synergy among sectors.	Work plan executed according to timeframes and requested details	Idem
Prepare draft TOR's for consultants according to the project procurement plan.	Consultancy contracts, services and acquisitions.	Idem
Assist the NPC in coordinating for the execution of all work plan activities to ensure timely and smart implementation of the project components according to the project M&E.	Activities efficiently executed according to the project M&E plan	Idem

<b>Main Duty</b>	<b>Output</b>	<b>Timing</b>
Assist the NPC in coordinate and convening high level meetings with politicians and decision-makers to seek their support to the project and to promote project outputs.	Minutes of meetings.	Idem
Support the NPC in organizing Steering Committee (SC) meetings and prepare draft agendas and minutes.	SC's meetings, minutes.	Idem
Assist the NPC in the elaboration of different reports pertaining to the project.	This may include procurement plan; inception workshop report; quarterly expenditure report accompanied by explanatory notes; quarterly cash advance request and details of anticipated disbursements; among others.	Idem
<b>Technical duties (50%)</b>	<b>Output</b>	<b>Timing</b>
Support the NPC in providing technical advice and guidance to consultants and project's activities. The NPA will prepare drafts for the NPC and provide with an initial review of all technical products produced by consultants to ensure alignment with project objectives and quality standards.		Activities will be realized during the 4 years of project management and in accordance with the provisions of the project work plan.
Interact and coordinate with consultants and stakeholders in preparation of documents and materials destined to realizing the different Outputs of the project's work plan.		Idem.

### **Expert on Genetic Resources**

This is a part time position. The expert will be responsible for supporting activities in relation to the pilot studies under Output 2.a.4, 3.a.1 and 3.a.2. The expert on genetic resources will be based at MINAM offices. The selected expert should have a degree or advanced studies in genetics, molecular biology, biochemistry, pharmaceutical chemistry, or related areas; with proven knowledge and experience on R&D in genetic resources and derived products in relationship with ABS in the context of the CBD, Nagoya Protocol and national legislation. At least 7 years of experience is required.

The following table describes the main duties and the outputs expected.

<b>Main Duty</b>	<b>Related Output</b>	<b>Output</b>	<b>Timing</b>
Provide MINAM with specific advice regarding different aspects of R&D in genetic resources and derived products, according to specific requirements of MINAM and other actors involved in the project.	2.a.4	Technical reports.	Activities will be undertaken during the 4 years of the project in accordance with the provisions of the project work plan.

Develop calculations on the potential value of genetic resources, which may be used by Providers of genetic resources and TK in the negotiation of fair and equitable benefit sharing terms for each pilot project implemented	2.a.4 ; 3.a.1	Technical reports.	
Provide MINAM with in situ advice and guidance in regards to the specific features which genetic resources have and on how to incorporate these features in assessment and evaluation processes.	3.a.1	Technical reports, including reports of in situ visits to pilot projects.	
Support MINAM in identifying monitoring options for genetic resources and derived products along R&D value chains identified in pilot cases in the project.	3.a.2		
Identify how monitoring options for genetic resources can be scaled up and integrated into the national ABS system coordinated by MINAM.	3.a.2	Technical reports.	
Coordinate with the TK expert and legal advisor as to how best to translate technical aspects of genetic resources monitoring into appropriate and sound administrative and legal practices.	2.a.4 ; 3.a.1 and 3.a.2	Technical reports.	
Participate in capacity building and advisory activities with different stakeholders involved along value chains and interested in participating in ABS projects and businesses.	3.a.1	PPT presentations.	
Identify key materials and literature in genetic resources R&D which may help orient ongoing national policy, legal and administrative processes, particularly in the field of valuation and monitoring and tracking.	2.a.4 ; 3.a.1 and 3.a.2	List of materials.	

### **Expert on Traditional Knowledge related to ABS**

This is a part time position. The expert on genetic resources will be based at MINAM offices. Person should have a degree in social or natural sciences, with proven knowledge and experience about the relationship between indigenous people's TK and ABS in the context of the CBD, Nagoya Protocol and national legislation. Experience on intellectual property sui generis systems will be considered as preferable. At least 5 years of experience is required.

The following table describes the main duties and the outputs expected.

<b>Main Duty</b>	<b>Related Output</b>	<b>Output</b>	<b>Timing</b>
Provide MINAM with specific advice regarding different aspects of traditional knowledge (protection, promotion, valuation) in genetic resources and derived products, according to specific requirements of MINAM and other actors involved in the project.	2.a.4	Technical reports.	Activities will be undertaken during the 4 years of the project in accordance with the provisions of the project work plan.

Develop calculations on the potential value of traditional knowledge, which may be used by Providers of TK in the negotiation of fair and equitable benefit sharing terms for each pilot project implemented	2.a.4 ; 3.a.1	Technical reports.	
For the specific pilot cases and practical experiences, identify how and under what precise circumstances TK is being utilized along value chains and R&D processes	2.a.4	Technical reports.	
Provide CENSI and the Nor-Andino Cooperative with specific recommendations to revalue TK used as part of their R&D processes and maximize benefit sharing possibilities respectively.	2.a.4	Technical reports.	
Provide MINAM with in situ advice and guidance in regards to the specific features which TK may have and on how to incorporate these features in assessment and evaluation processes	3.a.1	Technical reports, including reports of in situ visits to pilot projects.	
Support MINAM in identifying monitoring options for traditional knowledge along R&D value chains identified in pilot cases in the project	3.a.2		
Identify how monitoring options for TK can be scaled up and integrated into the national ABS system coordinated by MINAM	3.a.2	Technical reports.	
Coordinate with the ABS expert and legal advisor as to how best to translate technical aspects of TK into appropriate and sound administrative and legal practices	2.a.4, 3.a.1 and 3.a.2	Technical reports.	
Participate in capacity building and advisory activities with different stakeholders involved along value chains and interested in participating in ABS projects and businesses.	3.a.1	PPT presentations.	
Identify key materials and literature in TK which may help orient ongoing national policy, legal and administrative processes, particularly in the field of valuation and monitoring and tracking.	2.a.4 ; 3.a.1 and 3.a.2	List of materials	
Participate in the development of the TK capacity building program of the project. Note: Though this is not specifically related to Outputs 2.4.a, 3.a.1 and 3.a.2, the experience gained by the TK expert could prove very important as an input to the capacity building program.		Report with a possible list of issues and themes to be addressed.	

**Appendix 11: Co-financing commitment letters from project partners**

(Provided in a separate pdf)

**Appendix 12: Endorsement letters of GEF National Focal Points**

(same as PIF)

**Appendix 13: Draft procurement plan**

(separate file)

## Appendix 14: Checklist for Environmental and Social issues

Please note that as part of the GEF's evolving Fiduciary Standards that Implementing Agencies have to meet there is the need to address 'Environmental and Social Safeguards'.

To address this requirement UNEP-GEF has developed this checklist with the following guidance:

1. Initially filled in during concept development to help guide in the identification of possible risks and activities that will need to be included in the project design.
2. A completed checklist should accompany the PIF
3. Check list reviewed during PPG phase and updated as required
4. Final check list submitted with Project Package clearly showing what activities are being undertaken to address issues identified

<b>Project Title:</b>	Effective Implementation of the Access and Benefit Sharing and Traditional Knowledge Regime in Peru in accordance with the Nagoya Protocol		
<b>GEF project ID and UNEP ID/IMIS Number</b>		<i>Version of checklist</i>	<i>CEO-endorsement</i>
<b>Project status (preparation, implementation, MTE/MTR, TE)</b>	<i>CEO-endorsement request</i>	<b>Date of this version:</b>	25-Aug-2016
<b>Checklist prepared by (Name, Title, and Institution)</b>	Marianela Araya, Task Manager UNEP BD Unit		

*In completing the checklist both short- and long-term impact shall be considered.*

### Section A: Project location

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	Comment/explanation
- Is the project area in or close to -		
- densely populated area	N/A	Project focuses on capacity building issues.
- cultural heritage site	N/A	
- protected area	N/A	
- wetland	N/A	
- mangrove	N/A	
- estuarine	N/A	
- buffer zone of protected area	N/A	
- special area for protection of biodiversity	N/A	
- Will project require temporary or permanent support facilities?	No	
<i>If the project is anticipated to impact any of the above areas an Environmental Survey will be needed to determine if the project is in conflict with the protection of the area or if it will cause significant disturbance to the area.</i>		

**Section B: Environmental impacts**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	Comment/explanation
- Are ecosystems related to project fragile or degraded?	N/A	Project activities are mainly capacity building
- Will project cause any loss of precious ecology, ecological, and economic functions due to construction of infrastructure?	N/A	
- Will project cause impairment of ecological opportunities?	N/A	
- Will project cause increase in peak and flood flows? (including from temporary or permanent waste waters)	N/A	
- Will project cause air, soil or water pollution?	N/A	
- Will project cause soil erosion and siltation?	N/A	
- Will project cause increased waste production?	N/A	
- Will project cause Hazardous Waste production?	N/A	
- Will project cause threat to local ecosystems due to invasive species?	N/A	To the contrary, the project will contribute to the preservation of native genetic resources and biodiversity through the efficient implementation of ABS mechanisms in accordance with the Nagoya Protocol.
- Will project cause Greenhouse Gas Emissions?	N/A	
- Other environmental issues, e.g. noise and traffic	N/A	
<i>Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.</i>		

**Section C: Social impacts**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	Comment/explanation
- Does the project respect internationally proclaimed human rights including dignity, cultural property and uniqueness and rights of indigenous people?	Yes	The project also focuses on providing tools to preserve traditional knowledge of indigenous people, and to enhance its adequate use.
- Are property rights on resources such as land tenure recognized by the existing laws in affected countries?	N/A	
- Will the project cause social problems and conflicts related to land tenure and access to resources?	N/A	To the contrary, the project safeguards indigenous peoples' rights over their genetic resources and associated traditional knowledge.
- Does the project incorporate measures to allow affected stakeholders' information and consultation?	Yes	The project has been developed in a participatory manner taking advantage of former consultation structures and groups that were created prior to and during the PPG (i.e. GTPI).
- Will the project affect the state of the targeted country's (-ies') institutional context?	Yes	The project will enhance and strengthen national institutional capacities.
- Will the project cause change to beneficial uses of land or resources? (incl. loss of downstream beneficial uses (water supply or fisheries)?	No	
- Will the project cause technology or land use modification that may change present social and	No	The project does not promote the use of any particular technology; it only creates regulatory

	Yes/No/N.A.	Comment/explanation
economic activities?		capacity for the country to make informed decisions.
- Will the project cause dislocation or involuntary resettlement of people?	N/A	
- Will the project cause uncontrolled in-migration (short- and long-term) with opening of roads to areas and possible overloading of social infrastructure?	N/A	
- Will the project cause increased local or regional unemployment?	No	
- Does the project include measures to avoid forced or child labour?	N/A	
- Does the project include measures to ensure a safe and healthy working environment for workers employed as part of the project?	N/A	
- Will the project cause impairment of recreational opportunities?	N/A	
- Will the project cause impairment of indigenous people's livelihoods or belief systems?	No	To the contrary, the project will reinforce the importance of preserving indigenous peoples' knowledge and their cultural heritage.
- Will the project cause disproportionate impact to women or other disadvantaged or vulnerable groups?	No	
- Will the project involve and or be complicit in the alteration, damage or removal of any critical cultural heritage?	No	To the contrary, the project will reinforce the importance of preserving indigenous peoples' knowledge and their cultural heritage.
- Does the project include measures to avoid corruption?	Yes	UNEP fiduciary standards will be followed as a requirement of UNEP as a GEF IA.
<i>Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.</i>		

### **Section D: Other considerations**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	Comment/explanation
- Does national regulation in affected country (-ies) require EIA and/or ESIA for this type of activity?	N/A	
- Is there national capacity to ensure a sound implementation of EIA and/or SIA requirements present in affected country (-ies)?	N/A	
- Is the project addressing issues, which are already addressed by other alternative approaches and projects?	No	The scope of the project is different from previous initiatives as it addresses systemic issues related to ABS in Peru at the national level, while also conducting pilot cases to provide local examples to test and try the adjusted/consolidated national ABS system. Given the relevant experiences generated by the GIZ-Proambiente initiative that is coming to a close, the project will coordinate with GIZ to ensure lessons learned are captured and applied where relevant to this GEF program.



**Appendix 15: Tracking Tools**

(separate excel file)

## Appendix 16: Pilot Experiences as well as Alternative Pilots for Plan B

These pilots are expected to increase the national capacities to address ABS related matters in alignment with the Nagoya protocol and/or National regulations.

### Description of the Selected Pilot Experiences:

#### **2.a.4 Assistance for three ongoing initiatives in negotiation of ABS for providers to increase their negotiation capacity and users to promote and facilitate legal certainty in contracts on ABS.**

Under this Output, the project seeks to work with three pilot initiatives which will contribute to improve the capacity of genetic resources and derivatives providers to follow the national ABS procedures and, especially, negotiate fair and equitable benefit sharing terms in access contracts and agreements.

#### **Initiative 1: Bioprospecting of cocoa oil for cosmetic purposes**

Cosmo International Ingredients is a French company, founded in 1981, dedicated to research and development in biodiversity for the production of cosmetics and fragrances. Cosmo produces personal care, home, fine and household fragrances.

The biodiversity is sourced and accessed mainly from Latin America, with local branches of the company in Peru and Colombia. Since 2011, Cosmo International Ingredients has been in partnership with the Cooperative Norandino – an association of small farmers in the Piura Region in Northern Peru- to obtain and process a special variety of cacao (White Cacao or Porcelain Cacao, *Theobroma cacao*), very rich in nutrients and particular to this specific area of Peru. The Cooperative is formed by 180 small farmers.

**Figure No. 1 White cacao from Piura**

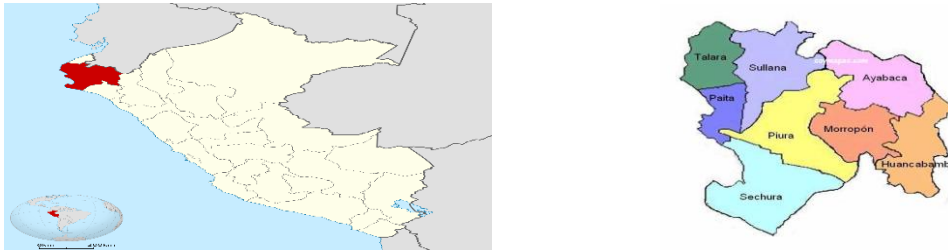


Cacao has become a prime and coveted crop, with multiple uses in the food (chocolate) and cosmetics and health industries. Cacao is grown in many regions in Peru (especially in the Piura, Tumbes, San Martín, Amazonas, Junín and Cusco Regions). Peru has become the world's second exporter of cacao and fine quality cacao. It is grown mainly by small and medium farmers in over 140,000 hectares across the country, and in 2015 over 45,000 tons were produced, primarily for the food/chocolate industry. In order of importance, the main production of cocoa products involve: 51% of cacao oils; 19% of cocoa flour; 12% chocolates and 15% cocoa grains/fruits.

The GEF ABS projects will assist farmers of the Campesino Community of César Vallejo (Chulucanas District) and the San Juan de Morote Campesino Community (Morropón Province), members of the Cooperative Norandino, to negotiate an Accessory Contract with Cosmo International, under Decision 391 and Supreme Decree 003-2009-MINAM, during the very first phase of a project under national ABS

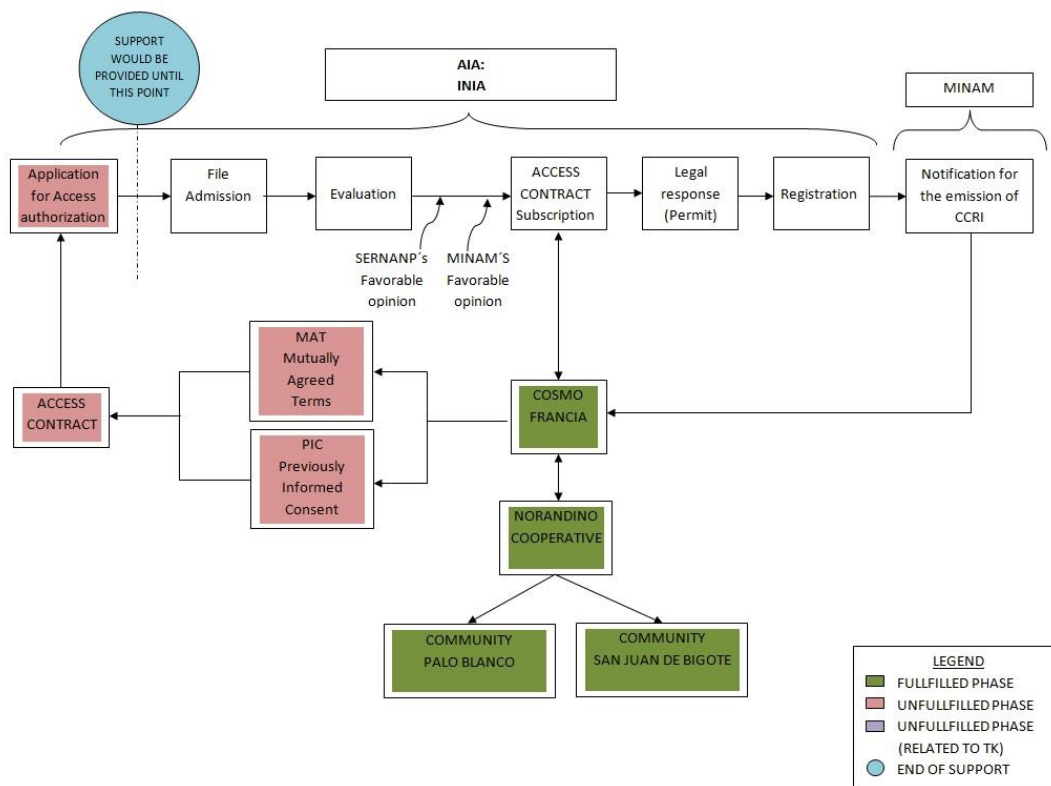
regime. It will also provide with technical and legal assistance to ensure that the appropriate permits are obtained from INIA, as the competent authority concerning cultivated genetic resources (cacao).

**Figure 2. Map: location of small farmers of the Norandino Cooperative**



In this particular case, the interest of Cosmo International is in identifying and obtaining active ingredients from the native “white” cacao grown by this Cooperative for commercial use in cosmetic products. This is in line with article 5 of the NP (Fair and Equitable Benefit-sharing), since the pilot seeks to support the process of negotiation for benefit sharing between the provider (Cooperative Norandino), and the user.

**Diagram No. 1 Support to phase 1: accessory contract**



## Initiative 2: Ethnobiological research of quinine for therapeutic use of malaria

The National Center for Intercultural Health (Centro Nacional de Salud Intercultural, CENSI) (<http://www.ins.gob.pe/portal/home-censi/>) is an institution which is part of the National Institute of Health of Peru, which is in turn part of the National Health System. Its main mission is to coordinate the develop public policies related to intercultural and complementary health strategies, and undertake specific research in medicinal plants and native biodiversity in the search of useful metabolites, compounds and molecules for health related uses. CENSI is responsible for producing many vaccines and reactive to tropical diseases as well as antidotes. Its facilities extend over 15 hectares in the Chorrillos District and include a series of research and development laboratories (including in biotechnology), a medicinal plant botanic garden and training and capacity building infrastructure.

Since its creation in 2008, CENSI has undertaken extensive research in the field of medicinal plants, historically used by indigenous peoples across Peru, both from the Andes and Amazon. CENSI has developed an extensive inventory of medical plants, and also has an herbarium and botanical garden which facilitates *ex situ* research. One of the specific areas of research interest of CENSI has been malaria and its treatment through the use of medicinal plants and associated traditional knowledge (TK) of indigenous peoples. Its main lines of research and production include vaccines, test kits, tropical diseases, antidotes, etc.

One of its current areas of focus in this field is the conservation and applications of quina (*Chinchona officinalis*) to malaria. Quina is a plant of which Peru is country of origin. Quina first became notorious in the 16<sup>th</sup> century when the Spaniards fell ill during their conquest missions to Peru and South America in general, and were treated with this medicinal plant by indigenous peoples. A Peruvian ruler, the Countess

of Chinchon (thereby “chinchona”), is recognized as the “discoverer” of quina and its properties in 1629. The quina tree is officially included in the Peruvian national flag emblem.

**Figure No. 3 The quina tree**

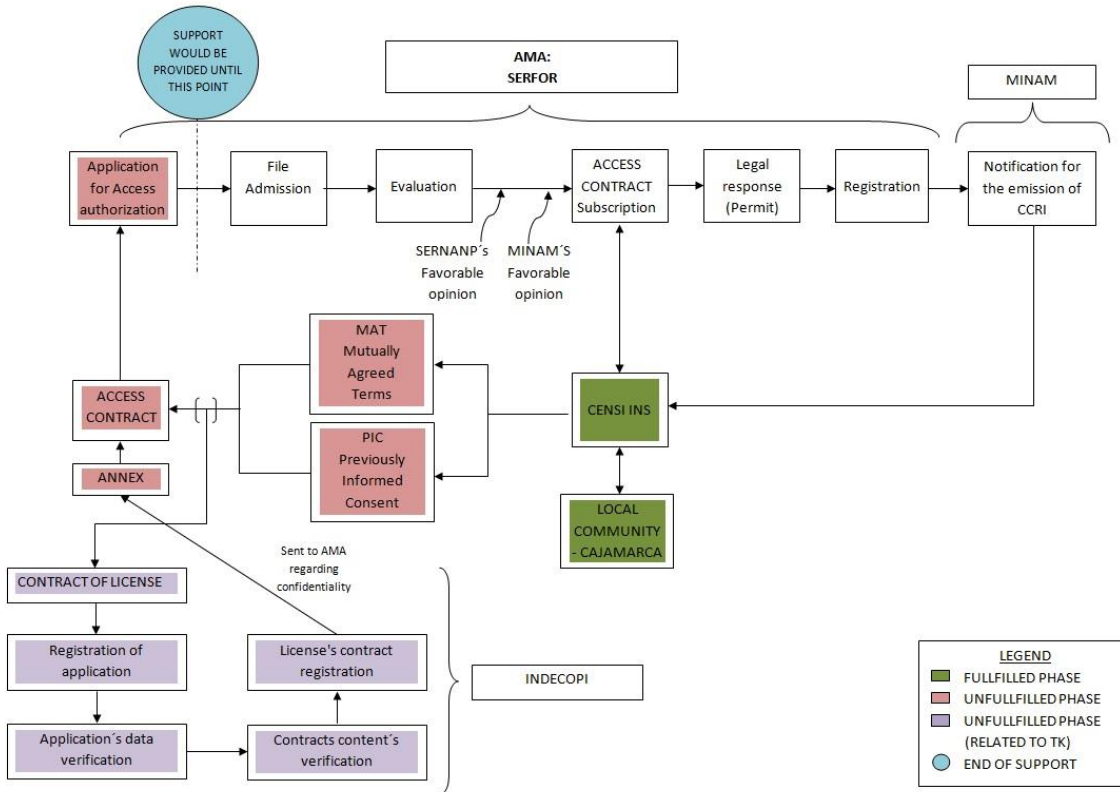


Many of the world’s most effective drugs against malaria (e.g. cloroquine, primaquine) derive or are synthesized from quina and its quinine compounds. CENSI is looking at ways (Research and Development) to develop new and upgraded derivatives to treat malaria, particular of the more virulent mosquito (*Falsiparum*) and its variations. Malaria affects annually almost 3-5% of the national population, especially children in the Amazon region in particular, where it is endemic in certain areas. At the same time, the quina tree is almost extinct in many areas of the country. It is mostly found in the higher Andean-Amazon region and has been historically used by indigenous peoples to treat ulcers, as well as malaria.

The GEF ABS project will assist in the negotiation between CENSI and indigenous peoples (campesinos) in the Cajamarca Region, of a “traditional knowledge know how license” as mandated under Law 27811 for the protection of TK (2001) and which is an annex under the ABS regime of Decision 391 and the national regulation, Supreme Decree 003-2009-MINAM (2009). In this sense, this pilot is not about access to the genetic resource itself, but obtain PIC and MAT for the use of traditional knowledge associated to it.

This contract or license needs to pass through a process under which indigenous peoples’ representative organizations (in this case the Supayacu campesino community) provide with their prior informed consent (PIC) and reach Mutually Agreed terms (MAT) to determine the conditions of use of their TK and possible benefit sharing alternatives. The project will be a way to demonstrate and validate a basic methodology to negotiate this type of license – which will be the first of its kind in Peru.

**Diagram No.2 Support to CENSI for its quina related activities**



### Initiative 3: Use of genetic resources of catfish for aquaculture conservation and management purposes

The Doncella species (*Pseudoplatystoma fasciatum*) is part of a group of species important for its commercial value and food security in the Amazon, especially in Iquitos, the capital of the Loreto Region. Almost 45% of the total fish catch disembarked in Iquitos city, is of the bagre species of which Doncella represents 16% of this catch and is number 4 or 5 in terms of its importance in the urban diet in Iquitos and neighboring cities (IIAP, 2010 <http://www.iiap.org.pe/cdpublicaciones2011/documentos/pdf/aquerec/pu/12.pdf>).

Figure 4 Doncella and recent research

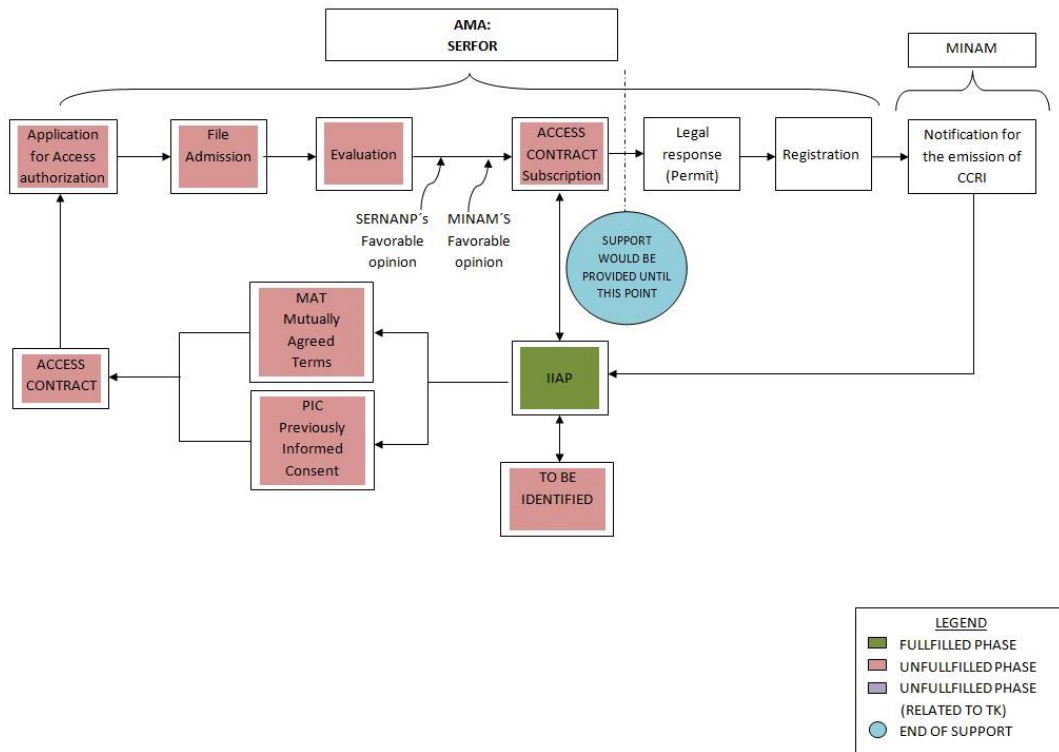


The IIAP has been undertaking research in the genetics, phylogeny, evolution and distribution of this species, both *in situ* and *in ex situ* conditions. Some of the more advanced research includes the work by Castro- Ruiz *et al.* 2009, concerning parental relations of *Doncella* larvae bred in captivity (<http://www.iiap.org.pe/Upload/Publicacion/PUBL557.pdf>), and Fernandez-Mendez *et al.* 2012, related to the adaptation, growth and survival of young fish of *Doncella* species to the consumption of balanced food in captivity (<http://www.iiap.org.pe/Upload/Publicacion/PUBL1282.pdf>). Also important is research by García Dávila *et al.* 2013, regarding molecular identification of *Doncella* from Peru (<http://www.iiap.org.pe/Upload/Publicacion/PUBL1274.pdf>).

IIAP is also starting research at the genetic and molecular level to determine factors which induce cannibalism in larvae bred in captivity: the hypothesis is that this may respond to genetic factors and not to environmental or food pressures, which would require reconsideration to diets being used to breed larvae.

The project will assist IIAP researchers in regularizing their access to genetic resources permits and contracts, in the field of basic research, and in alignment with local ABS provisions. This will also provide the opportunity to implement a Framework Access Agreement between IIAP and PRODUCE. This is important for two reasons: Framework Access Agreements have not been implemented in Peru and PRODUCE (ABS competent authority in the area of hydrobiological resources) will have the opportunity to develop and test the viability of its internal procedures regarding ABS.

**Diagram No. 3 Support to IIAP and its research on *Doncella* species**

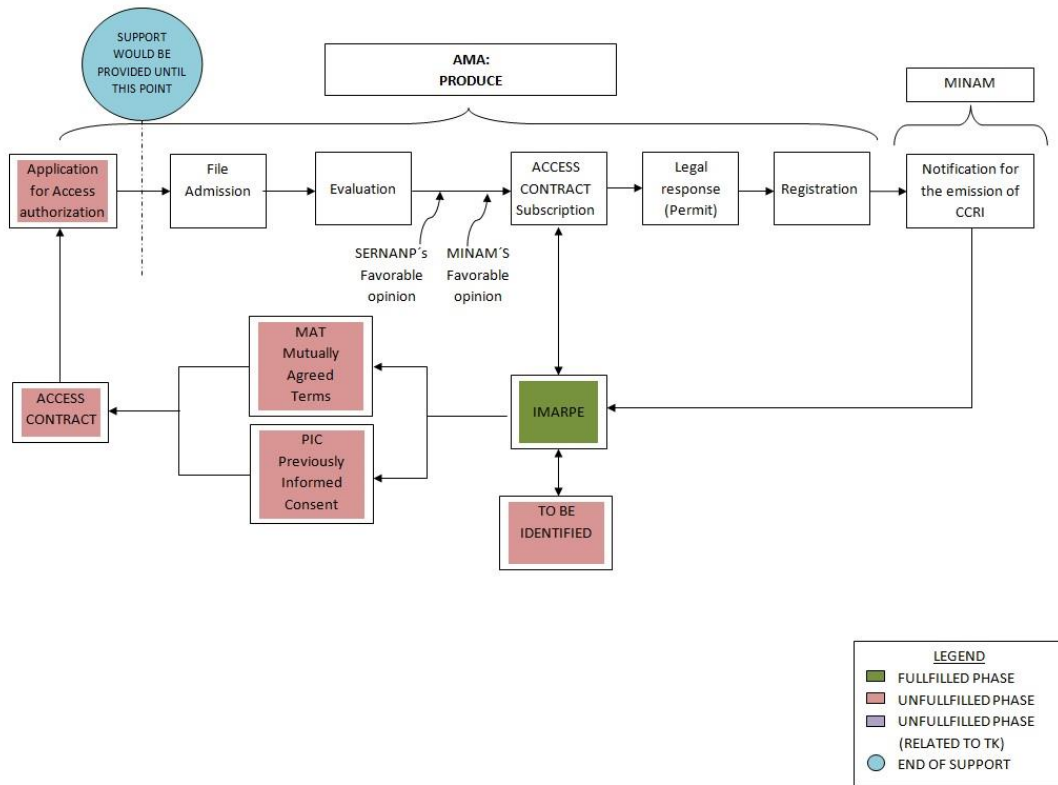




**Alternatives (Plan B): Research and development activity based on marine hydrobiological genetic resources of two species**

The project has also considered a Plan B alternative if need be. Work could be undertaken – based on initial talks- with PRODUCE and IMARPE (the marine research institution) who are working with R&D in marine genetic resources.

**Diagram 4: alternative with IMARPE and hydrobiological/marine genetic resources**



**3.a.1 Ongoing research and innovation project based on native genetic resources and associated TK supported by the project to comply with national ABS legislation and the Nagoya Protocol throughout the R&D chain.**

**Pilot case 1: Bioprospecting of aromatic plants for perfumery purposes**

Cosmo Ingredients Peru is a branch of Cosmo International Ingredients (France). Cosmo Peru has become very active over the past few years in its activities regarding research in biodiversity, specifically for its cosmetics and fragrance programs. At present, Cosmo Peru has a number of ABS applications presented to SERFOR and INIA regarding a series of native crops such as molle, camu camu, and others. These are awaiting formal technical approval – with the technical opinion of MINAM.

The GEF ABS project will provide Cosmo Peru with technical and legal assistance to successfully pass through the different stages of the national ABS administrative procedures under Decision 391 and Supreme Decree 003-2009-MINAM. In particular, the project will accompany both Cosmo and the

national ABS authority (in this case INIA) in the negotiation of the Access Agreement and its benefit sharing conditions for a specific bioprospecting activity involving aromatic plants for the fragrances industry. For the moment, the species of plants is being maintained under confidentiality by Cosmo Ingredients Peru, given the commercial sensitivity of this particular aspect.

This will be the first formal Access Agreement for industrial purposes, negotiated under the national regulation and will be used as an example to streamline and promote further R&D activities by other companies, researchers and institutions in general, particularly in the field of commercial and industrial oriented research.

**3.a.2 Utilization of native genetic resources and benefit sharing of at least three on-going research authorized projects will be analyzed, serving as a learning experience for governmental officials and as a test for the national monitoring system.**

Two specific experiences have been selected to support the implementation of the national ABS monitoring system. On one hand, Cosmo Ingredients Peru and its project on plant metabolites from “molle” (*Schinus molle*) for the aromatics/fragrances industry, and secondly “mauka” (*Mirabilis expansa*), a plant collected by the University of Copenhagen, Denmark.

**Figure No. 5 Molle and mauka species**



Why have these experiences been chosen? In the case of Cosmo Ingredients Peru, the fact that it is a company committed to participating in and collaborating with the project, and that it is undertaking bioprospecting with native plants, provides with an opportunity to test how monitoring and verification mechanisms within the national ABS system may operate.

This could include, for example, assessing whether and how contractual obligations under the ABS agreement between Cosmo and INIA (plants collected are cultivated) are being met and complied with. This may require close interaction between Cosmo, INIA and MINAM to ensure there are practical ways and mechanisms in which these obligations, especially in the case of benefit sharing, are being implemented. Likewise, the University of Copenhagen has celebrated access contracts with INIA and furthermore there is evidence of transfer to a third party, which will offer the opportunity to test the ABS monitoring system at this stage.

## Appendix 17: Prioritized Genetic Resources of Peru – a preliminary list

Determining a list of the most important genetic resources of a country is complicated, especially in a megadiverse and culturally diverse country like Peru. Criteria, systematization and selection may always be subject to critique. These lists are certainly not “official” nor consensual but respond to professional evaluations of what may be deemed as critically important at this point in time. The idea of this preliminary list plus an additional complementary list proposed by SERFOR is to have on hand a set of genetic resources which may be used throughout the lifetime of the ABS GEF project to undertake a series of activities as part of its different components.

### Criteria

In economic terms, prioritization can be established with a focus on supply or demand. The supply of genetic resources in a country like Peru is so abundant and varied as its own biodiversity. It therefore makes sense to prioritize according to a general demand for specific genetic resources, as defined through the following set of criteria:

- 1. Demand in the National System of Access and Benefit-Sharing:** Since this is a list of genetic resources prioritized for the access and benefit-sharing (ABS) system, the first criteria responds to the system’s own variables: this means according to the number of times that a particular resource has been requested for the purpose of access. It is the demand through the system by users. However, not all genetic resources pass through the ABS system.
- 2. Use in Research, Development and Innovation at the National Level:** Is easy to see from a quick survey of research and development projects, that many of them make use of biological resources because of the nature of genetic, derived resources and associated intangible components, TK. Competitive funds from different sources (especially CONCYTEC and PRODUCE) are financing a growing number of projects that make use of genetic resources, and its often a good indicator of demand for a specific kind of resource.
- 3. Development of Innovations protected by Intellectual Protection.** Internationally, patent systems and searches also offer an indication of demand for national genetic resources. Patent claims provide with often useful information about genetic resources, derived products and their origin. The National Commission on Biopiracy has already developed a preliminary list of resources which it has identified are in use and demanded abroad and protected by IP.
- 4. Inclusion of Information Gaps:** There are significant gaps of information in regards to marine genetic resources, insects and microorganisms. For future more embracing prioritization there may be need to consider these “rare” type of resources, but which have great potential in their genetic resources, derivatives and / or associated traditional knowledge.
- 5. Criteria "Stackers by Homology":** Finally, because of the genetic nature and level of homology between related species phylogenetically, there cases where the priority should be assigned to a group or taxon with more than one species. For example, if we talk about potatoes there are 9 domestic potato species and nearly a hundred wild species whose genetic resources and derivatives have a high order of similarity and which are part of traditional knowledge systems rather related knowledge. In this case, it referred to the genetic resource "papa" representing all taxonomic groups we know with that common name.

### List of Ten Species

Under the general approach of demand, and on the basis of the sources and criteria used, as explained in the preceding paragraph, the following preliminary list of 10 priority species of Peru according to their nature contain genetic resources, derivatives and traditional knowledge is suggested. An additional pair (potato viruses and cochineal) is also included as is a list suggested by SERFOR.

N <sup>o</sup>	Species/Taxon/Group	Origin	Inclusion criteria (*)
01	Cacao ( <i>Theobroma cacao</i> )	Native	Of the most sought after in the Access system Widely used projects I&D + i in recent years It is present in a large number of patent documents
02	Potatoes ( <i>Solanum</i> spp.)	Native	Of the most sought after in the Access system Widely used projects I&D + i in recent years It is present in a large number of patent documents
03	Chilis ( <i>Capsicum</i> sp)	Native	Of the most sought after in the Access system Widely used projects I&D + i in recent years It is present in a large number of patent documents
04	Quinoa ( <i>Chenopodium quinoa</i> )	Native	Of the most sought after in the Access system Widely used projects I&D + i in recent years It is present in a large number of patent documents
05	Palms	Native	Widely used projects I&D + i in recent years It is present in a large number of patent documents
06	Algae	Native	Widely used projects I&D + i in recent years It is present in a large number of patent documents Sectoral and taxonomic inclusion
07	Coffee ( <i>Coffea arabica</i> )	Naturalized	Widely used projects I&D + i in recent years It is present in a large number of patent documents
08	Flounder	Native	Widely used projects I&D + i in recent years Taxonomic and sectoral inclusion
09	Paiche	Native	Widely used projects I&D + i in recent years
10	Camelids ( <i>Lama</i> sp y Vicugna)	Native	Widely used projects I&D + i in recent years Taxonomic and sectoral inclusion
11	Sacha inchi	Native	Of the most sought after in the Access system Widely used projects I&D + i in recent years It is present in a large number of patent documents
12	Potato virus	Native	It is the most requested in the access system
13	Cochinilla	Native	Taxonomic inclusion
(*) Levels expressed in terms of "widely used", "most requested" or "present in large numbers" have a statistical backing to be included in the full document.			

### **Sources and References**

- Dora Velásquez Milla & Emma Rivas (2016) Diagnóstico de la gestión de las autorizaciones de acceso a recursos genéticos con fines de investigación y uso comercial otorgadas (versión preliminar).
- CONCYTEC y PRODUCE INNOVATE (2016) Perú Bases de Datos de Proyectos I + D + i (2011 – 2015)
- Google (2016) Base de Datos Google Patent (incluye datos de USPTO, EPO y otras)

### Appendix 18: Indigenous people action plan for the project

There are seven indigenous organizations that represent the indigenous populations involved in the project's implementation. These are:

- Asociación Interétnica de la Desarrollo de la Selva Peruana AIDSESP
- Confederación Campesina del Perú - CCP
- Confederación Nacional Agraria - CNA
- Confederación de Nacionalidades Amazónicas del Perú - CONAP
- Federación Nacional de Mujeres Campesinas, Artesanas, Indígenas, Nativas y Asalariadas del Perú - FEMUCARINAP
- Organización Nacional de Mujeres Indígenas Andinas y Amazónicas del Perú - ONAMIAP
- Unión Nacional de Comunidades Aymaras (UNCA)

Together with two representatives of the Ministry of Culture, these 7 indigenous organizations form the Working Group of Indigenous Policy (GTPI), which was formally created as a working group of permanent nature in November 2014 by Ministerial Resolution No. 403-2014-MC. The inclusion of these indigenous organizations was a result of the agreement reached by the indigenous peoples themselves. The seven indigenous organizations have national representation, grouping various indigenous ethnic groups that settle in coastal, Andean and Amazonian areas of the country, several of them have an important historical trajectory and two of them specifically representing indigenous women.

The GTPI meets the objective of allowing dialogue between indigenous peoples and the Executive Branch; indigenous peoples can propose and monitor public policies that involve and require an intercultural approach.

In this context, the IP Action Plan has been developed as follows:

Institution	PIF development	Full project development (PPG)	Inception	Implementation
Ministry of Culture (MINCU)	Preliminary discussions held regarding PIC and MAT	Specialists who work closely with members of the GTPI provided valuable comments and recommendations to the project	MINCU would be part of the support institutions that would be summoned when intercultural matters have to be discussed. Also, as stated by law, when the project develops activities related to MINCU's authority it will be involved from the beginning.	In general, MINCU will be part of the training activities set for all officials from institutions related to the project (Output 1.a.1) in order to improve the current ABS system aiming to achieve a fully functional ABS system.  Also, since activities of Component 2 will be directed to indigenous peoples in general, those activities have to be elaborated in coordination with MINCU, in order to obtain adequate material with an efficient intercultural focus. This is related to the following Outputs: Output 2.a.1. Awareness raising

				<p>activities</p> <p>Output 2.a.2. Interactive training modules</p> <p>Output 2.a.3 Intercultural training program</p>
GTPI	Not yet operational	<p>PPG team actively sought to integrate the intercultural vision that indigenous peoples have on the topics covered; the document was presented to members of the GTPI so they could provide their comments and suggestions directly. The project worked with the GTPI in guidance and validation of an intercultural project approach, seeking to meet the main needs of indigenous peoples based on the guidelines of the project.</p>	<p>GTPI will be the link to stakeholders, informing IP of Project start-up/ inception workshop. Also, GTPI could act as representative of the indigenous people if they decide so.</p> <p>Although GTPI might not be part of the Board, they will be summoned when intercultural matters are to be discussed. This would allow to obtain the perspectives and opinions from the indigenous people before taking decisions regarding the activities that involves them.</p> <p>The GTPI will serve as an intermediary between public institutions and indigenous peoples so as to facilitate access to villages that require visits, facilitate dialogue and the introduction of training courses, among others.</p>	<p>The activities of Component 2 will be directed to indigenous peoples in general, especially those related to the following</p> <p>Outputs:</p> <p>Output 2.a.1. Awareness raising activities</p> <p>Output 2.a.2. Interactive training modules</p> <p>Output 2.a.3 Intercultural training program</p> <p>Meanwhile, the selection of the places where the activities of Component 2 are implemented will be conducted in coordination with the GTPI, particularly for activities associated with Output 2.a.4 Assistance for providers to promote and facilitate their negotiation capacity and for users to promote and achieve legal certainty in ABS contracts, in 3 ongoing initiatives under negotiation (Cacao, Quina, Doncella)</p>

As a result of the abovementioned consultations and participation plan, the project has a consolidated intercultural orientation.