



# PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: GEF TRUST FUND

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## PART I: PROJECT IDENTIFICATION

<b>Project Title:</b>	Mainstreaming the conservation, sustainable use and valuation of critically threatened species and endangered ecosystems into development-frontier production landscapes of the Arica y Parinacota, and Biobío regions		
<b>Country(ies):</b>	Chile	<b>GEF Project ID:<sup>1</sup></b>	5429
<b>GEF Agency(ies):</b>	FAO	<b>GEF Agency Project ID:</b>	623646
<b>Other Executing Partner(s):</b>	Ministry of Environment (MMA)  and  Ministry of Agriculture (National Forest Corporation – CONAF- and Livestock and Agriculture Service - SAG)	<b>Resubmission Date:</b>	22 August, 2013
<b>GEF Focal Area (s):</b>	Biodiversity	<b>Project Duration (months):</b>	36
<b>Name of parent program (if applicable):</b> <ul style="list-style-type: none"> <li>For SFM/REDD+ <input type="checkbox"/></li> <li>For SGP <input type="checkbox"/></li> <li>For PPP <input type="checkbox"/></li> </ul>		<b>Agency Fee (\$):</b>	229,084

## A. FOCAL AREA STRATEGY FRAMEWORK<sup>2</sup>:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-Financing (\$)
BD-2 (outcome 2.1 and 2.2, output 2.1 and 2.2)	GEFTF	2,411,416	8,811,707
<b>Total project costs</b>		2,411,416	8,811,707

## B. PROJECT FRAMEWORK

<b>Project Objective:</b> To integrate the conservation and sustainable use of critically threatened species and endangered ecosystems into priority development-frontier landscapes, by promoting sustainable agricultural and forestry production, capacity-building, and socio-environmental benefits, in the Arica y Parinacota, and Biobío regions						
Project Component	Grant Type <sup>3</sup>	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
1. Awareness-raising and capacity-	TA	1.1. Critical information has been broadcasted, institutional and local	1.1.1 Three (3) information-sharing mechanisms and three (3) training	GEFTF	528,215	1,930,183

<sup>1</sup> Project ID number will be assigned by GEFSEC.

<sup>2</sup> Refer to the reference attached on the Focal Area Results Framework and LDCF/SCCF Framework when completing table A.

<sup>3</sup> TA includes capacity building and research and development.

building to support the protection of endangered species in the Arica y Parinacota, and Biobío regions.		stakeholders' capacities have been developed, best practices singularised, and conditions for replication and upscaling of lessons learned improved for the conservation of 4 critically endangered species (the Arica hummingbird, the huemul, the Darwin fox and the queule)	tools that trigger the engagement of local stakeholders, production sectors, private sector and governmental agencies in biodiversity conservation in 3 local landscapes.  1.1.2. Three (3) environmental education programmes for civil society organisations, municipalities and schools.  1.1.3. Five (5) manuals of good practices for the agricultural and livestock (2), forestry (1) and tourism (2) sectors, developed and adopted by sectorial organizations			
2. Integrated landscape management based on good agricultural and forestry practices, and the valuation of biodiversity and ecosystem services in Arica y Parinacota, and Biobío.	INV	<p>2.1. Priority demonstrative actions have been catalyzed, at the appropriate scale and sector, and territorially integrated</p> <p><i>300,000 hectares of sustainably managed landscapes including agro-ecosystems, production forests, critical biological corridors, and threatened species refuge and breeding grounds</i></p> <p><i>300.000 hectares of agricultural and forest landscapes certified by internationally or nationally recognized environmental standards that</i></p>	<p>2.1.1 Three (3) integrated landscape management plans that include valuation of biodiversity and ecosystem services, and best practitioners labeling (Pilot areas: 300,000 hectares in valleys of the Micro-reserves Network of Arica y Parinacota, the Biosphere Reserve <i>Nevados de Chillán</i>, and the Nahuelbuta Range).</p> <p>2.1.2. At least 2 labeling schemes identified and adopted, that allow the internalization of biodiversity value into businesses' strategic analyses</p>	GEFTF	1,148,293	4,196,051

		<p><i>incorporate biodiversity considerations, recorded by GEF tracking tool.</i></p> <p><i>Population-loss trends, stabilized. Current levels of individuals, maintained (500 individuals for the Arica hummingbird, 20 breeding individuals for Huemul, 50 individuals for Darwin's fox and 100 ha - 10000 trees)</i></p>	<p>2.1.3 At least 3 local public-private partnerships including agreements for the valuation of biodiversity-friendly practices through at least 2 certification and labeling schemes (see 2.1.2)</p> <p>2.1.4 At least 10 demonstrative pilot actions developed by 10 small-scale and medium-scale landholders in the Northern valleys (covered by the Microreserves Network of Arica y Parinacota<sup>4</sup>), the Nahuelbuta Range, and BR <i>Nevados de Chillán</i></p> <p>2.1.5 Replication actions are supported in Chiloé Island (Darwin fox), Maule Region (queule) and Tarapacá (Arica hummingbird)</p>			
3. Mainstreaming the conservation and sustainable use of threatened species and endangered ecosystems, including valuation, into policies and regulatory frameworks in the Arica y Parinacota,	TA	<p>3.1 The conservation, and sustainable use of critically endangered species, and the valuation of biodiversity and ecosystems services, have been incorporated into municipality, regulatory and inter-institutional frameworks.</p> <p><i>At least 4 critically endangered species (Arica hummingbird, huemul, Darwin fox, queule) valued at landscape level</i></p>	3.1.1 Four (4) Species' Conservation Plans with concrete policy tools at municipal and regional level, regulating the forestry and agriculture practices that affect the existence and the ecosystem services needed by the Arica hummingbird, huemul, Darwin fox, and the queule.	GEFTF	528,215	1,930,183

<sup>4</sup> For its name in Spanish "Red de microreservas de Arica y Parinacota"

and Biobío regions.		(300,000 hectares).  7 Policies and regulations governing 2 sectoral activities (agriculture, forestry) that integrate biodiversity conservation as recorded by the GEF tracking tool as a score	3.1.2 Two (2) regional policies and at least five (5) municipal regulations that explicitly incorporate the Four (4) Species' Conservation Plans through a participatory process. in the three project intervention areas (300,000 hectares).			
4. Project progress monitoring and information dissemination	TA	4.1 Project implementation based on results-based management, and application of project findings and lessons learned in future operations, facilitated (Overall Satisfactory or Highly Satisfactory rating for project implementation)  4.2 Project monitoring and GEF tracking tool completion	4.1.1 Project monitoring system operating providing systematic information on progress in meeting project outcome and output targets  4.1.2 GEF tracking tools completed, mid-term and final evaluation, conducted. Project implementation and sustainability strategy, adjusted to recommendations  4.1.3 Project-related "best-practices" and "lessons-learned" published  4.1.4 Website to share the experience and information dissemination.	GEFTF	91,863	335,684
Sub-Total					2,296,586	8,392,102
Project management Cost (PMC) <sup>5</sup>					114,829	419,605
Total project costs <sup>4</sup>					2,411,416	8,811,707

#### C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Ministry of Environment	Unknown at this stage	1,097,766
National Government	Ministry of Agriculture (SAG)	Cash	823,324

<sup>5</sup> To be calculated as percent of subtotal

National Government	Ministry of Agriculture (CONAF)	Cash	823,324
National Government	Ministry of Agriculture (INDAP)	Cash	159,574
National Government	Ministry of Public Land, National Monuments Council	Cash	2,823,324
National Government	SERNATUR (National Tourism Service)	In-kind	159,574
Local Government	Regional Government of Arica y Parinacota	Cash	319,149
Local Government	Regional Government of Biobío	Cash	638,300
GEF Agency	FAO	Cash	125,000
Private Sector	Forestal Arauco (AntarChile Holding)	In-kind	662,184
Private Sector	Pioneer (DuPont Group)	In-kind	197,440
CSO	Grupo Altués	In-kind	123,013
Private Sector	Antuco	In-kind	2,745
CSO	Aumen	In-kind	139,564
CSO	Forest Ethics	In-kind	15,106
Private Sector	Others	Unknown at this stage	702,320
<b>Total Co-financing</b>			<b>8,811,707</b>

**D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA(S) AND COUNTRY<sup>1</sup>**

GEF Agency	Type of Trust Funds	Focal Area	Country Name/ Global	Grant Amount (\$) (a)	Agency Fee (\$) (b) <sup>2</sup>	Total (\$) c=a+b
<b>Total Grant Resources</b>						

<sup>1</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table

<sup>2</sup> Indicate fees related to this project.

**E. PROJECT PREPARATION GRANT (PPG)<sup>6</sup>**

Please check on the appropriate box for PPG as needed for the project according to the GEF Project Grant:

<u>Amount</u>	<u>Agency</u>
<u>Requested (\$)</u>	<u>Fee for</u>
	<u>PPG (\$)<sup>7</sup></u>

<sup>6</sup> On exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

- No PPG required
- (Upto) \$50k for projects up to & including \$ 1 million
- (Upto) \$100k for projects up to & including \$ 3 million 100,000 9,500
- (Upto) \$150k for projects up to & including \$ 6 million
- (Upto) \$200k for projects up to & including \$ 10 million
- (Upto) \$300k for projects above \$ 10 million

**PPG AMOUNT REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND/OR MTF PROJECT ONLY**

Type of Trust Funds	GEF Agency	Focal Area	Country Name/ Global	PPG (\$) (a)	Agency Fee (\$) (b)	Total (\$) c=a+b
Total Grant Resources						

<sup>7</sup> PPG fee percentage follows the percentage of the GEF Project Grant amount requested.

## **PART II: PROJECT JUSTIFICATION**

### **A. PROJECT OVERVIEW**

**A.1. Project description.** Briefly describe the project, including: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) baseline scenario and any associated baseline projects; 3) the proposed alternative scenario, with a brief description of expected outcomes and components and the project; 4) incremental cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF, and co-financing; 5) global environmental benefits (GEFTF, NPIF), and adaptation benefits (LDCF/SCCF); 6) innovativeness, sustainability and potential for scaling-up.

1. Chile relies heavily on its natural resource base for its economic development. The country has a wide range of ecological zones including expansive arid desert, remote Pacific islands, a Mediterranean ecosystem, high-altitude grasslands and wetlands and temperate rainforests, among others. These diverse ecoregions contribute to Chile's rich biodiversity that is characterized by high levels of endemism, unparalleled natural beauty and highly favorable environmental conditions for its successful resource-based industries (forestry, fisheries and agriculture).

2. However, unsustainable management practices and a gold-rush mindset have contributed to accelerate habitat degradation and soil erosion in productive landscapes, mainly in human development-frontier regions<sup>8</sup>, such in Arica and Parinacota, and Biobío, impacting adversely on biodiversity, affecting food security, and generating vicious circles. Landscapes' capacity of providing agro-ecosystem services to support local livelihoods have been markedly reduced in these regions during the last decades<sup>9</sup>. Development-frontier production systems, such as agriculture, livestock and forestry, have become more unsustainable, putting pressure on unique ecosystems<sup>10</sup>. While natural resources and arable lands (or lands for commercial forestry) became more constrained as shown by the doubling of area under agricultural or commercial-forestry use during the last century in both Arica y Parinacota and Biobío<sup>11</sup>, people intensified the use of resources in the remaining areas, increasing threats to vulnerable ecosystems such as deforestation, forest degradation or building of connectivity-reducing infrastructure. At present, it is critical to find effective ways to reverse the perverse practices in these frontiers, where changes are putting pressure back - into the densely populated areas: the so-called "centre" of the country (administrative regions V, VI, VII and VIII, where more than ten millions out of a total population of sixteen million live) and forth (into the remaining pristine and near-pristine land).

3. The baseline scenario in both selected regions shows that individual efforts have been made to preserve the remaining biodiversity, even successfully. However, these efforts have not resulted in the loosening of pressures affecting the species under consideration, because these species have very extensive habitat requirements. No conservation efforts in a single region could guarantee the stabilization of these species' populations. Furthermore, narrow sectoral approaches in the main public agencies dealing with land management in these areas have made it difficult to deploy effective actions that engage biodiversity valuation and production incentives.

4. Another root cause of this environmental problem is the lack of awareness and mutual trust among local economic agents (i.e. medium and large-scale companies of the export-oriented forestry and agri-food businesses, SMEs oriented to the domestic markets in the same sectors) in the regions of Biobío, and Arica y Parinacota. These stakeholders benefit from the exceptional bio-geographical conditions (extended growth periods, biological isolation, continuous pollination<sup>12</sup>), but are poorly aware of the hidden landscape-level threats they are favoring

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<sup>8</sup> The concept of "human development frontier" defines areas where the threat of endangered biodiversity extinction, ecosystems overexploitation, economic "gold rushes" over renewable resources or exceptional natural conditions, and biodiversity richness, occur simultaneously. In addition, the lack of political consensus drives excessive pressure over the natural resources base leading to a "tragedy of the commons" scenario (Hardin, 1976). Indeed, the author later acknowledged that it might have been called "the tragedy of the *unmanaged* commons", since it is the lack of a coherent agreement between the agents what drives the tragedy.

<sup>9</sup> Although historical data is generally lacking, some proxy data serves for grasping the rhythm and scope of the threat: for the Biobío region, the historical series of forest fires (see Graphic 2, Annex I) shows the rural activity intensity focused on "cleaning" spaces (one main cause of forest fires). Graphic 3, Annex I, illustrates the decrease of areas that were declared as "Preferably Apt for Forests" (PAF), due to land use change trends (the PAF Regulation was intended to avoid transformation of forests into crop plantations).

<sup>10</sup> See Table 2 in Annex I that illustrates the distribution of land uses at national level, and in these two regions.

<sup>11</sup> Ministry of Agriculture, 2011

<sup>12</sup> The Meteorological Directorate of Chile reports that: a) the coastal desertic climate (valleys in the Arica y Parinacota Region) has very little temperature range (6-7 °C) both within the day and the year and continuous high hygroscopic

through unsustainable practices and have no incentives to modify them in the short-term. Environment and development are, in these development-frontier areas, commonly seen as non-complimentary, even opposed, concepts. Biodiversity concerns go in second place to short-term economic results. The lack of understanding of targeted species dynamics, their ecosystems, and their interaction with livelihoods sustainability have predominate in the selected landscapes.

5. In light of this, several types of unique habitats and species are critically threatened in Arica and Parinacota, and Biobío. In particular, flagship “landscape species”, at least one for each selected area, which are all endangered: the Arica hummingbird (*Eulidia yarrellii*) in the Northern valleys, the Darwin’s fox (*Pseudalopex fulvipes*) in the Nahuelbuta rangeland, the huemul (*Hippocamelus bisulcus*) in the Andean Nevados de Chillán Biosphere Reserve, and the queule (*Gomortega keule*) in both the last two, Biobío region. These species, while being unique (the queule belongs to the monospecific family *Gomortegaceae*, the huemul is one of only two *Cervidae* in the Southern Andes, as well as the Darwin’s fox’s *Lycalopex* genus is the only *Canidae* representation in this area, and the Arica hummingbird is endemic of a little number of valleys in Northern Chile), also indicate the health of the respective ecosystems.

6. In the region of Biobío, three demonstrative areas have been selected due to the threats posed to three species. The first demonstrative area is the Nahuelbuta range, where the Darwin fox is under pressure. The second demonstrative area is the *Nevados de Chillan* Biosphere Reserve, where the huemul is negatively impacted. The third demonstrative area is the Queule Range, where the tree queule is threatened.

7. In the region of Arica y Parinacota, one demonstrative area has been selected due to the pressures suffered by the Arica hummingbird. These are the Valleys of Azapa, Vitor, Chaca, and Camarones (Northern Valleys).

8. The main threats by species are: a) Huemul: habitat loss and fragmentation (it is that 60%<sup>13</sup> of its habitat has been lost); b) Darwin’s fox: loss of connectivity and habitat that contributes to the critical status of the species; c) Queule: forest substitution, fires, and illegal logging; and d) Arica hummingbird: habitat and connectivity loss.

9. The Valdivian Temperate Forest-Dry Chilean Forest eco-region, where the three demonstrative areas of Biobío are located, and the Arica y Parinacota valleys, are currently affected by a complex dynamic of drivers of biodiversity loss. This dynamic mainly occurs in the so-called development-frontier areas, generating an ever-growing pressure on remaining wild habitat and species. Drivers and their impacts are detailed below:

10. i) **With immediate local impacts:** explicit land use change<sup>14</sup> (mainly for land clearing, urban growth and infrastructure building), and forest fires<sup>15</sup> that lead to habitat fragmentation, and destroy all environmental values of selected zones, while generating GHG emissions. This is the most visible category, and cover most of quantifiable biodiversity losses, but probably it is not the major effect at general level.

11. In the Biobío region, only forest lands in inaccessible areas keep a significant degree of integrity and connectivity. In development-frontier areas, a high degree of fragmentation and degradation affects the remaining relatively pristine forests. The resilience of forest ecosystems to other external stressors (i.e.: invasive species, pests and diseases, forest fires, droughts, and climate change) has also been reduced, triggering vicious cycles. The queule tree is placed into this pressuring context.

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saturation, making it extremely suitable for cultivation throughout the year - when water is available (this puts pressure on underwater resources); and b) The temperate rainy climate which characterizes the Biobío Region has precipitation of more than 1,000 mm/yr (which can reach 3,000 mm/yr in mountainous landscapes such as the Nahuelbuta Range and the *Nevados de Chillán*) and little temperature amplitude, making the region extremely suitable for industrial forestry. Regarding biological isolation, Chile as a whole is surrounded by the ocean, deserts and the Andes, while the valleys in the Arica y Parinacota Region are surrounded by desert.

<sup>13</sup> Povilitis, 2002

<sup>14</sup> In Chile, 8000 ha/year of native forests are permanently converted into forests into agriculture or agro-industrial plantations, grasslands for cattle or goats, smallholder farming, or urban settlement and infrastructure building. The Biobío region is highly affected by this dynamic that is generating habitat fragmentation, and destroying the ecosystems that those three selected species (see above) need to survive and/or reproduce themselves.

<sup>15</sup> In the Biobío region, forest fires are a significant source of habitat and biodiversity loss: 5500 ha/year of native forest have been burnt in 1985-2011 (CONAFOR, 2012). Forest fires are caused intentionally (i.e. as a result of land clearing or as biomass management tool), and unintentionally (i.e. runaway fires, fires started as lightning, and other factors). Most of fire damage are caused by the establishment of plantations, in landholding conflicts, and/or due to unsustainable pastoral management practices that burn surface areas.



12. ii) **With mid-term impacts:** regulated and unregulated firewood collection for commercial and subsistence purposes, extensive overgrazing and cattle breeding, unsustainable extraction of timber and non-timber products (many of them with low value-added). This type of extraction finds any regulation gap to implement unsustainable practices of forest management. It puts excessive pressure over the forest and related natural resources (impeding their natural regeneration), without improving people's living conditions. Unsustainable extraction is practiced by micro, small-, and medium-scale producers that are excluded in a unregulated market dominated by a high volume of internationally-oriented industries (e.g.: agro-industry, and mining sector, that establish the capital cost and their profitability at high levels). Land use change is also included in this category: land can be constantly burnt, overexploited and overgrazed without any regulation. Land is therefore degraded and become infertile, and many times is reclassified as "urban land". The zones of Nahuelbuta range, the Nevados de Chillan Biosphere Reserve, and the Queule's Range that are not included into protected areas are heavily affected by this category, impacting on species of global uniqueness and value.

13. iii) **With long-term impacts:** depletion of aquifers (the agro-industry is the main water consumer in Biobío and in Chile: 84.5% of water is utilized in the agriculture sector<sup>16</sup>). The agro-industry is concentrated in the Mediterranean region of Chile, where Biobío is located, and mainly produces grapes, strawberries, apples and other fruits and vegetables of temperate climate. Physical, chemical and biochemical pollution of soils and water bodies. Destruction of pollination cycles due to the use of agro-chemicals and agriculture engineering systems. Biobío is the region most affected by these impacts due to the concentration of population and their activities (industrial, agricultural) and the relative easy access to national and international markets (the region has the main national airports and ports). These long-term impacts are complex and baseline data lacks. However, sufficient evidence is available to ensure that they contribute to natural resources degradation, ecosystem services losses, and GHG emissions.

14. In the North Valleys eco-region, where Arica y Parinacota's demonstration site is located, land use change is linked to the unsustainable agriculture intensification and related changes in the agricultural practices. This eco-region has a desert climate, with no presence of native forests, thus deforestation and fires are not drivers in the threats posed over the Arica hummingbird. Instead, the substitution of traditional land management practices by intensive agriculture and crops grown within greenhouses, the substitution of tree crops by high-rotation trees, the over-occupation of agricultural land and river banks, and the intensive application of agro-chemicals, have all created habitat loss and fragmentation, putting into risk this hummingbird species and its reproductions means (including the stop of pollination cycles).

15. Although Conservation Plans have already been designed for these four species, the lack of intra-institutional, inter-institutional, and public-private<sup>17</sup> coordination prevent these plans from being effective policy instruments. Public policies and regulations regarding production and biodiversity conservation are seldom dispersed and even contradictory. At social and cultural levels, the value of these species is not incorporate and agents living and producing in the development-frontier areas are not sufficiently aware of their importance.

16. Table 1 illustrates the legal threat status, causes, practices, threats, impacts on the species, and agents that threaten the Arica hummingbird, the queule, the huemul, and the Darwin fox. In addition, Table 2 shows the ecosystem services at risk by eco-region, affecting the habitats of the four above-mentioned species.

**Table 1:**  
**Causes, Practices, Threats, Impacts, Agents and Sought Practices**  
**that threaten the Arica hummingbird, the queule, the huemul, and the Darwin fox**

Species	Darwin's fox	Huemul	Queule	Arica hummingbird
Legal threat status (IUCN and MMA)	Endangered (Chile: DS 151/2007)	Endangered (Chile: DS 151/2007)	Endangered (Chile: DS 151/2007)	Endangered (Chile: DS 151/2007)
Causes	"Gold-rush" mindset, lack of awareness on the species' and its habitat's value, public institutions with sectorially-oriented visions			

<sup>16</sup> Review of Environmental Performance, OCDE, 2011

<sup>17</sup> Private sector is referred in this context to forest and agriculture companies, and small-, medium-, and large-scale landholders.

Species	Darwin's fox	Huemul	Queule	Arica hummingbird
Practices	Inefficient practices in agriculture and livestock breeding, lack of awareness on the species' and its habitat's value	Extensive livestock breeding and unsustainable commercial forestry, competitive use of natural resources for cattle and goats raising, lack of awareness on the species' and its habitat's value	Native forest substitution by commercial plantations executed by forestry companies and private landholders, illegal logging by small- and medium-scale landholders, forest fires, lack of awareness on the species' and its habitat's value	Substitution of traditional land management practices with intensive and crops grown in greenhouse, substitution of tree crops with high-rotation ones, over-occupation of agricultural land (river banks), intensive application of agrochemicals
Threat	Land use change (from native forest to agriculture and/or commercial plantations), feral dogs	Land use change (from native forest to grasslands and/or commercial plantations)	Land use change (native forest to commercial plantations) and forest degradation through illegal logging and forest fire	Intensification and agricultural practice change
Impact on the species	Habitat loss and fragmentation, increased infectious-disease mortality, increased competitive pressure for habitat and food	Habitat loss and fragmentation	Reduction of individuals, scarce/difficult regeneration, decrepitude	Habitat loss and fragmentation
Agents	Forestry companies, private landholders (mostly small- and medium-scale), public institutions with sectorial mandate	Forestry companies, private landholders (mostly big), public institutions with sectorial mandate	Forestry companies, private landholders (mostly small and medium), public institutions with sectorial mandate	Agricultural companies, private landholders (mostly small and medium), public institutions with sectorial mandate
Sought practices	i) implementing feral dog controls at field level; ii) supporting the two selected regional governments in establishing regional funds with a window for initiatives for the Darwin fox conservation; iii) promoting the implementation of private and public-private protected areas; and iv) implementing concrete land use plans in pilot areas based on a connectivity approach	i) supporting the two selected regional governments in establishing regional funds with a window for initiatives for the Huemul conservation; ii) promoting the implementation of private and public-private protected areas; and iii) implementing concrete land use plans in pilot areas based on a connectivity approach.	i) supporting the two selected regional governments in establishing regional funds with a window for initiatives for the Queule conservation; ii) promoting the implementation of private and public-private protected areas; iii) implementing concrete reforestation/forest enrichment at field level; and iv) implementing concrete queule-wise fire management plans at local level	i) supporting the two selected regional governments in establishing regional funds with a window for initiatives for the Arica hummingbird conservation; ii) promoting the implementation of private and public-private protected areas; iii) implementing concrete reforestation/forest enrichment at field level; iv) implementing concrete hummingbird-wise hedgerow installation/enrichment at local level; v) promoting the substitution of agrochemicals among small-scale and medium-scale producers in areas selected applying a replicability criteria; and vi) implementing concrete land use plans

Species	Darwin's fox	Huemul	Queule	Arica hummingbird
				in pilot areas based on a connectivity approach

Source: Ministry of Environment of Chile, 2012

**Table 2:**  
Ecosystem services at risk by eco-region  
Biobío, and Arica y Parinacota regions, Chile

	Eco-region		
Ecosystem service at risk	Arica Northern Valleys	Nahuelbuta range	Nevados de Chillán Biosphere Reserve
Plague and disease control		X	
Soil fertility	X	X	X
Water quality regulation	X	X	X
Polinisation	X		
Aesthetic/recreational value	X	X	X

Source: Ministry of Environment of Chile, 2012

17. During the PPG stage, further refinement and measurable indicators and milestones will be developed for these practice changes. The evidence of the impacts has been registered by the Ministry of Environment of Chile in the last decades. Some key maps have been included in Annex 1. In particular: Map 2: *Records of Chiloe fox sightings in the mountains of Nahuelbuta*; Map 3: *Risks for the conservation of Chiloe fox in the in the mountains of Nahuelbuta*; Map 4: *Presence of Queule (in good-shape, and in damaged status)*; Map 5: *Primary sites of Huemul's presence in the Nevados de Chillán*; Map 6: *Geographical distribution of the presence/absence of huemuls by site, in the Wildlife Corridor Nevados de Chillán-Laguna del Laja, 2009*; Table 6: *Abundance of Arica Hummingbird, 2003-2012*.

18. In this context, three main barriers (*awareness, practices and policies*) should be addressed to integrate the conservation and sustainable use of those critically threatened species and their ecosystems into these three development-frontier areas:

19. ***Barrier 1: The lack of awareness, and of social and cultural valorization of the species' and their habitats, and the weak capacities of the civil society, private sector and the institutions operating at local and regional levels, generate practices against the protection of the four targeted species and the ecosystem services needed by their vulnerable habitats in Arica y Parinacota, and Biobío***

20. The national government has implemented some technical assistance programmes for individual farmers, to trigger the consistency between field practices and productivity-oriented policies, but no integrated approaches have been applied.

21. At regional level, training tools and information resources are inadequate to reach targeted audiences and to upscale efforts by sharing lessons learnt and experiences. Many local producers do not clearly understand how to maintain or increase land productivity while conserving endangered habitats. Local knowledge regarding species lifecycle is limited. Landholders have poor skills and knowledge about the adoption of ecology-wise principles (e.g.: good water management and connectivity preservation). Pro-sustainability activities are isolated and uncoordinated. The approach for transferring and up-scaling best agricultural and forestry management practices is still incoherent and fragmented. There is lack of motivation among enough stakeholders to adopt these practices and systems before a tipping point can be reached. Innovative processes are not going forward quickly enough for avoiding permanent biodiversity losses.

**22. Barrier 2: The gold-rush mindset both in high-impact activities (intensive agriculture, industrial forestry) and in medium and small-scale farms, generates land-use change, conversion of native forests, agricultural intensification, and competence for natural resources, posing increasing environmental threats, creating habitat loss and fragmentation, and reducing connectivities between protected areas in Arica y Parinacota, and Biobío.**

23. Chile has safeguarded some of its most valuable pristine ecosystems through the declaration of protected areas (PAs), mainly in remote zones where population and economic development dynamics are less intense due to harsh living conditions. However, the strategy of declaring public PAs has shown signs of exhaustion (see Graphic 1 in Annex I). National PAs have usually been declared in high-value conservation landscapes that were not under serious threat of habitat conversion or alteration nor species extinction. This strategy has neglected more populated and intensely-utilised ecoregions as well as high-value agriculture and forestry areas, as those located in Arica y Parinacota, and Biobío. PAs here are now facing the risk of becoming relatively small and isolated islands of intact wild habitat in a larger landscape devoid of significant biodiversity. Connectivity between still-existing suitable habitats and protected areas is particularly poor.

24. In addition, the national prioritization of the exports-oriented agriculture and forestry sectors (to take national economy out of mining) have undermined the achievement of protection status for other most vulnerable ecosystems and globally and locally important species in Arica y Parinacota, and Biobío. Agriculture and forestry are major source incomes in Biobío: 32.4% of the population of the Arauco province (where the Nahuelbuta Range is located), and 23.9% of people living in the Ñuble province (where BR Nevados de Chillán is placed) depends on these two sectors. Although in Arica this figure is lower (only 9.7% of the population works in agriculture and forestry) the high mechanization and commercial approach of the two sectors generate amplified impacts and threats over the ecosystems.

25. This narrow focus on exports has led to a dissemination of a “gold-rush” mindset in the areas of Chile with broad availability of rich natural resources and/or suitable climate conditions for forestry, agriculture, and livestock production at large scale. As explained above, unsustainable extraction is also practiced by micro, small-, and medium-scale producers that are excluded in a unregulated market dominated by a high volume of agro-industry, and mining sector, that establish the capital cost and their profitability at high levels).

26. In Arica y Parinacota, and Biobío<sup>18</sup>, the gold-rush mindset (along with a sectorial-only regulation of high-impact activities, that is described in barrier #3) is triggering unsustainable productivity increases, depletion of agro-ecosystem services, and weakening of local social-environmental resiliency.

27. The production-focus mindset is broadly extended in these regions, preventing the achievement of long-term global and local environmental benefits, and the understanding of sustainable agriculture/forestry models. In light of this, there is low motivation to establish public-private partnerships that envisage the win-win approach of “plus production/plus environment”. Marketing of non-traditional products and services, certified agricultural products, or other sustainably produced goods, are rarely implemented in the areas, limiting the capacity of scale economies to commercialize these goods.

**28. Barrier 3: National and regional agencies in charge of land management, related regulations and policies are based on a sectorial-only approach for high-impact activities (i.e.: intensive agriculture, industrial forestry), and indirectly undermine actions aimed at including biodiversity valuation and sustainable production incentives in the Arica y Parinacota, and Biobío regions.**

29. The sectorial legislation in Chile is concentrated on regulating the activities within each land property, but does not have specific tools for ecosystem management in broader land extensions. This narrow approach indirectly generates incentives for unsustainable land management and all processes that degrade biodiversity described above. In addition, main public agencies in charge of land management usually apply sectorial regulations for high-impact activities (i.e.: intensive agriculture, industrial forestry), that indirectly undermine actions that may effectively include biodiversity valuation and sustainable production incentives. This context also reduces the creation of partnerships among knowledgeable and trustworthy private sector groups, NGOs and mutual mechanisms.

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<sup>18</sup> See Map 1 in Annex I, to locate the project intervention areas (these two regions in Chile).

30. In Arica y Parinacota, and Biobío many government agencies<sup>19</sup> favor an isolated and narrow landholding approach to enhance agricultural/forestry productivity that neglects interactions at landscape level. Municipalities have too limited capacities to influence policy-making processes at the national level.

31. Regional policy and regulatory frameworks are weak to identify and promote the adoption of sustainable practices and production systems in landscapes of high biodiversity value or vital for the generation of ecosystem services. Coordination mechanisms are insufficient to leverage greater economic benefits and sustainable income-generating activities. Participatory planning has not been implemented.

32. Both regional and municipal governments lack policy instruments that explicitly integrate the valuation of biodiversity and ecosystem services, productivity and development demands. There are many contradictions between national- and regional-level sectorial policies (e.g.: agriculture-biodiversity, forestry-water, biodiversity conservation-economic development, among others) between them, and with municipal-level ones (more comprehensive from a sectorial point of view, but more limited in geographic scope) that need to be assessed and reduced to zero.

33. At national level, environmental management is regulated by the Environmental Framework Law (Law N° 19.300, 1994), that includes public participation, environmental education, Environmental Impact Assessment, and management, prevention and decontamination plans. Law 19.300 was modified by Law 20.417 of 2010, which created the Ministry of Environment with the mandate of designing and applying environmental policies and programs, and related agencies<sup>20</sup>.

34. Besides that, the Ministry of Environment (MMA) is implementing the *Conservation Plans for Species of Interest*, which are public instruments for the protection of endangered species out of protected areas. *Plans* are based on scientific evidence, can technically direct conservation actions, and have directed the implementation of limited local activities financed by public and private funds. Specifically in the landscapes covered by this proposed project, the MMA is implementing the conservation plans for huemul, Darwin's fox, Arica hummingbird and queule (see Table 1 in Annex I for details). The Study of Conservation Priorities for Huemul (species-specific analysis) is being prepared by the WWF. The MMA has developed the Study of Threats to Conservation Objects in the Biosphere Reserve *Nevados de Chillan* (Biobío), and is financing limited actions on site. In addition, the MMA is implementing some site-specific Management Plans (Caramavida as an example) in the Arica y Parinacota, and Biobío regions. The MMA also develops nation-wide environmental awareness and education programme.

35. The Agriculture and Livestock Service (SAG), Ministry of Agriculture, is implementing the monitoring and landscapes restoration programme currently ongoing in Arica y Parinacota. Nationwide, it is also responsible for the enforcement of the Acts governing game hunting, wildlife captures and agrochemicals.

36. The National Forestry Corporation (CONAF), Ministry of Agriculture, is implementing the conservation plan for Queule (species-specific plan). CONAF is leading the preparation of the management plans for the National Reserve (NR) Nuble (Biobío); NR Huemules de Niblito (Biobío); National Park (NP) Laguna del Laja (Biobío); and NR Nonguen (Biobío). CONAF maintains tree-nursing infrastructure in both regions, which will be used for project activities in Component 2. As well, CONAF is responsible for the enforcement of the Act 20.283 aimed at protecting native forests (prevention of illegal logging and forest fires).

37. The Institute of Agricultural Development (INDAP), Ministry of Agriculture, is devoted to the enhancement of agricultural practices in management units, covering the Arica y Parinacota, and Biobío regions. However, the inclusion of biodiversity valuation into farms decision-making is absent in the fund's strategy. The National Monuments Council, Ministry of Public Land, provides land for the establishment of Nature Sanctuaries (NS) in Arica y Parinacota, and Biobío. The National Tourism Service (SERNATUR) currently promotes the value of biodiversity as a touristic asset in Arica y Parinacota, and Biobío.

<sup>19</sup> Mainly the Ministry of Agriculture's dependencies, and the regional governments of Arica y Parinacota, and Biobío.

<sup>20</sup> It refers to the Council of Ministries for Sustainability, in charge of discussing and approving environmental policies and programs; the Environmental Assessment Agency (SEA), responsible for managing Environmental Impact Assessments; and the National Bureau of the Environment (SMA), to oversee compliance with environmental laws. A law that creates special environmental courts has been recently approved and enters into force as this document is being finalized.

38. Regarding the private sector, economic agents with broad capacities and needing long-term planning are concerned about the threats posed by the loss of key ecosystem services, and have already started action in the form of incipient research, monitoring and CSR (Corporate Social Responsibility) programmes. Forestal Arauco (AntarChile Holding), Forestal Minico, Pioneer (DuPont Group), and Antuco have expressed interest in being involved into concerted actions in the field if they have a solid direction and lead. Forestal Arauco has developed a camera trap study of Darwin's fox, and it is also supporting the management plans in high-value conservation areas of Caramavida (Biobío), and Huemules de Nuble (Biobío). Forestal Minico is contributing to management plans of high-value conservation areas in Biobío. Pioneer, which has operations in the Northern valleys (Arica y Parinacota Region), is today developing its CSR department with a focus on its local community.

39. Civil society organizations are also working on biodiversity protection in these 2 regions, in particular the National Committee for the Defense of Flora and Fauna (CODEFF), Grupo Altué, Aumen, and Forest Ethics. All of them have current operations in the project area, implementing environmental awareness and education activities.

40. In light of the identified global environmental problems and baseline scenario, the project objective is to integrate the conservation and sustainable use of critically threatened species and endangered ecosystems into priority development-frontier landscapes, by promoting sustainable agricultural and forestry production, capacity-building, and socio-environmental benefits, in the Arica y Parinacota, and Biobío regions.

41. Current levels are of about 500 individuals for the Arica hummingbird<sup>21</sup>, 20 breeding individuals for Huemul<sup>22</sup>, 50 individuals for Darwin's fox and 100 ha (10000 trees) for the Queule<sup>23</sup>. The project seeks to maintain at least these numbers by project's end (i.e. to stop the population-loss trends) as a first step towards the saving of these critically endangered species.

42. The project will be implemented in two administrative regions of Chile: i) region of Biobío; and ii) region of Arica y Parinacota. In the region of Biobío, three demonstrative areas have been selected due to the threats posed to three species. The first demonstrative area is the Nahuelbuta range, where the Darwin fox is under pressure. The second demonstrative area is the Nevados de Chillan Biosphere Reserve, where the huemul is negatively impacted. The third demonstrative area is the Queule's Range, where the tree queule is threatened. In the region of Arica y Parinacota, one demonstrative area has been selected due to the pressures suffered by the Arica hummingbird. These are the Valleys of Azapa, Vitor, Chaca, and Camarones (Northern Valleys).

43. The proposed project will be implemented out of protected areas, in targeted productive landscapes in the Northern (Arica y Parinacota) and mid-Southern (Biobío) of Chile, where those four different species are impacted by similar anthropogenic threat drivers. Project interventions will address the lack of awareness and actions regarding these four species' values that lead to destroying them through land-use change, habitat fragmentation, ecosystem degradation, and institutional uncoordination. Pilot interventions will be implemented in 300,000 ha. (see Table B). The specific good practices will be participatory designed during full project preparation. The proposed project is aimed at protecting and/or restoring the ecosystem services through the application of a comprehensive approach that goes beyond the limits of each land property, and that include an integrated landscape management vision. The project will restore connectivities and implement threat-reduction activities in the project intervention areas (at least 300,000 hectares). By mean of this, the project will reinforce the conservation efforts for 4 critically endangered species, while supporting local livelihoods and rural production.

44. The ultimate goal of the project is to help change behaviors in the productive private sector, and to facilitate institutional coordination to include biodiversity value into public policies, and set the ground for the effective implementation of environmental-friendly regulations.

45. The proposed project will be structured in **four components**.

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<sup>21</sup> "Estimación poblacional del Picaflor de Arica" (*Eulidia yarrellii*), Aves Chile, October 2012

<sup>22</sup> "Reporte sobre la Meta-Población de Huemuls (*Hippocamelus bisulcus*) de la zona norte de Los Nevados de Chillán". FZS Proyecto 1171/93: Proyecto Conservación del Huemul. CODEFF, 2010

<sup>23</sup> "Queule: Dámaso Saavedra (com. pers., 2012)

**46. Component 1: Awareness-raising and capacity-building to support the protection of endangered species in the Arica y Parinacota, and Biobío regions**

47. Component 1 aims at overcoming barrier #1, through one outcome: Outcome 1.1) Critical information has been broadcasted, institutional and local stakeholders' capacities have been developed, best practices singularized, and conditions for replication and up-scaling of lessons learned improved, for the conservation of 4 critically endangered species (the Arica hummingbird, the huemul, the Darwin fox, and the queule). Outcome 1.1) will be achieved through five outputs: 1.1.1) Three information-sharing mechanisms and three training tools that trigger the engagement of local stakeholders, production sectors, private sector and governmental agencies, in biodiversity conservation in 3 local landscapes; 1.1.2) Three environmental education programmes for civil society organizations, municipalities and schools; and 1.1.3) Five manuals of good practices for the agriculture and livestock (2), forestry (1) and touristic (2) sectors, developed and adopted by sectorial organizations.

48. Component 1 will have a bottom-up approach. It will start from spreading key information about the status and threat level of selected ecoregions. Based on a common vision about the landscape, Component 1 will foster the setting of public-private agreements, the identification of capacity lags, and the creation of enabling environments where private conservation initiatives may thrive. Targeted training, identification and dissemination of good production practices, share of comparable best practices and lessons learned between the three pilot areas will also be promoted.

49. The co-financing of Component 1 will include staff and budgeted programs of public and private institutions present in the two regions, dedicated to environmental awareness-raising activities both internally (e.g.: in big companies) and externally (in local governments, at schools, etc).

50. Component 1 will be co-financed by U\$S 1,930,183, coming from the Environmental Awareness and Education Programme of MMA (see paragraph 34), the awareness and education initiatives concerning local civil society being developed by Grupo Altu , Aumen and Forest Ethics (see paragraph 38). In addition, SAG, CONAF and SERNATUR will provide funding and technical expertise for seminars and workshops and the printing and distribution of outreach materials for schools and farmers. INDAP (agriculture and forestry) and SERNATUR (tourism) will provide technical expertise for the identification of best practices through their existing networks and will bring fresh funding to the project.

**51. Component 2: Integrated landscape management based on good agricultural and forestry practices and the valuation of biodiversity and ecosystem services in Arica y Parinacota, and Biob **

52. Component 2 aims at overcoming barrier #2, through one outcome: Outcome 2.1) Priority demonstrative actions have been catalyzed, at the appropriate scale and sector, and territorially integrated (measured through two indicators: (i) 300,000 hectares of sustainably managed landscapes including agro-ecosystems, production forests, critical biological corridors, and threatened species refuge and breeding grounds; and (ii) 300,000 hectares of agricultural and forest landscapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity considerations, recorded by GEF tracking tool). This expected outcome will be achieved through five outputs: 2.1.1) Three integrated landscape management plans that include valuation of biodiversity and ecosystem services, and best practitioners labeling; 2.1.2) At least 2 labeling schemes identified and adopted, that allow the internalization of biodiversity value into businesses' strategic analyses; 2.1.3) At least 3 local public-private partnerships including agreements for the valuation of biodiversity-friendly practices through at least 2 certification and labeling schemes (see 2.1.2); 2.1.4) At least 10 demonstrative pilot actions developed by 10 small-scale and medium-scale landholders in the Northern valleys (covered by the Microreserves Network of Arica y Parinacota<sup>24</sup>), the Nahuelbuta Range, and BR *Nevados de Chill n*; 2.1.5) Replication actions supported in Chiloe Island (Darwin fox), Maule Region (queule) and Tarapac  (Arica hummingbird).

53. Component 2 will concentrate on field interventions for protecting the four above-mentioned species, and restoring ecosystem services (ES) that have been degraded due to the unsustainable forestry and agricultural practices applied in Biob , and Arica y Parinacota. The pilot sites will cover 300,000 ha. located in the Micro-Reserves Network of Arica y Parinacota, the Biosphere Reserve *Nevados de Chill n*, and the Nahuelbuta range. The Project will promote the implementation of three integrated landscape management plans (one for each project area) that combine conservation agriculture, sustainable livestock production, sustainable timber and non-timber production, and restoration of ecosystem services at risk in the pilot areas (see the list of ES at risk in Table

<sup>24</sup> For its name in Spanish "*Red de micro-reservas de Arica y Parinacota*"

2 above). As explained above, the restoration of degraded ES will reduce habitat fragmentation and will therefore contribute to the stabilization of the four species' individuals at current levels (see Table B). The main project goal is to stop the losses of individuals of these four threatened species (please see maps and table in Annex I, that illustrate the species' reductions in the last decades).

54. Since the four species are only present in Biobío and Arica y Parinacota regions, at least two certification schemes will be designed during full project preparation considering the particular features of the Arica Valleys and the hummingbird, and the Nahuelbuta, Nevados de Chillán, and Queule range, and their threatened species. The certification schemes will be based on a label provided to agents that produce their agriculture and/o forestry goods and services in a manner that help maintain the current population of hummingbird in Arica, and that apply biodiversity-friendly practices in Biobío (where ecosystems are more under pressure). These labels will give marketing added-value to those biodiversity-friendly produced goods and services, and the producers will then benefit from selling them. Labels will certify that relevant agents (forestry and agricultural producers) have applied good production practices with regard to the involved biodiversity values.

55. Component 2 will have a catalytic approach. The aim is to trigger public-private partnerships for conservation, ranging from small- and medium-sized enterprises that produce certified products under locally-developed labels, to big companies with Corporate Social Responsibility (CSR) strategies and strong local presence.

56. GEFTF investment through Component 2 will be framed within the previously-developed Management Plans and Conservation Plans (by MMA), and will be provided as catalytic resources to co-financing initiatives. This GEF investment will be monitored through the project's mechanisms, while co-financing contributions from the private sector will be monitored by the partnerships' own mechanisms. Therefore, full relevance of both investments will be ensured.

57. Component 2 will receive co-financing by US\$ 4,196,051. Co-financing initiatives will include: the Landscapes Monitoring and Restoration of SAG (see paragraph 35); the management plan of Forest Minico (see paragraph 38); the NRs management plans and protecting native forest plans of CONAF (see paragraph 36); good agriculture practices implemented by INDAP (see paragraph 37). Moreover, the National Monuments Council will provide support for the identification of cultural values (indigenous patrimony) and professional expertise for the appraisal and economic valuation of cultural assets; SERNATUR will support the tourism sector in its incorporation to the project (ecotourism initiatives) through technical assistance; two Regional Governments will provide financial resources through their respective allocations of the National Fund for Regional Development; private agents will provide land, human resources and investment such as monitoring equipment, vehicles and other similar, and funds for seminars and workshops and the printing and distribution of outreach materials for government officers. FAO will provide co-financing through the project GCP/RLC/195/BRA (see description in section B.3 below).

**58. Component 3: Mainstreaming the conservation and sustainable use of threatened species and endangered ecosystems, including valuation, into policies and regulatory frameworks in Arica y Parinacota, and Biobío.**

59. Component 3 aims at overcoming barrier #3, through one outcome: Outcome 3.1) The conservation, and sustainable use of critically endangered species, and the valuation of biodiversity and ecosystems services, have been incorporated into municipality, regulatory and inter-institutional frameworks (measured through two indicators: (i) At least 4 critically endangered species (Arica hummingbird, huemul, Darwin fox, queule) valued at landscape level – in 300,000 hectares; and (ii) seven policies and regulations governing 2 sectorial activities (agriculture, forestry) that integrate biodiversity conservation as recorded by the GEF tracking tool as a score). This expected outcome will be achieved through two outputs: 3.1.1) Four (4) Species' Conservation Plans with concrete policy tools at municipal and regional level, regulating the forestry and agriculture practices that affect the existence and the ecosystem services needed by the Arica hummingbird, huemul, Darwin fox, and the queule; and 3.1.2) Two (2) regional policies and five (5) municipal regulations that explicitly incorporate the Four (4) Species' Conservation Plans through a participatory process. in the three project intervention areas (300,000 hectares).

60. As detailed above, the biodiversity that the project intends to protect is represented by four species: Arica Hummingbird, Huemul, Queule, and Darwin fox (in the Chiloe Island). The ecosystem services that are at risk, affecting the survival of these four species, are: i) plague and disease control (in the Nahuelbuta mountains); ii)



soil fertility (in the Arica Valleys, Nahuelbuta, and Nevados de Chillan); iii) water quality regulation (in the Arica Valleys, Nahuelbuta, and Nevados de Chillan); iv) pollination (in the Arica Valleys); and v) aesthetic/recreational value (in the three areas) (see Table 2 above).

61. Component 3 will address the practices that generate loss of biodiversity and ecosystem services (see more details above) by incorporating the valuation of BD and ES into municipality and regional policies. Policy instruments are referred to: i) four already-existing Conservation Plans (one for each selected species); ii) two regional policies (one for Biobío, and one for Arica y Parinacota); and iii) five municipal regulations (project intervention areas where the 300,000 pilot hectares are located). The modality to incorporate the four existing-but-not-operating Species' Conservation Plans into those policies and regulations will be through a participatory process. These Conservation Plans have a developed text, but no-concrete policy tools have been designed for them. In addition, the Conservation Plans are not effectively implemented because the coordination among government agencies, public sector, private sector and peasants' organizations is lacking. Therefore, output 3.1.1 will focus on developing concrete application tools and regulations that promote good practices in the forestry and agriculture sector, and disincentive natural resources depletion among local agents (including small-, medium-, and large-scale companies). The objective is to convert the Conservation Plans into effective policy tools. Once developed the concrete policy tools of the Conservation Plans, these plans will be incorporate into the regional sectorial policies (forestry and agriculture-related) and in the municipal regulations (including municipal governments ruling over the 300,000 ha. selected as project pilot sites – see output 3.1.2). The project has a huge potential for the scale-up: the proposed institutional model and its lessons learned may be replicated by Ministry of Environment for the recovery of ES and the protection of other threatened species throughout the country.

62. The seven policies and regulations referred in outcome 3.1 are: i) the forestry and agriculture-related policies implemented by the regions of Biobío, and Arica y Parinacota, under the supervision and guidance of the Ministry of Agriculture, and the Ministry of Environment; and ii) the municipal regulations for natural resources management in the agriculture and forestry sectors in five municipal governments of the regions of Biobío, and Arica y Parinacota, where pilot sites will be located. These are the key policies to protect the four above-mentioned species because they regulate the economic activities that pose more challenges and threats on those ES and BD that this proposed project seeks to address.

63. A preliminary analysis has demonstrated that local governments are interested in assuming responsibilities in the NR management, given the *devolution* process in action in Chile. Please notice that the concrete identification of pilot sites (and pending relevant municipal governments) will be conducted during full project preparation.

64. In sum, Component 3 will have an institutional and policy-oriented approach. It will support local and regional governments to learn from the experiences developed by Component 2 (at production and field level), adapting and reflecting these new, consensual and biodiversity-based spotlights into their policy and regulatory frameworks, which in turn, will strengthen the good production practices in a virtuous circle. Project sustainability will be based on this positive interaction. Under output 3.1.2, an identification exercise will be conducted to find new sectorial funding mechanisms. The aim is to incorporate biodiversity valuation into targeted funding decision processes. This exercise will be co-financed by the financing mechanisms of the Ministry of Environment (Environmental Protection Fund - FPA<sup>25</sup>) and the Ministry of Agriculture (Local Rural Development Programme - PRODESAL<sup>26</sup>, and Native Forest Fund<sup>27</sup>), the Corporation for the Promotion of Production (CORFO)<sup>28</sup>, and the National Commission of Science and Technology Research (CONICYT)<sup>29</sup> (see line "Others" in Table C).

65. Component 3 will be co-financed by US\$ 1,930,183. Co-financing initiatives will be: studies of Forestal Arauco (see paragraph 38); biodiversity and tourism programmes promoted by SERNATUR (see paragraph 37); conservation plans of specific species led by MMA (see paragraph 34); and conservation plan of queule designed

<sup>25</sup> For its name in Spanish, *Fondo de Protección Ambiental*, which depends on the administrative structure of the Ministry of Environment of Chile.

<sup>26</sup> For its name in Spanish, *Programa de Desarrollo de localidades Rurales*, INDAP (National Institute of Agriculture Development), Ministry of Agriculture of Chile.

<sup>27</sup> Its name in Spanish is *Fondo del Bosque Nativo*, and depends on the administrative structure of the Ministry of Agriculture of Chile.

<sup>28</sup> For its name in Spanish, *Corporación de Fomento de la Producción*. CORFO is a public-sector organization dedicated to promoting entrepreneurship, innovation and growth in Chile, using tools and instruments compatible with the central framework of a social market economy, creating "the conditions necessary to build a society of opportunity".

<sup>29</sup> For its name in Spanish, *Comisión Nacional de Investigación Científica y Tecnológica*, which depends on the administrative structure of the Ministry of Education of Chile.

by CONAF (paragraph 36). In addition, SAG will provide technical expertise and fresh funding for designing the concrete policy tools of the Conservation Plans (see output 3.1.1), monitoring activities and GIS needs; two Regional Governments will provide financial resources through their respective allocations of the National Fund for Regional Development. FAO will bring co-financing with the project GCP/RLC/195/BRA (see description in section B.3 below).

66. The Project will implement concrete practices to revert unsustainable natural resources management practices that are driving species loss (see also Table 1 above):

a) Good practices for protecting/stopping the lost of the Darwin fox: i) implementing feral dog controls at field level; ii) helping the two selected regional government to set regional funds with a window for the Darwin fox conservation; iii) promoting the implementation of private and public-private protected areas; and iv) implementing concrete land use plans in pilot areas based on a connectivity approach. The selection of pilot areas for field interventions will be carried out during full project preparation.

b) Good practices for protecting/stopping the lost of Huemul: i) helping the two selected regional government to set regional funds with a window for the Huemul conservation; ii) promoting the implementation of private and public-private protected areas; and iii) implementing concrete land use plans in pilot areas based on a connectivity approach. The selection of pilot areas for field interventions will be carried out during full project preparation.

c) Good practices for protecting/stopping the lost of Queule: i) helping the two selected regional government to set regional funds with a window for the Queule conservation; ii) promoting the implementation of private and public-private protected areas; iii) implementing concrete reforestation/forest enrichment at field level; and iv) implementing concrete queule-wise fire management plans at local level. The selection of pilot areas for field interventions will be carried out during full project preparation.

d) Good practices for protecting/stopping the lost of Arica hummingbird: i) helping the two selected regional government to set regional funds with a window for the Arica hummingbird conservation; ii) promoting the implementation of private and public-private protected areas; iii) implementing concrete reforestation/forest enrichment at field level; iv) implementing concrete hummingbird-wise hedgerow installation/enrichment at local level; v) promoting the substitution of agrochemicals among small-scale and medium-scale producers in areas selected with replicability criteria; and vi) implementing concrete land use plans in pilot areas based on a connectivity approach. The selection of pilot areas for field interventions will be carried out during full project preparation.

67. The private sector in this project is considered as two categories: i) large companies, generally, export-oriented; and ii) small- and medium-scale producers, domestic market-oriented. In addition to that, Civil Society, in particular local communities that have participated in the design of the project proposal, are also incorporated.

Large rural sector companies have an internal incentive to be involved in best production practices in Chile. This incentive is based in their *a priori* company policies that promote the implementation of broad Corporate Social Responsibility strategies with clear environmental components. In addition, these export-oriented companies (producers of seeds, forest-based products, agro-industry) have a globalized market and consumers and, in accordance with their internal policies and CEOs, would not like to be in a situation where they are not complying with local environmental policies. They are as such sensitive to improvements in public policies, regulations and plans for increased conservation of threatened species. With regard to the small- and medium-scale rural producers, the incentive comes from an incipient awareness that the loss of biodiversity and the related habitats is causing losses in their livelihoods, production resources, and productivity levels. In addition, at community level there is awareness of the aesthetical and economic opportunity losses generated by deforestation and land degradation. During the process of designing the present project proposal, large, medium-, and small-scale rural producers have expressed the need of having clear policies and regulatory tools providing predictability and

facilitating informed-decisions that will favor the threatened species. These tools will include incentive schemes that give support to the best practices implemented.

68. The labeling system will be monitored by the Ministry of Environment, and locally implemented by the Regional Governments of Arica y Parinacota, and Biobío. The labels will be assigned at small- and medium-scale level in both regions, and some large-scale companies in the North (producing seeds, fruits and vegetables, that do not have any certification system in place. Other forest companies are already applying FSC SFM and CoC certification). The selection of the companies and producers with whom the certification criteria will be developed and implemented as the 'first-movers', the calculation of targeted premium and the identification of related market opportunities will be conducted during full project preparation, based on a replicability criteria.

**69. Component 4: Project progress monitoring and information dissemination**

70. This component will make sure that the project implementation is based on results-based management, external evaluations are timely conducted, lessons learned and best practice from project implementation are identified and registered, and project information is available for interested external parties, and will facilitate that project findings are applied in future operations. Component 4 will complement and coordinate monitoring activities implemented by MMA and private landholders, which will amount U\$S 335,684.

71. Table 3 illustrates how the outputs of the proposed project will address the causes, practices, threats, impacts, and agents that threaten the four species (as detailed in Table 1 above)

**Table 3:  
Project Outputs by demonstrative areas**

Administrative region	Biobío Region			Arica y Parinacota Region
Demonstrative area	Nahuelbuta range	Nevados de Chillán Biosphere Reserve	Queule range	Northern Valleys
<b>Project outputs</b>	<p>Outputs 1.1.1, 1.1.2, 1.1.3, 2.1.1, 2.1.2, 2.1.3, 2.1.4,</p> <p>3.1.1. One Species' Conservation Plans with concrete policy tools, regulating the forestry and agriculture practices that affect the existence and the ecosystem services needed by the Darwin fox.</p> <p>3.1.2 One regional policy (Biobío) and at least two municipal regulations (in Contulmo, Nacimiento, and/or Cañete municipalities) that explicitly incorporate the</p>	<p>Outputs 1.1.1, 1.1.2, 1.1.3, 2.1.1, 2.1.2, 2.1.3, 2.1.4.</p> <p>3.1.1. One Species' Conservation Plans with concrete policy tools, regulating the forestry and agriculture practices that affect the existence and the ecosystem services needed by the Huemul.</p> <p>3.1.2 One regional policy (Biobío) and at least two municipal regulations (in Chillán, Coihueco, Pinto and/or San Fabián municipalities) that explicitly incorporate the Species' Conservation</p>	<p>Outputs 1.1.3, 2.1.2, 2.1.4.</p> <p>3.1.1. One Species' Conservation Plans with concrete policy tools, regulating the forestry and agriculture practices that affect the existence and the ecosystem services needed by the Queule</p> <p>3.1.2 One regional policy (Biobío) and one municipal regulations (place to be defined) that explicitly incorporate the Species' Conservation Plans for the Queule through a participatory process in the project areas located in the Queule range</p>	<p>Outputs 1.1.1, 1.1.2, 1.1.3, 2.1.1, 2.1.2, 2.1.3, 2.1.4.</p> <p>3.1.1. One Species' Conservation Plans with concrete policy tools, regulating agriculture practices that affect the existence and the ecosystem services needed by the Arica hummingbird.</p> <p>3.1.2 One regional policy (Arica y Parinacota) and two municipal regulations (Camarones, and City of Arica) that explicitly incorporate the Species' Conservation Plans</p>

Administrative region	Biobío Region			Arica y Parinacota Region
Demonstrative area	Nahuelbuta range	<i>Nevados de Chillán</i> Biosphere Reserve	Queule range	Northern Valleys
	Species' Conservation Plans for the Darwin fox through a participatory process in the project areas located in the Nahuelbuta range	Plans for the Huemul through a participatory process in the project areas located in the <i>Nevados de Chillán</i>		for the Arica hummingbird through a participatory process in the project areas located in the Northern Valleys

69. The MMA, the Ministry of Agriculture (SAG, CONAF, INDAP), the Ministry of Public Land, National Monuments Council, SERNATUR, the regional Governments of Arica y Parinacota, and of Biobío, local governments, local civil society, CSOs, and the private sector involved in the project intervention areas will contribute to deliver the following GEBs: i) at least four (4) critically threatened species (Arica hummingbird, huemul, Darwin fox, queule) conserved or sustainably used in critical habitats; ii) at least 300.000 hectares of land sustainably managed, reducing pressures on globally important species; iii) At least 4 critically endangered species valued at landscape level (300,000 hectares); iv) at least seven (7) policies and regulations governing regional, municipal or sectorial activities that integrate biodiversity valuation; v) 300.000 hectares of agricultural and forest landscapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity considerations, as recorded by the GEF tracking tool.

70. This proposed project will also generate GEBs by contributing to Aichi Targets #2, 3, 5 and 12 through the following outputs:

Aichi Biodiversity Target	Related Project Outputs	Selected SMART Indicators <sup>30</sup>
<b>Target 2.</b> By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	3.1.2 Seven (7) policies, regulations and/or protocols at municipal and regional levels that explicitly incorporate the sustainable use and valuation of biodiversity and ecosystem services in the three project intervention area 2.1.1. Three (3) integrated landscape management plans that include valuation of biodiversity and ecosystem services.	Trends in integration of biodiversity and ecosystem service values into sectoral and development policies (C)
<b>Target 3 -</b> By 2020, at the latest, (...) positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	2.1.2. At least 2 labelling schemes identified and adopted, that allow the internalisation of biodiversity value into businesses' cost/benefit analyses 2.1.3 At least 3 local public-private partnerships including agreements for the valuation of biodiversity-friendly practices through at least 2 certification and labeling schemes	Trends in identification, assessment and establishment and strengthening of incentives that reward positive contribution to biodiversity and ecosystem services and penalize adverse impacts (C)
<b>Target 5 -</b> By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible	2.1.1 Three (3) integrated landscape management plans that include valuation of biodiversity and ecosystem services 2.1.5 Replication actions are supported in	Extinction risk trends of habitat dependent species in each major habitat type (A) Trends in proportion of

<sup>30</sup> The intermediate milestones to be achieved during project implementation will be established in the full project formulation phase.

brought close to zero, and degradation and fragmentation is significantly reduced.	Chiloé Island (Darwin fox), Maule Region (queule) and Tarapacá (Arica hummingbird)	degraded/threatened habitats (B)
<b>Target 12</b> - By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	2.1.4 At least 10 demonstrative pilot actions developed by 10 small-scale and medium-scale landholders in the Northern valleys, the Nahuelbuta Range, and BR Nevados de Chillán 2.1.5 (see above)	Trends in extinction risk of species (A) (MDG indicator 7.7)

71. In Chile, this project proposal is highly innovative due to the incorporation of the value of three so-called “landscape species” into the decision-making processes of big, medium and small-scale companies, that operate in the most important economic sectors of these regions (agriculture, forestry and tourism).

72. This valuation process will be built upon dialogue, public-private partnerships, and market mechanisms, which will render this project proposal very sustainable in the long-run. The project will support the catalyzing and demonstrative activities, while mechanisms and agreements will rely on stakeholders’ agreements and coordination that will last after project termination.

73. Project replicability is potentially high, since its successful implementation may open paths for other landscapes, where the project strategy and lessons learnt may be adopted and adapted in the mid-term future. Nearby landscapes in the same administrative regions can be encouraged by the respective regional governments to reproduce successful experiences of integrated landscape management. This project is also intended to function as demonstration phase for other initiatives<sup>31</sup>.

**A.2 Stakeholders. Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and other as relevant) and describe how they will be engaged in project preparation.**

74. Regional Governments are increasingly important in the Chilean institutionality. They have been provided with new competencies and funding, and are willing to support locally- and regionally-relevant initiatives that diversify economic production. The RGs of Arica y Parinacota, and Biobío have already expressed their interest in participating in this project. During project preparation, RGs will have a central role in gathering project stakeholders, providing facilities to carry out inception, preparation and completion workshops, and validating the final full-sized project document.

75. Local governments: The legislation of Chile assigns many environmental responsibilities to the municipalities, but they are frequently unable to undertake these duties, given their lack of funding, capacities, and local support. This proposed project represents an opportunity for them to strengthen their environmental teams and role in the local development issues. The Municipalities of Arica and Camarones (Region of Arica y Parinacota), Contulmo, Nacimiento and Cañete (Nahuelbuta range), Chillán, Coihueco, Pinto and San Fabián (Biosphere Reserve of Nevados de Chillán) have shown interest in participating in project preparation activities at local level (workshops, supporting national consultants in field data collection at local level, outreach and dissemination of activities among local communities, others). As well, they will have a key role during project implementation and for ensuring project sustainability.

76. Private companies: Big private companies such as Arauco (AntarChile Holding) and Pioneer (Dupont Group) have economic interests in the areas and issues tackled hereby, and have declared an interest in having a real participation in the project. Arauco holds more than 100,000 ha of land in the Biobío region, and it is engaged in existing conservation actions in the region through its CSR Strategy. Pioneer has a CSR Strategy that is seeking to enhance local involvement in the Northern valleys. Their project roles will be according to the FAO’s Principles and Guidelines for Cooperation with the Private Sector (see details in B.3 below).

77. SMEs, local communities, indigenous groups are the social base of the proposed project, since smallholding is a feature of the selected human development-frontiers. Indigenous communities live in two over three of project

<sup>31</sup> Such as GEF ID 4939 *Supporting civil society and community initiatives to generate global environmental benefits using grants and micro loans in the Mediterranean ecoregion of Chile.*

intervention landscapes (*aymará* communities in the Region of Arica y Parinacota; and *mapuche* communities in the Region of Biobío) and will be involved with full respect of the prior-consent and agreement procedures.

**A.3 Risks.** Indicate risks, including climate change risks, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (Table format acceptable).

Risk	Rating	Mitigation Measures
<b>Economic Risk:</b> Difficulties for certified products to access markets	Medium	Some products already have reliable markets and are traded for a reasonable price. Newly certified products or services to be introduced by this project will require market analysis to assess their economic viability. The project will work with existing networks and groups engaged in trade and marketing of these products to ensure timely and effective support.
<b>Climatic Risk:</b> Accelerated climate change further worsens the species' survival possibilities	Medium	The project in itself, by its promotion of measures that augment the effective habitat and curb illegal extraction, enhances the species' possibilities of coping with non-manageable changes (at this scale) such as suitable-habitat displacement that climate change can bring in.
<b>Organizational risk:</b> Organizational weaknesses in partners and public-private partnerships prevent them from effectively executing the project.	Medium	Risk mitigation systems in place (e.g. partner and partnership capacity development support, appropriate rates of co-funding, intensive monitoring) will be strengthened to maintain or improve this rate of achievement. The project will also reduce this risk by supporting replication of good practices that have proven delivery in FAO previous experiences.
<b>Political Risk:</b> Lack of political will to support and take action in favor of sustainable production landscapes	Low	Several experiences show that landscape sustainability is closely related to the degree of biological diversity, beyond the goods and services directly provided by biodiversity. The project will promote this resilience and be careful in recording and promoting the associated ecosystem services of production landscapes in which the value of biodiversity is recognized, such as increased soil stability and fertility, maintained crop resistance to diseases and pests, increased capacity for water-cycle regulation, microclimatic benefits and others. These long-term benefits will be known by the inhabitants and therefore political support will mount for the politicians that favour biodiversity-wise policies.

**A.4 Coordination.** Outline the coordination with other relevant GEF financed and other initiatives.

78. In order to avoid duplication of efforts, the proposed project will incorporate findings and lessons learnt of ongoing initiatives, and will coordinate actions with them at the local and national level:

79. *GEF ID 4857 National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan* (implementing agency: UNDP), which is supporting the preparation of the National Biodiversity Strategy and Action Plan (NBSAP). The FAO proposed project will contribute to the NBSAP by providing concrete on-the-ground examples of integrated activities that deliver global environmental benefits, and by developing bottom-up policy inputs for conservation strategies out of the PA system. In addition, during 2013 the Biobío, and Arica y Parinacota regions will hold regional workshops for developing regional strategies in the framework of the NBSAP. The outputs of these workshops will be considered during the full FAO project document preparation. The MMA will ensure coordination among both initiatives.

80. *GEF ID 4104 Sustainable Land Management* (implementing agency: World Bank), which addresses the mainstreaming of SLM into agriculture and forestry incentive policies. It funds local activities in regions that are not covered by the FAO proposed project. Coordination and adequate flow of information will be mainly ensured

by the Natural Resources Division of the MMA which participates in the implementation of the World Bank project and is an executing partner in the FAO proposed initiative.

81. *GEF ID 4939 Supporting civil society and community initiatives to generate global environmental benefits using grants and micro loans in the Mediterranean ecoregion* (implementing agency: UNDP). The project aims at improving the efficiency of landscape-level actions developed by community-based organizations (CBOs). The project is supporting the elimination of barriers that block better sectorial frameworks, and the implementation of renewed communication mechanisms between the MMA and CBOs. The species and areas addressed by this UNDP project are complimentary and non-overlapped with those problems concerned by the FAO proposed project. The Natural Resources Division of MMA participates in both projects and will ensure the adequate flow of information between them.

82. *GEF ID 1207 Regional System of Protected Areas for Sustainable Conservation and Use of Valdivian Temperate Rainforest* (implementing agency: UNDP), which supports the development of Chile's first regional system of PAs, and fosters the implementation of best production practices, connectivity and management plans for public and private reserves in the Valdivia rainforest ecoregion. The species and areas addressed by this UNDP project are complimentary and non-overlapped with those problems concerned by the FAO proposed project. The Natural Resources Division of MMA participates in both projects and will ensure the adequate flow of information, best practices, and lessons learned between them.

83. *GEF ID 5135 Biological Corridors in Mediterranean Ecosystems* (implementing agency: UNEP). This project will contribute to the conservation of globally-significant biodiversity in the Metropolitan Region of Chile (Santiago and its immediate surroundings). The species and areas addressed by this UNDP project are complimentary and non-overlapped with those problems concerned by the FAO proposed project. The MMA is planning to scale-up the lessons learnt from both projects. In view of that, the Natural Resources Division (MMA) is assuring the coordination between them.

## **B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

### **B.1 National strategies and plans or reports and assessments under the relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, Biennial Update Reports, etc.**

84. Chile is Party to the Convention on Biological Diversity (1994). The proposed project is consistent with the strategies identified by the National Biodiversity Strategy (2006) and the National Biodiversity Action Plan (2008-2012): integrated landscape planning and management, technology transfer, coordination among actors, and enhanced funding mechanisms. The project is also in line with the Fourth National Report to CBD (2009), that recognized habitat fragmentation, degradation, and conversion - mainly outside the protected areas - as primary drivers of biodiversity loss. The Report also considered overexploitation and unsustainable use of natural resources as significant threats.

85. Chile is currently preparing its National Biodiversity Strategy and Action Plan (NBSAP). The flagships addressed by the proposed project have been prioritized in the National Policy of Threatened Species (2005) and the National Biodiversity Strategy (2006), and will be incorporated into the NBSAP - currently under construction at national and regional levels.

### **B.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities**

86. This proposed project will support the focal area objective BD-2 by targeting a minimum of 300,000 hectares of sustainably managed landscapes including agro-ecosystems, production forests, critical biological corridors, and threatened species refuge and breeding grounds. In particular, the project will address outcome BD-2.1 by increasing landscapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity (300,000 hectares, see Component 2), setting up public-private coordination mechanisms and overcoming barriers that are blocking enabling environments (policies and frameworks for sectoral activities) at regional level (see Components 1 and 3). In addition, it will aim at achieving outcome BD-2.2 by enhancing the effectiveness of landscape-level actions (developed by local/regional governments and local organizations), promoting integrated landscape management with biodiversity valuation, and conservation plans (see Components 1 and 3).

### B.3 The GEF Agency's comparative advantage for implementing the project

87. As the UN Agency dealing with agriculture and forestry, FAO is uniquely fit for carrying out the present project. FAO has a considerable experience on the development of methods, tools and voluntary policy guidelines to promote sustainable agriculture and forestry practices, participatory planning methods, and land restoration. FAO promotes the appropriate use of biodiversity and its relation with food security, genetic resources, and responsible ecosystem management.

88. FAO's engagement with the private sector in recent campaigns on food security, hunger and climate change will provide valuable strategies for this project objective. The FAO Programme and Finance Committees are preparing a revised *FAO Strategy for Partnerships with the Private Sector*, which will update the Strategy designed in 2000. FAO has an overall strategy of using partnerships to achieve its renewed strategic objectives.

89. The FAO Regional Office for LAC (FAORLC, Santiago, Chile) is implementing the project *Strengthening agro-environmental policies in countries of Latin America and the Caribbean through dialogue and exchange of national experiences* (GCP/RLA/195/BRA). In Chile, FAO is working jointly with the MMA, the Ministry of Agriculture, and local institutions that promote good landscape management. This project will provide co-financing by US\$ 125,000. Moreover, FAORLC hosts the Executive Secretariat of the regional network of PAs (REDPARQUES), where supports the appropriate management of protected areas in LAC.

90. The FAO Country Office in Chile is implementing the national forestry inventory project, aim at collecting accurate data and information about forest cover, use and users of trees, non-wood forest products including biodiversity, natural forest and plantations, for better planning, management and policy monitoring. The Forest Management Division (FAO Headquarters, Rome, Italy) is backstopping the process, collaborating with the National Forest Institute (INFOR). In addition, FAO Chile is supporting CONAF to develop an assessment methodology that measure the economic impacts suffered by PAs due to biodiversity losses, forest fires, and restoration expenditures. FAO has a long experience collaborating with national government agencies (ODEPA, CORFO, INDAP, CONAF), local communities, and the private sector, in income generating activities, small-scale forest enterprises, and forest conservation initiatives, that will serve as institutional memory for the proposed project.




**PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):** (Please attach the Operational Focal Points endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Ximena George Nascimento	Operational Focal Point	MINISTRY OF ENVIRONMENT	

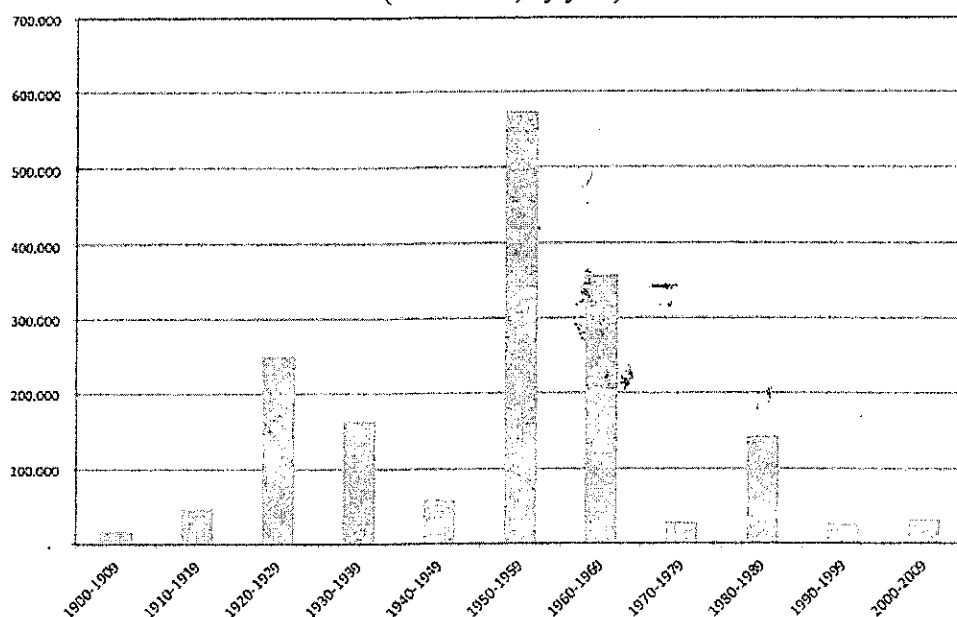
**B. GEF AGENCY(IES) CERTIFICATION**

**This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.**

Agency Coordinator, Agency name	Signature	Date (MM/DD/YYYY)	Project Contact Person	Telephone	Email Address
for Gustavo Merino Director Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla (00153) Rome, Italy <a href="mailto:TCI-Director@fao.org">TCI-Director@fao.org</a>		22 August, 2013	Hivy Ortiz Chour, Forestry Officer, FAO Regional Office for Latin America and Caribbean  Valeria Gonzalez Riggio FAO-GEF Programme Officer	(56-2) 29232137  (39) 0657055473	<a href="mailto:Hivy.OrtizChour@fao.org">Hivy.OrtizChour@fao.org</a>  Valeria.Gonzalez Riggio@FAO.org
Barbara Cooney FAO GEF Coordinator Email: <a href="mailto:Barbara.Cooney@fao.org">Barbara.Cooney@fao.org</a> org Tel: +3906 5705 5478					

## ANNEX 1

**Graphic 1: Mean size of protected areas declared in Chile**  
(in hectares, by year)



Source: MMA, 2010

**Table 4: Baseline conservation initiatives in Arica y Parinacota, and Biobío regions**

Initiative	Scope	Institution
Conservation Plan: Huemul	species specific	MMA
Conservation Plan: Darwin's fox	species specific	MMA
Conservation Plan: Queule	species specific	CONAF
Study of conservation priorities: Huemul	species specific	WWF
Declaration of Queule "Representative Tree", Talcahuano Municipality	Municipal	Municipality
Regional Biodiversity Strategy	Regional	MMA
Study of threats to conservation objects	BR Nevados de Chillán	BR Nevados de Chillán
Camera-trap study of Darwin's fox	Nahuelbuta Range	Forestal Arauco
Management Plan Caramavida	Management-unit specific	MMA
Management Plan Reserva Nacional Ñuble	Management-unit specific	CONAF
Management Plan Reserva Nacional Huemules de Ñublinto	Management-unit specific	CONAF
Management Plan Parque Nacional Laguna del Laja	Management-unit specific	CONAF
Management Plan Reserva Nacional Nanguen	Management-unit specific	CONAF
CONAF-Forestal Arauco agreement on forest management	Management-unit specific	CONAF
Management Plan, high conservation value area Caramavida	Management-unit specific	Forestal Arauco
Management Plan, high conservation value area Huemules de Ñuble	Management-unit specific	Forestal Arauco
Management Plan, high conservation value areas	Management-unit specific	Forestal Mininco

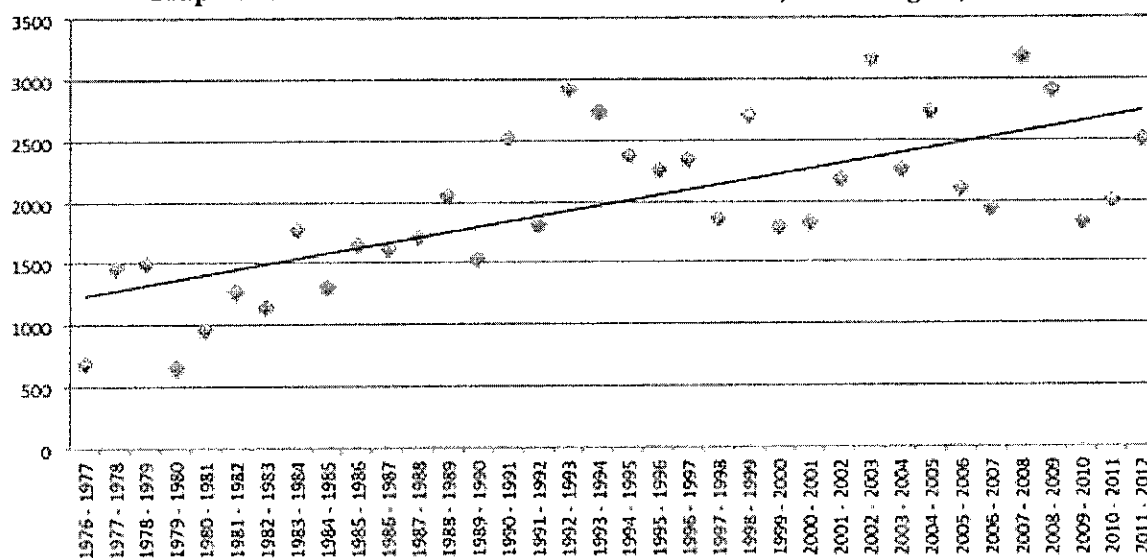
Source: Baseline analysis, 2013

**Table 5: Distribution of land uses in Chile, Region VIII (Biobío), and Region XV (Arica y Parinacota)**

Country, Administrative Region, Province	Landholdings		(of which to) Agropastoral use		(of which to) Forestry		Indigenous (self-declared)	
	Number	Area (ha)	Number	Area (ha)	Number	Area (ha)	Number	Area (ha)
Chile	301.269	36.439.533	280.484	29.781.691	20.785	6.657.842	15%	3%
Region VIII del Bio bio	62.792	3.121.064	57.567	1.790.901	5.225	1.330.163	n.c.	n.c.
Province of Arauco	6.351	469.477	5.541	151.852	810	317.625	28%	5%
Province of Ñuble	32.326	1.121.042	30.397	767.911	1.929	353.131	0%	0%
Region XV de Arica y Parinacota	2.495	203.129	2.452	201.011	43	2.119	38%	68%

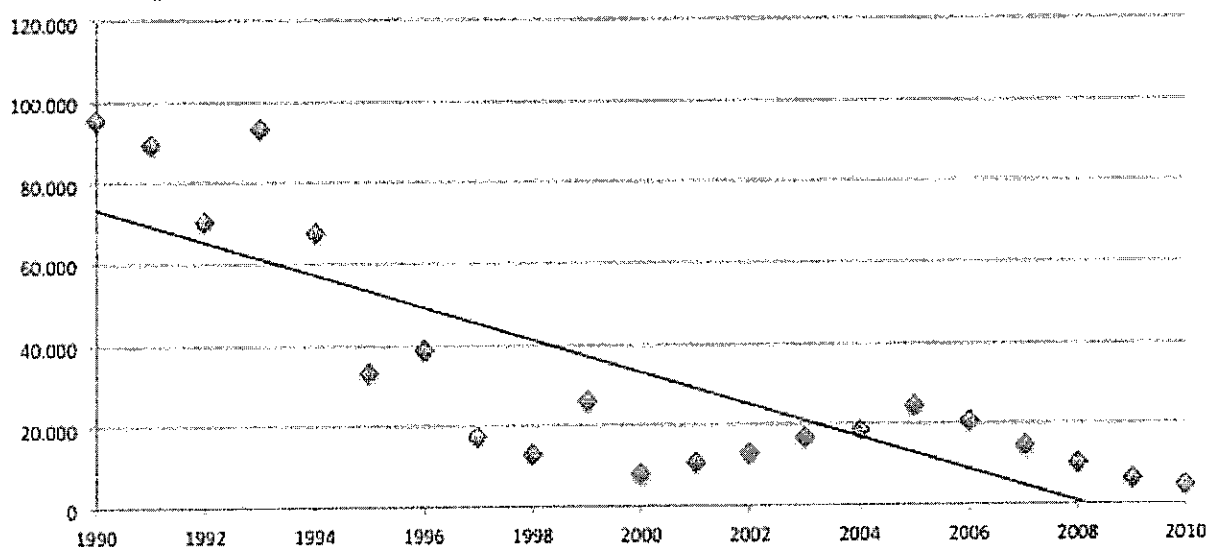
Source: SAG, 2011

**Graphic 2: Historical series of forest fires 1977-2012, Biobío region, Chile**



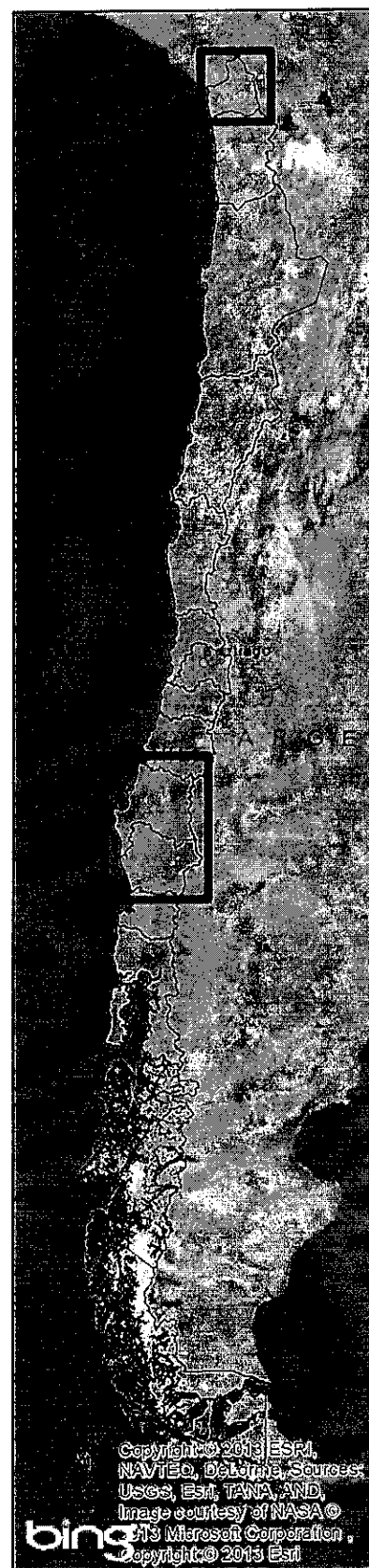
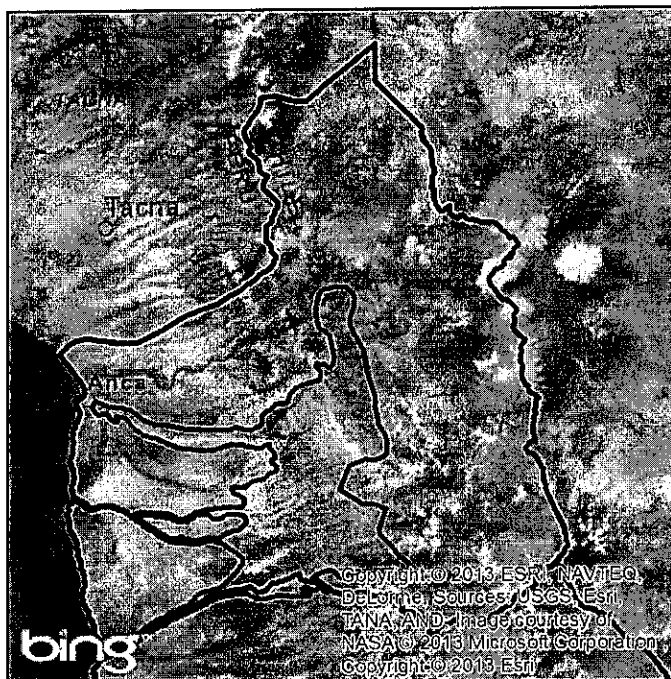
Source: CONAF, Chile, 2012

**Graphic 3: Areas classified as Preferably Apt for Forests, Biobío region, Chile**

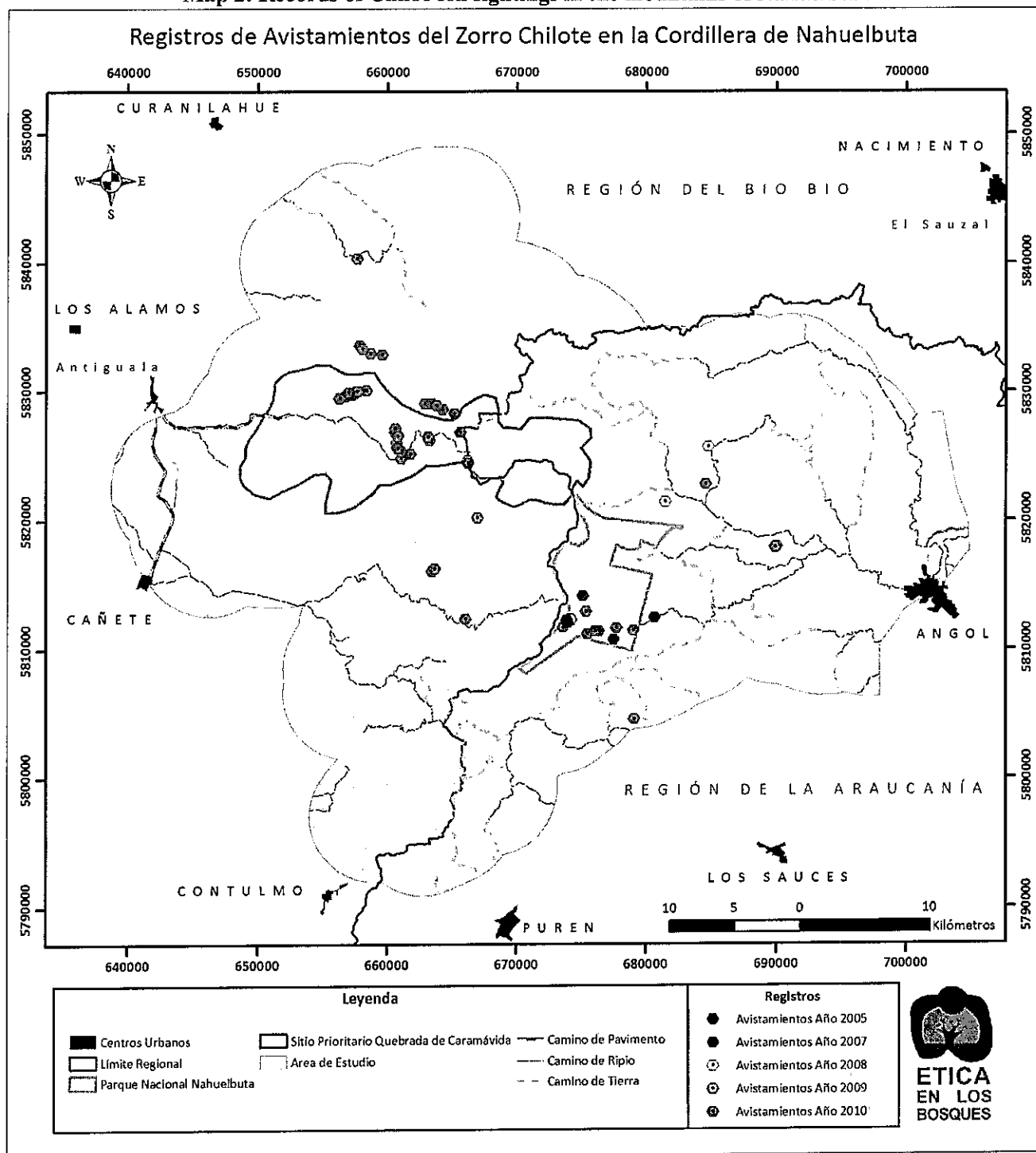


Source: INFOR, Chile, 2011

**Map 1: Project intervention areas: Arica y Parinacota region (North Chile) and Biobío region (South-central Chile)**

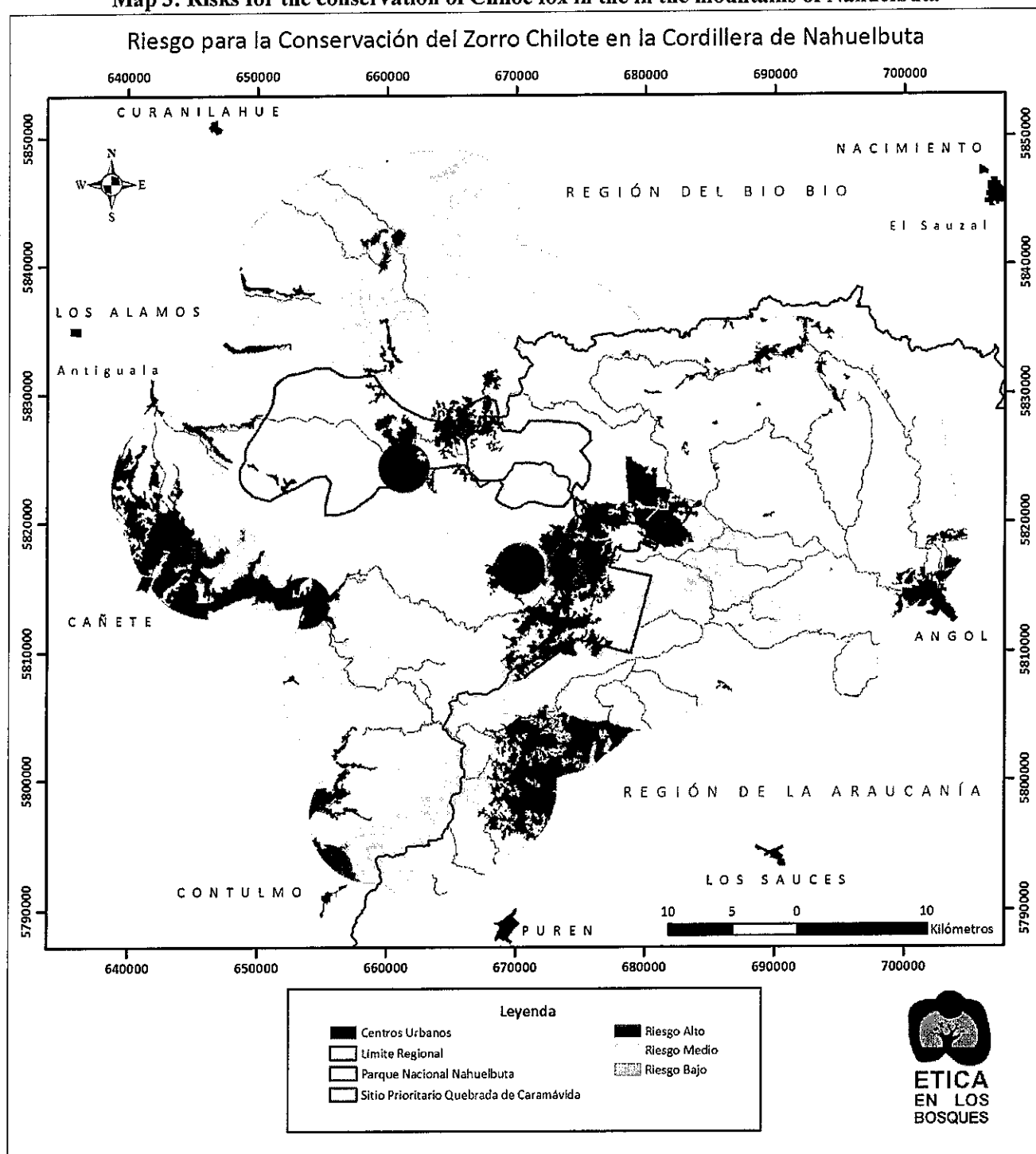


**Map 2: Records of Chiloe fox sightings in the mountains of Nahuelbuta**



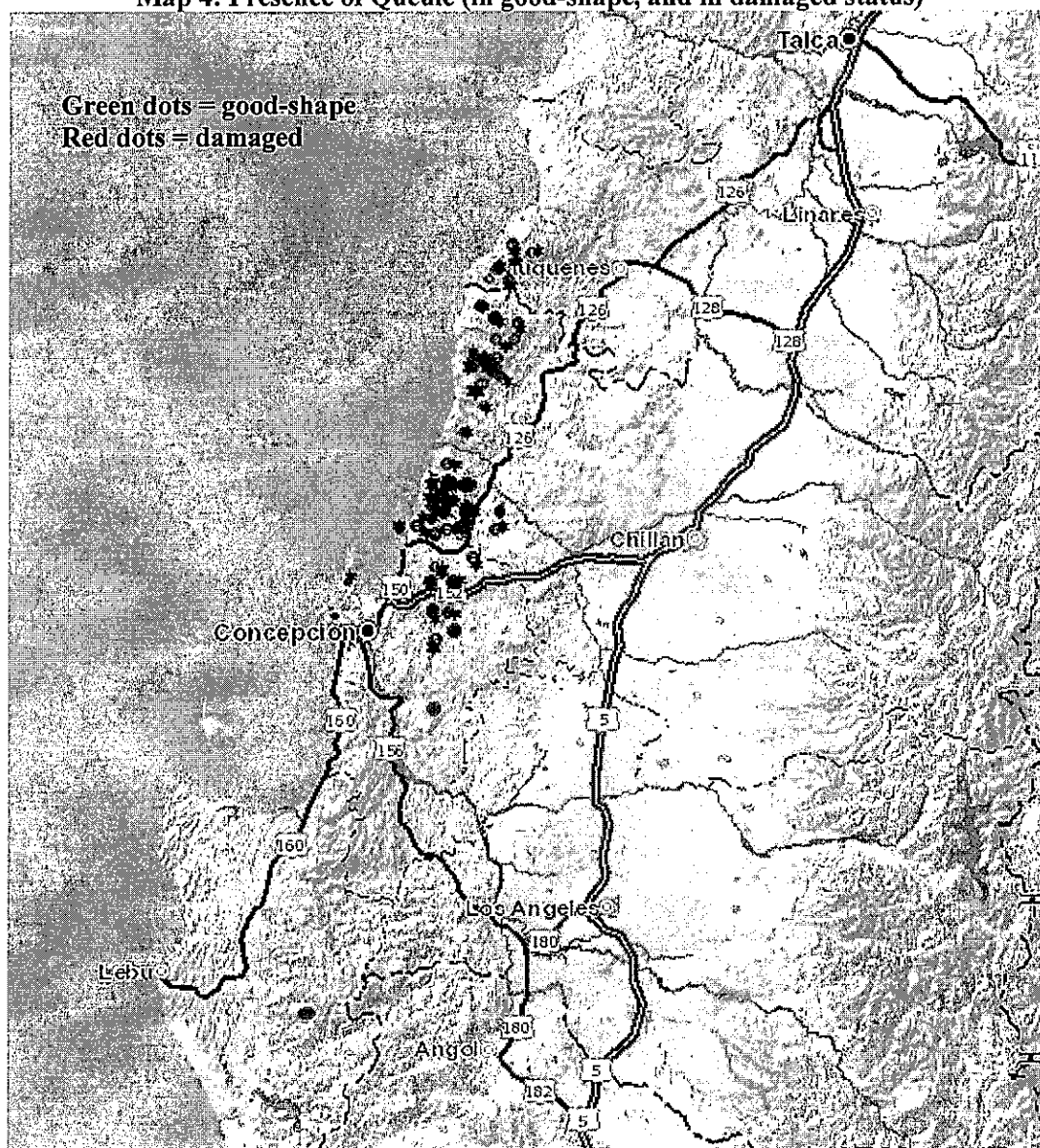
Source: Ministry of Environment of Chile, 2012

**Map 3: Risks for the conservation of Chiloe fox in the in the mountains of Nahuelbuta**



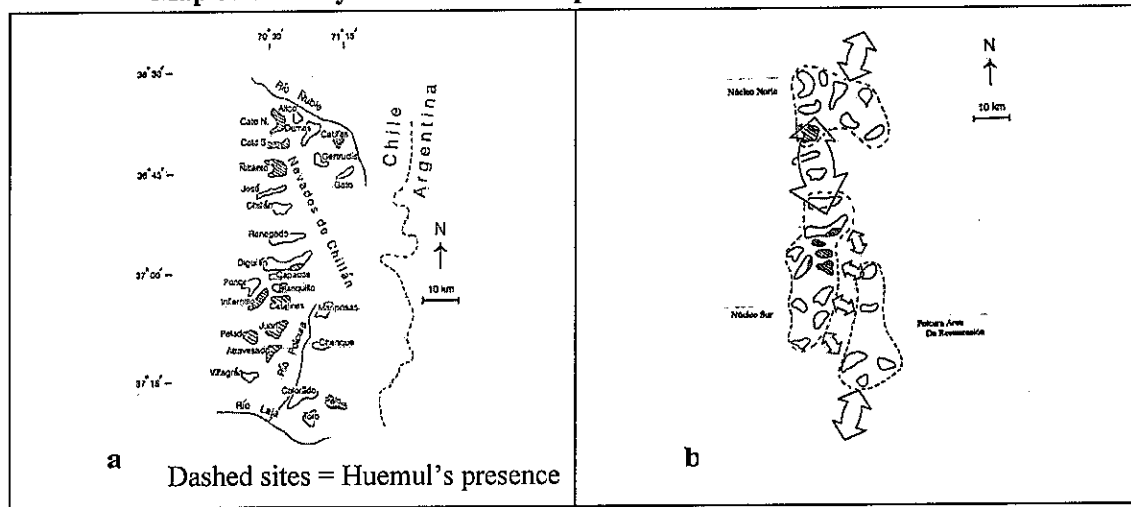
Source: Ministry of Environment of Chile, 2012

**Map 4: Presence of Queule (in good-shape, and in damaged status)**



Source: Ministry of Environment of Chile, 2012

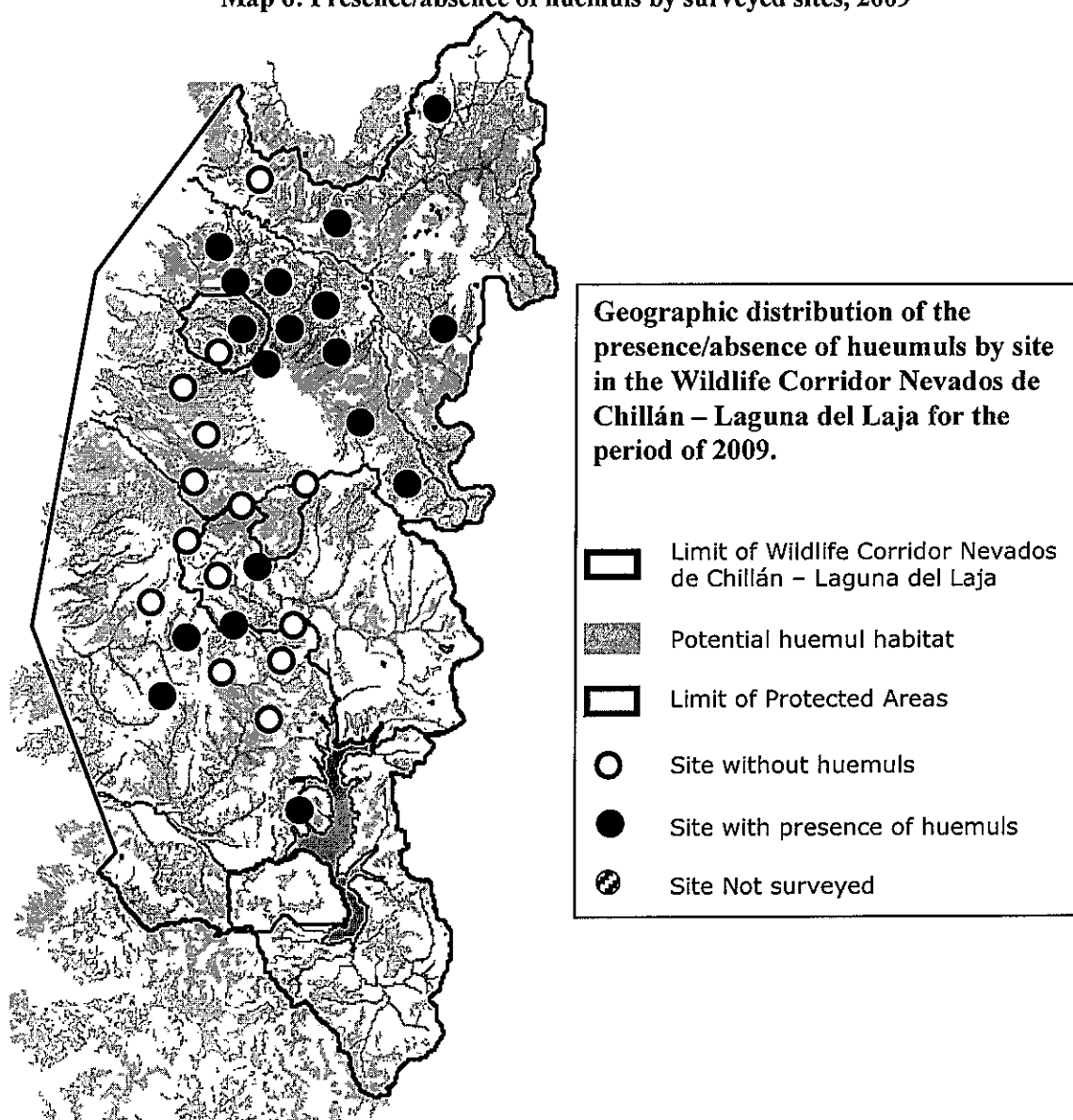
**Map 5: Primary sites of Huemul's presence in the *Nevados de Chillán***



Source: Ministry of Environment of Chile, 2003



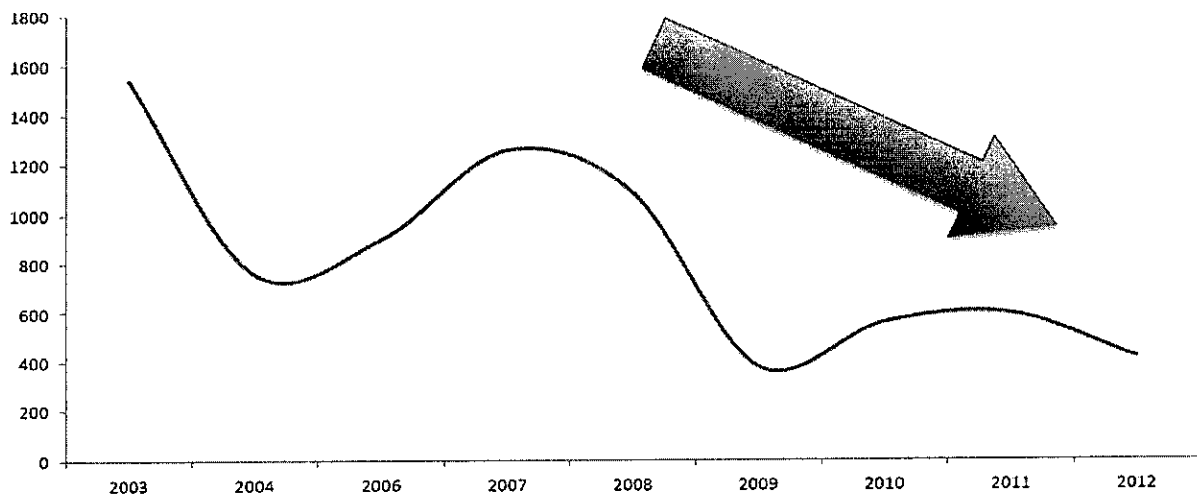
**Map 6: Presence/absence of huemuls by surveyed sites, 2009**



Source: Ministry of Environment of Chile, 2012

**Table 6: Abundance of Arica Hummingbird, 2003-2012**

Especie	Año									
	2003	2004	2006	2005	2007	2008	2009	2010	2011	2012
P. de Arica	1539	758	898	S/D	1256	1084	377	557	592	413
P. Cora	1649	1160	728	S/D	1950	1805	1778	1791	1840	3216
P. del Norte	10075	6342	6565	S/D	6639	6392	5937	6190	7711	9517



Source: Ministry of Environment of Chile, 2012