Minutes from the Chile visit 31.03.2007 to 06.04.2007

Dr. Kai Ahrendt/Germany & Aldo Palacios Courret/Chile

Report No. 1



Project: Coastal Futures for Chiles Coastlines "CoFuChiCo"











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1. Short description of the project

Increasing pressures from a wide range of human activities lead to environmental deterioration and the loss of ecological and socio-economic functions of coastal ecosystems. Managing multiple demands and economic needs without creating negative impacts on integrity and resilience of coastal ecosystems is a key factor in this context and requires innovative approaches for assessments, planning and the formulation of management schemes. A comprehensive framework for the integrated assessment and management of coastal areas illustrate its applicability under different socio-economic and climatic conditions.

The german project "Coastal Future" (http://www.coastal-futures.org) carries out research for implementation/acceptance for an ICZM strategy. The project "Coastal Futures" is a multidisciplinary projects regarding research for ICZM in Germany. The project focuses on new utilizations in the coastal zone, land- and seaward. The risk-management for economic and ecological development and an integrated assessment are the main issues of the project as well as the linking between the socio-economic tools and the natural science tools. The possibilities for transfer and verification of the results of the "Coastal Future" project are another main issues in this project. Constitutive on an ecology and economical assessment of existing and possible futures upcoming utilizations in the coastal zone and on basis of the DPSIR (Driver-Pressure-State-Impact-Response) approach in combination with scenario technics, the economical und ecological development will be transfer into an integrative assessment approach. Negotiability, advancement and verification will be carried out for different coastal strips of Chile.

The methods developed in the German project can be verified for a wider range esp. for South America together with the Chilean partners. The nature of the project is the approach and adaption of new developed management tools. Together with the "CoFuSoBa" project (Argentina-German cooperation) a verification for South America can be adopted and tested.

The exchange of knowledge by workshops in both countries is the preferred method. In addition the Chilean partners will made an inventory of existing data and together with the German partners an assessment of necessity and quality of that data (EEA-standard). The basis is the input of existing data in the DPSIR-approach and using indicators for estimating the results. After an intensive prearrangement through the partners, workshops with stakeholders, politicians and scientists will be carried out.

The project is devided into 4 workpackages:

WP1: existing conflicts, upcoming utilization; There are already a lot of existing conflicts in both contries. New conflicts will grow up by extension of existing utilization and new ones, f. e. mariculture, renewable energy, aquaculture (related to coastal) zones, tourism, ethnics agenda etc. This WP will make a stocktaking.

WP2: risk assessment for ecology and economy; Utilization in the coastal zone are often negative for the ecosystems or can have also negative influences to other utilization, esp. upcoming measures. Also positive influences to ecology and/or economy are thinkable, f. e. new infrastructure for sustainable management/development for zones to be impacted. This WP will make an assessment.

WP3: DPSIR scenario technics; The DPSIR approach was developed for ecology based assessments. The German team extended this by scenarios technics and formulated a new way of an integrated assessment of ecology-economy interaction. This WP will use this "tool".

WP4: integrated assessment; Following the three upper WP an integrated assessment of the interaction of the impact of possible ecology/economic changes to the social-political response is necessary. This WP will formulate necessities for further development of ICZM.

Another aim of the "CoFuChiCo" project is to extend the German know-how regarding ICZM in the EU and also world-wide. In doing so Germany will be able to contend with other countries (such as the US) in the sustainable use of marine resources world wide. The Chilean partner CODESOSUR-SINERGIAS and the Company for Environment and Coast made a proposal for an UNDP Project in Chile named "biodiversity conservation of global importance in marine and coastal Chilean zones". There are strong interests of both side for networking and testing sophisticated ICZM impulses. ICZM is not a mathematical function which works world-wide in the same manner. ICZM is a planning and management process fit to regions needs but with more or less some similar basic steps like

stakeholder involvement, data assessment (by EEA standard) or using the DPSIR approach. The German side can test and a verify the "tool-box" under different conditions. The Chilean side can participate in an ICZM-process in the marine and coastal zones they are now working in and may be implement an own kind of ICZM. This project will be linked to the CoFuSoBA (Coastal Futures for the State of Buenos Aires) project and can participate in the upcoming South American network regarding ICZM. Esp. a ICZM-network between Germany/EU, Chile, Argentina and Brasil can rise up.

The utilization of ICZM is discussed in a lot of publications. Especially for this project the utilization can be pointed out as a better understanding of the function of a coastal zone and deduced a sustainable managing of the coastal zone under different natural, socio-economic and psycholgical conditions. The "CoFuChiCo" project can participate in the Latina-America network of ICZM. The private partners on each side can applied the results in further projects in co-operations with the research institutes.

The persons involved in the project in both countries are the leading actors in their country regarding ICZM with experiences in this new upcoming discipline on national and international level. CODESOSUR-SINERGIAS is responsible for the aquaculture management for marine and coastal zones in Region de Los Lagos and made the Water Governance evaluation in Chilean aquatic ecosystems. The project "Coastal Futures" supports a lot of PhD and Master theses. These candidates will be involved in the "CoFuChiCo" project. The master's program "Environmental Management" at the Ecology Centre of the University of Kiel aims to form professionals in the environmental sector to be able to work in interdisciplinary and international teams.

2. CoFuChiCo Coordination Plan

CODESOSUR-SINERGIAS/University of Kiel (Puerto Montt March 30 – April 6)

Day	Date	Hour	Activities			
Friday	March 30	17:25 19:30 20:30	 Pick Kai up from the airport /Check in at the Hotel. Basic Coordinations between you and us for your visit Meeting – Dinner with Roberto de Andrade (National Coordinator of GEF/UNDP - Marine Project) 			
Saturday	March 31	10:00 10:30 12:00 14:30 16:30	Presentation of the COFUCHICO Project Questions and Answers about the project Update about Coastal and Marine situation in Chile. Description of our stakeholders and our partners for the project Lunch Making the General Schedule of the COFUCHICO Project			
Sunday	April 1	-	Free Time. Visit to some parts of the City and surrounding areas			
Monday	April 2	10:00 14:30 16:30	 Planing Activities of the COFUCHICO Project Lunch Meeting with Santo Tomás University Board of Directors 			
Tuesday	April 3	10:00 14:30 16:30	 Planning Activities for the project (2007-2008-2009) Lunch Meeting with Local Coordinator of GEF/UNDP – Marine Project 			
Wednesday	April 4	08:00 19:00	Trip to visit Local Zone of GEF/UNDP – Marine Project (Lafken Mapu Lahual)			
Thursday	April 5	10:00 14:30 16:30	Gantt Letter of the COFUCHICO Project Lunch Final Review of the COFUCHICO Project			
Friday	April 6	07:00	Bring you to the airport			

3. Country profile:

	Chile: Country Profile
Main Issues	 The coast of Chile has unique biodiversity with high levels of endemism, but is experiencing rapid development inconsistent with conservation of biological diversity. Since 2005, the Government of Chile is seeking to remove capacity barriers at the systemic, institutional and individual levels for the establishment of a network of Multiple Use Marine and Coastal Protected Areas (MUMPAs) along its coast that would allow for both biodiversity conservation and development. Contrary to these main facts, Chile has no ICZM political, institutional or policy establishment in order to develop a consistent and coherent administration and to manage their coast properly, that would impact in fact in all of the people and ecosystems lives. This year has been approved and has been designated the Environmental Ministry of Chile. Its Minister, Ana Lya Uriarte has the task to develop all the institutional arragement in one year. The present Environmental National Commission (CONAMA) will be hosted by this new ministry.
Political Organization	 Chile has three main governmental institutions: (i) Presidency; (ii) The Congress (Senators and Diputes); and (iii) Justice. The regimen is presidencialist. The institutional establishment and the budget is centralized, mainly in the capitol city, Santiago de Chile.
Administrative Organization	 Since 2007, Chile is divided into fifteen (15) regions. Each region conains a different number of provinces and each province reunites a number of districs (named "comunas"). The administrative responsible for each region is called "Intendente". Each region has its own Regional Government, but mainly they do not have the main decissions for its territory. Each province has also its own responsible called "Gobernador". Intendentes and Gobernadores are designated by the only decission of the President, based upon a list of the political parties that belong to the winner partnership. The local governments (comunas) are in charge of Majors, who are elected in public elections
Coastal Description	1. The Chilean territorial sea extends from 18°S to 56°S latitude along the South Pacific Coast of South America, covering more than 4,500 km in extension and 6,435 km of coastline. Between 18°S and 32°S, the continental shelf is narrow and widens to the south, reaching its peak at 56°S. The topography of the continental coast clearly delineates two principal coastal regions. Between Arica (ca. 18°S) and Puerto Montt (ca.41°S) the coast forms an almost straight line exposed to winds and waves. There are few protected bays and the few sandy beaches are exposed to the prevailing winds. To the south of Puerto Montt, the coast is jagged and has numerous islands that protect the coastline from storms. The Central and Northern portions of the coast are periodically impacted by El Niño Southern Oscillation (ENSO) events. resulting in a superficial spill of warm

and highly saline waters coming from the equator. Southern waters have Antarctic and deep sea influences.

- 2. The heterogeneity in physical features of the marine environment has resulted in high levels of endemism, with a number of relict taxa and the presence of latitudinal discontinuities in the species composition of assemblages from different taxonomic groups. Recently, Lancellotti and Vasquez (1999) distinguished three broad bio-geographical regions along the Chilean coast. These are the: (i) Warm Temperate Region between the border with Peru at 18° latitude to 35° in Central Chile. The northern part of this region is heavily influenced by warm waters from Peru and has been declared of the highest conservation priority in a recent study for Latin America and the Caribbean (Sullyvan and Bustamante, 1999); (ii) Transitional Temperate Region between 35° and 48° latitude and is impacted by north-south variations in the cold Humboldt up-welling current; and the (iii) Cold Temperate Region between 48° and 56° South that is influenced mainly by the Cape Horn cold waters.
- 3. These regions house a plethora of endemic species with percentages similar, or even higher, than those of oceanic islands. Analyses of coastal benthic macro invertebrates belonging to 7 phyla (Annelida, Cnidaria, Crustacea, Echinodermata, Porifera, Urochordata), 835 genera, 336 families, and 76 orders, show that 38.2% of the species have restricted distributions and exhibit high levels of endemism. In the Warm Temperate Region this endemism is about 35.4% and in the Transitional Temperate Region 21.8%. It rises to 52.0% in the Cold Temperate Region. Bryozoan species exhibit a similar pattern, with an endemism of 38% between 18 and 42 °S, and 55% between 42 to 56 °S. In terms of overall endemism along the entire coast, Bryozoan and Ophiuroid species have a level of 40%; Polyplacophoran species 17.3%; Isopods 51%, Bivalve species 27%; Asteroid species 20%; and Prosobranch gastropods 52.6%. Littoral teleost fishes exhibit similar levels of endemism, at 17%, while macro-algal species reach 27%. These extremely high percentages of endemism are similar to or even higher than those of oceanic islands and comparable seas1. Annexes F and M provide more specific information on marine and coastal species and include several threatened and vulnerable species.

Institutional, Policy and Regulatory Frameworks

4. Due to up-welling systems, the Chilean coast is among the world's most productive. Indeed, Chile is one of the world's four major fishing powers with marine landings and mariculture activities accounting for approximately 10% of global fisheries and contributing 12% to the export value of national economy.

¹ The Galapagos islands have an overall endemism of 20%, and for algae this reaches 35%, 17% for fishes, and 18% for invertebrates; the Mediterranean Sea has 14% of endemic species; the Hawaiian islands, 20% of endemic coral reef species; the Red Sea, 15% of endemic fish species and 7% of endemic mollusc species. In the southwest Atlantic sea 11% of fish species in continental shelves are endemic and 15% of species in highly isolated habitats.

Exploitation of these resources is governed mainly through the General Law for Fishing and Agriculture enacted in 1991 to ensure sustainable fisheries management, establish specific exploitation categories that can be applied to marine areas and confer the Undersecretary for Fisheries the authority to administer marine resources in these areas. Regulatory norms can be divided into two main components: those for the zone restricted to artisan fishing and corresponding to waters within five miles from the coast, and those governing waters reserved for industrial fishing between 5 and 200 miles from the coast. Industrial fishing is strictly regulated following a precautionary approach, adopting the use of close seasons and strict quotas to control catches. Regulatory norms also include the obligatory use of GPS by authorised boats to ensure that resources are not over-exploited despite the population changes characteristic of benthic species submitted to the periodic environment changes associated with the ENSO events.

- 5. The main regulatory tool for artisan fishing is the adoption of Management Areas, one of three regulatory categories created in the 1991 Law. This is a community-based management scheme that restricts access in defined management areas, to a specific community of fishers and regulates catch levels in these through a management plan. This has proven to be successful in avoiding problems often associated with open access resources and around 400 Management Areas have been established as result of the Law. The other two of the three categories established to ensure sustainable fisheries management, have been applied less extensively. One category is that of Marine Reserve and is for the protection of specific species. To date Chile has one reserve and for the purpose of protection of scallops in La Rinconada Reserve, Antofagasta.
- 6. While the regulatory framework for sustainable fisheries management has been consolidated substantially over the past decade, that for conservation and preservation of resources and the broader marine and coastal ecosystem on which they depend, is still incomplete. Although considerable advances were made in the conservation of terrestrial biodiversity and ecosystems through the 1984 SNASPE Law, this framework does not apply to marine and coastal ecosystems. The third category established under the 1991 Fishing and Mariculture Law is intended for preservation areas through Marine Parks but this has yet to be applied. In addition, through the Ministry of Defence Decrees No 223 and 660, the Navy can assign legal status and allocate user rights (concessions) over marine areas in addition to their authority to control, inspect and oversee the coast and territorial sea, conferred under Decree 340 in 1960. Under Decree N° 223 the Navy delimited three marine areas in Easter Island as Protected Marine and Coastal Areas for promoting scientific research and environmental education rather than biodiversity conservation per se.

7. A further Ministry of Defence Decree, N°475 of 1994, established the National Policy for the Use of the Seaboard and a special Commission for this. The mandate of this Commission is to plan land use in the coastal zone within 80 meters from the high tide line. An extensive programme related to this is being implemented throughout the country and particularly in the Regions I, II, IV and IIX (see Annex A). Finally while the regulatory framework for main and coastal areas is complex and still incomplete in terms of biodiversity conservation, the Basic Law for the Environment, enacted in 1994, provides an important tool in pursuing this goal as it established the National Commission for the Environment-CONAMA- and conferred it the authority to coordinate other governmental agencies in the development and execution of environmental and biodiversity policies and projects. CONAMA is the focal point for the Convention on Biological Diversity, coordinates the execution of the NBSAP and was the lead institution for seeking GEF support to overcome barriers for marine and coastal biodiversity conservation through the proposed project.

Coastal and Marine Protected Areas

- 8. In 1984 Chile enacted a Law for the Establishment of a National System of Wildlife Protected Areas (SNASPE). The system now counts with 94 areas, 31 of which are National Parks, 48 National Reserves and 15 Natural Monuments. Collectively they cover 14 million hectares and represent 19% of the national territory, excluding the Chilean Antarctic2. However, the SNASPE Law is limited to terrestrial ecosystems. In 2000, the Undersecretary for the Navy (hereafter referred to as the Navy) designated limited marine areas in Easter Island as Protected Marine and Coastal Areas to promote scientific research and environmental education. These have yet to be implemented and do not focus on biodiversity conservation (paragraph 22).
- 9. More recently, in its environmental agenda (2001) the Government of Chile has committed, to the conservation of 10% of terrestrial and aquatic ecosystems of the country, including coastal and marine ecosystems. Despite considerable advances towards this target in the terrestrial ecosystems, a series of barriers that include institutional, financial and capacity related factors has impeded progress to marine and coastal ecosystems. The result is that Chile's extensive coast with unique biodiversity, rich in endemism, currently has no established and effective system of protected areas. As the proposed project will remove barriers for the establishment of a network of multi-use protected areas (MUMPAs) along the coast, it is a major step forward in such a system and in achieving the nation's conservation goals. As such, it falls squarely within country priorities and has the full support of relevant institutions. Amongst these are the Government of Regions III. X and XII that have

² The 1984 Law gives the National Forestry Corporation (CONAF) the authority to administer these areas. See www.conaf.cl for more information on the SNASPE.

illustrated their commitment not only through the establishment of Regional Commissions for MUMPAs but also through the high levels of resources committed to the project by them .

10. The commitment of the Government of Chile to the project objectives is further exemplified in the National Biodiversity Strategy and Action Plan of Chile (2002), which specifically flags the establishment of marine and coastal protected areas in the country as a priority and in particular for the areas of Regions III, X and XII3. In line with these priorities, the three demonstration marine and coastal protected areas to be established through the proposed project are located in these three regions as follows: the Caldera site in region III; the Bahia Mansa site in Region X; the Carlos III site in Region XII. Furthermore, each is included in the list of 68 sites that the National Commission for the Environment (CONAMA) has recently determined as priority sites for conservation in the country.

Main Issues

11. ICZM: industrial distribution along the coast tends to follow the same as demographic patterns and, as a consequence, large areas of the coast line are unaffected by this threat. Nevertheless, in areas where this threat is high, the Government of Chile is taking strides to reduce the point sources of contamination. These issues should include the strict application of the Environmental Impact Assessment. These measures must also include the National Programme for Use of the Coastal Zone that will continue under the baseline scenario in a bid to address these issues and apply the regulatory frameworks for urban and industrial development in a more coordinated and effective manner and enable inter-sectoral planning and management of the coastal zone. Despite these commendable efforts to adopt a more integrated approach to coastal zone management (ICZM), to be successful this requires highly participatory processes over long periods of time. In Chile's quest to expand it's economic and development options, industrial and urban development along the coast will increase considerably in the baseline scenario. In the absence of marine and coastal protected areas that would afford greater control of land-use and development restriction in areas of high valued biodiversity, waiting for the completion of baseline ICZM actions could have high opportunity costs, and important sites may be lost. Unless other site-specific conservation mechanisms, which can be applied in the short term, are implemented, and shown to be successful, the current trends of degradation of the resources in some parts of the coast will continue.

³ Chile is a unitary country rather than federative but is has very strong decentralised action. It is administratively divided into a north-south sequence of 13 "Regions", with Region I being in the extreme north and Region XII in the extreme south part of the country. The area surrounding Santiago is the Metropolitan Region. "Regions" are biologically and ecologically distinct, and act as semi-autonomous political and administrative units.

- 12. Fishing: Most benthic and pelagic fisheries in Chile are regulated through the norms described above, principally the establishment of strict quotas and close seasons in industrial fisheries, and through community-managed management areas for artisan fishing. These successful measures will continue in the baseline scenario. However, continued growth in the fisheries markets has led to quotas being set at their utmost limits. Whilst this is expected to maintain catches at a sustainable level in terms of overall biomass, under the baseline scenario negative impacts on biodiversity in some areas can be expected. The reason for this is that the Chilean coast is reputed for the role of keystone predators in structuring its communities and when these predators are depleted by high levels of fishing, the rest of the biological community changes dramatically often resulting in local reductions in the number of species. The high permitted fishing levels, coupled with the limited refuges for the natural repopulation of stock, have already caused reduction of keystone predators to a level that affects biodiversity. This is particularly seen in inter-tidal and sub-tidal biological communities, increasing the pressures on threatened, vulnerable, endangered and endemic species.
- 13. Land based-pollution: As is true in many other parts of the world, the coastal zone in Chile has historically been the main sink for land-based pollution. All major urban centres in Chile are located at less than 100 km from the coast. Not all have primary sewage treatment plants, and others have no treatment, with the result that varying degrees of domestic effluent reach coastal waters either through pipelines or through rivers. Urban development along the coastal zone has been explosive during the last 10 years (INE, 1996), and several associated large infrastructure projects have changed coastal geomorphology causing habitat disruption, fragmentation, and/or habitat loss. However, Chile's 15.5 million population is geographically very highly concentrated. Ninety percent live in Central Chile, mainly in cities, 40% of which are in the Metropolitan Region. Urban centres and population densities in the Southern and Northern areas, on the other hand, are very low. The result is that Chile still has long stretches of uninhabited coastline such that, in overall terms, the urban related threat is still
- 14. Run-off from land based productive activities is an increasing threat in some areas. Run-off from agricultural activities (fresh fruit make up 10% of exports) and soil erosion following deforestation is more prominent in the southern and central areas. To address this the Governement of Chile should ensure the adoption of more sustainable practices and the application of existing norms that will reduce this negative impact, including water contamination. Runoff associated with mining is more common in northern areas (minerals form 62% of exports with copper alone contributing 42%). Copper mining facilities, for example, have disposed copper

Chile: Country Profile							
	mine tailings in some sites along the coast, altering the geomorphology and chemistry of the area and affecting local communities. Other industries, such as fish processing plants, thermo electrical plants, chemical industries, paper and pulp industry, and oil and gas industry, also dispose of their effluents in rivers or directly into the sea, with different levels of treatment.						

4. General Description of Chilean Regions and Local Partners

N^o	Zone	1*	2**	3***	4+	5**	Main Problems	Local Partners
15 th	Región de Arica ⁴	N	N	N	M FY T	E C S SO	 Few water flows Overused rights of water Contamination of waters, undergroud waters, rivers, bay and sea Dicreasing fisheries Potential Energetic Crisis 	• (Potential ⁵) In negotiation with: Local NGOs and Association of Local Governments with Coastal Zones
1 st	Región de Tarapaca	S	S	S	M AQ FY T	E C S SO	 Few water flows Overused rights of water Contamination of waters, undergroud waters, rivers, bay and sea Dicreasing fisheries Potential Energetic Crisis 	(Potential) In negotiation with: Local NGOs and Association of Local Governments with Coastal Zones
2 nd	Región de Antofagasta	S	S	S	M AQ FY T	E C S SO	 Few water flows Overused rights of water Contamination of waters, undergroud waters, rivers, bay and sea Dicreasing fisheries Potential Energetic Crisis Cases more known of Environmental Impacts 	(Potential) In negotiation with: Local NGOs and Association of Local Governments with Coastal Zones

^{*} Coastal Zones: N: none plan; S: sectorial plans; PZW: pilot zones for Water Integrated Management; PZC: pilot zones for Coastal and Marine Protected Areas.

^{* *} Land Zones: N: none plan; S: sectorial plans; PZT: pilot zones for Territorial Integrated Management (GTZ).

^{* **} Water & Basins: N: none plan; Sectorial plans: PWB: pilot zones for Water and Basins Integrated Management

⁺ Main Economic Activities with Natural Resources: M: mining; F: forest; A: agriculture; AQ: aquaculture; FY: fishery; T: tourism; NT: natural tourism; HE; hydroelectric

^{+ +} Main Potential Energy Resources: E: eolic; C: carbon: W: water: M: Metane: P: petroleum; S: seapower; SO: solar

⁴ Political and administrative recently created this year (2007)

⁵ Potential: Ready to define final negotiation, if required.

N^o	Zone	1*	2**	3***	4+	5**	Main Problems	Local Partners
3 rd	Región de Atacama	S PZC	S	S	M AQ FY T	E C S SO	 Few water flows Overused rights of water Contamination of waters, undergroud waters, rivers, bay and sea Dicreasing fisheries Potential Energetic Crisis Cases more known of Environmental Impacts 	GEF-UNDP/CONAMA project
4 th	Región de Coquimbo	S	S	S PWB	M AQ A FY T	E C S SO	 Few water flows Overused rights of water Contamination of waters, undergroud waters, rivers, bay and sea Dicreasing fisheries Potential Energetic Crisis Cases more known of Environmental Impacts 	 (Potential) In negotiation with: Local NGOs and Association of Local Governments with Coastal Zones Water and Basin Initiative/CONAMA
5 th	Región de Valparaiso	S	S	S	A AQ FY T	E S	 Dicreasing fisheries Contamination of rivers, bays and sea Cities expanding quickly Potential Energetic Crisis 	• (Potential) In negotiation with: Local NGOs and Association of Local Governments with Coastal Zones
13 th	Metropolitan Region	-	S	S	A T	E SO	 Dicreasing fisheries Contamination of rivers Potential Energetic Crisis Cases more known of Environmental impacts 	 GEF-UNDP/CONAMA project Water and Basin Initiative/CONAMA
6 th	Región de Lib. O'Higgins	S	S	S PWB	M A AQ FY T NT	E W S SO	 Dicreasing fisheries Contamination of rivers, bays and sea Potential Energetic Crisis Cases more known of Environmental Impacts 	 (Potential) In negotiation with: Local NGOs and Association of Local Governments with Coastal Zones Water and Basin Initiative/CONAMA
7^{th}	Región de Maule	S	S	S	FY	Е	Dicreasing fisheries	• (Potential) In negotiation with:

N°	Zone	1*	2**	3***	4+	Main Problems	Local Partners
					A AQ T NT	 W Overused rights of water Contamination of rivers Potential Energetic Crisis 	Local NGOs and Association of Local Governments with Coastal Zones
8 th	Región de Bío Bío	S	PZT	S	A AQ FY T NT HE	 Dicreasing fisheries Overused rights of water Contamination of rivers, bays and sea Cities expanding quickly Potential Energetic Crisis Cases more known of Environmental impacts 	 Local NGOs (Acción por el Mar and CODEFF) Local Government (Tirua) Regional Government (Executive Secretary of Coastal Zones)
9 th	Región de Araucanía	S	S	S	A AQ FY T NT HE	 Dicreasing fisheries Dicreasing Natural Forestry and Biodivesity Cities expanding quickly Potential Energetic Crisis Water Basins Conflicts Cases more known of Environmental impacts 	Local NGO (Identidad Territorial Lafkenche)
14 th	Región de Los Ríos ⁶	N	S	S	A AQ FY T NT HE	 Dicreasing fisheries Contamination of rivers, bays, estuarines and sea, Dicreasing Natural Forestry and Biodivesity Cities expanding quickly Potential Energetic Crisis Water Basins Conflicts Cases more known of Environmental impacts 	(Potential) In negotiation with: Local NGOs and Association of Local Governments with Coastal Zones
10 th	Región de Los Lagos	S PZC	S	S	FY A AQ T NT	 Dicreasing fisheries Contamination of rivers, bays, estuarines and sea Dicreasing Natural Forestry and Biodivesity Cities expanding quickly Water Basins Conflicts 	 Local Governments (Fresia and Puerto Montt GEF-UNDP/CONAMA project

⁶ Political and administrative recently created this year (2007)

CoFuChiCo, Projektkennziffer: CHL 06/003

N^o	Zone	1*	2**	3***	4 ⁺	5 ⁺⁺	Main Problems	Local Partners
					HE		Cases more known of Environmental impacts	
11 th	Región de Aysén	S	PZT	S	FY A AQ T NT HE	E W S M	 Dicreasing fisheries Contamination of rivers, bays, estuarines and sea Dicreasing Natural Forestry and Biodivesity Water Basins Conflicts Cases more known of Environmental impacts 	Congress, SenatorRegional Government
12 th	Región de Magallanes and Antartic	S PZC	S	S	FY A AQ T NT	E W S M	 Dicreasing fisheries Dicreasing Natural Forestry and Biodivesity Cases more known of Environmental impacts 	GEF-UNDP/CONAMA project

5. Additional Local Partner's Map (General Description for CoFuChiCo Project)

Local Partner ⁷	Zones	Issues to develop	Task for the project	Contact Person
GEF-UNDP/CONAMA ⁸ National Project	Región del Bio Bio Región Aysén	Two (2) Coastal and Marine Protected Areas	Identification, definition and development of two (2) new Pilot Zones for the GEF-UNDP/CONAMA Project Evaluation of the National System of the Coastal and Marine Protected Areas Partnership for the International Seminar of Methodologies related to Coastal and Marine Zones	 Roberto de Andrade, National Coordinator Jorge Urrea, Executive Secretary of Coastal Regional Commitee (Región del Bio Bio) Antonio Horvath, National Congress, Senator for the Región de Aysén
Water and Basin Initiative/CONAMA	Región de Coquimbo Región de O'Higgins	• Three (3) Water and Basins Data into ICZM	• To be determined in second meeting (May/June 2007)	Jaime Iturriaga, National Coordinator
Regional Government	Región del Bio Bio	 One (1) ICZM (Urban/Rural) (#) Coastal and Marine Protected Areas 	• To be determined in second meeting (May/June 2007)	Jorge Urrea, Executive Secretary of Coastal Regional Committee

⁷ CODESOSUR-SINERGIAS has defined with each local partner that: (1) there must be a written and signed agreement between CODESOSSUR-SINERGIAS and every local partner, in order to develop the project; (ii) all the activities will be based in accordance of the CoFuChiCo proposal approved; (iii) all the agreements will be sent by CODESOSUR-SINERGIAS to the Germany CoFuChiCo counterpart; (iv) CODESOSUR-SINERGIAS will be in charge of all the activities and coordination of the project in Chile; (v) Every official communication will be only held between each of the formal Germany and Chilean counterparts or between their respective contact persons; and (vi) the official office for the CoFuChiCo project is located in CODESOSUR-SINERGIAS' office, in Puerto Montt, Región de los Lagos, Chile.

⁸ CONAMA: National Commission of Environment of Chile

Local Partner ⁷	Zones	Issues to develop	Task for the project	Contact Person
Regional Government	Región de Aysén	 One (1) ICZM (Urban/Rural) (#) Coastal and Marine Protected Areas 	• To be determined in second meeting (May/June 2007)	Antonio Horvath, Senator for the 11 th Region, National Congress
Association of Local Governments with Coastal Zones	Tirua (Región del Bio Bio) Fresia/Puerto Montt (Región de Los Lagos)	 One (1) ICZM (Urban/Rural) (#) Coastal and Marine Protected Areas 	 Local Plan of ICZM Local Monitoring of ICZM Local Public Policies of ICZM 	 Adolfo Millabur, Major of Tirua Mirtha Lerchundi, Major of Fresia Maritza Pérez Van der Stelt, Environmental Responsible of Puerto Montt
NGOs (3)	Región del Bio Bio Región de Los Lagos Región de Aysén	 One (1) ICZM (Urban/Rural) (#) Coastal and Marine Protected Areas 	Capacity Building of ICZM (Workshops and Trainning)	 Pablo Carrasco, Acción por el Mar Bladimir Painecura, Identidad Territorial Lafkenche Rodrigo Lopéz, CODEFF
Santo Tomas University	Región de Los Lagos	LogisticsPracticesResearch	 Provide infrastructure for the Seminar, Workshops and Trainning activities Professional practices for students related to water sciences Participation of (some selected) teachers in CODESOSUR-SINERGIAS Research Team of the CoFuChiCo project 	Ramiro Trucco, Principal (Regional Level)

6. Task to do in the first year

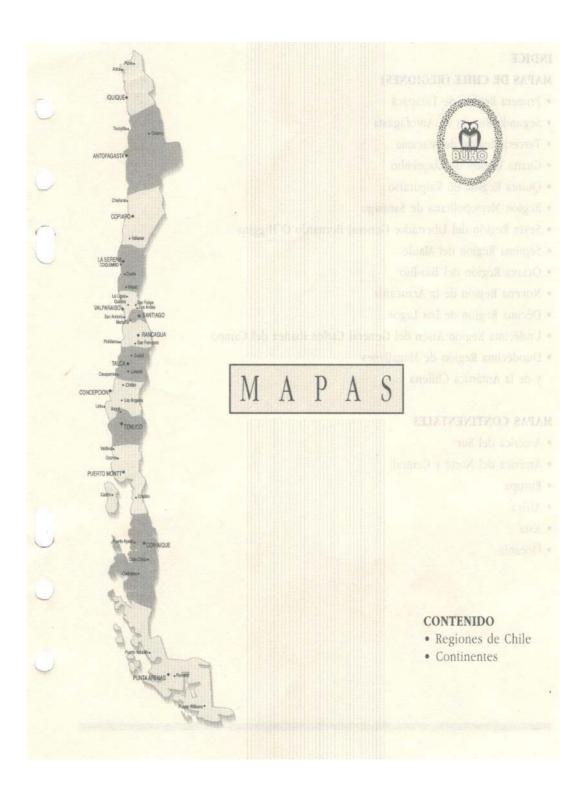
Project Partner	Task: CODESURIGAS	Task: Kiel
GEF Marine Project, Roberto de Andrade	Proposal for agreements	Questionary for stakeholder analysis translation into English till beginning of august
	Terms of references	ÖZK-GEF involvement in master study? Till beginning of August
	Stakeholder analysis in Region 11 and 8	English publication to Aldo, till beginning of august
	Communication with stakeholders about seminar etc.	PPT about stakeholders to Aldo, till august
	Terms of the GEF project send to Kiel	GAIA- article to Aldo
NGO/Stakeholder	Interviews in region 6 (7), 8 and 10	Participation in workshops
	Workshop for explaining methodology for the application in that areas	Master thesis at ÖZK/Geography with the theme NGO's in Chile and Germany, different or equal??
	Description of the NGO and agreements send to Kiel	Dipl. Thesis at University?
	Supply translators	
Santo Tomas university	Together with Aldo apply the logistic	DFG proposal for Diss. or Dipl. In the frame of bilateral scientific cooperation? Is there one?
	Involvement of the students as workers in the project and master thesis in Chile	
Seminars with Robert	Seminar in Puerto Montt comparison of methods with WWF and TNC etc. possible as an extended seminar	Assistance and participation in the seminars
Fundraising*	FONDECYT	EEA
	INNOVA	BMBF-bilateral cooperation
	MECESUP	EU
		DAAD
		DFG
		WWF
		GTZ/WB
		Lighthouse foundation

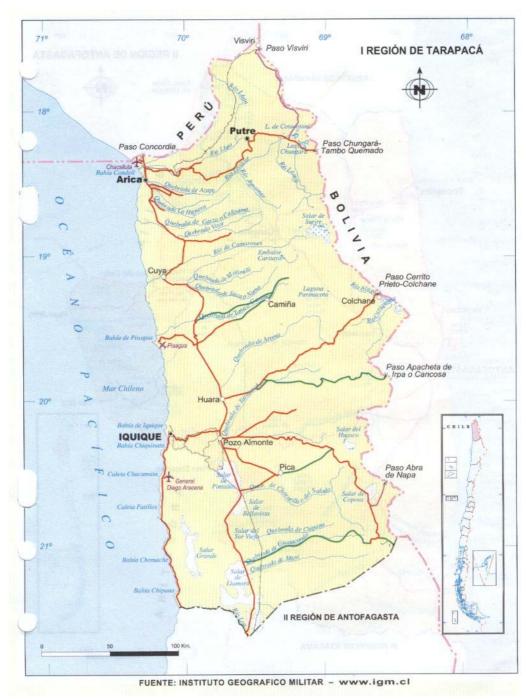
* already ask: BMBF: no additional bilateral cooperation EU: no call open

GTZ: no longer a target country DAAD: no condition for this project

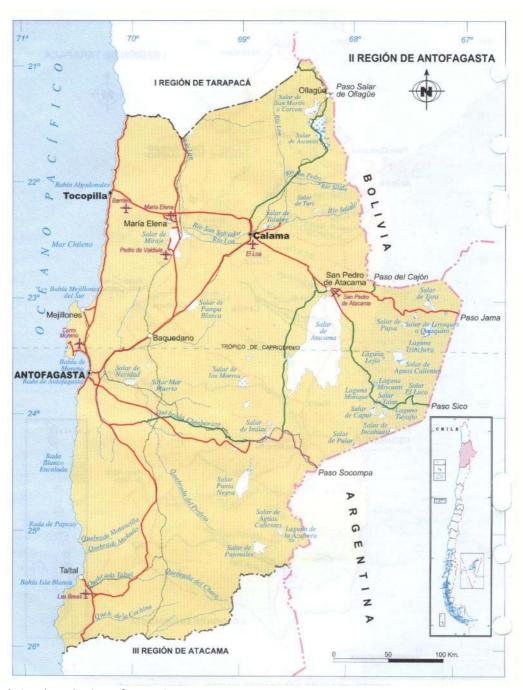
EEA: no open call

7. Mapas





region 15 (region de Arica) and 1 (region de Tarapaca)



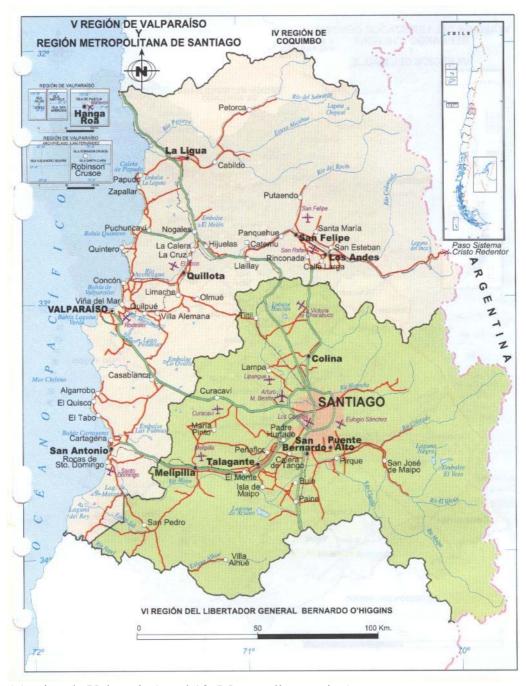
region 2 (region de Antofagasta)



region 3 (region de Atacama)



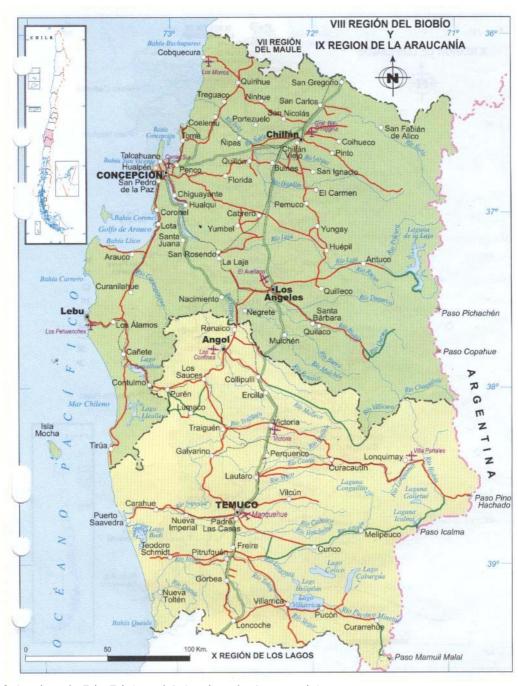
region 4 (region de Coquimbo)



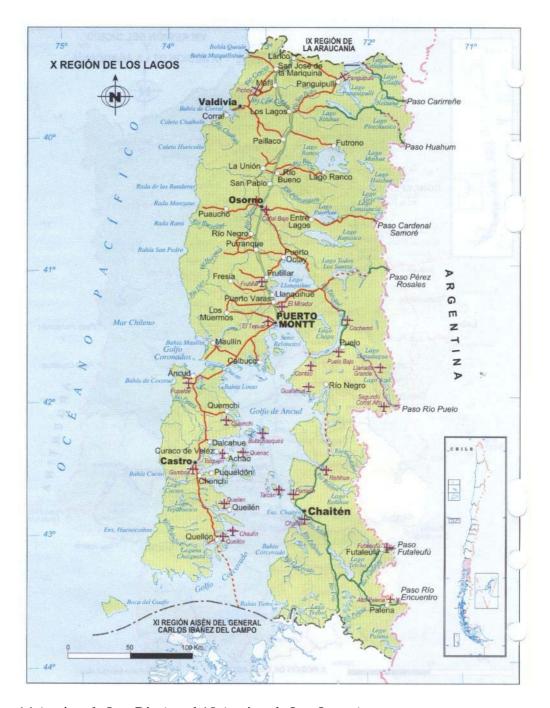
region 5 (region de Valparaiso) and 13 (Metropolitan region)



region 6 (region de Lib. O'Higgins) and 7 (region de Maule)



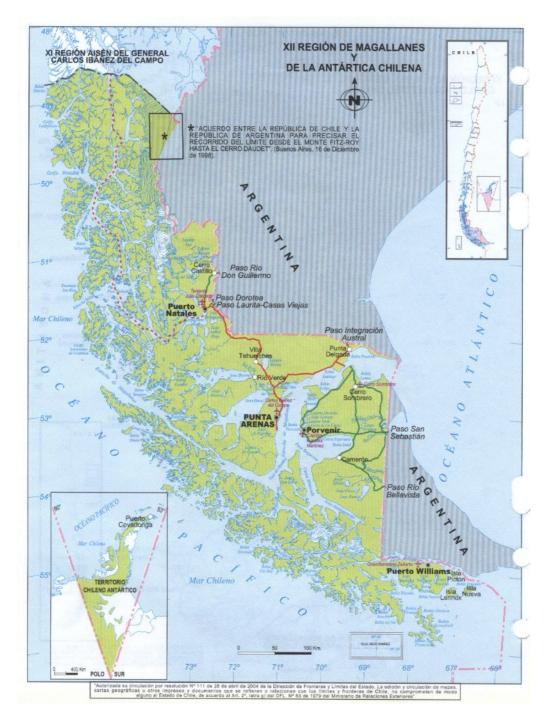
region 8 (region de Bio Bio) and 9 (region de Araucania)



region 14 (region de Los Rios) and 10 (region de Los Lagos)



region 11 (region de Aysen)



region 12 (region de Magallanes and Antartic)