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Effective tools and methods for integrating environment and development: Chile and Latin America

Final Draft

RIDES

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The following team members have been involved in this study and in writing this report:

Hernán Blanco
Edmundo Claro
Francisco Molina
Catherine Weller

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RIDES is an independent research centre that seeks to contribute to sustainable development policies in Chile and Latin America. For further information please visit www.rides.cl or www.environmental-mainstreaming.org.

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INTRODUCTION AND EXECUTIVE SUMMARY

The integration of environment into development is increasingly important. Success in this task depends on numerous factors. One is the availability of proper tools and tactics which facilitate the consideration of environmental issues in development decisions. Developing countries most of the time do not have either the experience or information or capacities or resources to use appropriate tools and tactics.

IIED has launched an international initiative to produce a diversity of resources to strengthen environmental mainstreaming, particularly in developing countries. The initiative seeks to produce a User Guide with a selection of relevant tools, tactics and approaches to integrate environment into development. The project is being carried out in the Caribbean, Central-Eastern Europe, Ghana, India, Kenya, Philippines, South Africa, Uganda, and Chile. In these countries/regions, a partner organization has been carrying out activities such as literature review, interviews with key stakeholders, workshops and meetings. In Chile and in the region (Latin America), RIDES has been the partner organization.

Conceptual framework

An international advisory panel to the project was set up before the project started. This panel, together with IIED team, developed the approach to this project. It is assumed that in the integration of environment into development there are a number of determinant factors. **Tools and tactics** are one, but there are others equally or more important. Among them, the panel defined: the country **context** for environmental mainstreaming, the **goals** that are pursued, and the key **actors** for the integration to take place. The project then focuses on tools and tactics but without losing sight of this bigger picture where context, goals and actors are relevant.

Approach in this case

In Chile, RIDES identified 36 key actors who were interviewed following a structure defined by a questionnaire designed by IIED and applied in all the other countries. Relevant reports and general literature was reviewed. A draft report was prepared and discussed with a set of the interviewees in a breakfast meeting (January 2008). All the input was then compiled into this report.

RIDES also contacted key actors in Latin America and invited them to respond the questionnaire in written. The International Association for Impact Assessment (IAIA) kindly disseminated the questionnaire amongst its Latin American members. Some of them were later on contacted for follow-up analysis.

Report contents and structure

There are basically three sections: I) main results for the Chilean case, II) main results for Latin America and III) annexes. Whereas in the Chilean case a significant number of key people could be directly interviewed and the input is substantive, in the case of Latin America the approach is much more panoramic and of a preliminary nature. Readers interested in the detailed information will find in Annex 1 and 2 the complete results of the research in Chile and the region, respectively. Annex 3 summarises the methodology applied both in the case of Chile and the region. Annex 4 includes the questionnaire actually used in both cases (in Spanish). Annex 5 is a list of specific tools and tactics mentioned by respondents and interviewees in the case of Chile. Annex 6 acknowledges the contributions from diverse people to this initiative.

Key messages and results

In Chile:

- The challenge of mainstreaming environment into development is directly related to the pressure on natural resources (environment) and inequity (development).
- Much of Chile's environmental progress over the last fifteen years was driven by concerns about pollution's impacts on health and the need for improving environmental performance in industries largely exporting to OECD countries.
- Availability and access to reliable, periodic and comparable environmental information is an endemic weakness in Chile (and also in the region).
- The integration of the environment into decision-making is well developed at the project level through the statutory EIA system. However, more strategic decisions – for instance on plans, programs and policies – are not subject to any systematic way of considering environmental aspects.
- Whereas at the urban level there are regulations and instruments for land use planning, at the rural level there are neither regulations nor appropriate instruments for making land-use decisions.
- There is very limited capacity for environmental enforcement. Progress in the implementation of concrete tools and tactics for this purpose are therefore most needed.
- Political leaders, in general, still have a "zero-sum" approach to the environment: protecting it is expensive and might be to the detriment of development. Tools and tactics for mainstreaming environment into development decision-making, which make explicit the need for longer time-frames, would be of great utility.
- Poor capacity and limited experience with tools and tactics for environmental integration exist in the country. As noted in this report, EIA is the most prevalent tool/tactic for integrating environment into development decision-making.
- Most tools identified by respondents fell into the category "Information and assessment". While the categories "Deliberation and engagement" and "Implementation, management and monitoring" were frequently associated with tools used by respondents, the category "Planning and organizing" was by far the least associated with tools used for integrating the environment. This should not come as a surprise, as Latin American culture is not characterised for devoting much time and resources to planning activities.
- Within "Information and assessment" the most mentioned tools were: EIA, economic analysis (Cost Benefit Analysis in particular), diverse tools for information gathering and analysis, land use planning and risk assessment.
- Within "Deliberation and engagement" the most mentioned tools are related to diverse kinds of meetings and interactions with stakeholders.
- Within "Implementation, management and monitoring" the most mentioned tools are monitoring, environmental auditing, ISO or similar certifications and the use of indicators.
- Within "Planning and organising tools" the most mentioned tools are diverse kinds of strategic planning, ISO certification, Gantt charts, and internal environmental policies.
- There are few voluntary, informal and experimental approaches cited by the interviewees. These are basically related to communication and participation, analysis of international regulations, review of national jurisdiction and quality management systems.
- In terms of traditional or indigenous approaches to integrating environment into development, only one case was identified in the forestry sector.

In Latin America (panoramic view):

- Very few of the respondents identified areas in which tools are unavailable. This suggests that in Latin America the tools exist but their effectiveness is being hindered somehow.

- The explanations for the choice of "least useful tools" were often related not to the tool itself but the limitations of the context in which it is used.
- Another clear message was the need to ensure an integrated approach and emphasise the interlinked nature of various components, for instance by promoting awareness of the environment's link to security, health and food production.
- Various tools that were mentioned by respondents were particularly commended for their ability to enable dialogue between actors in different fields. Listening and understanding "the other" enables a broader view to be taken.
- Lack of political will was one of the constraints on environmental mainstreaming most frequently identified. An explanation of this may be the perception among the political elite who make the decisions on development projects that environmental activities are an expense and not an investment.
- Another comment in the same vein was that the problem in Latin America is not a lack of tools but a lack of culture of sustainability.
- Looking ahead to the User Guide, responses to the question on criteria to enable judgment of the utility of tools are interesting. The most relevant criteria were "Demand for particular skills, training, qualifications" and "cost".
- As communication possibilities grow in this era of increasing information availability and public participation in Latin America, the possibilities to begin to create a culture of sustainability through education and information distribution were noted.
- Most mentioned tools are (for each category):
    - Information and assessment: EIA, Social Impact Assessment and Environmental situation diagnostic.
    - Deliberation and engagement: inter-sector dialogues/forums, conflict management, public hearings.
    - Planning and organizing: strategic plans, environmental management plans, demand/supply aptitude scenarios, SWOT analysis.
    - Implementation, management and monitoring: environmental auditing systems, environmental management systems, environmental indicator systems.
- Among the most useful tools mentioned are: intersector dialogue, conflict management training, EIA, Sustainability Impact Assessment, Strategic Environmental Assessment, Environmental risk assessment, Economic valuation of environmental impacts.

I. CHILE: COUNTRY FOCUS

I.1. Environmental mainstreaming – the current situation in Chile

Chile has much to do in order to advance in mainstreaming the environment into development decisions. Although mainstreaming tools are used in some environmental management spheres, their application is confined basically to the requirements of the obligatory Environmental Impact Assessment (EIA) system. The prevalence of tools linked to the EIA of projects –for instance all the public participation instances associated with the EIA process– reflect this fact. This shows not only that most mainstreaming activities in Chile are closely related to the obligatory EIA process for projects, but also that there is a clear lack of application of mainstreaming tools to *policies* and *programmes*.

Apart from the EIA process, there are some rather isolated mainstreaming initiatives that seem to bring some hope regarding future progress in these matters. In line with the impact of economic globalization, one of these corresponds to the implementation of clean production agreements, mainly for the agricultural sector. Another is the use of cost-benefit analysis for assessing the economic impacts of pollution quality and emission standards and of decontamination plans. A more recent one is the energy efficiency programme launched by the Ministry of Economics in 2007 that seems to be having positive results so far.

Despite the presence of these initiatives, environmental mainstreaming in Chile corresponds to unconnected and reactive measures basically aimed at addressing specific challenging economic circumstances. For example, while clean production agreements emerged in order to confront the environmental demands of international markets, the impetus for the establishment of the energy efficiency programme seems to lie in the energy crisis provoked by the shortages in the supply of gas from Argentinean sources. There is no clear evidence of systematic and proactive environmental mainstreaming initiatives aiming at improving environmental performance as a part of broader development objectives.

In this respect, it is worrying that the study was not able to identify the emergence of new or forthcoming initiatives that would reverse this trend. Although the study pinpointed economic globalization (including the environmental demands of international markets, the environmental standards brought into Chile by multinational corporations and the environmental requirements of free trade agreements) as an important driver for the inclusion of the environment in development decisions, this does not seem to be strong enough to generate broad mainstreaming initiatives at the country level.

I.2. The context: opportunities and challenges for mainstreaming[1]

Since 1990 Chile has experienced a high degree of economic growth, led by increasingly diversified exports and supported by solid macroeconomic and social policies. Two consequences of this growth,

[1] This section, before the final part on opportunities and challenges, is extensively based in OECD (2005).

in the context of sustainable development, have been evident: poverty reduction (from 39 to 19% in 1990-2005) and considerable pressure on natural resources, particularly in booming sectors such as mining, forestry and aquaculture. Despite the progress in terms of poverty reduction, inequity is a pervasive social problem (Gini coefficient 57% according to OECD 2005). In this respect, the environmental context of Chile should be understood in the background of its rapid pace of development and special consideration should be given to the fact that the **challenge of environmental mainstreaming has thus much to do with the pressure on natural resources (environment) and inequity (development)**.

The Political Constitution of Chile, published in 1980, contains basically two provisions related to the environment. They state that:

- citizens have the right to live in an environment free of pollution and that the State is responsible for ensuring that this right is respected and for the conservation of nature; and
- the right to property shall be limited by the social function of that property, which involves how much it demands of the country's interests, national security, public use and health and the conservation of environmental heritage.

Thus, the Constitution implies that the protection of the environment is a State responsibility and that in certain circumstances the exercise of certain rights or liberties might be restricted as a result of the above.

Given the growing importance of environmental issues on the social and political agenda and the inability to offer responses to environmental problems using existing judicial regulations and institutional structures, at the beginning of the 1990s it was evident that new legal and institutional instruments were needed. This led **in 1994 to the passing of Law 19.300** on the General Environmental Framework. This law established a structured environmental management system and regulated various issues associated with environmental management, beginning with the premise that no activity, however legitimate it may be, can be carried out at the expense of the environment. The law also contains, among other elements, definitions and procedures for the establishment of primary and secondary quality standards, environmental education, and plans for pollution prevention, control and management.

This law also strengthened Chile's environmental institutions, most notably with the establishment of the National Environment Commission (CONAMA); it co-ordinates government environmental policies, prepares environmental regulations and fosters integration of environmental concerns into other policy. **The law also introduced one of the most relevant environmental management instruments, the Environmental Impact Assessment System** (EIA), the most active and influential instrument currently applied in Chile.

Much of Chile's environmental progress over the last fifteen years was driven by concerns about pollution's impacts on health and the need for improving environmental performance in industries largely exporting to OECD countries. An example of the former corresponds to air pollution management, where air quality standards have been made more stringent and, for some air pollutants such as particulate matter, the system includes thresholds for alerts, pre-emergencies and

emergencies. Plans for air pollution prevention and control in the Metropolitan Region (1998 and 2004) have been, respectively, implemented and launched, allowing significant reductions in emissions of targeted pollutants and in the number of pre-emergencies. Another major and successful reform occurred in water and sanitation service provision to households. This led to the restructuring of the water sector, full-cost pricing and rapid infrastructure improvement. Similarly, at least half of urban municipal solid waste is deposited in sanitary landfills and similar figures appear to have been reached for the country as a whole.

Concerning progress related to exporting industries, the need to comply with international requirements was an important driver for the creation of clean production agreements, particularly in the agriculture sector (pig producers, wine industry, fruit and vegetable farming and cheese making, among others). In this respect, domestic environmental policies have not undermined international competitiveness; on the contrary, in a number of sectors they are perceived as a basic requirement to gain and retain market access to OECD countries.

Despite these advances, and others in areas such as biodiversity conservation, there remain important challenges in continuing with environmental management progress and integrating environmental concerns in sectoral policies (e.g. concerning agriculture, energy, transport, primary industry, tourism and taxation). For example, **in general, Chile has not achieved a high degree of decoupling between environmental pressures and growth**. Although there is a national system responsible for standards, methodologies and procedures for the approval of investment initiatives in the public sector, it pays little attention to environmental aspects (OECD, 2005). Although quantitative cost-benefit analyses are carried out for new environmental standards and clean-up plans (of polluted sites), this kind of analysis is not used in the case of decisions on projects and instruments which affect the environment.

In the **energy sector**, even though the sustainable growth of the sector is an explicit goal, there is little consideration given to environmental aspects. There is no strategic environmental assessment for the energy sector, nor is there an SEA for the national and regional transport plans. A recent interesting initiative has been the promotion of renewable energy sources; it is expected that by 2014 5% of the energy supply be from renewable sources, and by 2024 this should increase up to 10% (Senado de la República de Chile, 2008).

In the **agriculture sector**, environmental considerations have only been partially integrated as a result of increasing awareness of the importance of water quality and quantity and the use of pesticides. In some sectors there is a need to study the impacts distorted markets have on the environment. Regarding the tax policy, there are no explicit taxes used for environmental purposes, and environmentally-related taxes in the energy and transport sector were designed with little attention to their environmental effects.

In terms of **environmental democracy**, progress has been made in aspects such as the provision of environmental information, public participation and access to justice, and there have been concrete initiatives such as the National Environmental Information System (SINIA). Health considerations have been the driver of environmental improvements in the country. One example has been the reduction of urban atmospheric pollution. Environmental infrastructure (sanitation, potable water, solid

waste disposal, etc.) has developed significantly and has contributed to the reduction and prevention of health related problems.

Environmental education has also shown interesting developments, particularly through initiatives such as the environmental certification of schools (more than a 100 in the country) and the introduction of environmental subjects in school syllabus. Despite these improvements, there are still a number of challenges. Environmental information is still poor in terms of reliable and periodic indicators. SINIA is still not consolidated and lacks economic information on the environment. And public participation requires further development in the context of the EIA and for Strategic Environmental Assessment of policies, plans and programs.

In summary, the current context provides a number of opportunities and challenges for advancing the integration of the environment into development decision-making; a succinct summary is provided below.

Opportunities for environmental integration

- As mentioned, the Chilean economy is to a large extent dependent on **international markets**. Environmental preferences and conditions placed on Chilean exports have been a key driver of environmental mainstreaming in diverse economic sectors, and this condition will most likely continue in the future. Industry is, in general, conscious that better environmental performance is at present an element of competitiveness.
- **Climate change** is ever more present in the national agenda. Whereas mitigation initiatives are almost completely related to the clean development mechanism within the Kyoto Protocol, adaptation initiatives are scarce. Despite this situation, the growing prominence in the national agenda of climate change offers opportunities for facilitating mainstreaming initiatives.
- Chile is on the brink of becoming an **OECD member**. Given the importance that the OECD gives to environmental performance and development, it is expected that the pressure to become an OECD country will open up opportunities in the country for mainstreaming environment into development decision-making.
- After some high profile situations affecting the environment –notably the black neck swans allegedly killed by an upstream discharge of a large scale pulp mill plant– Chilean **citizens are more sensible to environmental issues**. This sensitivity can play in favor of future initiatives to integrate environment into development decision-making. The current energy crisis (shortage of natural gas supply by Argentina and an acute drought) has also made citizens more aware of the relationship between environment and development; energy efficiency and the need for renewable energy sources in the energy matrix are frequently in the public debate (all this in the context of climate change).
- Last, but not least, there is an **interesting political momentum** related to the environment. Two elements are worth highlighting. The designation of former President, Ricardo Lagos, as UN envoy for climate change negotiations and the current revision of the national environmental institutional arrangement (from the current coordination agency to a national ministry by the end of the year).[2]

[2] It must be stated that not everybody agrees that the transformation of the current coordinating agency into a ministry will necessarily provide a wider space for environmental mainstreaming initiatives. On the contrary, some see this as a source of further difficulties for this task, basically because it will concentrate most environmental faculties and decisions in one institution, furthering the current distance between sectoral ministries and

Challenges for environmental integration

- Availability and access to reliable, periodic and comparable **environmental information** is an endemic weakness in Chile (and also in the region). The lack of information (or access to it) in itself might prevent or hinder mainstreaming initiatives. On the other hand, the User Guide could put emphasis on tools and tactics which contribute to the generation and management of environmental information.
- The integration of the environment into decision-making is well developed at the project level through the statutory EIA system. However, more **strategic decisions – for instance on plans, programs and policies** – are not subject to any systematic way of considering environmental aspects. Although at present there are initiatives for the development of Strategic Environmental Assessments, this tool is not yet applied in the country.
- In addition to the previous point, whereas at the urban level there are regulations and instruments for land use planning, **at the rural level** there are neither regulations nor appropriate instruments for making land-use decisions.
- **Environmental enforcement** falls under the responsibility of diverse sectoral ministries and relevant public agencies. In practice, this has meant there is very limited capacity for environmental enforcement. Progress in the implementation of concrete tools and tactics for this purpose are therefore most needed.
- **Business** main approach to the integration of the environment in their decisions, and thus into development decision-making, is basically i) to comply with the law (e.g. EIA, standards and regulations on emissions), ii) carry out environmental management (e.g. apply environmental management systems and/or certification schemes), and iii) define and implement social and/or environmental responsibility strategies (which in many cases are still closer to philanthropy than strategic responsibility). In general, the bigger the company the greater its coverage of these three dimensions. Business should move from this **rather reactive approach to a more proactive one**, in which environmental integration is embraced as a strategic value for the industry.
- Political leaders, in general, still have a **"zero-sum" approach to the environment**: protecting it is expensive and might be to the detriment of development. Perhaps this is, to a great extent, the result of the rather short time-frames politicians use (periods of 4-6 years), whereas the environment (and development) requires much longer time-frames. Climate change is a clear example. Tools and tactics for mainstreaming environment into development decision-making, which make explicit the need for longer time-frames, would be of great utility.
- Perhaps as a result of the previous points, and inherent to the relative newness of the subject, **poor capacity and limited experience with tools and tactics** for environmental integration exist in the country. As noted in this report, EIA is the most prevalent tool/tactic for integrating environment into development decision-making.

I.3. Goals

The Law 19.300 on the General Environmental Framework addresses the issue of sustainable development when making explicit three objectives:

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environmental responsibilities, and therefore making their integration of environmental considerations more difficult.

- sustaining equitable improvement in individuals' quality of life without compromising future generations' expectations;
- ensuring that socio-economic development and environmental sustainability are complementary; and
- improving social equity and eradicating poverty.

In order to bring more policy coherence to sustainable development, in 1998 the Sustainable Development Council was established as an advisory body to the President.

Coinciding with the establishment of the Sustainable Development Council, CONAMA published a document entitled "An Environmental Policy for Sustainable Development". This document identifies a series of "Big areas that the country needs to address" in order to advance towards sustainable development. More specifically, the description of some of these tasks shows that the integration of the environment in development, economic and social policies and initiatives was a central element for their achievement.

- In first place, it stresses the need to incorporate environmental considerations into the design of public policies in diverse areas, such as education, energy, urban development, transport, water resources, technological innovation, fisheries, etc. More specifically, it emphasizes the need to integrate the environmental dimension in land use planning instruments and the urban development initiatives. In parallel, it also promotes the implementation of Strategic Environmental Assessment as a broad tool for assessing and integrating the environmental impacts of sector specific policies, development strategies and some macroeconomic policies, and for addressing the cumulative environmental effects of individual projects assessed under the Environmental Impact Assessment System in place.

- Concerning specific economic activities, the document states that both the mining and energy sectors should make special efforts at integrating environmental considerations into the planning and implementation of their strategies and policies. Similar arguments address the forestry and fisheries sectors, adding the need to complement the regulatory framework of these sectors with the application of economic valuation techniques to these natural resources. In more general terms, the document stresses that the growing environmental demands of international markets should be addressed by broader and stronger efforts directed at certificating export products and their processes.

- Likewise, it states that the practice of making macroeconomic decisions without considering the environment, in areas such as fiscal policies, national budget, and macroeconomic adjustments, must change in order to begin integrating the environmental impacts they produce. At the microeconomic level the document stresses the need to introduce economic incentives that promote environmentally benign behaviour, such as green taxes, eco-labelling and environmental charges.

- Concerning cultural and social aspects of sustainable development, the document expresses the need to increase the provision of environmental information to citizens in order to fill up their knowledge gaps and empower them for more fruitful and just pubic participation processes related

to environmental decisions. To achieve these objectives, the government was tasked with implementing environmental education strategies in the future.

As might be expected, most of these objectives have not been achieved. Nevertheless, as expressed by OECD (2005), there are three areas where environmental and economic concerns show some level of integration:

- environmental issues are addressed at the project level for new public and private investment project through the EIA process;
- with the aim of meeting the demands of international markets, various agricultural sectors have participated in clean production agreements; and
- cost-benefit analysis are applied to the setting of quality and emission standards, and the implementation of decontamination plans;

Similarly, progress has been made in the following areas associated with integrating environmental and social concerns (OECD, 2005):

- provision of environmental information and legal bases for access to information;
- atmospheric pollution management;
- provision of environmental infrastructure (drinking water supply, waste water treatment, and solid waste disposal); and
- environmental education.

Despite the sustainable development objectives in the law and the establishment of the Sustainable Development Council in Chile, there is an **almost complete absence of specific governmental policies or initiatives aimed at integrating environmental considerations into economic and social decisions**. As the OECD Environmental Performance Review of Chile states: "Chile has no national sustainable development strategy" (OECD, 2005). The lack of priority given to sustainable development as a political goal is reflected by the fact that the publication in 1998 by CONAMA of "An Environmental Policy for Sustainable Development" is actually the last official document published by the Chilean government specifically targeting sustainable development.

In fact, to date **Chilean political leaders, irrespective of their orientation, have generally shown very little concern for sustainable development or environmental mainstreaming**. What undoubtedly dominates the political agenda is economic growth. While those to the right of the political spectrum are single-minded in their focus, those to the left soften their preoccupation for economic growth by emphasizing their concern for equality and claim that their goal is "equitable economic growth". As expressed by some of the interviewees, the vision that dominates in Chilean political and private sector leaders is that the proper integration of environmental concerns into developments decisions is just too expensive for a country like Chile. The same school of thought argues that income and the satisfaction of basic needs have absolute priority in the assessment of

development decision. In this context, the government has been unwilling to subsidize any environmental improvement[3].

In view of the overwhelming priority of economic considerations, the Chilean case for integrating environmental concerns into development decisions seems to be limited to areas where environmental improvement clearly contributes, or at least does not hinder, economic growth. In this respect, **mainstreaming goals are basically associated with initiatives aimed at improving environmental performance in industries where environmental considerations play a relevant role in their competitiveness strategies**. In the Chilean context, this applies mostly to natural resource industries actively participating in international markets, such as agriculture, forestry, fisheries, mining, aquaculture and tourism. Existing examples are clean production agreements and ISO 14000 and other certification procedures.

On the other hand, **integration of economic concerns into environmental management appears to have an ample space in the design and assessment of public environmental policies**. Although to date this has been limited to the application of cost-benefit analysis to the setting of pollution emission and environmental quality standards, and decontamination plans, the pressure for efficiently using public resources, together with the explicit OECD (2005) recommendation expressing the need to expand economic analysis to other areas of environmental policy, will certainly involve an increasing use of economic assessment tools in this area.

It is also sensible to consider other areas of environmental management that are expected to expand in the near future and that might present opportunities for environmental mainstreaming. For example, it is likely that health issues will continue to drive environmental progress in Chile, including further reductions in air emissions (e.g. from industry, energy production and transport) and continued improvement in water-related infrastructure and domestic and industrial waste management. Nature and biodiversity should increasingly be protected as assets for the domestic and international recreation and tourism industries. Stronger actions are also needed concerning the following: EIA; quality and emission standards for air, water, waste and nature management; the use of economic instruments; and land use planning. Lastly, economic information and analysis affecting environmental decisions should be strengthened considerably (OECD, 2005).

I.4. Actors

The Chilean survey was implemented with the aim of examining what environmental mainstreaming tools and methodologies are applied in Chile, including their strengths and weaknesses. The study was designed to cover the opinions of public sector officials, NGOs representatives, academics, industrialists and consultants. In total, it comprised **36 interviews**. All respondents currently work, or have previously worked, in the field of environmental management. Most of them have important experience in the topic and some are internationally known experts.

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[3] Nevertheless, the designation of former Chilean President, Ricardo Lagos, as UN envoy for climate change negotiations has clearly increased the strategic and political status of the environment among political and private sector leaders. In this sense, it is expected that within the following years environmental considerations will play a more important role in economic and social decisions than they have to date.

In general, while public sector participants had the least difficulty going through the interviews, private sector actors and consultants were the least comfortable. The reason behind this phenomenon seems to arise from the fact that while the former are quite used at thinking about tools and methodologies used in public environmental management and environmental policy making, the latter most of the time are involved in environmental management practices associated with the demands of businesses and corporations.

In accordance with the subsequent recommendation of the International Panel encouraging classifying actors according more to their relation to environmental mainstreaming than to their type of institution, 17 respondents can be considered as "enablers", 11 as "practitioners", 7 as "investors" and only 1 as "vulnerable". What follows corresponds to a summary of the basic perceptions that interviewees showed towards environmental mainstreaming using this classification of actors. Special emphasis is put on the views expressed by those actors with the most potential for bringing change in these endeavors. In this respect, we are confident that the opinions emitted by these respondents provide a reasonable overview of what Chilean environmental leaders think about these issues. The table that follows presents the actors from which most of the following opinions were obtained.

Name	**Position**	**Institution**	**Sector**	**Relation**
Nicola Borregaard	Director, National Energy Efficiency Programme	Ministry of Economics	Public	Enabling
André Laroze	Director, Climate Change Unit	Ministry of Agriculture	Public	Enabling
Ximena Ruz	Chief, Clean Production Agreements Unit	National Council of Clean Production	Public	Enabling
Orlando Jiménez	Manager, Investment and Development Unit	Chilean Economic Development Agency	Public	Enabling
Alvaro Sapag	Executive Director	National Commission of the Environment	Public	Enabling
Rafael Asenjo	Senior Researcher	Development Studies Centre	NGO	Enabling
Gianni López	Executive Director	Centro Mario Molina Chile	Private	Enabling
Ricardo Katz	Manager	Gestión Ambiental Consultores	Private	Investor
Andrés Camaño	Corporate Environmental Manager	Arauco	Private	Investor
Wilfredo Jara	Environmental Manager	Endesa Chile	Private	Investor
Javier Hurtado	Research Manager	Chilean Construction Chamber	Private	Investor
Juan Ladrón de Guevara	Environmental Assistant to the Minister	Ministry of Economics	Public	Practitioner
Andrés Gómez-Lobo	Assistant Professor	Faculty of Economics, Universidad de Chile	Academic	Practitioner
Pablo Daud	Senior Assistant	Arcadis Geotécnica	Private	Practitioner

Enablers

In general terms, most respondents belonging to this category identified aspects associated with economic globalization as the major impetus for environmental mainstreaming in Chile. More specifically, they emphasized issues such as the pressure imposed by international markets on

environmental performance of exporting firms, the environmental standards brought into Chile by multinational corporations, and the environmental requirements of free trade agreements. Other factors supporting environmental mainstreaming for enablers included the higher increasing environmental demands by the citizenship and the growing understanding of politicians and authorities that the environment is of political significance.

On the other hand, most enablers seem to agree that the most limiting aspect for integrating environmental considerations in development decisions in Chile corresponds to a lack of good quality and comparable information and data, something considered crucial for mainstreaming the environment and enabling fruitful dialogues between the public sector, businesses and civil society. Another constraint frequently identified by enablers was lack of political will, both at the country and organizational level.

Regarding the usefulness of mainstreaming tools, most enablers mentioned those associated with what might be called information management. In this respect they emphasized the relevance of practical and reliable information for making good decisions. Tools related to meetings with external actors, such as discussing public policies with the private sector and NGOs, were also frequently mentioned. Finally, tools associated with performing economic analysis, such as cost-benefit analysis and cost-efficiency analysis, were also mentioned as being useful.

Practitioners

For practitioners, there seem to be no real motivations within Chile for systematic environmental mainstreaming. According to most of them, the major forces in this respect correspond to legal requirements and isolated demands springing from specific environmental conflicts or the action of international environmental movements. A common argument supporting this view was that giving priority to environmental mainstreaming would be counter productive to achieving more basic development goals such as economic growth and increasing salaries. At the same time they see that lack of governmental financing further restricts the advance of environmental mainstreaming in Chile. Concerning useful mainstreaming tools, the most common one among practitioners was cost-benefit analysis for assessing the economic value of environmental changes.

Investors

Although most investors hold similar opinions to those expressed by practitioners with regard to what propels environmental mainstreaming in Chile, some of them mentioned increasing environmental demands by international markets and domestic citizens as positive forces in these matters. In relation to factors impeding the advance of mainstreaming, they identified lack of political will, the absence of environmental data and information, and absence of clear environmental objectives and leadership at the country level as the most relevant obstacles. Concerning the usefulness of mainstreaming tools, responses by investors were diverse enough to prevent an easy grouping of their views. While only arranging meetings with authorities and communities seems to be more or less common for most of them, specific responses highlighted tools such as environmental impact assessment, statistical analysis, implementing ISO 14000 and performing cost-benefit analysis.

I.5. Tools

Tools most used

In order to approach the use of mainstreaming tools in Chile, questionnaire respondents were asked to mention the tools they normally use when integrating environmental concerns in their jobs differentiating the following key tasks:

- Information and assessment
- Deliberation and engagement
- Planning and organizing
- Implementation (including capacity building), management and monitoring
- Other

Respondents mentioned 191 tools. While some respondents identified 12 tools and others none, on average they mentioned 5.3 tools. Table 1 shows that most tools identified by respondents fell into the task "Information and assessment". It also shows that while tasks "Deliberation and engagement" and "Implementation, management and monitoring" were frequently associated with tools used by respondents, task "Planning and organizing" was by far the least associated with tools used for integrating the environment. This should not come as a surprise, as Latin American culture is not characterised for devoting much time and resources to planning activities.

Table 1: Tools identified by respondents by task

Task	Total	
	N°	%
Information and assessment	70	36.6
Deliberation and engagement	46	24.1
Implementation, management and monitoring	40	20.9
Planning and organizing	27	14.1
Other	8	4.2
Total	191	100.0

Information and assessment tools

Concerning task "Information and assessment", Table 2 shows that tools associated with assessing environmental impacts, such as the legally required EIA and emissions modelling, and assessing economic impacts, such as cost-benefit analysis and cost-efficiency analysis, were the most mentioned by respondents. Case Study 1 presents an example of EIA and Case Study 2 one on economic assessment tools applied to pollution management. Tools related to information gathering and analysis were also frequently highlighted. Other highlighted tools were land use planning, risk assessment, life cycle analysis, analysis of sector specific policies from abroad, and state-pressure-response analysis.

Table 2: Information and assessment tools identified by respondents

Tool	Total	
	N°	%
Environmental impact assessment	16	23.5
Economic analysis	14	20.6
Information gathering and analysis	9	13.2
Land use planning	2	2.9
Risk assessment	2	2.9
Others	25	36.8
Total	68	100.0

Case Study 1: Compensating for atmospheric pollution through the Environmental Impact Assessment System (EIAS) in Santiago

Air pollution in Santiago, Chile's capital, is probably the major environmental problem of the country. During autumn and winter Santiago experiences very high levels of air pollution, often exceeding guidelines suggested by the World Health Organization. Air pollution in Santiago causes significant health damage, including premature death and serious respiratory diseases. It is caused by industrial and vehicle emissions as well as street dust blown from unpaved roads and eroded hillsides. Not only is it air pollution aggravated by thermal inversions but also because the city's location is in an enclosed valley with limited wind and little rain.

Since 1992, in Santiago and the rest of the Metropolitan Region operates an emissions compensation system that is similar to "cap-and-trade" tradable permits. In line with the common arguments for applying economic instruments in environmental management, the objective of this system is to control metropolitan atmospheric pollution in an economically efficient way and at the same time promote technological development and the use of cleaner energy.

Whereas at the beginning new sources had to compensate 100% of their emissions, this requirement has been increased since then. Article 1.4.6.2 of Decree 16/98 of the Ministry of the Presidency (SEGPRES), as amended by Decree 20/2000, states that any new activity or project in the Metropolitan Region that exceeds specific annual atmospheric emission levels must provide 150% compensation. The table below details these limits.

Limits for atmospheric emissions compensation in the Metropolitan Region

Pollutant	**Maximum emissions (metric tons/year)**
PM10	10
CO	100
NOx	50
VOCs	100
SOx	150

Source: Decree 20/2000, Ministry of the Presidency

In order to comply with these requirements, the Environmental Impact Assessment System (EIAS) commands that all new projects in the Metropolitan Region that go through the system and exceed these limits must compensate their emissions accordingly. To date, compensation commitments under the EIAS have generally addressed PM10, CO and NOx.

The latter two pollutants have been compensated with the withdrawal of taxi vehicles without catalytic converters and the replacement of diesel buses by compressed natural gas powered models, basically by property developments, sanitary landfills, and one thermoelectric plant. PM10 has been compensated ultimately in two ways: the closure of existent stationary sources and forestation. Whereas the former way has been used for compensating PM10 emissions associated to industrial combustion processes, the latter has been applied to projects implying important increases in vehicle traffic. The table that follows summarizes compensations officially committed up to 2004.

Summary of emissions compensation committed through the EIAS in the Metropolitan Region up to 2004

Compensation	Pollutant	Status	Tons	Observations
Withdrawal of taxis without catalytic converter	CO and NOx	Committed Paid Outstanding	2,345 261 2,084	Paid compensation relates to property developments and a thermoelectric plant. Outstanding amounts relate mainly to sanitary landfills.
Replacement of diesel buses with CNG models	CO and NOx	Committed Paid Outstanding	415 40 375	Commitments have been made for the replacement of buses EPA91 or EPA94 for 2005 and 2011.
Closure of existing stationary sources	PM10	Committed Paid Outstanding	40 0 40	
Compensation	**Pollutant**	**Status**	**Hectares**	**Observations**
Forestation	PM10	Committed Paid Outstanding	418 0 418	Payment deadlines from 2005 al 2010

Source: CONAMA (2004).

Although the compensation mechanism, and its enforcement for new sources by the EIAS, has provided positive results in environmental and economic terms, it also presents some weaknesses. For instance, some are skeptic about the efficacy of the system, especially about compensations between mobile sources and stationary sources, basically due to lack of reliability of emission inventories and enforcement programs (Lents, Leutert and Fuenzalida, 2006). More specifically, others argue that as PM10 compensations sometimes involve important differences in relation to specific chemical elements and particle size, health impacts are not being safeguarded (Préndez, Corvalán and Cisternas, 2007).

In general terms, it might be argued that through the compensation system the EIAS has contributed to integrating environment and development in at least two ways. In first place, it has contributed to the control of air pollution in Santiago and therefore reduced the associated health and morbidity risks. In second place, by introducing economic incentives in the management of air pollution, it has reduced the costs associated to reaching corresponding air quality objectives.

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Case Study 2: Economic analysis of pollution standards and decontamination plans

The Chilean approach towards pollution control can be considered as a process involving two steps. While in the first environmental quality standards are defined, the second is concerned with the implementation of instruments for achieving them. Among instruments, two of the most relevant ones are emission standards and decontamination plans.

While emission standards correspond to a generic and specific pollution prevention instrument that has been applied in various sectors of society and for diverse types of pollution, decontamination plans correspond to a more reactive kind of instrument that only come into force when certain pollution levels have been surpassed and that involve a serious of parallel actions aimed at controlling emissions. Whereas there are emission standards for industries, vehicles and homes covering atmospheric, odor, noise, water and soil pollution, decontamination plans have only been applied in the context of atmospheric pollution in the metropolitan area of Santiago and in copper smelters along the country.

The 1994 Law 19300 on the General Environmental Framework requires that an economic analysis be conducted when drawing up decontamination plans, environmental quality standards and emission standards. This analysis must include an assessment of the costs and benefits imposed by these instruments to: a) communities, ecosystems and species; b) emission sources; and c) government in its capacity as enforcer of the standards and plans. The methodology to be employed is that of cost benefit analysis, subject to availability of information. Up to now, several environmental quality standards, emission standards, and decontamination plans have been implemented and economically assessed. The following table summarizes one economic analysis for each them related to the control of air pollution.

Some economic analyses of atmospheric standards and decontamination plans in Chile

Standard or Plan	Description	Aim of the Economic Analysis	Main results
Air Pollution Prevention and Control Plan for the Metropolitan Region, 2000 Revision.	Control of emissions from multiple urban sources to achieve compliance with standards on PM10, ozone, CO, TSPs and NO2.	Estimate of avoided adverse health effects resulting from compliance with proposed schedule on PM2.5 and ozone. Estimate of costs and effectiveness of set of measures to be prioritized.	• PM2.5 health effects avoided are 3.1 billion dollars over 15 years. • Ozone health effects avoided are 406 million dollars in 15 years. • 50 million dollars annually thanks to set of measures to reduce PM10 by 30% in 5 years.
Arsenic emission standard.	Sets upper limits for gold or copper smelter emissions.	Estimates of compliance costs for smelters not complying with standard, and of total mortality risk reduction for the affected population.	• Abatement costs of 250 million dollars • Quantitative estimate of reduction of lung cancer mortality risk attributable to standard
Primary air quality standard for sulfur dioxide, nitrogen dioxide and ozone (2001).	Sets air quality goals applicable throughout the country for the three pollutants.	Estimate of costs and benefits (adverse health effects avoided) for hourly and daily SO2 standards. Qualitative analysis of change in level and parameter of ozone standard (from hourly average to 8-hour average).	• Benefits and costs of 3 and 12 million dollars respectively from setting an hourly average standard for SO2 • Benefits and costs of 16 and 13 million dollars respectively from setting a stricter annual standard for SO2

Although neither Law 19300 nor the correspondent regulations specify the use of the results emerged from economic analyses, they provide valuable information for decision makers. By revealing the economic impacts that the implementation of these instruments would imply, they serve as valuable inputs for technical teams and decision makers. They also have proved to be an effective way of structuring and synthesizing diverse pieces of information employed during the drawing up of these instruments. Nevertheless, as one interviewee expressed, in some cases economic analysis are not very useful, especially when the decision concerning the implementation of the instrument has already been taken or when there are no alternative instruments to be applied.

Deliberation and engagement tools

Most tools associated with "Deliberation and engagement" related to arranging meetings with actors external to the respondent's organisation, such as meetings with local communities and establishing dialogues with environmental authorities. Other tools frequently mentioned corresponded to the development of seminars and workshops intended at openly discussing and disseminating the policies or initiatives at hand. Less highlighted tools were private-public committees, internal meetings with members from other departments of the organisation, lobbying, capacity building, strategic environmental assessment, information disclosure on the web, and developing surveys (see Table 3).

Table 3: Deliberation and engagement tools identified by respondents

Tool	Total	
	N°	%
Meetings with external actors	16	34.8
Seminars and workshops	7	15.2
Private-public committees	3	6.5
Internal meetings	2	4.3
Lobby	2	4.3
Capacity building	2	4.3
Others	14	30.4
Total	46	100.0

Implementation, management and monitoring tools

When confronted with the task of identifying "Implementation, management and monitoring" tools, those most mentioned were linked to monitoring activities, including the monitoring of specific pollutant emissions and the monitoring performance of environmental policies. Other tools frequently mentioned were environmental auditing, ISO or similar certifications, and the use of environmental indicators. Other identified tools included environmental capacity building, social responsibility initiatives, and check lists (see Table 4).

Table 4: Implementation, management and monitoring tools identified by respondents

Tool	Total	
	N°	%
Monitoring	9	22.5
Environmental auditing	5	12.5
ISO or similar certifications	4	10.0
Use of indicators	2	5.0
Others	20	50.0
Total	40	100.0

During a collective meeting with a set of interviewees a concern was raised on the absence of enforcement as a monitoring tool. This was very surprising, especially considering that the largest group of respondents belongs to the public sector (14 out of 36). As some participants argued that this absence might have sprung from the language used during the interviews, this discussion led also to more methodological reflections concerning the way the initiative classifies tools. In this respect, it was

argued that tools should be classified not only in function of the task they fulfil, but also regarding their application level, such as political, operational or tactical.

Planning and organising tools

In relation to the task "Planning and organising", tools most mentioned were those associated with strategic planning, such as annual implementation planning of policies in the public sector and sustainability planning in the private sector. Other frequently mentioned tools were pursuing ISO 9000, 14000 and 18000 certifications, the use of Gantt tables, holding of internal meetings, and developing organisations' environmental policies (see Table 5).

Table 5: Planning and organising tools identified by respondents

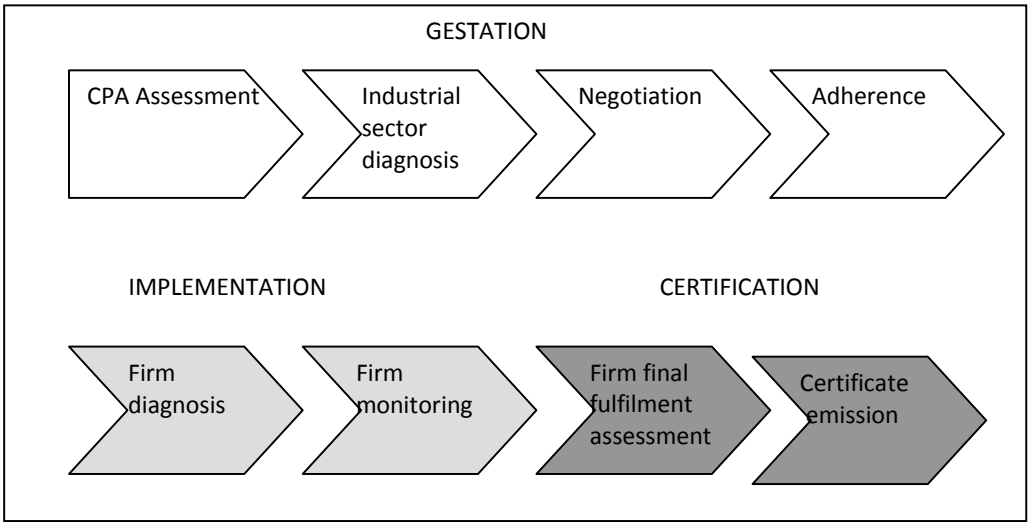
Tool	Total	
	N°	%
Strategic planning	5	18.5
ISO certification	3	11.1
Gantt tables	3	11.1
Internal meetings	2	7.4
Internal environmental policy	2	7.4
Others	12	44.4
Total	27	100.0

One tool that did not fit squarely within the specified task categories was the implementation of clean production agreements. Although it was mentioned by several respondents, it was associated with all four tasks. The implementation of clean production agreements is one of the clearest examples of environmental mainstreaming in Chile and has a structured and precise management model. Case Study 3 summarises its main characteristics.

Case study 3: Clean production agreements (CPAs)

A Clean Production Agreement (CPA) is a voluntary environmental management tool accorded between a specific productive sector and the public sector that establishes precise goals and actions to be implemented within a determined period of time. The APL management model is structured around three main levels: action platform, support pillars and sustenance base. The first level, action platform, includes the fundamental actions for the concretion of a CPA. The second level, support pillars, includes the necessary procedures by the action platform to successfully put into practice its three stages, and basically consists of five activities: information gathering and rising, communications management, policy development, institutional coordination and territorial organisation. Finally, the third level, sustenance base, corresponds to those elements that induce both the private and public sectors to subscribe a CPA, mainly consisting of a set of economic incentives and sanctions.

Although all three levels are important in the CPA process, the most important is the first one. This level comprises three stages: gestation, implementation and certification. At the same time, these stages involve various elements and/or phases. Thus, whereas the gestation stage includes industry level assessment, diagnosis, negotiation and adherence phases, and the implementation stage covers individual firm level diagnosis and monitoring, the certification stage includes firm level final fulfilment assessment and the emission of the certificate. The following figure shows this scheme.



Although some are critical about the real environmental impact of CPAs, arguing that they only make explicit what productive sectors are already doing or would do in any case, there is some consensus in that they have contributed to better environmental management practices in the industrial sector of Chile. Even if they have not established stricter pollution standards, they have helped in improving environmental management systems within firms and making their environmental compromises public. By the end of 2005 there were 26 implemented CPAs, involving 2,045 firms across the country. These firms represent approximately 10.7% of the Chilean GDP and 20.8% of its exports. Industry sectors covered by CPAs include agriculture, forestry, fishing, construction, manufacture, mining and tourism.

Most useful tools

When confronted with the task of identifying the most useful tools for mainstreaming the environment for sustainable development, an important fraction of respondents signalled tools belonging to the task "Information and assessment", such as economic analysis, EIA and information gathering and analysis. Tasks "Implementation, management and monitoring" and "Deliberation and engagement" were also accredited with a significant portion of tools identified as most useful. While examples of the former task include monitoring environmental impacts and operating according to ISO certification standards, examples of the latter include meetings with external actors and seminars and workshops. Tools associated with ask "Planning and organising" received the least attention (see Table 6).

Table 6: Most useful tools by task

Task	N°	%
Information and assessment	26	44.8
Implementation, management and monitoring	12	20.7
Deliberation and engagement	11	19.0
Planning and organizing	5	8.6
Others	4	6.9
Total	58	100.0

In terms of specific tools identified as most useful, those associated with what might be called information management were the most emphasised (see Table 7). They were backed mainly by private and public sector respondents emphasising the relevance of sound baseline building, monitoring, and data analysis for making good decisions.

Table 7: Most useful tools

Tool	N°	%
Information management	10	17.2
Meetings with external actors	8	13.8
Economic analysis	7	12.1
EIA	7	12.1
Seminars and workshops	3	5.2
ISO or similar certifications	3	5.2
Internal meetings	3	5.2
Analysis of foreign experiences	2	3.4
Others	15	25.9
Total	58	100.0

Tools related to meetings with external actors, such as discussing public policies with the private sector and NGOs, or disseminating private projects through citizenship participation processes, were also frequently mentioned. These were emphasised by representatives from all sectors, except academics. In general terms, these tools are appreciated because they enable effective communication between policy or project proponents and other actors. More specifically, they are valued because they are helpful in providing trust strengthening and political support.

Tools associated with performing economic analysis of initiatives, such as cost-benefit analysis and cost-efficiency analysis, were also highlighted as being useful. Economic tools were basically valued due to methodological, efficiency and equity reasons. Tools linked to environmental impact assessment were also signalled as some of the most useful. These were emphasised basically because they allow for the identification of potential environmental impacts at an initial stage of the project or policy process, so that mitigation measures can be designed and environmental impacts reduced.

Voluntary, informal and experimental approaches used for environmental integration

With the purpose of addressing the task "Deliberation and engagement", tools associated with informal communication and participatory processes were by far the most mentioned (see Table 8). Including approaches such as informal meetings with local communities, forming local alliances, and informal dialogues between the public and private sectors, the reasons for using these tools are basically those associated with the tool meetings with external actors, as discussed previously: trust strengthening and political support. Approaches mentioned less included analysis of international regulations, review of national jurisdiction, Quality Management Systems, and others.

Table 8: Voluntary, informal and experimental approaches

Approach	N°	%
Informal communications and participation	9	42.9
Analysis of international regulations	2	9.5
Review of national jurisdiction	2	9.5
Quality Management Systems	2	9.5
Others	6	28.6
Total	21	100.0

Traditional or indigenous approaches

Although sixteen respondents mentioned that they have worked with or included indigenous people in environmental management, only one respondent offered a concrete case in which indigenous knowledge is actually being applied. This corresponded to the use of Mapuche people by a forestry private corporation in the monitoring of huemul populations in native forests owned by the company.[4] In contrast, most respondents mentioned that when projects or initiatives affect indigenous people, they usually arrange meetings with them in order to provide them with relevant information and gain their trust. An interesting issue mentioned by two respondents corresponded to the need to understand the cultural and cosmological visions of indigenous communities in order for environmental initiatives affecting them to be successful.

Unavailability of useful tools

Unavailability of useful mainstreaming tools was perceived as being relevant for all tasks. For task "Deliberation and engagement", arguments ranged from the very general to more specific ones. While the former included issues such as being the task with the weakest available tools and corresponding to a purely rhetoric resource, examples of the latter were the lack of environmental education and the rigid nature of current citizen participation procedures, which only produces drastic and absolute results (the project or initiative being either good or bad).

With respect to task "Information and assessment", most arguments were related to the absence of both credible environmental data and rigorous procedures for producing it. This situation, not only makes the development of new environmental policies and initiatives more difficult, but also impedes the proper assessment of currently applied instruments and the generation of credible environmental research. While the absence of tools for task "Planning and organizing" was mainly associated with the lack of instruments and procedures for land use planning, obstacles for task "Implementation, management and monitoring" were primarily linked not the absence of tools but to those existing tool not being applied due to lack of resources or difficult accessibility. Similarly, an important point made by many respondents was that the major problem is not the absence of tools, but that they are not applied, mainly due to the lack of local technical capacity to adapt those tools available to specific and local circumstances.

[4] Mapuche (from Mapudungun language mapu "land, earth" and che "people") are the indigenous inhabitants of Central and Southern Chile and Southern Argentina. The huemul (*Hippocamelus bisulus*), a genus of *Cervidae*, the deer family, is found in Chile and Argentina. These endangered mammals live at high altitudes in the summer, then move down the mountains in the fall and spend the winter in sheltered forested valleys.

I.6. Main Recommendations for the User Guide

There is an urgent need to make progress in the integration of environment into development decision-making in Chile. This is expressed by interviewees in this project and also stated in recent reports and national assessments. The answer to the question of how to achieve this integration is, however, less consensual. In particular, the concept of tools and tactics proved both i) not easy to understand by users and ii) not completely decisive in the pursuit of integration. Elements such as institutional arrangements, people's idiosyncrasies and user capacities are all deemed by various interviewees as important (or even more important) than the concrete tools and tactics used. However, when interviewees are asked to judge the potential utility of a UG on tools and tactics for environmental integration, there is general acknowledgement of its value.

Tools and tactics are frequently perceived as a technocratic abstraction that does not necessarily represent reality in a faithful or relevant manner. The UG could be of considerable use if it gave life to the description of tools and tactics by means of relevant case studies: brief situations where the specific tool/tactic has been used. A concise account (e.g. as a text box) of the situation, the relevant actors, the way the tool/tactic was implemented, and the result obtained would suffice.

The UG should start by describing and acknowledging the diverse elements in play in mainstreaming environment into development. The conceptual framework discussed at the January meeting of the international panel, although it was not in time for being included in the country work (questionnaire and interviews), could be a sufficiently comprehensive and succinct way to depict reality. The user would then better understand the rationale behind the abstraction represented by tools and tactics. The conceptual framework should include clear and illustrative descriptions of concepts such as mainstreaming, environment, development, tools and tactics.

The availability of, and access to, tools and tactics is not perceived as a problem. As revealed by the interviews and the breakfast meeting held in January, tools and tactics for environmental mainstreaming are numerous and generally quite available on the web. In this sense, the UG must aim at becoming a "Google plus" instrument. The "plus" element would be given by the added value of the analyses provided, both in terms of context or framework and the description and categorisation of the tools and tactics. In particular, regarding the latter, diverse kinds of SWOT and suitability analyses, according to relevant criteria, would be significant contributions. Specific recommendations on the implementation of the tools and tactics could be targeted to different kind of users (public, private, civil society, etc.). To facilitate the synthesis of information, the UG could include a number of resources in the way of tables or matrixes presenting a panoramic view of the universe of tools and tactics included, and with diverse entry points to them.

One participant to the breakfast meeting stated, "[In Chile] we make decisions based on perceptions; we do not have reliable and updated information". His point was that if we wanted to strengthen environmental integration into development **our starting point ought to be the generation and management of environmental information**. In this sense, he argued for tools and tactics that would contribute to this purpose. Given that this situation is not only shared by Latin American countries, but also by developing countries in general, it seems wise to consider a focus of the UG on tools and tactics

that could contribute to generating, managing and facilitating access to relevant information on environment and development.

A pervasive concern, expressed by interviewees and participants to the breakfast meeting, is the fact that similar initiatives end up on a shelf, with little real impact. Clearly, the UG project process – through the international panel, partners in different countries and a diversity of products – is trying to maximize the degree of impact and influence on real-life situations. Interestingly, a number of commentators suggested that the UG should consider some kind of follow-up activity. In particular, **it was suggested that a training module in selected countries or organizations would be very useful.**

Lack of political will is the number one constraint to environmental mainstreaming both in Chile and in Latin America. One participant to the breakfast meeting rightly asked "we might have the tools, but we lack the political will; what will the UG do about this". The UG might work further to elaborate a sensible political strategy to influence policy decision-makers. For instance, in the region there are some key forums/organizations that could be approached and informed. The Inter American Development Bank and the Latin American and the Inter-Sessional Committee of the Forum of Ministers of Latin America and the Caribbean are but two examples.

II. LATIN AMERICA: A PANORAMIC VIEW

Latin America covers a huge area of approximately one sixth of the world's surface and includes countries at varying stages of development. The World Bank 2006 rankings for per capita gross national income (GNI) place the first Latin American country at number 73 (Mexico) with the lowest ranked Latin American country (Nicaragua) at number 154 in the world. The difference in the per capita GNI between these two countries is 6,870 USD.

This section of the report does not pretend to explore the infinite variety of the region and diverse challenges that particular areas are facing, but merely aims to give a flavour of the issues facing environmental mainstreaming in the region.

II.1. The relevant context - environment and development in the region

In terms of the link between development and the environment it is worth beginning this section with a few facts that indicate the position of Latin America in a global context.

- 8% of the world's population lives in Latin America.
- 23% of the world's potential arable land is in Latin America
- 23% of the world's forests are in Latin America
- 20% of the world's potential to generate electricity using hydropower is in Latin America
- A significant proportion of the world's mineral reserves are found in Latin America [5].

In a region marked by its reliance on export of primary materials, the Latin American countries are generally vulnerable to external economic influences. The region has historically been limited by low growth during lengthy periods, but in recent years there has been an increase in inflows of capital with the regional average gross domestic product growth between 2003 and 2006 at 4% per capita[6]. Despite this, Latin America has been unable to improve wealth distribution and economic growth has been insufficient to generate a level of employment that would allow workers to escape from poverty and enable the spread of access to adequate health care and education to the poorest.

There is no doubt that Latin America's natural resources are substantial, however protecting and managing those resources for the long term is proving a real challenge and will continue to do so if development emphasis is placed solely on economic growth. With a population of 555.9 million[7] which is projected to increase to 800 million people by 2050[8], pressure on those resources is only likely to increase. Deforestation, pollution, and damage to coastal and marine ecosystems are among the most important problems associated with the push for economic growth.

Poverty and inequality

"The most unequal region on the planet"[9]

Despite improvements in the situation, data for 2006 indicates that 38.5% of people in the region (205 million) are living below the poverty line and 79 million of these people are living in extreme poverty[10].

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[5] Statistics taken from Los Retos Del Desarrollo Sostenible En América Latina by Ramón Pichs Madruga available at http://www.redem.buap.mx/t1pichs.html

[6] Draft Regional Latin America and the Caribbean Programme Document, UNDP, www.undp.org

[7] Data for 2006 from World Bank group data profiles

[8] Visiones del Desarrollo en América Latina, 2007. www.cepal.org

[9] Inequality in Latin America and the Caribbean: Breaking with History? World Bank 2003

In Bolivia, Guatemala, Haiti, Honduras, Nicaragua and Paraguay over 30% of the population lives below the extreme poverty line.[11]

Further, the wealth distribution in Latin America is extremely unequal. While the top ten richest percent of the population receive between 40% and 47 % of the total income, the poorest 20 per cent receive only between 2% and 4%.[12] It is not just access to wealth that is unequal, but also access to certain services, such as drinking water and sanitation services. A World Bank report in 2003 said "Latin American inequality is also pervasive, characterizing every aspect of life, including access to education, health and public services; access to land and other assets; the functioning of credit and formal labour markets; and attainment of political voice and influence."[13]

In 2005 CEPAL predicted that provided progress to date continues, Brazil, Costa Rica, Mexico, Panama and Uruguay could meet the goal of halving extreme poverty (with Chile already having achieved this milestone). In other countries, however, evidence showed that there was little progress or even some regression.[14] Rural areas in particular remain largely poor.

The trend for migration from rural areas to cities and towns continues (the proportion of urban residents is projected to reach 81% by 2015)[15]. However, the scarcity of affordable land and housing in these urban areas means that shanty towns continue to grow despite efforts to integrate and provide better services. In countries such as Belize, Bolivia, Guatemala, Haiti, Nicaragua and Peru more than 50% of the urban population lives in slums[16].

However, the news is not all negative. Most of the region's countries should meet the Millennium goal for urban drinking water. And there also appears to be a success story in primary education.

Depletion of resources/environmental degradation

Latin America enjoys an extraordinary wealth of natural resources. The region includes five of the world's ten most biodiverse countries – Brazil, Colombia, Ecuador, Mexico, and Peru – as well as the single most biologically diverse area in the world – the eastern slope of the Andes[17]. Latin America is home to 40% of the world's species of plants and animals many of which are endemic.[18] However, the high rate of extinction of species and varieties is extremely worrying.

Figures show that between 1990 and 2005, 4% of the region's forests disappeared[19]. Both local and external demands are leading to deforestation. Local demand is for agricultural land or construction materials; the external demand for timber comes mainly from industrialized countries and the international trade in forest products. The consequences of deforestation are well known: soil degradation with nutrient loss and contamination by the intensive use of agrochemicals, fertilizers and pesticides.

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[10] Draft Regional Latin America and the Caribbean Programme Document, UNDP, www.undp.org
[11] The Millennium Development Goals: a Latin American and Caribbean perspective available at http://www.eclac.cl/cgi-bin/getProd.asp?xml=/publicaciones/xml/0/21540/P21540.xml&xsl=/tpl-i/p9f.xsl&base=/tpl-i/top-bottom.xsl
[12] Draft Regional Latin America and the Caribbean Programme Document, UNDP, www.undp.org
[13] Inequality in Latin America and the Caribbean: Breaking with History? World Bank 2003
[14] The Millennium Development Goals: a Latin American and Caribbean perspective
[15] The Millennium Development Goals: a Latin American and Caribbean perspective
[16] The Millennium Development Goals: a Latin American and Caribbean perspective
[17] http://www.usaid.gov/locations/latin_america_caribbean/issues/biodiversity_issue.html
[18] The Millennium Development Goals: a Latin American and Caribbean perspective
[19] Panorama Social de América Latina 2007. Anexo Estadístico, www.cepal.org , Cuadro 53

The rich biodiversity of the region's coastal and marine ecosystems are also under threat from increasing pollution and degradation. Pollution comes mainly from human settlements, agricultural or tourism activities, marine transport and the extraction, processing or transport of oil and gas while degradation is the result of the overexploitation of marine and coastal resources[20].

Environmental degradation is evident in urban areas also. Latin America is the most urbanized region in the developing world and contamination and poor air quality is such a serious issue that some large cities (Mexico City, Santiago de Chile and Sao Paulo are good examples) have had to implement measures to control the situation. Poor waste management is also jeopardizing health in cities, with the waterways seriously suffering from uncontrolled dumping.

Indigenous peoples

"*Poverty rates among the indigenous population are higher and fall more slowly*"

According to the World Bank's 2004 study[21], indigenous peoples represent 10 percent of the region's population. Indigenous populations are found mainly in rural areas.

In the last decade indigenous political influence in Latin America has seen remarkable growth, with constitutional provisions for indigenous people or tailored health and education policies appearing in some countries. Nonetheless the World Bank report concluded that this sector of Latin American society is still the most heavily disadvantaged and that the rise of political participation has not been accompanied by significant improvements in indigenous living standards. Specifically, the report finds that indigenous poverty rates are falling more slowly than the national poverty rates and that indigenous people continue to have fewer years of education and inferior access to basic health services.

Political commitment to sustainable development

"***The main concerns of the region over the last decade have been poverty and political stability, not sustainable development*".**[22]

The region's economic, political and social crises have defined priorities other than sustainable development. That said, on paper there are sustainable development initiatives. The Inter-Sessional Committee of the Forum of Ministers of Latin America and the Caribbean signed up to an initiative called the Latin American and Caribbean initiative for sustainable development in 2002[23]. The priorities set out under this initiative include eradication of poverty and social inequality, improving education on the environmental dimension in economic and social endeavours, sustainable management of water resources, sustainable generation of electricity, management of protected areas for sustainable use of biodiversity, climate change adaptation and sustainable urban management. However it is up to each government to design and put in place measures to achieve these objectives. Further, with countries producing reports showing indicators relating to these areas, at least more information will be available for analysis of progress in this area.

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[20] The Millennium Development Goals: a Latin American and Caribbean perspective

[21] Indigenous Peoples, Poverty and Human Development in Latin America: 1994-2004. The executive summary is available at http://www.worldbank.org

[22] Environmental Movements, Politics and Agenda 21 in Latin America by María Pilar García-Guadilla

[23] See http://www.sdnp.org.gy/wssd/initiativelac.pdf

Public participation in policy making, in general, is increasingly recognised as important and necessary. However, observers still note a problem of gender equality in those participating. Further, although the problem of including excluded groups, such as indigenous people, is increasingly on the agenda, there is still progress to be made.

Development in Latin America is heavily dependent on external financing. The region continues to have high levels of external debt - Bolivia, Nicaragua and Honduras for example qualify for debt relief under the Heavily Indebted Poor Countries Initiative[24]. This factor undermines the pursuit of sustainable development because the burden of debt service on the public purse (about 2.8% of GDP in 2003) seriously impairs capacity to implement social policies.[25] Furthermore, the region is highly vulnerable to natural disasters - hydrometeorological, seismic and volcanic are the most frequent - which have repeatedly disrupted the development process in many countries.

Environmental policies and the state of environmental mainstreaming

Only two countries in the region (Chile and Mexico) allocate more than 1% of GDP to environmental spending[26] which is the lowest level of environmental expenditure found among the OECD countries. All the Latin American countries are clearly trailing behind in terms of environmental standards but the environmental demands being made in international markets and increasing popular awareness of the issue, particularly climate change, are slowly building pressure for more effective environmental regulations. Private sector actors are already reacting – between 2000 and 2006 the number of ISO 14001 certified enterprises in Latin America increased from 705 to 4743 enterprises[27], though this is of course but a drop in the ocean!

In the last twenty years, environmental issues have been making their way into political consciousness: legal frameworks and specific laws on natural resources and limitation of polluting emissions have been passed in most countries, instruments such as environmental impact assessments have been introduced and countries now have specific government ministries or commissions dedicated to the environment. Further, signature of the various international environmental conventions is widespread among Latin American countries, for example all Latin American countries have signed the Kyoto Protocol agreement and the United Nations Convention on Biological Diversity (although Venezuela only signed the former belatedly in 2005).

Nonetheless the environment is far from integrated into the political decision making process. Incoherence with other political and social goals is a serious obstacle. For example, certain fiscal policies acting as incentives linked to environmental policies operate at a micro-economic level and can often be neutralised by macroeconomic incentives that work in the opposite direction. Tax exemptions created to attract investment often target activities which have potentially seriously negative environmental impacts (such as mining).

In general, the incorporation of concepts of conservation and sustainable natural resource use into urban development and housing has only just begun. National land-use planning is a particular area where environmental mainstreaming could significantly add value.

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[24] Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI)— report (August 2007) available at http://www.imf.org/external/np/pp/2007/eng/082807.pdf
[25] The Millennium Development Goals: a Latin American and Caribbean perspective
[26] The Millennium Development Goals: a Latin American and Caribbean perspective
[27] Statistical Yearbook for Latin America and the Caribbean 2007, www.cepal.org

It is widely acknowledged that the environmental authorities generally lack political weight. Various studies show that there are gaps in the institutional capacity for enforcement of environmental policies and insufficient mobilisation of resources (both technical and human). The mere existence of environmental regulators is not enough; better communication, dialogue and coordination of activities between those responsible for implementing the relevant public policies is required.

Opportunities for environmental mainstreaming in Latin America

- The region has strong cultural, political and socioeconomic ties. Various fora are already available for discussion of sustainable development or environmental topics at a regional level, for example the Forum of Environmental Ministers of Latin America and the Caribbean which are held every two years and declares itself to be a "platform for analysis and discussion and an effective mechanism for promoting regional cooperation on matters of environmental safeguarding and sustainable development"[28]. There are opportunities to build on these bases. An example of a regional initiative that has borne fruit in the area of environmental mainstreaming is the decision of the Latin American and Caribbean Forum of Ministers in 1995 to promote the EIA as a regional priority. It is not therefore surprising that the tool most frequently identified in the survey results is the EIA.
- Climate change is a hot topic and has really pushed questions such as energy efficiency onto the political agenda. Effects of climate change are already being noticed with Peru predicted to be the third most vulnerable country in the world to the impacts of climate change[29].
- Market force drivers such as environmental standards required for Latin American exports should continue to increase awareness in both the private and public sectors.
- The transition to democracy has been relatively recent for some Latin American countries. The continuing advances in public participation can potentially be harnessed to help mainstream environment into development decisions.

Challenges to environmental mainstreaming in Latin America

- Ineffective administration is still a problem in Latin America, particularly as mentioned when environmental policies are undermined by conflicting interests and regulators have little political weight. Lack of political will was cited in the survey answers as one of the major constraints on environmental mainstreaming, but the challenge is not only to overcome this but to find resources to implement it.
- Political corruption "not only adversely affects the region's economic and democratic development, but also places a direct burden on the population"[30]. According to Transparency International's 2006 Global Corruption Barometer report[31], in the Latin American countries surveyed, 17% of those surveyed had paid a bribe in the previous 12 months. Although the extent and form of corruption will clearly differ from country to country in Latin America, it is clear that corruption is affecting political life in the region. In terms of environmental mainstreaming, respondents indicated that corruption is one of the main constraints in Latin America.

[28] See http://www.pnuma.org/informacion/comunicados/pdf/ForumRepDominic.pdf
[29] Perú: tercer país más vulnerable después de Honduras y Bangladesh al cambio climático. Cómo pasar de la emergencia al desarrollo bajo el prisma del Desarrollo Humano. Available at http://www.pnud.org.pe/PDFs_IDH/Articulos/Febrero/Texto1.pdf
[30] http://www.transparency.org/regional_pages/americas
[31] Informe sobre el Barómetro Global de la Corrupción by Transparency Internacional 2006 – available at www.transparency.org/

- More information is needed on environmental problems, together with a quantification of the resources needed to tackle those difficulties, but information of this sort is not yet available in most countries of the region.
- Generally speaking, budget deficits and the need to generate funds to meet external debt obligations have led to budget cuts that have fallen perhaps disproportionately on environmental expenditure.[32]

[32] Financing for Sustainable Development in Latin America and the Caribbean (2002) available at www.eclac.org/

II.2. Main themes in the Latin American survey answers

A clear message from the survey answers was that environmental mainstreaming tools are not the be all and end all to succeeding in environmental mainstreaming. One respondent even noting that one must not have overly high expectations of a tool.

Very few of the respondents identified areas in which tools were unavailable. This suggests that in Latin America the tools exist but their effectiveness is being hindered somehow. Explanations of this situation focussed on local contextual hindrances. The context in which a certain tool is used can often be a decisive factor. The explanations for the choice of "least useful tools" were often related not to the tool itself but the limitations of the context in which it is used. For example, surveys were said not to be useful because of a "culture of fear" that prevented people expressing their true opinions. EIAs were often not properly implemented where the law did not contain sufficient regulation. Certification was criticised because the end goal had become more important to managers than the process itself. It was also noted that reliable information is lacking, that there is a lack of planning systems at national, regional and local levels and that resources of all types are lacking to enable environmental monitoring. To reflect this concern, the user testimonies in the tool profiles in the User Guide could give hints on any particular contextual situation which might hinder the effectiveness of a tool and, as appropriate, suggest modifications or suggest another tool that might be more effective in those circumstances.

Another clear message was the need to ensure an integrated approach and emphasise the interlinked nature of various components, for instance by promoting awareness of the environment's link to security, health and food production. This integrated approach is particularly evident in climate change. An example of this might be where impacts on water resources and ecosystems in turn negatively impact on agriculture which in turn impacts on the poverty of those working on the land (30-40% of the working population of Latin America[33]). Regarding this aspect one respondent specifically remarked that tools are of value and can be extremely useful in contributing to an integrated and logical development especially in developing countries that do not have development planning.

Various tools that were mentioned by respondents were particularly commended for their ability to enable dialogue between actors in different fields. Listening and understanding "the other" enables a broader view to be taken. For example in conflict management training, participants are encouraged to think about a diversity of viewpoints in the search for integrated solutions. Task forces also enable problem solving by multi-disciplinary teams. One respondent made this remark about multi-sector steering committees: "multi-sector steering committees enables multi-sector dialogue as information is generated. Dialogue is therefore focussed on information (and not for example on negotiation) the mechanism becomes an opportunity to generate communal language and understand different perspectives."[34] Given the remarks made above on the lack of coherence and co-ordination between environmental and other policies and the need for better communication and dialogue among authorities, these tools might be key ones for the Latin American context.

Lack of political will was one of the constraints on environmental mainstreaming most frequently identified. An explanation of this may be the perception among the political elite who make the decisions on development projects that environmental activities are an expense and not an investment. This short termist mentality could prove difficult to overcome.

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[33] Up in smoke? Latin America and the Caribbean. The threat from Climate Change to the environment and human development. 2006 available at http://www.iied.org/pubs/display.php?o=10017IIED.
[34] Nicolás Lucas. President of the Centro Fueguino para el Desarrollo Sustentable.

Another comment in the same vein was that the problem in Latin America is not a lack of tools but a lack of culture of sustainability. As noted above, economic, political and social crises have tended to define priorities in development decision making. Respondents were asked to indicate factors which facilitate or complicate environmental mainstreaming. The majority of responses head us back to this question of a culture of sustainability. For example, without clear environmental regulation there is no legitimisation of a push for environmental sustainability, without effective enforcement of environmental regulation there is no real incentive to push sustainability and without strong public awareness of environmental heritage there is no understanding of the importance of sustainability. Strong economic or political interests leading to conflict of interests frustrate environmental mainstreaming because the culture of sustainability is not strong enough to overcome them. High levels of unemployment or poverty complicate environmental mainstreaming because sustainability gets submerged by these more visible problems. Further, it was suggested that mainstreaming is facilitated when the decision relates to macroinfrastructure – i.e. without sustainability in the big picture; the details are harder to fill in.

Looking ahead to the User Guide, responses to the question on criteria to enable judgment of the utility of tools are interesting. The most relevant criteria were "Demand for particular skills, training, qualifications" and "cost". Although interestingly lack of resources and financing were not the highest scoring elements in the constraints part of the survey, the prevailing context for environmental mainstreaming in Latin America reported above suggests that both financing and training seem to be in short supply. The low score for "The impact of the tool in helping make progress towards sustainable development" may be explained by the general feeling explained above that the real impact of a tool will depend on whether it is used in an appropriate context.

The four key tasks set out used in the project questionnaire (Information and assessment, Deliberation and engagement, Planning and organizing, and Implementation, management and monitoring) were deemed by this small sample of respondents to be generally suitable. However, one respondent emphasised his view that big economic decisions must be included in the list, or at least it should be made clear that these are included in "planning". His reason was that this is where mainstreaming must first occur otherwise mainstreaming in other activities will be pointless.

An interesting point to note was that one respondent suggested that tools should also be classified according to the stage in the process when they should be deployed. This respondent suggested a distinction between "preventive tools" and "corrective tools".

As communication possibilities grow in this era of increasing information availability and public participation in Latin America, the possibilities to begin to create a culture of sustainability through education and information distribution were noted. However, the dangers of miscommunication were also noted. Misleading information and preconceived ideas about potential environmental impacts can frustrate environmental mainstreaming too. Let us make sure that a User Guide to Environmental Mainstreaming tools can be part of the educational solution.

Annex 1: Survey results - Chile

Key drivers for including environment in development decisions

Respondents were confronted with the task of identifying the three most relevant drivers influencing the inclusion of the environment in their job. They had to select these drivers from the following list of nine topics:

- International commitments (eg. UN agreements/conventions)
- Legislation, regulations and requirements (national/local)
- Organisation/business plans/objectives
- Stakeholder/public demands
- Donor conditions
- Risk management
- Organisation's own values
- Traditional/cultural reasons
- Environmental circumstances or events (eg. climate change)

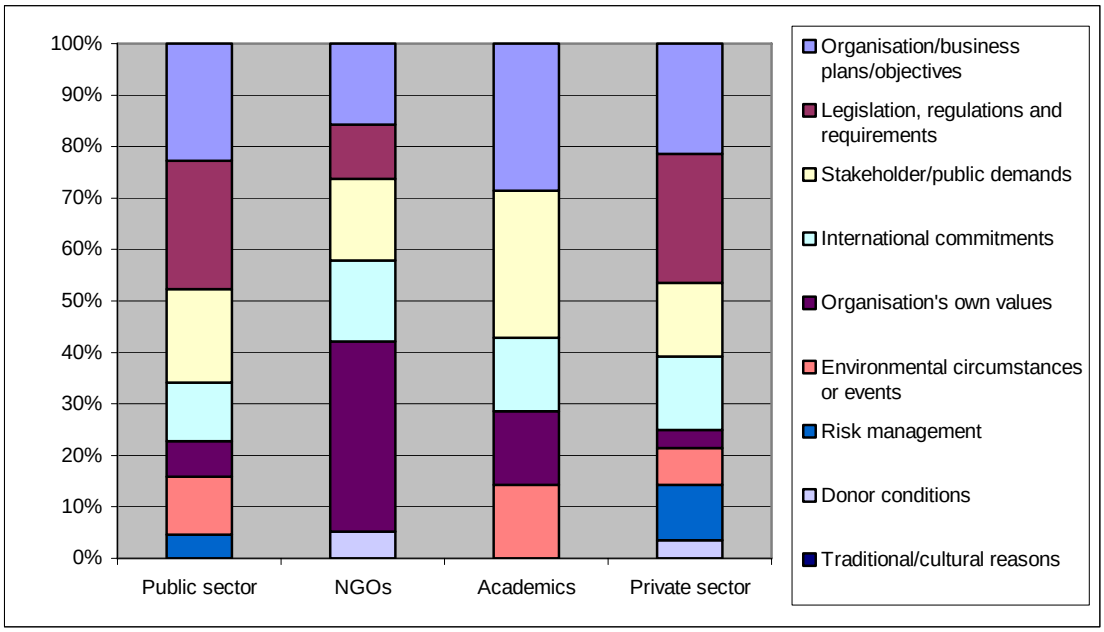
Of these, the 36 respondents identified 98 drivers. While some identified 4 and one none, on average they identified 2.72 drivers per respondent (see Table 1). Table 1 shows that in general terms while the most relevant drivers were "Organisation/business plans/objectives", "Legislation, regulations and requirements" and "Stakeholder/public demands", the least relevant were "Donor conditions" and "Traditional/cultural reasons".

Table 1: Summary of the key drivers identified by respondents

Key driver	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Organisation/business plans/objectives	10	22.7	3	15.8	2	28.6	6	21.4	**21**	**21.4**
Legislation, regulations and requirements	11	25.0	2	10.5	0	0.0	7	25.0	**20**	**20.4**
Stakeholder/public demands	8	18.2	3	15.8	2	28.6	4	14.3	**17**	**17.3**
International commitments	5	11.4	3	15.8	1	14.3	4	14.3	**13**	**13.3**
Organisation's own values	3	6.8	7	36.8	1	14.3	1	3.6	**12**	**12.2**
Environmental circumstances or events	5	11.4	0	0.0	1	14.3	2	7.1	**8**	**8.2**
Risk management	2	4.5	0	0.0	0	0.0	3	10.7	**5**	**5.1**
Donor conditions	0	0.0	1	5.3	0	0.0	1	3.6	**2**	**2.0**
Traditional/cultural reasons	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0.0**
Total	**44**	**100.0**	**19**	**100.0**	**7**	**100.0**	**28**	**100.0**	**98**	**100.0**

It is also significant to note that there were some differences between the drivers identified as most relevant among the different groups of actors. While both public and private sector respondents were aligned with the general responses by ascribing more relevance to "Organisation/business plans/objectives" and "Legislation, regulations and requirements", NGOs representatives considered "Organisation's own values" the most important driver. Whereas academics also considered "Organisation/business plans/objectives" as one of the most relevant drivers, they also assigned great significance to "Stakeholder/public demands" (see Figure 1).

Figure 1: Key drivers for including environment in development decisions by group of actors



Respondents were also asked to express their opinion about what drivers are motivating the inclusion of the environment in development decisions not just in their own organisations but at the country level. In this respect, the most mentioned key drivers were those associated with economic globalisation. Of 28 country level drivers identified by respondents, 12 were of this kind, such as the pressure imposed by international markets on environmental performance, the environmental standards brought into Chile by multinational corporations and the environmental requirements of free trade agreements. Other drivers frequently mentioned included the higher environmental demands by the citizenship and the increasing understanding of authorities that the environment is of political significance (see Appendix 1 for the full list of country level key drivers identified by respondents).

In summary, while at the organisational level the most relevant drivers for including the environment in development decisions appear to be

- legislation, regulations and requirements (national/local),
- organisation/business plans/objectives,
- stakeholder/public demands,
- international commitments, and
- organisation's own values,

at the country level these seem to be

- economic globalisation,
- environmental demands by the citizenship, and
- increasing political significance of the environment.

<u>Key constraints for including environment in development decisions</u>

Similar to the task of identifying the main drivers, respondents were confronted with the job of identifying the three most relevant constraints or obstacles that impede the inclusion of the

environment in development decision making. They had to select these impediments from the following list of nine topics:

- Lack of data/information
- Lack of skills/human resources
- Lack of methodologies/tools that work
- Lack of funding
- Lack of political will
- Corruption
- Lack of knowledge about available methodologies
- Dissatisfaction with available methodologies
- Lack of environmental consciousness

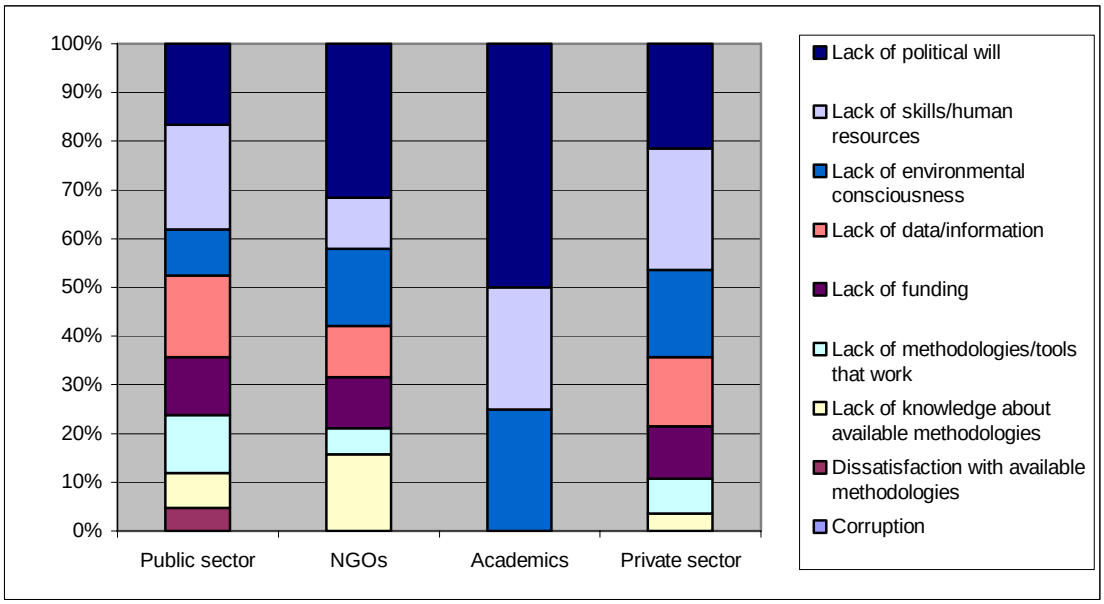
Of these, the 36 respondents identified 93 constraints. While one identified 7 and others none, on average they identified 2.58 constraints per respondent (see Table 2). Table 2 shows that in general terms while the most relevant constraints were "Lack of political will" and "Lack of skills/human resources", the least relevant were "Dissatisfaction with available methodologies" and "Corruption". In fact, "Corruption" was never identified as a major constraint.

Table 2: Summary of the key constraints identified by respondents

Key constraint	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Lack of political will	7	16.7	6	31.6	2	50.0	6	21.4	**21**	**22.6**
Lack of skills/human resources	9	21.4	2	10.5	1	25.0	7	25.0	**19**	**20.4**
Lack of data/information	7	16.7	2	10.5	0	0.0	4	14.3	**13**	**14.0**
Lack of environmental consciousness	4	9.5	3	15.8	1	25.0	5	17.9	**13**	**14.0**
Lack of funding	5	11.9	2	10.5	0	0.0	3	10.7	**10**	**10.8**
Lack of methodologies/tools that work	5	11.9	1	5.3	0	0.0	2	7.1	**8**	**8.6**
Lack of knowledge about available methodologies	3	7.1	3	15.8	0	0.0	1	3.6	**7**	**7.5**
Dissatisfaction with available methodologies	2	4.8	0	0.0	0	0.0	0	0.0	**2**	**2.2**
Corruption	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0.0**
Total	**42**	**100.0**	**19**	**100.0**	**4**	**100.0**	**28**	**100.0**	**93**	**100.0**

Although all groups of actors recognized "Lack of political will" as a major constraint, and considered "Dissatisfaction with available methodologies" and "Corruption" as not significant at all, there were some differences in relation to the other constraints. For example, whereas academics and public and private sector respondents signalled "Lack of skills/human resources" as a major constraint, NGO respondents did not. Similarly, all sectors identified but public sector respondents ascribed high relevance to "Lack of environmental consciousness". More specifically, while all sectors, except academics, considered "Lack of data/information" as an important constraint, it was public officials that mentioned it most. This is interesting, since the generation of data and information is generally the responsibility of the public sector (see Figure 2).

Figure 2: Key constraints for including environment in development decisions by group of actors



Respondents were also asked to express their opinion about what constraints are impeding the inclusion of the environment in development decisions not just in their own organisations but at the country level. The most mentioned constraints were those associated with a lack of good quality and comparable information and data, aspects considered by most respondents as crucial for mainstreaming the environment and permitting the generation of fruitful dialogues between the public sector, businesses and civil society. Of 42 country level constraints identified by respondents, 10 were of this kind.

Other constraints at the country level frequently mentioned were lack of political will (7), that protecting the environment is expensive for a country like Chile (3), lack of clear national environmental objectives (2), lack of environmental financing (2), lack of environmental enforcement (2), reduced environmental consciousness (2), absence of dialogue between environmentalists and the private sector (2), and excessive political pressure in environmental decision making (2) (see Appendix 2 for the full list of country level key constraints identified by respondents).

In summary, while at the organisational level the most relevant constraints for including the environment in development decisions appear to be:

- lack of political will,
- lack of skills/human resources,
- lack of data/information, and
- lack of environmental consciousness,

at the country level these seem to be:

- lack of good quality and comparable information and data,
- lack of political will, and
- that protecting the environment is expensive for a country like Chile.

Tasks and formal tools/tactics used for environmental integration

Respondents were asked to mention the tools they normally use when integrating the environment in their jobs differentiating the following key tasks:

- Information and assessment
- Deliberation and engagement
- Planning and organizing
- Implementation (including capacity building), management and monitoring
- Other

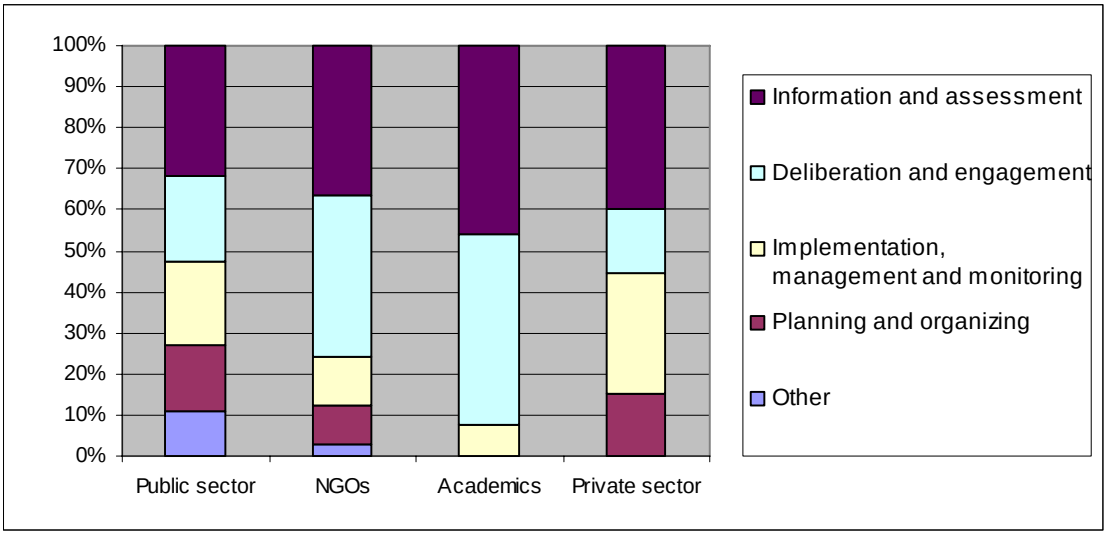
Respondents mentioned 191 tools. While some respondents identified 12 tools and others none, on average they mentioned 5.3 tools (see Table 3). Table 3 shows that most tools identified by respondents fell in the task "Information and assessment" (36.6%). It also shows that while "Deliberation and engagement" and "Planning and organizing" were frequently associated with tools used by respondents, coming second (24.1%) and third (20.9%) respectively, "Planning and organizing" was by far the least associated with tools used for integrating the environment (4.2%). This should not come as a surprise, as Latin American culture is not characterised for devoting much time and resources to planning activities.

Table 3: Tools identified by respondents by task

Task	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Information and assessment	20	31.7	12	36.4	6	46.2	26	40.0	**70**	**36.6**
Deliberation and engagement	13	20.6	13	39.4	6	46.2	10	15.4	**46**	**24.1**
Implementation, management and monitoring	13	20.6	4	12.1	1	7.7	19	29.2	**40**	**20.9**
Planning and organizing	10	15.9	3	9.1	0	0.0	10	15.4	**27**	**14.1**
Other	7	11.1	1	3.0	0	0.0	0	0.0	**8**	**4.2**
Total	**63**	**100.0**	**33**	**100.0**	**13**	**100.0**	**65**	**100.0**	**191**	**100.0**

While all sectors coincided in identifying a good portion of tools as belonging to "Information and assessment", tools belonging to "Deliberation and engagement" show a similar pattern except for private sector actors. Instead, this group gave more prominence to task "Implementation, management and monitoring" (see Figure 3). As the private sector is generally less willing than other sectors of society to participate and promote activities related to participation and disclosure, this outcome was expected.

Figure 3: Tools by task by group of actors



Information and assessment tools

Concerning "Information and assessment", tools associated with assessing environmental impacts (23.5%), such as the legally required EIA and emissions modelling, and economic impacts (20.6%), such as cost-benefit analysis and cost-efficiency analysis, were the most mentioned by respondents (see Table 4). Tools associated with information gathering and analysis were also frequently highlighted (13.2%). Other tools receiving more than one mention were land use planning and risk assessment (2.9% each). Respondents also mentioned numerous other tools, including life cycle analysis, analysis of sector specific policies from abroad, state-pressure-response analysis, and others.

Table 4: Information and assessment tools identified by respondents

Tool	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Environmental impact assessment	6	23.1	2	16.7	1	16.7	7	29.2	**16**	**23.5**
Economic analysis	6	23.1	3	25.0	2	33.3	3	12.5	**14**	**20.6**
Information gathering and analysis	3	11.5	2	16.7	0	0.0	4	16.7	**9**	**13.2**
Land use planning	2	7.7	0	0.0	0	0.0	0	0.0	**2**	**2.9**
Risk assessment	0	0.0	0	0.0	0	0.0	2	8.3	**2**	**2.9**
Others	9	34.6	5	41.7	3	50.0	8	33.3	**25**	**36.8**
Total	**26**	**100.0**	**12**	**100.0**	**6**	**100.0**	**24**	**100.0**	**68**	**100.0**

Deliberation and engagement tools

Respondents identified a total of 46 tools related to the task of "Deliberation and engagement". Of these, 16 (34.8%) were associated with arranging meetings with actors outside their own organisations, such as meetings with local communities and establishing dialogues with environmental authorities. Other frequently mentioned kinds of tools corresponded to the development of seminars and workshops intended at openly discussing and disseminating the policies or initiatives at hand (15.2%). Other tools mentioned more than once were private-public committees, internal meetings with members from other departments of the organisation, lobbying and capacity building. In addition, respondents identified 14 (30.4%) other tools, including strategic environmental assessment, information disclosure on the web, and developing surveys (see Table 5).

Table 5: Deliberation and engagement tools identified by respondents

Tool	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Meetings with external actors	5	29.4	3	23.1	2	33.3	6	60.0	**16**	**34.8**
Seminars and workshops	3	17.6	2	15.4	2	33.3	0	0.0	**7**	**15.2**
Private-public comités	2	11.8	1	7.7	0	0.0	0	0.0	**3**	**6.5**
Internal meetings	0	0.0	0	0.0	0	0.0	2	20.0	**2**	**4.3**
Lobby	0	0.0	2	15.4	0	0.0	0	0.0	**2**	**4.3**
Capacity building	0	0.0	2	15.4	0	0.0	0	0.0	**2**	**4.3**
Others	7	41.2	3	23.1	2	33.3	2	20.0	**14**	**30.4**
Total	**17**	**100.0**	**13**	**100.0**	**6**	**100.0**	**10**	**100.0**	**46**	**100.0**

It is worth mentioning that during the workshop a comment was raised concerning that as tools associated with meetings with external actors, especially for projects, are usually part of the EIA process requirements, they might have also been classified under the task "Information and assessment". This not only reflects that there might be a double counting of tools, but also that sometimes task categorisation is not as sharp as it might be expected.

Implementation, management and monitoring tools

When confronted with the task of identifying "Implementation, management and monitoring" tools, respondents mentioned 40 in total. Whereas public and private sector respondents mentioned most of them (34), NGOs and academics identified very few (6). Although there is not a straight forward interpretation for this difference, part of the explanation might lie in that whereas projects or initiatives developed by public and private sector actors normally are of a practical nature and usually include big sums of money, the nature of most projects by NGOs and academics is more conceptually or politically oriented, requiring the investment of far less resources. Thus, while the former are normally required to account precisely for their use of resources, the latter tend to operate within a more relaxed atmosphere in these matters.

The most mentioned tools were those linked to monitoring activities (22.5%), including the monitoring of specific pollutant emissions and the monitoring performance of environmental policies. Other tools frequently mentioned were environmental auditing (12.5%), ISO or similar certifications (10.0%) and the use of environmental indicators (5.0%). Tools mentioned only once (50%) included environmental capacity building, social responsibility initiatives, and check lists (see Table 6).

Table 6: Implementation, management and monitoring tools identified by respondents

Tool	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Monitoring	4	25.0	1	20.0	0	0.0	4	22.2	**9**	**22.5**
Environmental auditing	0	0.0	0	0.0	0	0.0	5	27.8	**5**	**12.5**
ISO or similar certifications	0	0.0	0	0.0	0	0.0	4	22.2	**4**	**10.0**
Use of indicators	2	12.5	0	0.0	0	0.0	0	0.0	**2**	**5.0**
Others	10	62.5	4	80.0	1	100.0	5	27.8	**20**	**50.0**
Total	**16**	**100.0**	**5**	**100.0**	**1**	**100.0**	**18**	**100.0**	**40**	**100.0**

During the workshop a concern was raised in respect of the absence of enforcement as a monitoring tool. This was very surprising, especially considering that most respondents belong to the public sector

(14 out of 36). As some participants argued that this absence might have sprung from the language used during the interviews, this discussion led also to more methodological reflections concerning the way the initiative classifies tools. In this respect, it was argued that tools should be classified not only in function of the task they fulfil, but also regarding their application level, such as political, operational, tactical, etc.

Planning and organising tools

In relation to "Planning and organising" tools, respondents identified 27 in total. Notably, academics did not mention a single tool for this task. The most mentioned were those associated with strategic planning (18.5%), such as annual implementation planning of policies by a public sector respondent and sustainability planning by a private sector actor. Other frequently mentioned tools were pursuing ISO 9000, 14000 and 18000 certifications, and the use of Gantt tables (11.1% each). Other tools mentioned more than once were the holding of internal meetings and developing organisations' environmental policies. Respondents also identified 12 (44.4%) other tools, such as developing strategic alliances with other institutions and analysing relevant legal requirements (see Table 7).

Table 7: Planning and organising tools identified by respondents

Tool	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Strategic planning	2	14.3	1	33.3	0	-	2	20.0	5	18.5
ISO certification	2	14.3	0	0.0	0	-	1	10.0	3	11.1
Gantt tables	0	0.0	1	33.3	0	-	2	20.0	3	11.1
Internal meetings	2	14.3	0	0.0	0	-	0	0.0	2	7.4
Internal environmental policy	0	0.0	0	0.0	0	-	2	20.0	2	7.4
Others	8	57.1	1	33.3	0	-	3	30.0	12	44.4
Total	**14**	**100.0**	**3**	**100.0**	**0**	**-**	**10**	**100.0**	**27**	**100.0**

Most useful tools in mainstreaming the environment for sustainable development

When confronted with the task of identifying the most useful tools for mainstreaming the environment for sustainable development, respondents identified 58 tools. In line with the identification of tools currently used, most tools (44.8%) acknowledged as most useful belonged to the task "Information and assessment", such as *economic analysis*, *EIA* and *information gathering and analysis*. Tasks "Implementation, management and monitoring" and "Deliberation and engagement" were also accredited with a significant portion of tools identified as most useful (20.7% and 19.0% respectively). While examples of the former task include *monitoring* environmental impacts and operating according to *ISO certification* standards, examples of the latter include *meetings with external actors* and *seminars and workshops*. Tools associated with ask "Planning and organising" received the least attention (8.6%) (see Table 8).

Table 8: Most useful tools by task

Task	N°	%
Information and assessment	26	44.8
Implementation, management and monitoring	12	20.7
Deliberation and engagement	11	19.0
Planning and organizing	5	8.6
Others	4	6.9
Total	**58**	**100.0**

In terms of specific tools identified as most useful when integrating the environment in projects or policies, those associated with what might be called *information management* were the most emphasised (17.2%) (see Table 9). They were backed mainly by private and public sector respondents emphasising the relevance of practical and reliable information for making good decisions. More specifically, respondents highlighted the relevance of baseline building, monitoring, and data analysis:

- *baseline building*: the construction of environmental baselines based in "real" data is identified as a basic requirement for the development of serious initiatives;
- *monitoring*: monitoring environmental variables after the project or policy is implemented is considered as a crucial step for both enforcement and environmental management purposes;
- *data analysis*: statistical tools are considered as providing solid and reliable information that permits more certain and confident planning processes.

Table 9: Most useful tools

Tool	N°	%
Information management	10	17.2
Meetings with external actors	8	13.8
Economic analysis	7	12.1
EIA	7	12.1
Seminars and workshops	3	5.2
ISO or similar certifications	3	5.2
Internal meetings	3	5.2
Analysis of foreign experiences	2	3.4
Others	15	25.9
Total	**58**	**100.0**

Tools related to *meetings with external actors*, such as discussing public policies with the private sector and NGOs, or disseminating private projects through citizenship participation processes, were frequently mentioned (13.8%). These were emphasised by representatives from all sectors, except academics. At a rather superficial level, most respondents valued these tools partly because they enable effective communication between policy or project proponents and other actors. Analysing the reasons given by respondents, at least three more specific reasons arise as well:

- *trust strengthening*: by enabling 'face-to-face' contact between actors, these tools provide opportunities for consolidating trustful relations where they exist and generating them where they are absent;
- *political support*: they allow proponents to persuade other actors to support the initiative they are proposing;
- *knowledge increase*: they provide the opportunity to increase knowledge through the exchange of relevant information between actors.

Tools associated with performing *economic analysis*, such as cost-benefit analysis and cost-efficiency analysis, were frequently mentioned as one of the most useful, representing 12.1% of the tools mentioned as most useful. These were highlighted mainly by representatives from the public sector as applied to the assessment of public policies. Economic tools were basically valued due to methodological, efficiency and equity reasons:

- *methodology*: they allow the comparison of diverse objectives under a single metric;
- *efficiency*: they permit public policies to show that they are economically efficient;

- *equity*: they permit the social analysis of public policies in terms of who benefits and who looses.

Tools linked to *environmental impact assessment* were also frequently signalled as some of the most useful, representing 12.1% of the tools identified as such. They were emphasised only by public and private sectors actors, basically because they allow for the identification of potential environmental impacts at an initial stage of the project or policy process, so that mitigation measures can be designed and environmental impacts reduced. Other frequently mentioned tools were seminars and workshops, ISO or similar certifications, internal meetings and analysis of foreign experiences.

Least useful tools in mainstreaming the environment for sustainable development

Confronted with the task of identifying the least useful tools for mainstreaming the environment, respondents highlighted 14 tools. Of these, five (35.7%) were related to *environmental impact assessment* (see Table 10). One argument against this tool, as formally administered by CONAMA, the environmental agency, is that as it requires lots of information to be submitted by project proponents, it diverts the attention of authorities from substantively assessing the main environmental impacts to formally administering a plethora of documentation. In other words, it has little effect on environmental impacts.

Other tools receiving more than one mention were conducting *economic analysis*, *public participation*, and implementing *ISO certification* schemes. Economic tools were criticised for not being able to quantify environmental benefits and for being redundant in cases where there are no alternative public policies. As current public participatory instances were found to be too massive and with little structure, they appear to be formally addressing inclusion issues rather than substantially adding value to the formulation and implementation of policies or projects. Concerning ISO certification schemes, they were considered too basic for establishing environmental management standards and viewed as not improving environmental performance as some of its supporters claim.

Table 10: Least useful tools

Tool	N°	%
EIA	5	35.7
Economic analysis	2	14.3
Public participation	2	14.3
ISO certification	2	14.3
Others	3	21.4
Total	**14**	**100.0**

A comment was raised during the workshop concerning that gaining information about which tools are less useful is not very productive. Instead, it was signalled that it would be much more interesting to know which tools are least applied and its causes. In this respect, it was mentioned that this exercise would generate diverse and sometimes contradictory arguments, and that understanding the source of these contradictions would be very productive for strengthening their application.

Voluntary, informal and experimental approaches used for environmental integration

Respondents offered 21 examples of how voluntary, informal and experimental tools or approaches are being utilised in Chile. Only academics did not identify any of these tools. While only a pair of respondents identified more than one tool, the rest either identified one or none. With the purpose of addressing task "Deliberation and engagement", tools associated with *informal communication and participatory* processes were by far the most mentioned (42.9%) (see Table 11). Including approaches

such as informal meetings with local communities, conforming local alliances, and informal dialogues between the public and private sectors, the reasons for using these tools are basically two of those associated with the tool *meetings with external actors*, as discussed in section 5.4: trust strengthening and political support. Approaches less mentioned included *analysis of international regulations*, *review of national jurisdiction*, *Quality Management Systems*, and *others*.

Table 11: Voluntary, informal and experimental approaches

Approach	N°	%
Informal communications and participation	9	42.9
Analysis of international regulations	2	9.5
Review of national jurisdiction	2	9.5
Quality Management Systems	2	9.5
Others	6	28.6
Total	**21**	**100.0**

Traditional or indigenous approaches used for environmental integration

Although sixteen respondents mentioned that they have worked with or included indigenous people in environmental management, only one respondent offered a concrete case in which indigenous knowledge is actually being applied. This corresponded to the use of Mapuche people by a forestry private corporation in the monitoring of *huemul* populations in native forests owned by the company.[35]

In contrast, most respondents mentioned that when projects or initiatives affect indigenous people, they usually arrange meetings with them in order to provide them with relevant information and gain their trust. An interesting issue mentioned by two respondents corresponded to the need to understand the cultural and cosmological visions of indigenous communities in order for environmental initiatives affecting them to be successful.

Although during the workshop there was agreement in that in Chile there is little experience with involving this kind of knowledge into environmental decision making, it was suggested that the issue should be treated more as being local in nature than traditional or indigenous. As this treatment is more inclusive, it has the benefit of generating more information.

The most helpful criteria in a User Guide which aims to judge the utility of tools

Respondents were confronted with the task of identifying the most helpful criteria to judge the utility of tools. They had to select them from the following list:

- Ease of use / complexity of process
- Demand for particular skills, training, qualifications
- Cost
- Time required
- How understandable the outputs are
- Need for data, fieldwork, etc.
- How robust particular tools are – does it deliver reasonably good info?

[35] Mapuche (from Mapudungun language mapu "land, earth" and che "people") are the indigenous inhabitants of Central and Southern Chile and Southern Argentina. The huemul (*Hippocamelus bisulus*), a genus of *Cervidae*, the deer family, is found in Chile and Argentina. These endangered mammals live at high altitudes in the summer, then move down the mountains in the fall and spend the winter in sheltered forested valleys.

- The impact of the tool in helping make progress towards sustainable development

In total, respondents identified 100 criteria (see Table 12). While one signalled all of them and one none, on average they identified 2.77 criteria. Table 12 shows that the most relevant criterion was "Ease of use / complexity of process", which might be an indication that users of environmental mainstreaming tools are not at ease with complicated or sophisticated procedures. It also shows that criterion "The impact of the tool in helping make progress towards sustainable development" was the least relevant, which might be interpreted as showing that tool users in Chile are more oriented towards formal aspects of environmental management than to the substantive objective of working towards sustainable development.

Table 12: Summary of the most helpful criteria identified by respondents

Criterion	**Public sector**		**NGOs**		**Academics**		**Private sector**		**Total**	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Ease of use / complexity of process	10	24.4	7	28.0	1	20.0	7	24.1	**25**	**25.0**
Demand for particular skills, training, qualifications	8	19.5	3	12.0	1	20.0	4	13.8	**16**	**16.0**
Cost	4	9.8	5	20.0	2	40.0	3	10.3	**14**	**14.0**
Time required	6	14.6	1	4.0	1	20.0	4	13.8	**12**	**12.0**
How understandable the outputs are	7	17.1	2	8.0	0	0.0	3	10.3	**12**	**12.0**
Need for data, fieldwork, etc.	2	4.9	4	16.0	0	0.0	2	6.9	**8**	**8.0**
How robust particular tools are – does it deliver reasonably good info?	3	7.3	1	4.0	0	0.0	4	13.8	**8**	**8.0**
The impact of the tool in helping make progress towards sustainable development	1	2.4	2	8.0	0	0.0	2	6.9	**5**	**5.0**
Total	**41**	**100.0**	**25**	**100.0**	**5**	**100.0**	**29**	**100.0**	**100**	**100.0**

Respondents were also asked to openly express their opinion about other criteria considered to be useful but not included in the original list. They mentioned 18 other criteria, including a variety of issues. Those receiving more than one mention were "compatibility with current legislation", "engagement of relevant stakeholders", "language and terminology familiarity", "persuasiveness and credibility of results", and "measurability and comparability of results". Interestingly, one respondents used this opportunity to express that he didn't believe in user guides, basically because institutions, actors and ecosystems are not homogenous around the world, varying greatly from one country to another.

Unavailability of useful tools

When identifying environmental mainstreaming tasks for which there are no available tools, respondents highlighted 41 cases. All environmental mainstreaming tasks received a similar share of the identified cases (see Table 13). For task "Deliberation and engagement", arguments ranged from the very general to more specific ones. While the former included issues such as being the task with the weakest available tools and corresponding to a purely rhetoric resource, examples of the latter were the lack of environmental education and the rigid nature of current citizen participation procedures, which only produces drastic and absolute results (the project or initiative being either good or bad).

Table 13: Unavailability of useful tools as identified by respondents

Task	Public sector		NGOs		Academics		Private sector		Total	
	N°	%	N°	%	N°	%	N°	%	**N°**	**%**
Deliberation and engagement	5	25.0	1	14.3	0	0.0	3	30.0	**9**	**22.0**
Information and assessment	4	20.0	1	14.3	0	0.0	3	30.0	**8**	**19.5**
Planning and organizing	4	20.0	0	0.0	2	50.0	1	10.0	**7**	**17.1**
Implementation, management and monitoring	5	25.0	1	14.3	1	25.0	0	0.0	**7**	**17.1**
Others	2	10.0	4	57.1	1	25.0	3	30.0	**10**	**24.4**
Total	**20**	**100.0**	**7**	**100.0**	**4**	**100.0**	**10**	**100.0**	**41**	**100.0**

With respect to task "Information and assessment", most arguments were related to the absence of both credible environmental data and rigorous procedures for producing it. This lack, not only makes difficult the development of new environmental policies and initiatives, but also impedes the proper assessment of currently applied instruments and the generation of credible environmental research. While the absence of tools for task "Planning and organizing" was mainly associated with the lack of instruments and procedures for land use planning, obstacles for task "Implementation, management and monitoring" were primarily linked not the absence of tools but to those existing tool not being applied due to lack of resources or difficult accessibility.

In close connection to the above, an important point made by many respondents under task named "Others" (see Table 13), was that the issue is not the absence of tools, but that they are not applied. The main reasons for this statement corresponded to the lack of local technical capacity to adapt those available to specific and local circumstances, the existence of legal barriers that impede their application and lack of political will.

Another gap identified during the workshop was the lack of regulations and incentives aiming at mainstreaming the environment in development decisions.

Annex 2: Survey results – Latin America

Summary of the project questionnaire findings

Key drivers for including environment in development decisions

The 8 respondents identified 22 drivers (although one respondent did not indicate any drivers). Table 1 shows that "Legislation, regulations and requirements" and "Organisation's own values" were both indicated by 5 of the respondents. "Donor conditions" and "Environmental circumstances or events" were not mentioned by any of the respondents. The drivers that were mentioned that were additional to those listed in the survey were: Global risks that threaten the planet; personal convictions; and demand conditions.

Table 1: Summary of the key drivers identified by respondents

Key driver	Public sector	NGOs	Academics	Private sector	Total
Organisation/business plans/objectives		1	1	1	**3**
Legislation, regulations and requirements	2		1	2	**5**
Stakeholder/public demands	1			1	**2**
International commitments	1				**1**
Organisation's own values	2	2		1	**5**
Environmental circumstances or events					**0**
Risk management		1			**1**
Donor conditions					**0**
Traditional/cultural reasons		1			**1**
Regulations/requirements affecting a company			1		**1**
Others		2		1	**3**
Total	**6**	**7**	**3**	**6**	**22**

Comments made in relation to the question about drivers for mainstreaming included a remark about the important role of international market demands, national and international rules and the emergence of mechanisms that highlight the role of the environment. These elements all result from decades of work of organisations across the world.

Key constraints for including environment in development decisions

The 8 respondents identified 29 constraints. Table 2 shows that "Lack of political will", "Corruption" and "Lack of environmental consciousness" were indicated the most frequently. Note that this contrasts with the responses received in relation to Chile where "Corruption" was never identified as a major constraint. "Dissatisfaction with available methodologies" and "Lack of knowledge about available methodologies" were not mentioned by any of the respondents.

The constraints that were mentioned that were additional to those listed in the survey were: lack of awareness of the environment's link to security, health and food production; competing views of the state/private/NGO participants on how to prioritize development; and the perception of environmental activities as an expense rather than an investment i.e. short termism. This latter was mentioned by 2 respondents.

Table 2: Summary of the key constraints identified by respondents

Key constraint	Public sector	NGOs	Academics	Private sector	Total
Lack of political will	1	2	2	1	**6**
Lack of skills/human resources		1	1		**2**
Lack of data/information	1	1	1		**3**
Lack of environmental consciousness	1	2		2	**5**
Lack of funding	2		1		**3**
Lack of methodologies/tools that work			1		**1**
Lack of knowledge about available methodologies					**0**
Dissatisfaction with available methodologies					**0**
Corruption	1	1	1	2	**5**
Others		2	1	1	**4**
Total	**6**	**9**	**8**	**6**	**29**

Comments made in relation to this question included the point that such a discussion of tools for mainstreaming is often very far from the local reality where the mainstreaming actually has to happen – this can mean that the tools are irrelevant and useless to the particular situation. Several respondents indicated that several factors were interlinked.

Comments relating to lack of political will included that the problem was related to selfishness and ambition and that mainstreaming may seek to change the status quo which will be strongly resisted by those powerful economic interests who are benefiting from the status quo. Notably, one respondent, who did not select "lack of political will" as a constraint, indicated that there was political will in Peru to seriously tackle climate change and conservation of biodiversity by giving the example of multiparty approval of the Peruvian Congress to the creation of a special commission on climate change and biodiversity (la Comisión Especial de Cambio Climático y Biodiversidad)

Tasks and formal tools/ tactics used for environmental integration

Respondents mentioned 50 different tools used when integrating the environment in their jobs, although it is possible that the tools are the same but given different names by different people, this may particularly relate to "Deliberation and engagement".

Table 3: Tools identified by respondents by task

Task	No of different tools identified
Information and assessment	12
Deliberation and engagement	13
Planning and organizing	13
Implementation, management and monitoring	9
Other	3
Total	**50**

Some tools were identified by more than one respondent. In relation to "Information and assessment" these were Environmental Impact Assessments and Strategic Environmental Assessments. In relation to "Deliberation and engagement" these were conflict management, citizen's forums and opinion surveys.

Surveys were associated by different respondents with "Planning and organising" and with "Implementation, management and monitoring". The tool may be the same but the objective of its use and the situation in which the tool is used might vary. Decisions and resolutions of international conventions were associated by the same correspondent with both "Information and assessment" and "Deliberation and engagement".

The tools that were attributed to a category "other" than the four key tasks were:

- Environmental audits
- Accumulated effect assessment
- Environmental diagnostics

The following tools were listed by respondents under the four key task areas:

Table 5: Tools identified

Information and assessment	**Deliberation and engagement**	**Planning and organizing**	**Implementation, management and monitoring**
EIA	Inter-sector dialogues/forums	Strategic plans	Environmental auditing systems
Social Impact Assessment	Conflict management e.g. mediation	Environmental order and Environmental management plans	Environment management systems
Environment situation diagnostic	Public hearings	Demand, Supply, Aptitude scenarios	Environmental indicator systems
Resource/use evaluation	Opinion surveys	SWOT analysis	Environmental management
Determination of carrying capacity	Public participation	Participatory planning	Environmental monitoring
Strategic Environmental Assessment	Presentation of development proposals	Project evaluation	Risk management
Interviews	Consultation and participation processes	Project monitoring	Regular inspections
Environmental risk analysis	Periodic meetings with communities representatives	Strategic objectives definition	Environmental audits
Decisions and resolutions of international conventions	Decisions and resolutions of international conventions	Quality management systems	Task forces
Financial and Economic assessment	International declarations	CSR	
Cost-Benefit analysis	Legal analysis dialogue	Legal and Risk assessment	
Geographic analysis	Consultations	Surveys	

Most useful tools in mainstreaming the environment for sustainable development

Respondents to this question identified between two and five tools as the "most useful" for mainstreaming with one respondent not answering this question. In total 18 different tools were identified. Some tools were identified by more than one respondent; these were Environmental Impact

Assessments (4) and Social Impact Assessments (3), conflict management (2) and cost-benefit analysis (2).

"Most useful tool"	**Why?**
Intersector dialogue	Broadens visions if listen to "other"
Conflict management training	Encourages thinking about a diversity of viewpoints in the search for integrated solutions Key to defining agendas and prioritising policy
EIA	Enables data and information to be taken into account in decision making Enables detailed environmental implications of development proposals to be identified Fundamental tool enabling measurement of impacts of our management against a baseline
SIA	Enables data and information to be taken into account in decision making Enables social implications of development proposals to be identified Fundamental tool enabling measurement of impacts of our management against a baseline
Strategic environmental assessment	Enables environmental implications of policy, plans and programs to be identified
Environmental risk assessment	Enables identification of the threats and vulnerabilities that the development proposed will be exposed to
Economic valuation of environmental impact	Enables economic implications of environmental impacts to be identified
Management systems	Definitions of strategies, plans, programs
Regular inspection	Periodic checks to ensure compliances with national and regional rules
Task force	Essential when problems arise that need to be treated by a structured and multi-disciplinary team
Multi-sector steering committee	Enables dialogue as information is generated. Dialogue is focussed on information (and not for example on negotiation) the mechanism becomes an opportunity to generate communal language and understand different perspectives.
Decisions and resolutions of international conventions and organisations	These legitimise concrete processes orientated towards compliance with environmental conventions, Legitimisation is useful for obtaining cooperation of many actors (governments, various organisations, companies etc)
International declarations	Enable a basis of agreement relating to the relevance of a particular topic without needing to re-approve it every time an initiative begins in relation to the topic.
Cooperation agreements	A formal expression of interest of two organisations in starting a project. The cooperation agreement legitimises the dedication of time and effort of technical teams within the organisations to the project.
Legal analysis dialogue	
Cost-benefit analysis	
Forums for citizen participations	These encounter least resistance
Sessions of the Peruvian Comisión Especial de Cambio Climático y Biodiversidad	These encounter little resistance but are a little more difficult to organise as need to get the decision makers together.
Regular environmental and social audits	Doing these regularly allows for structured monitoring

Least useful tools in mainstreaming the environment for sustainable development

Only 4 respondents answered this question. These respondents highlighted 7 tools. No tool received more than one mention.

The explanations for the choice of "least useful tools" were often related not to the tool itself but the limitations of the context in which it is used. One respondent noted that all tools can be useful to an extent, but one must not have overly high expectations of a tool. For example, surveys were said not to be useful because of a "culture of fear" that prevented people expressing their true opinions. It was suggested that where implementation of EIA was not properly regulated by the law, then the assessments were not done properly. It was noted that in Peru there is no regulation of the law and not much political will to rectify this situation.

Certification (for example ISO) was criticised because for being commercialised rather than focussing on raising awareness. However, they create a necessity to comply with a program, although it was also noted that in some cases "management concern" was only noticeable as assessments for certification or recertification approached.

Traditional cost-benefit analysis was criticised for often not taking into account the economic value of environmental goods and services and biodiversity.

Voluntary, informal and experimental approaches used for environmental integration

Respondents offered 8 examples of how voluntary, informal and experimental tools or approaches are being utilised in Latin America. The following tools were put forward:

- Social pressure through media and public events increases the relevance accorded by decision makers to public image.
- Satisfaction surveys for users and neighbours to enable consultation on their perception of the interference in their work and living space.
- Bimonthly project info bulletins ensure that people receive information first hand.
- Suggestion box – internet and email allow people who are directly affected to make their worries and needs known.
- Multi-sector steering committees can direct the process of evaluation in order to ensure that information generated actually related to interests of social actors who will receive the technical assessment.
- Cooperation agreements are a formal expression of interest of two organisations in starting a project. The cooperation agreement legitimises the dedication of time and effort of technical teams within the organisations to the project.
- Sustainable livelihood approach can highlight other perspectives of the relationship between man and nature that are interesting to analyse.
- Environmental risk assessment can reveal the threats and vulnerabilities of development proposals and their implications on the local environment.

Of these, 3 were labelled as tools for "Information and assessment", 2 for "Deliberation and engagement" and 1 for "Implementation". The other two named tools were not attached to one of the four key tasks.

Traditional or indigenous approaches used for environmental integration

Only 2 of the respondents mentioned an indigenous tool. The tools mentioned were informal and formal presentations of project proposals to the communities with the purpose of informing the population and enabling the population to express their opinion on the proposals. One respondent offered the concrete example of annual hearings attended by indigenous communities, called by entities or government department in the municipality of Quito. Another tool used with indigenous communities was an environmental awareness campaign in schools in the zone directly influenced by the proposed project, followed, for example, by clearing up missions involving the communities around their local area.

The most helpful criteria in a User Guide which aims to judge the utility of tools

Respondents were confronted with the task of identifying the most helpful criteria to judge the utility of tools. One respondent noted that he found the question irrelevant, but chose 3 criteria anyway. The number of criteria chosen per respondent varied between 3 and 7 (the single criteria not chosen by that respondent was "The impact of the tool in helping make progress towards sustainable development"). The most relevant criteria were "Demand for particular skills, training, qualifications" and "cost". The criteria "The impact of the tool in helping make progress towards sustainable development" and "Need for data, fieldwork etc" was the least relevant.

Table 5: Summary of the most helpful criteria identified by respondents

Criterion	Public sector	NGOs	Academics	Private sector	Total
Ease of use / complexity of process		2	1	2	**5**
Demand for particular skills, training, qualifications	2	2	2	1	**7**
Cost	2	2	1	2	**7**
Time required	2	1	0	1	**4**
How understandable the outputs are	1	1	1	1	**4**
Need for data, fieldwork, etc.	0	1	0	1	**2**
How robust particular tools are – does it deliver reasonably good info?	0	1	2	1	**4**
The impact of the tool in helping make progress towards sustainable development	0	1	1	0	**2**
Total	**7**	**11**	**8**	**9**	**35**

One respondent suggested the additional criterion of "relevance of tool for local context".

Unavailability of useful tools

Only 2 of the 8 respondents identified areas in which tools were unavailable. One of these identified all areas as lacking useful tools. The other suggested that tools were lacking in "Implementation (including capacity building), management and monitoring" and "planning and organising".

However, there were some interesting comments on the question with one respondent suggesting that it is processes of political and social action rather than tools that are more important in achieving mainstreaming and concluding that the problem is not a lack of tools but a lack of culture of sustainability. Further, this respondent argued that without a culture of sustainability, any tool is useless, but equally even a weak tool can be successful if the cultural context is appropriate. The chosen process is determined by the culture (political and social) of the community, therefore the values, attitudes and concrete style of relating to the community are at least as important, if not more so, than the technical design of the project.

One respondent from Guatemala commented that tools were not lacking but other factors might be missing – for example in relation to "Information and assessment" reliable information is lacking, in relation to "Planning and organizing" there is a lack of planning systems at national, regional and local levels"; and for "Implementation, management and monitoring", resources of all types are lacking to enable environmental monitoring.

Summary of the supplementary questionnaire findings

Factors affecting the successful mainstreaming of environmental issues into development decisions

3 of the 5 respondents agreed with the statement that "one of the factors affecting the successful mainstreaming of the environment into development decision making is the existence of appropriate tools; another is the presence of a context that facilitates the implementation of the appropriate tools". One respondent partially agreed and stressed that there were other factors too. One respondent disagreed with the statement and said that the political factor is the primary factor and that all other factors are not essential.

The respondents gave various examples where the context makes the application of tools for mainstreaming of environmental issues into development decisions easier. In relation to knowledge it was quite clear that while good knowledge was helpful, the reverse complicated the situation.

The following factors were listed:

- Clear environmental regulation
- Enforcement of environmental regulation
- Strong public awareness of environmental heritage
- Knowledge and training on the topic among government authorities particularly those involved in coordinating and managing environmental policies and strategies and national development.
- Knowledge and training on the topic among consultants responsible for preparation of EIA and Environmental management reports etc. and those working in development planning
- When the decision relates to macroinfrastructure
- When the decision relates to free trade treaties
- When the decision relates to land use planning
- When the decision relates to risk for populations from natural disasters (floods, mudslides etc)
- When the decision relates to large investment projects
- Growth in communication possibilities – if effectively used and adapted
- Local authorities where the decision making processes are shorter and more controllable and where the population more actively participates in government decisions and where the benefits are seen more rapidly.

The respondents gave various examples where the context makes the application of tools for mainstreaming the environment into development decision making more difficult. Many of these echoed responses to the question posed about constraints in Part I i.e. lack of knowledge/training/awareness and corruption. The following new factors were listed:

- Lack of environmental specialists within competent authorities
- Misunderstanding of purpose of legislation; perceived as another obligation rather than a tool to defend the environment.
- Mobilisation of affected public by misleading information and preconceived ideas about potential environmental impacts.
- Strong economic or political interests leading to conflict of interests

- High levels of unemployment
- Strong pressure to exploit natural resources
- Macroeconomic pressure to build infrastructure
- High poverty levels
- Political weight of development or popular movements
- Administrative divisions in a country making mainstreaming difficult (but a change in mindset and planning would be necessary)
- Lack of protocols for EIA and Strategic Environmental Assessments

Classification of tools under a variety of categories of activities or tasks

Each of the 5 respondents considered appropriate the example categories of activities or tasks of:

- Information and assessment
- Deliberation and engagement
- Planning and organizing
- Implementation, management and monitoring.

However, one suggested that technical regulation and legislation should be taken into account. Another emphasised his view that big economic decisions must be included in the list, or at least it should be made clear that these are included in "planning". His reason was that this is where mainstreaming must first occur otherwise mainstreaming in other activities will be pointless. The same respondent also made the point that in legislation, economic processes are joined with environmental issues.

Other suggested categories were:

- legislation
- training
- definition of environmental aims as part of economic development aims
- the measurement of environmental effects in terms of economics and quality of life
- relationship between environmental quality and human health.

An interesting point to note was that one respondent suggested that tools should also be classified according to the stage in the process when they should be deployed. This respondent suggested a distinction between "preventive tools" and "corrective tools".

Annex 3: Methodology

Chile

The global approach was designed by the IIED following consultations with the Poverty Environment Partnership and donor agencies, and following a project working group meeting involving participants from about 20 poorer countries in the early months of 2007. A generic survey questionnaire was developed by the IIED in consultation with the country survey partners. Three countries from three different continents agreed to pioneer country surveys – Chile, India and South Africa. The Chilean survey began in October 2007.

The project questionnaire was translated into Spanish and was used as a basis for interviews with 36 people in Chile. The interviews were conducted by a two people from RIDES: one economist and one sociologist. Respondents currently work, or have previously worked, in the field of environmental management. Most of them have important experience in the topic and some are international leaders. Participants included public sector officials, NGOs representatives, academics, private sector actors, consultants and members from international organizations. In relation to these various sectors, the breakdown was as follows:

Sector	**N° of respondents**
Public sector	14
NGOs	8
Academia	3
Private sector	11
Total	**36**

In general, while public sector participants had the least difficulty going through the interviews, private sector actors and consultants were the least comfortable. The reason behind this phenomenon seems to arise from the fact that while the former are quite used at thinking about tools and methodologies used in public environmental management and environmental policy making, the latter most of the time are involved in environmental management practices associated with the demands of businesses and corporations.

In addition to the interviews, eight interviewees attended a brief workshop where preliminary results of the study were shown. This provided an opportunity for them to bring in new comments and perspectives, which were used as further feedback for the study. In January 2008, the combined results of the interviews and the workshop were later presented to the International Stakeholder Panel of the project in London. The recommendations of this meeting were used to structure and feed the final document.

Latin America

The project questionnaire was translated into Spanish and sent to the Latin American members of the International Association for Impact Assessment (IAIA). The IAIA is an organisation that brings together researchers, practitioners, and users of various types of impact assessment. A mix of professions are represented among IAIA members including corporate planners and managers, public interest advocates, government planners and administrators, private consultants and policy analysts, university and college teachers and their students[36].

[36] www.iaia.org

8 responses to the project questionnaire were received from the following countries:

Country	N° of respondents
Argentina	3
Ecuador	2
Guatemala	1
Peru	1

In relation to the various sectors, the breakdown was as follows:

Sector	N° of respondents
Public sector	2
NGOs	2
Academics	2
Private sector	2

Following the panel meeting in January 2008, where the discussion had focussed on questions of context and activities, a supplementary questionnaire was drafted with two further questions which were again sent to the Latin American members of IAIA. At the same time, a copy of the presentation of the preliminary results given in London by Hernán Blanco and a summary in Spanish of the situation in Chile were sent out inviting comment. No comments on these documents were received.

The questions in the supplementary questionnaire were:

1. The successful mainstreaming of the environment into development decision making depends on many factors. One of the factors is the existence of appropriate tools; another is the presence of a context that facilitates the implementation of the appropriate tools

- Do you agree with the above statement?
- Can you give any examples where the context makes the application of tools for mainstreaming of the environment into development decision making easier?
- Can you give any examples where the context makes the application of tools for mainstreaming the environment into development decision making more difficult?

2. The User Guide will present and classify a selection of tools for mainstreaming the environment into development decision making. In order to classify the tools a variety of categories of activities or tasks are being considered. The following are examples:

- Information and assessment
- Deliberation and engagement
- Planning and organizing
- Implementation, management and monitoring

a) Do these activities or tasks seem appropriate to you for the classification of mainstreaming tools?
b) Do you have any suggestions of activities or tasks for the classification of mainstreaming tools in a future User Guide?

5 responses to these questions were received from the following countries:

Country	N° of responses
Argentina	2
Colombia	1
Guatemala	1
Peru	1

Alongside an in-depth analysis of the answers to the project questionnaires and supplementary questionnaire, a general review of literature on development issues and the environment in Latin American countries was carried out.

Annex 4: Questionnaire used in Chile and the region

Recursos e Investigación para el Desarrollo Sustentable - RIDES

y

International Institute for Environment and Development (IIED), Londres

'Guía para el Usuario': herramientas y métodos efectivos para integrar el medio ambiente y el desarrollo

CUESTIONARIO

Antecedentes

El *International Institute for Environment and Development* (IIED, www.iied.org) ha lanzado una iniciativa, dirigida por un Panel de Expertos internacional, para producir una "Guía para el Usuario" acerca de herramientas para la integración del medio ambiente en las decisiones para el desarrollo.

Explicación de conceptos claves

Integración del medio ambiente
Se trata del proceso a través del cual las organizaciones y los individuos involucrados en la toma de decisiones asociadas al desarrollo económico, social y físico de un país (en los niveles nacional, sub-nacional y local) consideran los aspectos ambientales en sus decisiones.

Herramientas
Los instrumentos, métodos y tácticas que son usadas (individualmente o en combinación) para llevar a cabo los procesos ya mencionados; por ejemplo, las estrategias para proveer información, evaluación, consulta, análisis, planificación y monitoreo, de modo de informar las decisiones.

La Guía se centrará en aquellas herramientas que ayuden directamente a dar forma a políticas, planes y decisiones; y NO en el conjunto mayor de herramientas que se utilizan para implementar aquellas decisiones (e.g., mecanismos e instrumentos de mercado, herramientas de gestión aplicadas). Tales herramientas pueden ser aplicadas en distintos niveles (ejemplo: nacional, regional, municipal) y por un rango diverso de usuarios (gobiernos, organizaciones no gubernamentales, el sector privado).

En la elaboración de la Guía se buscará responder a las necesidades de los propios usuarios. En este sentido, la Guía incluirá un conjunto expandido de herramientas y enfoques, más allá de aquellas que son enfatizadas por los expertos; por ejemplo, aquellas usadas por la sociedad civil y el sector privado.

La opinión del IIED es que las capacidades para integrar el medio ambiente serán mucho más poderosas si los interesados pueden seleccionar herramientas y métodos apropiados. Si bien algunas herramientas y algunos métodos son muy usados, otros recién se están desarrollando; algunos son fáciles de implementar y otros requieren de recursos técnicos y financieros considerables; algunos son efectivos y otro no. Muchas herramientas están siendo "empujadas" por intereses de terceros, y muy pocas desarrolladas localmente son ampliamente conocidas, a pesar de que generalmente son más informales y más baratas. No hay suficiente información que surja desde los propios usuarios potenciales. Tampoco existe información disponible que los ayude a elegir las herramientas apropiadas.

La iniciativa buscará identificar aquellas herramientas que se desempeñan mejor en consideración de los propósitos perseguidos y de los usuarios potenciales. La Guía estará basada en evidencia proveniente de una serie de consultas y talleres regionales y nacionales, entrevistas, cuestionarios y la experiencia del Panel de Expertos.

Esta Guía cubrirá el amplio espectro de herramientas y métodos disponibles para la integración del medio ambiente, utilizando la experiencia de los propios usuarios en enfoques técnicos como la EIA, hasta herramientas más políticas como los paneles de ciudadanos.

El proyecto ofrecerá tres productos:

(a) Un grupo de unas 30 herramientas serán revisadas y descritas según criterios previamente definidos.
(b) Una Guía para seleccionar herramientas para tareas específicas, de modo de asistir a los usuarios en la selección de enfoques que sean apropiados al problema o tarea específica.
(c) Se preparará adicionalmente un resumen de las áreas en las cuales las herramientas tienden a ser débiles o faltantes, de modo de guiar futuros desarrollos.

RIDES está asociado con IIED para desarrollar una encuesta nacional y regional en Chile y otros países de Sudamérica para asegurar una retroalimentación aplicada proveniente de potenciales usuarios acerca de los desafíos que ellos enfrentan al usar las herramientas, sus necesidades en relación a las herramientas de integración, y sus perspectivas con respecto a qué herramientas son útiles y cuáles no.

Nota: No hay respuestas erróneas a ninguna de las preguntas. Nosotros queremos conocer sus experiencias y opiniones como usuarios de herramientas para la integración ambiental.

Detalles del Encuestado
Nombre ……
Cargo ……
Organización ……
Dirección ……
……
Teléfono/fax ……
Email ……

Organización ***(puede marcar más de una categoría)***

(i) Gobierno
Especifique el sector (por ejemplo: transporte) ……..
Nivel nacional ……
Nivel regional/provincial ……
Nivel municipal/local ……
Empresa estatal ……

(ii) ONG
Desarrollo
Campaña/activismo ……
Medio ambiente ……
Otro – por favor detallar ……

(iii) Sector privado
Especifique el sector (por ejemplo: transporte) ……
Multinacional ……
Nacional ……

Servicio público (eléctrica, etc.) ……
PYME ……
(iv) Investigación (área) ……
(v) Otro (por favor detallar) ……

<u>Rol que desempeña</u> *(por favor marcar)*
Administración ……
Planificación ……
Economista ……
Experto ambiental ……
Experto social ……
Experto inversiones ……
Gestión financiera ……
Investigador/académico ……
Lobby/activismo ……
Otro (por favor detallar) ……
Por favor resuma sus principales responsabilidades
…….
…….
…….

1) MOTIVACIONES – ¿Qué lo empuja a integrar el medio ambiente en las iniciativas de desarrollo?

(marque las relevantes, <u>destacando las tres más importantes</u>)

Compromisos internacionales (eg acuerdos/convenciones ONU) …….
Legislación, regulaciones, y requerimientos (nacionales/locales) …….
Objetivos o planes de la empresa …….
Regulaciones o requerimientos que afectan a la empresa ……..
Demandas públicas o de terceros …….
Condiciones de los donantes …….
Gestión del riesgo …….
Los valores de la organización …….
Razones tradicionales o culturales …….
Circunstancias o eventos ambientales (ejemplo: cambio climático, inundaciones, etc.), especifique ……..
Otras (por favor detallar) ……..

¿Algún comentario con respecto a lo que está motivando la inclusión del medio ambiente en las decisiones sobre el desarrollo?

……

……

……

……

2) IMPEDIMENTOS – Cuáles considera Ud. que son los principales desafíos u obstáculos para integrar las inquietudes ambientales en los procesos de desarrollo de políticas, planificación y otras instancias de toma de decisiones?

(marque las relevantes, destacando las tres más importantes)

Carencia de datos/ información …….
Carencia de habilidades …….
Carencia de recursos humanos ……..
Carencia de metodologías/herramientas efectivas ……..
Falta de conocimiento sobre metodologías disponibles ……..
Insatisfacción con metodologías disponibles (especifique cuáles)
……
Carencia de financiamiento …….
Carencia de voluntad política …….
Falta de conocimiento y conciencia ambiental …….
Corrupción …….
Otros (por favor detalle) ……..

¿Algún comentario acerca de qué limita la integración del medio ambiente en las diferentes decisiones sobre el desarrollo?

……

……

……

……

3) TAREAS – ¿Qué herramientas o métodos formales usa Ud. para la integrar el medio ambiente en las siguientes tareas? *(Nota: la pregunta 4 trata sobre herramientas informales)*

Por favor identifique hasta 3 herramientas particulares que Ud. requiere utilizar para cada tarea. Cuando la herramienta tenga un nombre particular (e.g. 'evaluación de impacto social' o 'jurados ciudadanos'), por favor identifíquela.

Nota: como una ayuda memoria, el cuadro de abajo refleja un espectro típico de herramientas disponibles

Tarea	Herramienta 1	Herramienta 2	Herramienta 3
Información y Evaluación			
Participación y deliberación			
Planificación y organización			
Implementación, gestión y monitoreo			

Implementación de medidas (incluyendo la construcción de capacidades)			
Otras (especificar)			

Algunos tipos de herramientas para la integración ambiental

(A) Información y evaluación

Evaluación económica y financiera (ej. análisis costo beneficio)
Evaluación de impacto (ej. evaluación de impacto ambiental o social)
Evaluación especial (ej. planificación territorial)

(B) Participación y deliberación
Participación y acción ciudadana (ej. foros y diálogos)
Análisis y acción política (ej. comisiones y audiencias)
Manejo de conflictos (ej. mediación)

(C) Planificación y organización
Herramientas legales (ej. litigación)
Herramientas para la planificación, gestión y control ambiental (ej. sistemas de gestión de la calidad, ISO)

(D) Implementación, gestión y monitoreo de medidas implementadas
Certificación y auditorías (ej. FSC, ISO 14001)
Monitoreo y evaluación (ej. indicadores y encuestas)

4) ¿Además, qué enfoques voluntarios/informales/experimentales usa Ud., incluso si no son parte de los requerimientos formales? (por favor indique: cómo y por qué)

Tarea …… Herramienta……..

Y por qué se utiliza: ……

……

……

Tarea …… Herramienta……..

Y por qué se utiliza: ……

……

……

Utiliza usted herramientas de integración que han surgido de prácticas tradicionales o indígenas? Si es así, ¿cuáles, cómo y por qué son utilizadas?

…….

…….

…….

…….

5) ¿Qué criterios encontraría valiosos en una Guía para Usuarios que persigue evaluar la utilidad de las herramientas?

Por favor marque y sugiera criterios adicionales

Facilidad de uso / complejidad del proceso …..
Requerimientos de habilidades, capacitación, o calificaciones especiales …..
Costo …..
Tiempo requerido …..
Cuán comprensibles son los resultados …..
Requerimientos de datos, trabajo en terreno, etc. …..
Cuán robustas son las herramientas específicas - ¿entregan información razonablemente buena? …..
El impacto de la herramienta en apoyar el progreso hacia el desarrollo sustentable …..
Otros (por favor especifique)
……
……

6) En su trabajo, ¿puede identificar las cinco herramientas que Ud. considera más útiles?

Considerando sus respuestas a las preguntas 3, 4 y 5, por favor ordene las cinco herramientas en función de su preferencia/utilidad.

Herramienta	**Principal razón de la elección**
1	
2	
3	
4	
5	

INFORMACION SUPLEMENTARIA QUE SERIA BIENVENIDA

7) ¿En base a su experiencia, tiene, o podría proveer, ejemplos escritos acerca de los apectos positivos (ventajas/utilidades) y negativos (costos) de usar herramientas específicas? Si es así, por favor identifíquese de modo que podamos ubicarlo en el futuro.

……

……

Nombre del caso: ……

Si está de acuerdo, por favour escriba un breve párrafo sobre el caso

8) ¿Sabe de ejemplos de adaptaciones/innovaciones a herramientas que hayan sido efectivas (y quién las desarrolló o las promovió)?

……
……

Nombre del caso: ……

Si está de acuerdo, por favor escriba un breve párrafo sobre el caso

9) Si su respuesta a las preguntas 7 u 8 es afirmativa, podríamos contactarlo para preparar un caso de estudio (donde el medio ambiente y el desarrollo fueron completamente integrados)?

Sí ……. /No …….. (por favor marque)

Nota: Su contribución sera completamente reconocida en los estudios de caso nacionales (a menos que usted prefiera de otro modo).

10) De las herramientas que usted "debe" utilizar (pregunta 3, arriba), ¿cuáles le resultan menos útiles y por qué?

Herramientas menos útiles	***Principales razones***

11) ¿Para qué tareas de integración del medio ambiente (pregunta 3, arriba) no hay disponibilidad de herramientas útiles?

Tareas	**Indique con un tick si en su opinión <u>no</u> hay disponibilidad de herramientas útiles**
Información y evaluación	
Participación y deliberación	
Planificación y organización	
Implementación, gestión y monitoreo	
Otras (especificar)	

Annex 5: Information and assessment specific tools mentioned by interviewees in Chile

Type of tool	Tool
Environmental impact assessment	• Obligatory EIA for public and private projects • Emissions modeling • Life cycle analysis • EIA for policies
Economic analysis	• Cost-benefit analysis: decontamination plans, quality and emission standards, public projects, • Cost-efficiency analysis: pollution management, public initiatives, policies • Financial assessment of technological innovation, • Economic valuation of environmental externalities • Economic valuation of environmental impacts
Information gathering and analysis	• Information measurement: emissions, forest land, energy use • Information gathering: meetings with diverse actors in order to know their views about environmental priorities, interests and objectives • Second hand information gathering and analysis • Field work with communities • Information analysis: emissions tendencies, energy use tendencies, biofuel demand, agricultural expansion
Land use planning	• Land use planning of agricultural land • Land use modeling
Risk assessment	• Scenario modeling with probability assignment for big projects • Risk analysis in the design of quality and emission standards
Others	• Analysis of international environmental policies and legal instruments • Participation in international forums: OMC, OECD, APEC, biodiversity, climate change • Environmental cooperation with trade partners • Pressure, State, Response methodology • Socio economic characterization of communities affected by big projects

Annex 6: Acknowledgements

With special thanks to the IAIA, and to all respondents in Chile and Latin America for their cooperation.

Chilean interviewees

Name	Position	Organisation
Nicola Borregaard	Directora del Programa Nacional de Eficiencia Energética	Ministerio de Economía, Fomento y Reconstrucción
Eda Rossi	Jefe Departamento de Comercio y Desarrollo Sustentable	Ministerio de Relaciones Exteriores
Fernando Baeriswyl	Profesional Departamento de Recursos Naturales	Comisión Nacional del Medio Ambiente
André Laroze	Jefe de la Unidad de Cambio Climático	Ministerio de Agricultura
Ximena Ruz	Jefe de la Unidad de Acuerdos de Produccón Limpia	Consejo Nacional de Producción Limpia
Pilar Valenzuela	Profesional Departamento de Recursos Naturales	Comisión Nacional del Medio Ambiente
Orlando Jiménez	Subregente de Atracción de Inversiones	Corporación de Fomento de la Producción
Pablo Badenier	Secretario Ejecutivo	Secretaría Ejecutiva de Medio Ambiente y Territorio (SEMAT), MOP
Juan Ladrón de Guevara	Asesor Ambiental del Ministro	Ministerio de Economía, Fomento y Reconstrucción
Carlos Herrera	Jefe Departamento Medio Ambiente y Territorio	Dirección de Vialidad, Ministerio de Obras Públicas
Cecilia Adarme	Jefe Departamento Ingeniería y Gestión Ambiental	Servicio Nacional de Geología y Minería
Alvaro Sapag	Director Ejecutivo	Comisión Nacional del Medio Ambiente
Rodrigo Salas	Jefe Departamento Estudios, Sistema Nacional de Inversiones	Ministerio de Planificación y Cooperación
Alvaro Henríquez Aguirre	Jefe División de Estudios y Desarrollo, Subsecretaría de Transportes	Ministerio de Transportes y Telecomunicaciones
María Isabel Manzur	Coordinadora Area Biodiversidad	Fundación Sociedades Sustentables
Fernando Dougnac	Presidente	Fiscalía del Medio Ambiente
Hugo Guzmán	Asesor Desarrollo Sostenible	Comisión Económica para América Latina y el Caribe (CEPAL)
Marcela Angulo	Gerente de Medio Ambiente y Energía	Fundación Chile
Gilberto Ortiz	Director	Comite Nacional Pro Defensa de la Fauna y Flora
Ana Luisa Covarrubias	Directora Programa de Medio Ambiente y Recursos Naturales	Libertad y Desarrollo
Victoria Alonso	Investigadora	The Nature Conservancy, Chile

Rafael Asenjo	Investigador Senior	Centro de Estudios para el Desarrollo
Nicolo Gligo	Académico, Centro de Asuntos Públicos	Universidad de Chile
Dominique Hervé	Académica, Facultad de Leyes	Universidad Diego Portales
Andrés Gómez-Lobo	Académico, Facultad de Economía	Universidad de Chile
Ricardo Katz	Director Ejecutivo	Gestión Ambiental Consultores
Fernando Raga	Gerente de Desarrollo	Forestal Mininco
Marcela Bochetto	Gerente de Sustentabilidad	PricewaterhouseCoopers Chile
Karin Gauer	Consultora Independiente	
Gianni López	Director Ejecutivo	Centro Mario Molina Chile
Wilfredo Jara	Gerente de Medio Ambiente	ENDESA Chile
Daniel Benítez	Gerente de Medio Ambiente	Water Managment Consultants
Leonel Sierralta	Gerente de Desarrollo	Gestión Ambiental Consultores
Javier Hurtado	Gerente de Estudios	Confederación de la Producción y del Comercio (CPC)
Andrés Camaño	Gerente de Medio Ambiente	Arauco
Pablo Daud	Asesor Ambiental	Arcadis Geotécnica

Latin American respondents

Name	**Organisation**	**Country**
Pedro Augustus Flores Tenorio	Comisión Especial de Cambio Climáctico y Biodiversidad	Peru
Maria Amparo Alban Ricaurte	ACD Consulting	Ecuador
Nicolás Lucas	Centro Fueguino para el Desarrollo Sustentable	Argentina
Augusto Flores Andrade	Corporación Quiport S.A.	Ecuador
Yolanda Kakabadse	Fundación Futuro Latinoamericano	Ecuador
Pablo Mazariegos	Ambiente y Dearrollo	Guatemala
Maria Rossi	Secretaria de Ambiente y Desarrollo Sustentable	Argentina
Ernesto Pirillo	Postgraduate course teacher. Engineering department, Universityof Buneos Aires	Argentina
Only supplementary questions		
Silvia Iglesias León	Geological, Mining, Metallurgical and Geographic Engineering department, Universidad Nacional Mayor de San Marcos	Peru
Manuel Felipe Olivera	Environemntal Planning, Bogota	Colombia