

Darwin Initiative – Final Report

(To be completed with reference to the Reporting Guidance Notes for Project Leaders (<http://darwin.defra.gov.uk/resources/reporting/>) - it is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Darwin project information

Project Reference	15/028
Project Title	Community Resource Management Planning in the Maichin River Valley (Chile)
Host country(ies)	Chile
UK Contract Holder Institution	CESAGen, Lancaster University
UK Partner Institution(s)	
Host Country Partner Institution(s)	All the Lands Council - Biodiversity Team (Ad-Kimun Ltd)
Darwin Grant Value	203,977
Start/End dates of Project	October 2006 – September 2008
Project Leader Name	Paul Oldham
Project Website	
Report Author(s) and date	

1 Project Background

The overall aim of this project was to strengthen the capacity of the Mapuche Pehuenche communities of the Maichin River Valley in the Curarrehue comuna in the Araucaria region of Chile to participate in the negotiation and implementation of the provisions of the Convention on Biological Diversity with regards to the conservation, sustainable use and community co-management of the Villarrica National Park and Forest Reserve encompassing over 60,000 hectares of Andean uplands on the frontier between Chile and Argentina. The Maichin Valley is home to approximately 390 Mapuche families living in 8 communities who practice agro-silvo-pastoralism.

The Mapuche communities in the Maichin had been affected by the creation of the Villarrica National Park and Forest Reserve and policies introduced by the National Forestry Corporation (CONAF) that limited access to upland summer pasture areas inside the reserve in order to protect the habitat of *Araucaria araucana*, a tree from which the Mapuche in this area derive their name (Pehuenche) and hold sacred. The limitations on access to summer pastures, along with pressure from colonists at the mouth of the valley was a source of both frustration and tension between the communities and CONAF. In the year 2000 the Mapuche organisation, the All the Lands Council (Consejo de Todas las Tierras) facilitated a five year collaboration agreement between the communities and CONAF which permitted increased access to the reserve for agro-silvo-pastoralism and ritual purposes. However, while representing a landmark agreement between the Mapuche and state authorities in Chile, provisions for the development of complementary agreements and management planning were not implemented.

In 2003 the UK counterpart received a request for assistance with a participatory environmental management planning project from members of the biodiversity team of the All the Lands Council based on previous cooperation in debates under the Convention on Biological Diversity. In 2004 with support from a pre-project grant, the UK counterpart met with the traditional authorities and state authorities in the region to plan a Darwin project which received approval in 2006.

The situation of the estimated 700,000 indigenous people in Chile, of whom the Mapuche constitute the largest group, has been a source of long-standing concern among United Nations human rights bodies, as reflected for example in the 2003 Chile report of the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people (E/CN.4/2004/80/Add.3). In particular, during the Pinochet dictatorship Mapuche communities in what is now the 9th and 14th Region of Chile were heavily affected by the introduction of large scale pine and eucalyptus forest plantations and expulsion from the lands upon which they depended for their livelihoods. This resulted in a situation of bitterness and conflict between Mapuche communities, private landholders and the state that persists into the present day.

Within this context, and following consultations with the traditional authorities (Lonkos) of the Maichin at the project design stage, the Maichin valley was selected as a project location characterised by a lower level of conflict than other areas. The Maichin Valley was seen as providing an opportunity to move beyond the politics of confrontation that has blighted relations between the Mapuche and state authorities elsewhere in order to promote engagement and constructive dialogue in pursuit of the objectives of the Convention on Biological Diversity. In order to achieve this goal the project drew on participatory methodologies for research and conservation developed outside Chile, notably in Amazonia, that constitute best practice in work with indigenous peoples. This methodology consisted of providing resources and training in research, surveying and GPS mapping directly to the communities in order that the communities could develop their own environmental management plan and corresponding digital GPS map and resources to serve as tools in the negotiation of co-management of the Villarrica Forest Reserve and Villarrica National Park. In the process, we aimed to provide a model that other communities and project initiatives in Chile could pursue in participatory approaches to implementation of the Convention on Biological Diversity in relation to protected areas.

We were able to realise these goals. As a result of the Darwin project the communities in the Maichin Valley have:

1. Mapped an estimated 61,000 hectares (610km²) of the Maichin Valley and neighbouring Trancura Valley and associated protected areas using GPS technology. A digital map has been created that includes ecological zoning, resource identification, historical and cultural information and is accompanied by videos and other materials provided by elders and specialists from the communities;
2. The communities have agreed an environmental management plan and project portfolio for follow on work directed towards conservation and sustainable use in the Maichin and Trancura valleys and related protected areas;
3. A new collaboration agreement with the National Forestry Corporation (CONAF) has been established. The environmental management plan developed by the communities now forms part of ongoing negotiations on wider environmental management planning with state authorities;
4. An information management protocol between the traditional authorities (Lonkos) and the UK counterpart has been established with a view to sound management of digital data generated during the project;
5. The project model is now being replicated in a neighbouring area of the reserve by Mapuche trained through the project and involves collaboration between traditional authorities in both areas;
6. Traditional authorities in the Maichin Valley are using the project results as part of a wider collaborative project with Mapuche communities in Argentina directed towards co-management of protected areas and the possible establishment of a bi-national biosphere reserve;
7. A model has been provided for participatory approaches to the implementation of the CBD in collaboration with indigenous peoples that promises significant legacy and multiplier effects.

The project has been successful in the pursuit of its objectives, and we anticipate further positive developments and collaborations arising from the project. However, the project also confronted significant challenges both in the UK and in relations with the counterpart in Chile. Further details of issues encountered are provided below and in previous reports.

2 Project support to the Convention on Biological Diversity (CBD)

The project focused on advancing the implementation of the Convention on Biological Diversity in the following areas:

1. COP Decision VII/28 established a new programme of work on protected areas under the Convention which seeks to promote the participation of indigenous and local communities in the co-management of protected areas. The participation of indigenous and local communities and respect for their rights was also emphasised in Decision VIII/24 (see also Decision IX/18). This project focused on enhancing the capacity of indigenous communities to engage in the management of environmental resources using survey and GPS mapping techniques and, critically, to engage in constructive negotiations with state authorities regarding natural resource management and protected areas. Furthermore, through a combination of informal dialogue, negotiation roundtables and legal action, state officials from CONAF were encouraged to engage in constructive dialogue with the communities on the management of the Villarrica National Reserve and Villarrica National Park. In particular, by providing a set of high standard cartographic tools in the form of resource maps, it proved possible to create common interest and common ground in identifying and negotiating management strategies and priorities. In our view, the provision of training in participatory cartography led by the communities themselves proved critical in building the confidence of communities to engage in negotiations with state authorities and also to providing a common language through which constructive relations could be established directed towards co-management.
2. Implementation of the programme of work on Article 8(j) and related provisions concerning *in situ* conservation and the knowledge, innovations and practices of indigenous and local communities. Convention decisions with respect to Article 8(j) and related provisions call for the direct participation of indigenous and local communities in conservation and sustainable use and in particular for respect for traditional knowledge. This project contributed to the furtherance of implementation of the work programme through the use of participatory methods and capacity building among the Mapuche of the Maichin Valley. In addition through the development of an information management protocol agreed with the traditional authorities we sought to advance respect for indigenous peoples knowledge in research relationships and wider recognition of, and respect for, the rights of indigenous peoples under the United Nations Declaration on the Rights of Indigenous Peoples. In related project activities Drs Oldham and Forero served as the Chairs and Rapporteur respectively for the session on traditional resource rights of the Congress of the International Society on Ethnobiology (ISE) in June 2008.
3. The Mapuche Pehuenche culture is centrally focused on the *Araucaria* forest that forms the basis of their identity as Pehuenche or “people of the *Araucaria*”. In contrast with other Mapuche areas, the communities in this area had not been heavily affected by forest plantations although their livelihoods were affected by limitations on access to the non-timber resources provided by the *Araucaria* and historic loss of access to lands following the creation of protected areas. As originally envisaged in project design we anticipated that the project would contribute to the CBD programme of work on forest biological diversity (decisions V/17, VI/19, VII/1, VIII/19) . In practice, this occurred in three main areas. First, by highlighting and revalorizing Mapuche knowledge of the forest resources upon which they depend. Second, by encouraging communities to identify problem areas in resource use (notably arising from the increasing intensity of pastoralism) that required management attention and remedial action. Third, by serving as a source of independent advice during legal action against the National Forest Corporation arising from the construction of tourist trails and picnic area on a sacred site and illegal felling of *Araucaria*. The cumulative effect of these activities was to promote greater community participation in forest management, including the identification of problems, and to encourage state authorities to take the concerns, interests and rights of the communities seriously.

4. Biodiversity as a concept is unfamiliar in many indigenous communities in Chile and elsewhere. Through a programme of workshops and practical community led participatory research, this project contributed to work under the CBD on Communication, Education and Public Awareness (CEPA). Research conducted by the communities to develop the management plan included the participation of community elders, speaking in the Mapuche language (Mapudungun), cartography and classification was conducted in Spanish and Mapudungun and the appropriate application of Mapuche concepts and categories to seemingly alien western concepts was actively discussed by project participants. Indeed, the cross-cultural nature of the project and promotion of awareness of Mapuche history, values and customary law relating to biodiversity and the local landscape proved to be one of the most important contributions of the project from the perspective of participants. In particular, the voluntary participation of community members in mapping expeditions lasting several days, active discussion of results of cartographic work, photos and videos demonstrated the importance of participatory research methods with respect to CEPA. We were also greatly encouraged by the increasing interest in the project from schools in the area and believe that this could form an important focus of future work to promote implementation of the Convention on a local level.
5. Access to Genetic Resources and Benefit-Sharing (ABS). The project was not directly concerned with the provisions of the CBD on Access to Genetic Resources and Benefit-Sharing. However, in practice this subject is increasingly difficult for projects to avoid for two main reasons. First, universities have increasingly adopted policies that claim rights over any intellectual property generated by employees, including the right to pursue intellectual property protection and commercialisation of results. University lawyers may be ignorant of, or unwilling to recognise, the provisions of the CBD and related human rights provisions that do not conform with their 'standard' models for intellectual property protection. This can compromise professional ethics and the letter and spirit of the CBD. Second, researchers, even where they are engaged in strictly non-commercial research, are vulnerable to accusations of 'biopiracy', including, as in the case of this project, where biological collections are excluded from project activities. These dual developments present significant risks for researchers and for Darwin Initiative projects. This project confronted both of these problems. In the context of debates on access to genetic resources and benefit-sharing we believe that the project contributed to raising awareness of ABS issues within the communities and, through the information management protocol and its respect for the provisions of the United Nations Declaration on the Rights of Indigenous Peoples, to finding appropriate ways to address these concerns.

In summary, the project contributed to four main thematic and cross-thematic areas of the Convention on Biological Diversity based on the direct experience of some of the project participants in Convention debates. In particular, the project brought the seemingly abstract and remote provisions and decisions of the Convention down to the local level where they could be debated, discussed and rendered meaningful to communities. One lesson of this experience is that the existence of a Convention containing the dual objectives of conservation and sustainable use can be a powerful mobilising force for indigenous peoples and communities concerned with their local environments and livelihoods. The increased emphasis on the direct participation of indigenous and local communities in the decisions of the Convention, including the ecosystem approach, speaks directly to indigenous peoples and local communities and is a constructive force for change. In Latin America, and Chile in particular, this requires recognition of the part of the conservation authorities that conservation is not something that is done to people, but rather something that is done with people and recognises their rights, interests and concerns.

In this regard, our experience with a Darwin Initiative project suggests that the task of such a project is to promote constructive dialogue between different actors, and to lend expertise and resources directed to the pursuit of the local implementation of the Convention as a collaborative and participatory exercise. That is the legacy that the project leaves in the Maichin Valley and is increasingly being picked up by other communities and institutions in this part of Chile. As such, it is our view that Darwin Initiative projects have a strong role to play in promoting participatory approaches to conservation and sustainable use on the local level of which this particular project offers a good example. As we will see below, the project confronted significant problems in the course of its implementation. Nevertheless, the outcomes of the project demonstrate the important role played by Darwin Initiative projects in providing opportunities for communities to pursue implementation of the Convention on the local level.

3 Project Partnerships

This project developed partnerships with four main sets of actors in Chile.

1. The project was a response to a request by Mapuche communities in the Maichin Valley for assistance with negotiating a collaboration agreement with the National Forestry Commission (CONAF) that was channelled through members of the biodiversity team of the Mapuche All the Lands Council (Consejo de Todas las Tierras in Spanish). In particular, the traditional authorities (Lonkos) from eight communities in the Valley were concerned with securing and implementing a new agreement on better conditions than had previously existed, notably the lack of complementary implementing agreements, and with addressing perceived problems in the relationship with CONAF. In addition a number of Presidents and Vice Presidents of the communities (a modern leadership structure within Mapuche communities) participated in the design and implementation of the project. The direct involvement of the political authorities within the communities, notably the traditional authorities (Lonkos), was a central feature of the methodology employed in the project and central to the ability of the project to overcome problems encountered in order to deliver project outcomes. In effect, and in accordance with best practice in work with indigenous communities, the communities owned the design, implementation and outcomes of the project. Based on the outcomes of this project, the traditional authorities and community members trained under the project are taking the work forward. We would strongly recommend that future Darwin projects involving indigenous peoples and communities engage directly with the political authorities on the community level at all stages of project design and implementation. In our experience, in the absence of community support and ownership projects will fail.

2. The formal project counterpart for the project was Manuel Santander as the head of the Biodiversity Team established as part of the All the Lands Council (Consejo de Todas las Tierras). Mr. Santander played the leading role in the negotiation of the original collaboration agreement with CONAF and was the key point of contact between the communities and the UK team in the development and subsequent implementation of the project. The Biodiversity Team consisted of five people of whom two had been active in promotion of the CBD, notably Article 8(j) of the Convention and work on protected areas. Two members of the team (Mr. Santander and Mr. Jose Nain) had previous experience in negotiations under the Convention with regard to the Article 8(j), Access and Benefit-Sharing, forests, protected areas and the Conference of the Parties (2000-2006). This combination of local and international experience suggested a positive basis for work to implement the Convention through a Darwin project. However, in the period following project approval it became clear that the All the Lands Council had fragmented as an organisation. In order to mitigate risks to the project the Biodiversity Team reconfigured itself under the legal title of Ad Kimun, a registered not-for-profit organisation. The project proceeded well during late 2006 and into 2007. However, as previously reported, by April 2008 increasing tensions had emerged relating to the engagement of Mr. Nain in party political activity. In accordance with the terms of the Darwin grant Mr. Nain's involvement with the project was terminated by the project leader in agreement with the project counterpart. This however, led to a reaction against project team members and appropriation of project equipment from the project office that presented significant obstacles during the finalisation of the project. The remaining members of the Biodiversity Team continued in their work and contributed to the finalisation of the mapping and project completion. However, significant

tensions also emerged at the closure of the project with respect to control over information under the terms of the protocol agreed with the traditional authorities during the final project workshop. While the commitment of the members of the Biodiversity Team to the project was considerable we are regrettably not in a position to recommend the All the Lands Council or members of the Biodiversity Team as suitable partners for future projects. Here it is necessary to recognise that intermediary organisations have a role to play in projects with indigenous peoples and local communities. However, in our view projects are most likely to succeed where they work directly with the recognised authorities in the communities who are accountable to the communities they represent. This has been recognised in a follow on project in a neighbouring area through the creation of a Council of Traditional Authorities who are now collaborating with the Council of Traditional Authorities in the Maichin Valley. The emergence of a novel form of inter-community organisation in this area constituted by recognised authorities in the communities is in our view an important and promising development arising from the Darwin project in terms of community level control over decision-making.

3. The National Forestry Corporation was directly involved in the discussions of the planning of the project and a positive relationship was maintained throughout the project, principally through participation in events and the creation of negotiation roundtables with community authorities to discuss environmental management planning. For what appears to be historical reasons, the National Forestry Corporation (and other environmental institutions in Chile) possess limited experience in participatory approaches to environmental and protected area management. The dominant approach is top-down directive planning with limited consultation with affected communities except in cases of confrontation. The inevitable result has been significant tension. The signature of the collaboration agreement with the Mapuche communities in the Maichin in 2000 represented an important break with the past upon which the Darwin project sought to build. The project was successful in initiating negotiation roundtables with CONAF to develop and finalise a revised collaboration agreement. With support from the UK team, the resulting collaboration agreement is considerably stronger and more detailed than the 2000 agreement and provides a strong basis for constructive relations between CONAF and the communities. An important problem in relations between indigenous communities and state environmental authorities is frequently a lack of confidence on the part of communities in dealing with technical issues and negotiations with state authorities. At the same time, state officials educated in exclusionary models of conservation may regard indigenous communities as 'the problem' and treat them with disdain. However, decisions on environmental management can have major impacts on local livelihoods. In the case of CONAF this was further complicated by the dual role of the Corporation as a promoter of commercial forestry (i.e. plantations) and as the authority for a strict protected areas policy. The challenge for the project was therefore to raise the capacity of the communities in technical issues relating to environmental management and negotiation with state authorities and at the same time to promote constructive dialogue and engagement with CONAF officials in this region. In practice, while relations remained friendly throughout, a court case by the traditional authorities (with legal support from the Observatory for Indigenous Peoples Rights – see below) proved to be critical in persuading CONAF officials to take the work being conducted and proposals for environmental management generated by the project seriously. An additional factor in promoting increased collaboration was the development of a detailed GPS map of Mapuche zoning and use of the valley, created by the communities themselves, and an environmental management and project portfolio. This proved to be invaluable in negotiations with CONAF which had been developing its own plans independently of the communities. At the time of writing negotiations are ongoing, however, it is clear that the project has succeeded in strengthening collaboration and respect between the communities and CONAF which may well serve as a model for the similar approaches to environmental management planning elsewhere in Chile. At the time of writing we understand that responsibility for protected areas may be transferred to a new ministry. However, CONAF is likely to remain as an important state actor and the promotion of constructive dialogue and participatory approaches to forestry and protected area management should remain as an important area for further work.

3. The Observatory for Indigenous Peoples Rights. During the project planning stage a reviewer suggested that the inclusion of capacity for legal advice would strengthen the project. This was incorporated through discussions with the Observatory for Indigenous Peoples Rights, a human rights organisation that has considerable experience in providing legal advice and support to Mapuche communities and civil society. With the benefit of hindsight stronger relations with the Observatory, which is highly respected in the region and beyond, would have been desirable. However, this occurred as the project moved into its final phase with the completion of the map, management plan and project portfolio. In particular, the Observatory provided specialist legal support to the traditional authorities in pursuing legal action against CONAF following the construction of a tourist trail and picnic site on a sacred site that involved illegal felling of *Araucaria* and other important species. The decision in favour of the communities considerably strengthened the position of the communities in the negotiation round tables with CONAF.

In addition, as the project moved to a conclusion, the Observatory was initiating a bi-national environmental management project with the Coordinating body for Mapuche Territorial Identity (CITEM) in Chile and the Confederacion Mapuche in neighbouring Argentina. The project relates to the possible establishment of a Mapuche managed bi-national protected area and has been viewed as a positive development within the communities. The Darwin project has proved important in providing a demonstration of what the communities can achieve in terms of mapping and environmental management planning and a trained group of community members to engage in technical work. As the Darwin project drew to an end we provided support for members of the project team and community members to travel to Argentina as a basis for developing the participation of the communities of the Maichin in the project. In potential follow up work with the Council of Traditional Authorities to support this important initiative we would anticipate strengthened collaboration with the Observatory and other partners in this initiative.

4. Circolo Amerindiano (University of Perugia, Italy). A key consideration in the design of this project was the generation of local capacity among Mapuche communities to serve as multiplier effects to ensure project legacy. One of the people trained in participatory surveying and GPS mapping from the community of Conyaripe working with the inter-community Mapuche Huilenche Council of Traditional Authorities took the initiative to replicate the Maichin Darwin project in their area. This involved using a copy of our Darwin project proposal with support secured from academics at the Circolo Amerindiano. As with the bi-national Chile-Argentina project, members of the Maichin project team are now working with the Mapuche Huilenche to map the area and replicate the experience. The UK team has expressed strong support for this new project that forms part of project legacy and has provided some resources to facilitate operational needs such as travel. The legacy of the Darwin project now extends to joint meetings and emerging collaboration between the Councils of Traditional Authorities from both the 9th and the 14th regions of Chile.

A distinguishing feature of this project is that it was directed towards establishing partnerships between the communities of the Maichin Valley and other actors, rather than between the UK team and others. In our view progress could have been greater. However, the formation of the Council of Traditional Authorities, and emerging collaborations between project team members with other Mapuche communities in Chile and Argentina represents a major advance over the past and holds considerable promise in terms of project legacy and future work.

4 Project Achievements

Main Achievements:

1. A GPS environmental resource and land use map encompassing 61,000 hectares of the Maichin Valley and the neighbouring Trancura Valley (including the Villarrica National Park and Forest Reserve) has been developed by Mapuche communities for use in negotiations on environmental management planning in the Maichin Valley and Trancura Valley and co-management of the protected areas. This is the first known such map to have been developed by indigenous communities in Chile.

2. A resource management plan encompassing 61,000 hectares of the Maichin Valley and neighbouring Villarrica National Park and Forest Reserve has been developed by Mapuche communities and presented to the National Forestry Corporation of Chile and other state entities. To our knowledge, this is the first detailed environmental management plan to have been developed by indigenous communities in Chile.

3. A new collaboration agreement between the communities and the National Forest Corporation for environmental management in the Maichin Valley and neighbouring Villarrica Reserve. This is a pioneering agreement between indigenous communities and state authorities in Chile and provides a model for others to follow.

4. The project has generated multiplier effects. Other Mapuche communities (Juan Chañapi, Juan Caripán y Kurrimawisa) in Chile are directly replicating the project. The Observatory for Indigenous Peoples Rights and the Chilean Catholic University are collaborating with CITEM in Chile and the Mapuche Confederation in Argentina to replicate the project approach in order to advance negotiations for co-management of present and proposed protected areas on both sides of the frontier. These are both very promising developments.

5. An information management protocol has been established with the traditional authorities in the Maichin Valley that may serve as a useful model for other projects in managing digital information in a manner that respects the rights of indigenous peoples. This is particularly important in the context of ethical requirements, the provisions of the United Nations Declaration on Human Rights and reputational issues that may arise in the context of Darwin projects.

Other Achievements:

6. The Mapuche Pehuenche communities from one of the poorest and most unequal regions of Chile have been provided with the tools, training and the confidence they need to engage in long term planning and sustainable management of natural resources.

7. Project participant communities, whose territory encompasses both the Maichin and the Trancura Valleys, have a better understanding of the environmental and strategic challenges they confront in relation to long-term sustainable management of natural resources. In particular, by identifying problems using participatory approaches the communities have been able to identify options and solutions that are more likely to be appropriate and sustainable over the longer term.

8. Although further training will be required, the communities have gained much greater confidence in managing and directing negotiation processes and projects. Some project participants are participating in the negotiation table with CONAF (National Forestry Corporation) in relation to implementation of conservation policy in the Villarrica National Park and on sustainable projects to be developed in the Villarrica Forest Reserve with special attention to access to and care for sacred sites and sites of historical-cultural significance to the Mapuche (refuges, burial sites). Luis Carinao, a community focal point trained during the project is playing a leading role in coordinating meetings between the traditional community authorities and dialogue with other indigenous and environmental organisations on both sides of the Chile-Argentina border.

9. The project has provided government agencies, specifically the forest commission of Chile (CONAF) and Indigenous Affairs Office (CONADI) with an example of how participatory resource management planning can be developed.

10. To a more limited extent, the project has provided opportunities for both indigenous organisations and Chilean institutions to get involved in wider initiatives directed towards community managed protected areas in Latin America. Newly formed leaders from indigenous communities, Luis Carinao and Isabel J. Caripan, are working with the Traditional Authorities to integrate GIS, participatory mapping and natural resource planning into new bi-national initiatives (Chile-Argentina), among them the creation of a bi-national biosphere reserve in which conservation aims and indigenous people's rights develop in synergy.

11. The project has provided a platform for longer term partnerships between UK specialists and Chilean organizations (Chile's Austral and Catholic Universities, the Observatory for Indigenous Peoples Rights) in relation to participatory management planning in conservation areas and indigenous peoples' rights.

4.1 Impact: achievement of positive impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

An area of approximately 61.000 hectares which is protected as a Forest Reserve and National Park by the Chilean government, and forms part of the Mapuche Pehuenche ancestral territory, has been mapped by indigenous people. The map shows distinctive vegetation areas in accordance with standard classification but has also been classified using Mapuche-Pehuenche toponymy in the Mapuche language (Mapudungun). The map is supported by datasets with detailed information about local geography, infrastructure, and socio-cultural and environmental categories identified by the Mapuche communities. Broad environmental and resource use categories were subdivided into sixty-seven sub-categories in accordance with the classification that the Mapuche use in order to understand and manage the natural resources in their territory. The map is complemented by 70 hours of edited video, voice recordings, photographs, fieldnotes, reports and the results of a socio-economic survey that inform the management plan.

The importance of the participatory approach to the development of the management plan is that the project outputs were directly generated and are owned by Mapuche communities. This has three main impacts. First, it revalorizes the importance of Mapuche knowledge of their local environment, its history, cultural significance, traditional uses and modern uses to members of the communities themselves using Mapuche concepts and categories aligned with standard classification. Second, the exercise of producing the map involved Mapuche teams travelling the length of the Maichin into areas they might not, by virtue of being from other communities, normally have visited in the course of their lifetimes. This produced a greater appreciation of the Maichin and Trancura as a whole and of the issues that confront particular communities and families within this area. Third, the digital version of the map contains embedded video in which elders from the communities and others recite the history of the landscape, its ecology and significance to the Mapuche. As an interactive digital tool we anticipate that the map will have an important impact upon local education as a tool for exploring the history and geography of the area. Finally, and of greater immediate significance, the digital and physical printed map of the Maichin and Trancura are tools that can be used to discuss environmental issues involved in management planning and negotiations with state authorities and other actors.

With participatory projects such as this the actual *process* of producing data and results is as important as the results themselves at the level of impacts. The reason for this is that the act of doing, in terms of walking, riding and talking about the landscape emphasises the historical and ongoing importance of biodiversity to communities and creates solidarity around the pursuit of conservation and sustainable use. In particular the UK team were regularly surprised at the large numbers of people who turned out to accompany the mapping process with the mapping teams. In the process, the generation of data for the management plan and accompanying map increasingly became a collective activity. While this impact is intangible compared with physical documents such as a management plan and map, in our view it was one of the major impacts of the project and the participatory methodology that was employed.

The practical significance of this came into focus in March 2008 when community focal points received reports of the felling of protected *Araucaria* and other native tree species to construct a tourist trail leading to a sacred site as part of the "Sendero de Chile" project. The community focal points trained under the project documented the damage caused, reported to the traditional authorities and legal action to halt the activity and pursue restoration was successfully launched with legal support from the Observatory of Indigenous Peoples Rights. This is a practical example of the impacts of the underlying work in raising awareness of the importance of biodiversity and the capacity to address environmental problems. Similar mobilisations have emerged in response to attempts to introduce plantations of alien species (Oregon pine and eucalyptus) at the expense of native species and to proposals for the introduction of a hydroelectric dam.

Forest management planning in the valley is the responsibility of the National Forest Corporation (CONAF) which presently also holds responsibility for protected areas. One outcome of the project was the growing realisation that interventions by agencies external to the valley had significant and multiple negative impacts upon communities in the valley. Examples include: permission for the mining of sand and gravel from the river bed without a corresponding impact assessment; the introduction of an alien invasive grass species by a French funded project (PROMACIN), and; efforts to exploit the potential of the Valley for commercial tourism through the construction of tourist trails in contravention of environmental protection legislation. Additional concerns related to the allocation of grazing permits leading to over-concentration of livestock and corresponding degradation and soil erosion. In the context of these problems, communities were offered two basic options, the first being simple acceptance of these negative impacts and the second being resort to the politics of confrontation and violent demonstration that has blighted relations between the Mapuche and the state for generations.

The collaboration agreement established in 2000 promised an alternative way forward. The investment in this project sought to build upon that promise to promote practical action. In the course of the negotiation of the new agreement both CONAF and the communities recognized that they had not kept strictly to the terms of the agreement. This is important because one impact of the project was growing recognition of environmental and resource use problems that originate within the communities, notably with respect to grazing and an over-dependence on livestock as a source of income. At the level of impacts growing recognition of the importance of internal trends (rather than acts of external agencies) and a willingness to discuss these issues was an important development. At the same time, discussions on the development of the management plan resulted in an emphasis on finding sustainable ways forward, such as the sustainable use of native timber and non-timber forest resources, alternative biodiversity derived income opportunities, and avoiding privatization of common water resources. By approaching the Maichin and Trancura valleys as a whole, participants in the project increasingly recognized the difficult strategic choices they will confront in terms of the longer term conservation and development of the area both as a working landscape and conservation area. In particular, tourism is being actively promoted in the area as part of the Sendero de Chile project. One important impact of the project in this area has been to open these issues up for collective discussion along with the creation of a set of tools that provide a foundation for internal capacity to assess and evaluate the actual and potential benefits and negative impacts of such developments. Furthermore, the project has provided the training and tools to engage in evidence based assessment of such developments as evidenced in the legal action mounted during the project.

In discussions leading to the development of the management plan, a key question was 'what is a management plan'?. In the course of these discussions the project employed the concept of a management plan as a 'living document' that simultaneously recognises problem areas and focuses on solutions that reflect and respond to the needs of communities. This was achieved by constructing the plan as a set of issues to be addressed accompanied by a portfolio of projects directed towards addressing these issues. While the longer term outcomes remain to be seen, we believe that because communities designed the resulting management plan, this is more likely to generate positive practical impacts than top down approaches.

Finally, at the time of project completion, the traditional authorities and CONAF were engaged in ongoing negotiations on management planning for the Maichin and Trancura. CONAF officials had independently developed management plans without reference to the communities. A key impact of the project was that the community authorities were able to present their own management plan and accompanying map in these negotiations. This changed the nature of the negotiations, because as a result of project activities community authorities were able to present their priorities, concrete proposals and tangible evidence to support these proposals. It remains to be seen what the longer term impacts will be. Nevertheless, in our view the Maichin Valley increasingly provides a model for community based environmental management planning in Chile that could be replicated in communities elsewhere and provide concrete means to move beyond the politics of discrimination, marginalization and confrontation that has characterized relations between Mapuche

communities and state authorities with respect to natural resource and environmental management.

4.2 Outcomes: achievement of the project purpose and outcomes

The purpose of this project was to strengthen the capacity of Mapuche organisations and communities to participate in the negotiation and implementation of the Convention on Biological Diversity with regard to the conservation, sustainable use, and community co-management of protected areas.

As outlined above we succeeded in the realisation of the main objectives of the project in terms of the following outcomes:

1. A group of Mapuche leaders have increased their capacity to work in the planning and implementation of participatory natural resources management plans. They have received training in the use of computers, GPS, audio and video recording equipment with the aim of collecting and generating data for planning and implementing sustainable management of forest resources. They have been able to participate in workshops, conferences, meetings and negotiation round tables and have gained greater capacity to negotiate the future of their communities with respect to natural resource and environmental management planning;
2. Community members trained under the project used GPS technology to map and classify 61,000 hectares of the Maichin and neighbouring Trancura Valleys and the Villarrica Forest Reserve and National Park;
3. Community members trained under the project conducted a socio-economic survey;
4. Community members and authorities involved in the project developed a natural resource management plan and project portfolio to respond to locally identified needs directed towards conservation and sustainable use;
5. A new collaboration agreement has been established with the National Forestry Corporation;
6. The Darwin project is being replicated in other Mapuche communities in Chile;
7. Community members and focal points trained under the project are now participating in a larger project to create a bi-national co-managed protected area between Chile and Argentina;
8. Network effects are emerging between project participants and institutions and organisations in both Chile and Argentina directed towards the implementation of the Convention on Biological Diversity.

4.3 Outputs (and activities)

Project outputs were achieved as laid out in the logical framework. However, we encountered difficulties at the beginning of the project with respect to Lancaster University's intellectual property policy which delayed the start of the project. Additional unanticipated difficulties were encountered towards the end of the project arising from actions by former members of the local project team.

Project activities consisted of the following:

- a) Community and inter-community capacity building workshops
- b) Technical training of counterpart staff and community focal points
- c) Surveying (socio-economic survey and GPS landscape mapping)
- d) Framework community management plans
- e) Framework Management Plan
- f) Negotiation Roundtables with CONAF
- g) Case studies
- h) Regional Workshop

We were able to realise the vast majority project activities through adjustments to the project timetable.

a) In consultation with the Darwin Secretariat the project was rescheduled to accommodate the delays resulting from negotiation of the collaboration agreement with the Lancaster University contracts office. The project was rescheduled from the first of October 2006 to the end of September 2008. Subsequently additional time was added until the end of February 2009 to allow for additional work and make best use of available resources to ensure project legacy.

b) An additional activity included the creation of an audiovisual record for the project consisting of over 70 hours of edited video.

c) In view of time and resource constraints the regional workshop was rescheduled as the final project workshop with the agreement of the Darwin Secretariat.

d) Paul Oldham and Oscar Forero served as the chair and rapporteur for the Traditional Resource Rights segment (held in honour of Darrel Posey) of the 11th International Congress of Ethnobiology in Cusco, Peru in June 2008. As a result of this activity the Congress adopted the United Nations Declaration on the Rights of Indigenous Peoples.

e) Additional support was provided for project participants to visit Argentina to coordinate activities directed towards establishing a bi-national co-managed protected area.

f) Additional support was provided to the project team to facilitate multiplication of the project with the Mapuche Huilenche in Chile.

4.4 Project standard measures and publications

See Annex 4 and Annex 5

4.5 Technical and Scientific achievements and co-operation

An area of approximately 61,000 hectares that is protected as a Forest Reserve or National Park by the Chilean government, and forms part of the Mapuche Pehuenche ancestral territory, has been mapped by indigenous people. The map shows distinctive vegetation areas and signals Mapuche-Pehuenche toponymy in their vernacular language (Mapudungun). The toponymy is underpinned by survey datasets with detailed information about infrastructure, socio-cultural, historical and environmental categories that are fundamental to the management plan. Broad categories were subdivided into sixty-seven sub-categories that Mapuche people use in order to understand and manage the natural resources of their territory. The map is complemented by narratives, reports and audio visual material that inform the management plan. In summary, the map allows visualisation of the historical development of resource management in the area and trends in the transformation of resource use in this bio-geographical space and cultural landscape.

The project conducted a survey of 240 households from the eight participating communities in the Maichin and produced a dataset with current households' holdings (cultivated land, pasture, forest resources). The dataset could be used to estimate future trends in land use in the Maichin. The dataset includes number of families per community, use of land for agriculture, pastoral activities and forestry. Through analysis of this data, along with in-depth interviews, project participants realised the scale of the problem of property fragmentation in the Valley. They concluded that a food security strategy was needed as part of the natural resource management plan.

Audiovisual recording during fieldwork focused on gathering indigenous peoples' accounts of natural resources management in the Valley over the last one hundred years. Approximately 70 hours of edited material are available on DVD and in digital format. The data is covered under an information management protocol. However, the digital format could facilitate the development of newsfeeds, teaching materials (through web-base and GIS interfaces) and related educational activities beyond the lifetime of the project.

The UK team has been invited to partner with the Universidad Austral de Chile (UACH) to develop a series of workshops and lectures on the importance of the project for future research developments. We anticipate further collaboration in the implementation of the management plan and, in particular, in providing such assistance as may be needed with establishing the bi-lateral co-managed protected area between Chile and Argentina. In addition to providing assistance to enhance and multiply existing competences, the UK team is particularly interested in developing work with schools and working with communities on food security and alternative income generating opportunities.

4.6 Capacity building

The primary focus of this project was on capacity building and has been addressed in detail above. In summary, capacity building and institution/network building occurred on three different levels:

(a) Community level: Four focal points received complete training in the use of GPS, audio and video recording equipment with the aim of collecting and generating data for planning and implementing sustainable management of forest resources. They also went on first aid and fieldwork risk assessment training courses. Focal points have participated in workshops, conferences, meetings and negotiation tables; they have received training and developed skills in computing and surveying, organizing and leading field activities, planning, financial management and making presentations.

Other project participants received training in one or two themes i.e. using audio recording for facilitating data collection with respect to current uses of natural resources (8 people); GPS use (13 people); First Aid (7 people). Additionally, we provided ad hoc training and advice to volunteers who cooperated during fieldwork activities. During fieldwork activities we had 80 volunteers working at one time. Volunteers were also numerous when preparing community meetings and workshops and in preparing the final event. Due to the intensity of the fieldwork, many volunteers learned and developed skills 'on the job' and fully trained community focal points became the trainers of the volunteer force. It is difficult to estimate the total number of people who actively participated in collecting and analysing data throughout the whole project, as families and groups joined for a week or during weekends. However, community members of all ages, both men and women, volunteered and conducted data collection or data analysis for short periods of time. A rough estimate of volunteers' numbers throughout the project is between 120 and 140.

Unfortunately, valuable time was lost in initiating fieldwork due to problems encountered with Lancaster University lawyers in relation to intellectual property in year one. While the project achieved its objectives, we could have achieved more without the delays. In particular, the community focal point system worked well in serving as a point of coordination with the traditional authorities and keeping volunteers informed of developments. This proved crucial for fieldwork and the ability of the project to overcome the difficulties encountered to successfully deliver the project. Further development and extension of this system was desirable.

(b) Regional Level (Chile): Indigenous collaborators from elsewhere participated in the project. A Mapuche engineer who specialises in cartography became an invaluable member of the team and member of the technical advisory group. Two Mapuche media and communication specialists added an extremely valuable dimension to the project as did a Mapuche women's leader. These participants from outside the Maichin, along with members of the counterpart organisation, received practical training and opportunities to develop their skills that would not otherwise have been available. This included: training in fieldwork design and implementation; risk assessment; surveying; report writing; financial management; management of digital information; proposal preparation; presentation skills; meeting management and negotiation and networking skills.

National to International level

One important development in terms of institutional development was a decision to form a council of traditional authorities to take a directive role in decision making with respect to projects. Community focal points established by the project are now serving as liaison with other projects in neighbouring areas and in cross-frontier initiatives. This is a promising development. Growing contacts with other institutions in Chile (such as the Observatory of Indigenous Peoples Rights and CITEM) and Argentina (Mapuche Confederation) are illustrative of emerging network effects.

More work is desirable to promote networking on the national and regional level. In particular, greater participation in wider environmental networks in Chile and engagement with state authorities is desirable to disseminate the model and experience generated. In addition, while important developments are underway in collaboration with organisations in Argentina, project participants and environmental organisations in Chile would benefit from greater opportunities to engage with experiences elsewhere in Latin America and international initiatives. This would overcome the rather surprising lack of articulation between environmental management work in Chile and Latin America as evidenced by the lack of experience in participatory approaches compared with other countries in the region (i.e. Amazon basin countries).

4.7 Sustainability and Legacy

(a) Natural resources management plan and political processes

The interactive map and Natural Resource Management plan were publicly presented during the August 2008 round of the negotiation table with CONAF. CONAF has recognised the contributions of the Pehuenche people in terms of biodiversity conservation and planning for sustainable use of the natural resources of the Villarrica Forest Reserve. From now on all future management plans for the protected areas will take place in consultation with the council of traditional authorities. Issues of representation will undoubtedly continue to be discussed, however we regard this as a major step forward.

An important legacy of this project is that the Araucaria regional office of CONAF committed to respect indigenous peoples' rights and the IUCN guidelines for the development of management plans for protected areas when such areas are part of indigenous peoples' traditional territories. In international forums the Chilean government has expressed commitment to indigenous peoples rights (i.e. 2008 congressional approval of ILO Convention 169 and voting in favour of the 2007 UN Declaration on the Rights of Indigenous Peoples) and to the inclusion of indigenous people in the development of sustainable development and conservation aims. However, until this project there had been very little action in terms of collaboration agreements with indigenous peoples on environmental management and the co-management of protected areas. The major legacy of this project is in providing a model for how this might be achieved using participatory approaches. Furthermore, we believe the map and associated resources constitute a valuable educational tool and historical record for communities in the Maichin Valley. The evident attractions of this approach are demonstrated by efforts to replicate the project among other communities in the region and the use of this approach in bi-national work directed towards the creation of a co-managed bi-national protected area.

In policy terms the legacy of this project has been to insert the work of communities, respect for indigenous peoples' rights and indigenous knowledge, into negotiation processes for protected area planning and management. In contrast with the confrontational tactics that have dominated attempts to seek solutions to perceived problems in relations between Mapuche communities and state authorities, the project has demonstrated that technical capacity and the use of digital tools by communities opens up alternative, and non-violent, approaches to addressing problems.

(b) Staff and Resources

At the end of the project, the Chilean counterpart and the community focal points were left with equipment and resources to continue their work. This included desktop computers, laptops, external back up drives, GPS hand helds, digital cameras, tents, camping equipment and first aid kits. A precision GPS was made available to engineer Huaiquilao while the local womens group leader Isabel Caripan was given the high quality HD digital video camera used by the UK team. The project vehicle and other materials remained with the Chilean counterpart. To the extent possible, given the unfortunate behaviour of former team members and the counterpart, we sought to guarantee that the community focal points were in receipt of all necessary equipment to continue their work and purchased additional items where necessary.

Beyond the original financial provision for the project, with the agreement of the Darwin Secretariat, we have provided occasional support to facilitate travel by the traditional authorities and technical team to participate in meetings and workshops in Chile and Argentina directed towards ensuring the legacy of the project through participation in related initiatives. We see this low level support as critical to ensuring multiplier effects and project legacy. In particular, we have sought to provide ad hoc support to efforts to replicate the project by the Circolo Amerindiano (Italy) with the council of traditional authorities of the Mapuche Huilenche, and to facilitate the participation of the Maichin Valley focal points in providing technical capacity building for communities involved in this initiative. In addition, we have supported participation in meetings forming part of the emerging collaboration between Chile and Argentina. While the leading role is played by other institutions, we regard this support as an important contribution to enabling project legacy.

The project led to the creation of a technical advisory indigenous team consisting of three people trained through project development. The team consists of Rodrigo Huaiquilao (engineer), Gerardo Berrocal (audiovisual) and locally Isabel Caripan (womens leader in the 14th region) and Luis Carinao (9th region) who are currently preparing new project proposals. The team has continued supporting the Pehuenche people and have begun working with the communities of the 14th Region of Chile and elsewhere. They have been coordinating their activities with other institutions (Circolo Amerindiano, CITEM, Observatory of Indigenous Peoples Rights, Cozcoz Parliament and Confederation of Indigenous Peoples-Argentina). In coordination with the traditional authorities of Curarrehue and the Conyaripe areas, the technical team is developing a training scheme for new focal points to assist the project participants from the 14th region of Chile. A crucial part of the new training program is the exchange of experience and expertise of former focal points with new recruits to lead research and conservation activities in novel ways. We see this as an important part of project legacy, but this will in part depend on the success of members of the team in securing additional resources for their work.

In terms of sustainability while there is clear project legacy, it is equally clear that sustainability will in part depend on the extent to which new initiatives arriving in the Maichin build upon the achievements of the Darwin project. The primary example of this is the way in which the Council of Traditional Authorities, the community focal points and technical team are now involved in the joint Argentina-Chile initiative and the use of project results and the methodology by this initiative. In the pursuit of project legacy we will continue to provide advice and appropriate support to the extent possible and to pursue resources for a follow up project that builds on the success of this project.

5 Lessons learned, dissemination and communication

This project anticipated contributions to lessons learned with regard to Goals 1.1 and 2.2 of the CBD programme of work on protected areas. These contributions relate to activities 1.1.4 and 1.1.7 concerning innovative types of governance for protected areas such as co-management and the establishment of protected areas that benefit indigenous and local communities. Activities under Goal 2.2 are directed towards enhancing and securing the participation of indigenous and local communities, and respect for the rights of indigenous and local communities, in the management of protected areas.

At the time of writing the main contribution of the project has been towards Goal 2.2 with promising developments observable under Goal 1.1. in terms of innovative types of governance. In terms of lessons learned we have demonstrated that the participatory approach to research and environmental management planning adopted by the project works. We have also demonstrated what communities can achieve if provided with the training, resources and technical assistance to carry out research directed towards environmental management planning.

Based on our previous experience we adopted a human rights based approach to the design and implementation of the project. That is, the pursuit of conservation and sustainable use goals should be consistent with internationally established human rights. We found that the provisions of the United Nations Declaration on the Rights of Indigenous Peoples along with Convention 169 of the International Labour Organisation (ILO) provided an important baseline and common point of departure for the development and implementation of this type of initiative with indigenous peoples and communities. Awareness of, and a willingness to respect, these standards provides a foundation for trust and constructive relations with indigenous peoples.

The role of intermediary institutions is a known issue in project work with indigenous peoples (be they indigenous or non-indigenous NGOs). Our experience demonstrated that projects will succeed where they are designed and implemented with recognised community authorities. There is a clear role for intermediary organisations but projects will function best where those organisations are accountable to the communities where projects operate through defined mechanisms. Furthermore, for this type of project, legacy will best be achieved by targeting training and resources directly to community members and ensuring a sufficient pool of trained people to provide for capacity and multiplier effects over time. This will however perhaps inevitably generate tensions with intermediary organisations seeking to secure resources to pursue their own interests.

In contexts such as Chile, where relations between Mapuche communities and the state can be characterised in terms of low level protracted conflict, there is a need for counterparts employing human rights based arguments to recognise that everyone is entitled to respect for their human rights. From this perspective human rights instruments such as the UN Declaration on the Rights of Indigenous Peoples (for which the UK and Chile voted in favour) provide international minimum standards and a framework for dialogue in the pursuit of particular goals, such as implementation of the Convention on Biological Diversity, on the local level. At the same time it is necessary for state authorities and environmental organisations to recognise that indigenous peoples are not seeking 'special' or 'new' rights. They are seeking the realisation of the same rights that others already enjoy. Ensuring that indigenous peoples are able to enjoy human rights protections, rather than establishing new rights, is the purpose of the UN Declaration on the Rights of Indigenous Peoples. We recommend the use of the Declaration and respect for its provisions as a foundation for dialogue with indigenous peoples in implementation of the goals of the programme of work on protected areas and intend to address this issue in more detail in future work.

5.1 Darwin identity

The project was locally known as the 'Darwin project' (proyecto Darwin) and formed a distinct project with its own identity. The Darwin logo appears on the printed versions of the GPS map generated by the project and will appear on future editions. In view of the importance of community ownership of the project we decided to limit promotion of the Darwin project as an entity distinct from the communities themselves. Furthermore, in the context of subsequent difficulties in 2008 we decided to limit the public profile of the project to focus on project delivery. However, the Universidad Austral de Chile (UACH) has invited the UK team to develop a related research initiative in the area of sustainable agriculture, food security and biodiversity conservation. We also anticipate that future collaborations will stem from the Darwin project.

The purpose of the Darwin Initiative was explained to project participants on the community level. Collaborators and potential partners in future work from the Observatory of Indigenous Peoples Rights, CONAF (Chile), Parques para Chile, the Universidad Austral, the Universidad Católica and CITEM were made aware of the purposes of the Darwin Initiative.

6 Monitoring and evaluation

The project was rescheduled to accommodate delays at the beginning of the project with the approval of the Darwin Secretariat. However, with the exception of changes to the time frame for the project the activities were maintained in accordance with the original log frame. Three changes to activities are worthy of note:

1. We originally anticipated that individual communities would develop framework management plans and work was initiated in this area. However, Mapuche political organisation in the Valley proved to involve multiple communities. That is, multiple communities fell under the authority of the same Lonko or President. Taking into account these complexities and drawing on the inter-community capacity-building workshops it ultimately proved more effective to combine the work in accordance with the actual organizational structure.
2. We had anticipated holding a regional networking workshop involving participants from various countries in Latin America. However, in view of time, resource and organisational constraints, with the agreement of the Darwin Secretariat this was transferred to a final project workshop.
3. Case studies were initiated but put on hold to focus on delivering outputs and data processing. Writing up for publication is underway in 2009.

We did not, because we believe it became lost in the university mail system, originally receive the first annual review. We did however find the 2007/2008 review to be thoughtful, useful and encouraging in the context of the serious difficulties we encountered. For the purposes of our project the log frame proved useful with respect to reminding team members of objectives, activities and expected outcomes.

The project process and outcomes were considered at the final project workshop in conjunction with project participants. Considerable satisfaction was expressed by the participants with the participatory process and outcomes. However, there was a shared view that the difficulties experienced with members of the counterpart organisation were highly undesirable, divisive and presented unnecessary obstacles to practical progress.

6.1 Actions taken in response to annual report reviews

We successfully delivered the project and believe that will speak for itself. Reviewer comments in 2007/2008 were mainly queries and we will briefly respond here on points 3, 4 and 5.

We originally limited the project to two years with a view to an exit strategy if progress was not possible. However, we did not anticipate the obstacles posed by university lawyers, the severe winter of 2007, or the hostile actions mounted against us by former team members in mid-2008. This inevitably led to an extension of the project period. A central issue in planning for this project was the risk posed by the availability of extra time relative to delivery. By keeping the time frame short, pressure was exertable to deliver results. This was helpful. However, in the context of outputs and developments, such as the bi-national initiative, provision for a third year based on successful delivery of results would have been useful and appropriate in terms of multiplier effects and legacy.

In connection with whether project activities directed towards CONAF would have increased the willingness to work more closely with the counterpart and the communities, the relationship with CONAF was generally good. However, it was, and remains, difficult to see exactly what activities could have been mounted other than the approach taken. This perhaps arises from the bottom up participatory approach taken in which communities and the counterpart took the leading role facilitated by the UK team.

The question of whether links to policy and government processes would have prevented similar conflicts in future, the answer is possibly. However, the actions taken against the project team consisted of verbal and physical threats. Other than the involvement of the police it is difficult to see how government institutions could have assisted. Beyond this we would have preferred greater involvement of government environment institutions over the lifetime of the project but believe that this would have been most constructive at the end of the project or during a third year extension when tangible results were available.

We have solicited views on the information included in the Annex but provide our own assessment in this report.

7 Finance and administration

7.1 Project expenditure

	Budget	Expenditure	Variance	Notes
Staff Costs				Agreed reallocation of underspend for Research Associate Yr 1 /2 to Chile costs
Rents, rates, heating, cleaning, overheads				Agreed reallocation to purchase project vehicle
Office costs e.g. postage, telephone, stationary				
Printing				
Travel and subsistence				International & regional travel, accommodation
Conferences, seminars etc.				Community Workshops, final project workshop
Capital items/equipment				Project vehicle (£12,000), computers, printers, GPS, cameras
Other costs (in accordance with approved budget categories)				Camping equipment, fieldwork consumables, office and residence furniture horse hire.
TOTAL BUDGET				
TOTAL EXPENDITURE				

Note: Following delays in year 1 with agreement from the Darwin Secretariat, the project end dates and budgets were rolled forward. UK staff under-spends arising from the delay were reallocated to Chile and account for the increases relative to the original budget. Subsequent under-spends were carried forward with the agreement of the Darwin Secretariat. The above is a summary.

7.2 Additional funds or in-kind contributions secured

In kind contributions of staff time and contributions towards travel costs were made possible through Cesagen core funding. In addition, community members and counterpart staff provided significant in-kind contributions above and beyond resource provision under the project.

7.3 Value of DI funding

Darwin Initiative funding was fundamental to the ability of Mapuche communities in the Maichin Valley to receive technical training, hold workshops and mobilise to map the Maichin and neighbouring Trancura Valley and conduct related survey work, to discuss and agree an environmental management plan and to engage in negotiations with state authorities leading to a formal collaboration agreement and negotiation of co-management. Towards the end of the project the Darwin project also provided support to facilitate cross-frontier visits by project participants directed towards discussion of the establishment of a bi-lateral co-managed protected area with Argentina and additional support to replicate the Darwin project in other communities in the region. While the project confronted considerable challenges, the methodology and outputs from the project provide a model for use elsewhere in Chile. These achievements would simply not have been possible without the Darwin Initiative funding.

Annex 1 Report of progress and achievements against final project logframe for the life of the project

Annex 2 Report of progress and achievements against Logical Framework for Financial Year: 2007/08

Project summary	Measurable Indicators	Progress and Achievements	Actions required/planned for next period
<p>Goal: <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>			<p><i>(do not fill not applicable)</i></p>
<p>Purpose To strengthen the capacity of Mapuche organisations and communities to participate in the negotiation and implementation of the provisions of the CBD with regard to conservation, sustainable use and community co-management of protected areas</p>	<ol style="list-style-type: none"> 1. Staff and community members trained 2. Surveys conducted 3. Management plans developed 4. Negotiation phase completed 5. Case studies disseminated to partners and CBD 	<ol style="list-style-type: none"> 1. Completed 2. Completed 3. Completed 4. Negotiations reinstated following successful legal action by communities. New collaboration agreement signed. Implementation of management plan under ongoing negotiation with National Forest Corporation. 5. Conference presentations to translate into publications of case studies post project. 	

Project summary	Measurable Indicators	Progress and Achievements	Actions required/planned for next period
<p>Output 1. Capacity of the Mapuche-Pehuenche communities, the Consejo de Todas las Tierras and the relevant national body (CONAF) with regard to conservation and the sustainable and participatory management and use of the Villarrica National Reserve and bordering areas strengthened.</p>	<p>1. Year 1: 40 members from 8 communities trained through: capacity-building and planning workshops and training.</p> <p>2. Year 1: Technical Training of 2 staff from biodiversity team of the CTT.</p> <p>3. Year 2: Regional Latin American workshop held.</p>	<p>1. Completed. Technical training in use of GPS and related skills was ultimately limited to a smaller group than desired.</p> <p>2. Completed</p> <p>3. Transferred to final project workshop as agreed with DS.</p>	
<p>Output 2. Survey of the natural resources, conservation status, use, and status of traditional knowledge and practices associated with these resources completed.</p>	<p>4. Survey completed by UK team with the participation of the communities and local institutions by the end of the first half of year 2.</p>	<p>4. Completed. 61,000 hectare GPS map, classification tables, socio-economic survey. Accompanying digital media.</p>	
<p>Output 3. Community resource management proposals</p>	<p>5. Year 1: Minimum of 4 framework community proposals based on established conservation practices and traditional community knowledge and practices elaborated.</p>	<p>Proposals incorporated within project portfolio forming part of the environmental management plan in accordance with locally identified priorities.</p>	

Project summary	Measurable Indicators	Progress and Achievements	Actions required/planned for next period
<p>Output 4. A community plan for the participatory management of the Maichin valley and co-management Villarrica National Reserve elaborated.</p>	<p>6. Year 1: Framework community management plan agreed.</p> <p>7. Year 2: Detailed co-management plan agreed.</p>	<p>Fieldwork completed, reporting completed.</p> <p>Final environmental management plan developed by communities. In use for negotiation of co-management plan with CONAF following new collaboration agreement.</p>	
<p>Output 5. Community co-management plan and establishment of a community managed protected area negotiated with CONAF (note re-introduction of community protected area)</p>	<p>8. Year 2: Roundtables between the communities and CONAF established</p>	<p>Initiated and suspended pending outcome of legal action by communities. Re-established following community success in legal action and accompanied by management plan and GPS map.</p>	
<p>Output 6. Lessons learned related to the objectives 1.1 and 2.2 of the programme of work on Protected Areas provided to partners and the CBD.</p>	<p>10. 2 Case studies elaborated in the course of the project.</p>	<p>Initiated but require completion and publication.</p>	

Annex 3 Project's final logframe, including criteria and indicators

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <p>the conservation of biological diversity,</p> <p>the sustainable use of its components, and</p> <p>the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</p>			
<i>Purpose</i>			
<p><i>To strengthen the capacity of Mapuche organisations and communities to participate in the negotiation and implementation of the provisions of the CBD with regard to the conservation, sustainable use and community co-management of protected areas.</i></p>	<p>Staff and community members trained</p> <p>Surveys conducted</p> <p>Management plans developed</p> <p>Negotiation phase completed</p> <p>Case studies disseminated to partners and CBD</p>	<p>Reports</p> <p>Surveys</p> <p>Management plans</p> <p>Reports</p> <p>Case studies</p>	
Outputs			
<p>Capacity of the Mapuche-Pehuente communities, the Consejo de Todas las Tierras and the relevant national body (CONAF) with regard to conservation and the sustainable and participatory management and use of the Villarrica National Reserve and</p>	<p>1. Year 2: 40 members from 8 communities trained through: capacity-building and planning workshops and training.</p> <p>2. Year 2: Technical Training of 2 staff from biodiversity team of the CTT.</p> <p>3. Year 2: Regional Latin American workshop (Replaced by final project workshop, see above).</p>	<p>1. Workshop materials, reports and list of participants.</p> <p>2. Course inscriptions and certificates and records of attendance.</p> <p>3. Workshop report, material and list of</p>	

bordering areas strengthened.		participants.	
Survey of the natural resources, conservation status, use, and status of traditional knowledge and practices associated with these resources completed.	4. Survey completed by the project team with the participation of the communities, local institutions and the UK team by the end year 2.	1. Survey report	
Community resource management proposals	5. Year 2: Minimum of 4 framework community proposals based on established conservation practices and traditional community knowledge and practices elaborated.	1. Incorporated into final management plan and project portfolio	
A community plan for the participatory management of the Maichin valley and co-management Villarrica National Reserve elaborated.	6. Year 2: Framework community management plan agreed. 7. Year 3: Detailed co-management plan agreed.	1. Copy of framework community management plan 2. Copy of detailed co-management plan	
Community co-management plan and establishment of a community managed protected area negotiated with CONAF (note re-introduction of community protected area)	8. Year 2: Roundtables between the communities and CONAF established.	1. Reports and lists of participants in roundtables 2. Formal agreements	
Lessons learned related to the objectives 1.1 and 2.2 of the programme of work on Protected Areas provided to partners and the CBD.	10. 2 Case studies elaborated in the course of the project.	Copies of the case studies. Initiated but not completed. Publications planned on project outcomes for submission in 2009.	
Activities	Activity Milestones	Assumptions	

Planning and capacity-building workshops	<p>Year 1: Project steering committee established;</p> <p>Year 1 & 2: 3 inter-community planning workshops;</p> <p>3. 8 local community workshops each year.</p> <p>Year 2: Regional Latin American workshop on community/co-management of protected areas.</p>	
Training in surveying and participatory research methods	<p>Year 2. 8 young community members and 2 CTT staff trained by UK staff in cooperation with local institutions in: GPS mapping, remote sensing; sampling techniques, procedures and analysis; and socio-economic surveying (months 1-6). Training of 32 young community members in the same fields (months 6-12).</p>	
Survey	<p>Socio-economic and environmental survey including, zoning and resource mapping and impact assessment by 4 interdisciplinary and intercultural teams of 6 persons (September Year 2).</p>	
Elaboration of community proposals, management plans and case studies	<p>Year 2: Minimum of 4 community framework resource management proposals.</p> <p>Year 3: Framework community management plan agreed.</p> <p>Year 3: Detailed management plan</p> <p>Year 2 & 3: 1 case study per year elaborated by community member/s and CTT staff.</p>	
Negotiation roundtables	<p>Roundtables between communities and CONAF (2 in year 1 and 4 in year 2).</p>	

Annex 4 Project contribution to Articles under the CBD

Article No./Title	Project %	Article Description
6. General Measures for Conservation & Sustainable Use		Develop national strategies that integrate conservation and sustainable use.
7. Identification and Monitoring	15%	Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.
8. In-situ Conservation	40%	Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
9. Ex-situ Conservation		Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
10. Sustainable Use of Components of Biological Diversity	20%	Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.
11. Incentive Measures		Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.
12. Research and Training	10%	Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).
13. Public Education and Awareness		Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
14. Impact Assessment and Minimizing Adverse Impacts	10%	Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
15. Access to Genetic Resources	5%	Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair and equitable way of results and benefits.
16. Access to and Transfer of		Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair

Article No./Title	Project %	Article Description
Technology		and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
17. Exchange of Information		Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
19. Bio-safety Protocol		Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research.
Other Contribution		Smaller contributions (eg of 5%) or less should be summed and included here.
Total %	100%	Check % = total 100

Annex 5 Standard Measures

Code	Description	Totals (plus additional detail as required)
Training Measures		
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification(i.e. not categories 1-4 above)	4 (Focal Points:GPS use, participatory ethno-methodology, first aid)
6a	Number of people receiving other forms of short-term education/training (ie not categories 1-5 above)	13 (GPS use); audio visual recording and editing (8 people); GPS use (13 people); First Aid and fieldwork risk assessment (7 people); participation & ethnomethdology (20 people) Combination of sessions from one of the above by volunteers (80 people)
6b	Number of training weeks not leading to formal qualification	36 Approximately
7	Number of types of training materials produced for use by host country(s)	(1) Workshop guide: Ethno-methodologies for natural resource planning (2) Sampling cartography
Research Measures		
8	Number of weeks spent by UK project staff on project work in host country(s)	24
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s)	1 natural resource management plan
10	Number of formal documents produced to assist work related to species identification, classification and recording.	1 classification scheme
11a	Number of papers published or accepted for publication in peer reviewed journals	planned
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	1 Survey datasets deposited with community authorities under terms of information management protocol
Dissemination Measures		
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	3. 1. Final workshop in Reigolil 2008; 2. 11th International Congress of Ethnobiology, Cusco, Peru 2008; 3. Society for Latin American Studies panel: Natural resource management planning and bio-prospecting in Latin America, Leeds, 2009. Future events planned.
14b	Number of conferences/seminars/ workshops	2. ESRC Genomics Network

Code	Description	Totals (plus additional detail as required)
	attended at which findings from Darwin project work will be presented/ disseminated.	Conference presentation, 27th October 2008. Additional conference presentations and workshops on lessons learned planned for future dissemination activities.
Physical Measures		
20	Estimated value (£s) of physical assets handed over to host country(s)	£6,000 (Council of Traditional Authorities & community focal points) £15,000 (estimated value of physical assets)
Other Measures used by the project and not currently including in DI standard measures		
24	Hours of edited video recording available for newsfeeds, interactive mapping and pedagogic material	70 +
25	Data set on and tenancy (by household) and land use (forestry, agriculture, grassing) handed over to host country	1 of Maichín River Valley
26	Natural Resources Management Agreement between government and civil society organisations	1 Collaboration Agreement between Council of Traditional Authorities, Chilean Counterpart and CONAF established
27	Information Management Model Protocol UK academic institution, indigenous peoples advancing development of CBD (specifically Article 8j and ABS provisions)	2 (1 – property rights and procedure during research project. Agreed and ratified. 1 – property rights relating to data protection and curation generated through the project)

Annex 6 Publications

Not applicable at this time. Academic publications are in preparation. Under the terms of the information management protocol, decision-making regarding access to project results, notably the digital map, management plan and associated materials is at the discretion of the Council of Traditional Authorities in the Maichin Valley. Publication of an online digital map and accompanying materials is under consideration but pending approval.

Annex 7 Darwin Contacts

Ref No	15/028
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