PROJECT DOCUMENT

Government of Mongolia
Ministry of Nature and Environment

United Nations Development Programme
Global Environmental Facility

Community-based Conservation of Biological Diversity in the Mountain Landscapes of Mongolia's Altai Sayan Eco-region (PIMS 1929) MON/03/G31/A/G1/99

The five-year project aims to ensure the long-term conservation of the biodiversity of Mongolia's Altai-Sayan region by mitigating threats and encourage sustainable resource use practices by local communities. The project seeks to do this by 1) integrating biodiversity conservation objectives into sustainable natural resource use policy, programs, and practice and 2) linking traditional protected area management to the landscape around each area, including cross-border cooperation. By the end of the project, stakeholders will apply community-based management and conservation strategies that empower herder communities to resolve forest and grassland management problems and improve livelihoods through partnerships with Government and NGOs.

Date: _____

B. TABLE OF CONTENTS

C. ACRONYMS: Abbreviation and Mongolian terms

Abbreviations

ADB .....Asian Development Bank
CBWM.....community-based wildlife management
CBNRM .....community-based natural resource management
DI .....Designated Institution
GEF.....Global Environment Facility
GoM .....Government of Mongolia
GTZ.....Gesellschaft fuer Technische Zusammenarbeit (German Agency for Technical Cooperation)
HC.....herder's community
IFAD .....International Fund for Agriculture Development
IPECON .....Initiative for People-Centered Conservation
IE.....Irbis Enterprise
MAP 21.....Mongolian Action Programme for the 21st Century
MCC.....Mongolian Conservation Coalition
METF.....Mongolian Environmental Trust Fund
MFE .....Ministry of Finance and Economics
MFAg.....Ministry of Food And Agriculture
MFA.....Ministry of Foreign Affairs
MNE.....Ministry of Nature and Environment
MTE .....mid-term evaluation
NPD .....National Project Director
NPM.....National Project Manager
NZAID/ADAF .....New Zealand Agency for International Development
NZNI.....New Zealand Nature Institute
OP .....Operational Programme
PA .....protected area
PIU .....project implementation unit
PSC .....Project Steering Committee
PWG .....Project Working Group
SDC.....Sustainable Development Committee
SPA .....Special Protected Area
UNDP.....United Nations Development Programme
WB .....World Bank
WWF.....World Wildlife Fund for Nature

Mongolian Terms

aimag .....province
soum.....sub-province or district
bag .....sub-district, the smallest rural administrative unit
khural.....civil representatives legislature operating in each of the administrative levels

D. SECTION I: Elaboration of the Narrative

Part 1. Situation Analysis

The project will conserve and ensure the long-term sustainable use of resources in the Altai Sayan ecoregion, a WWF Global 200 Site[1]. A detailed description of the problem to be addressed is provided in Section 2 of this document. The project has also been designed in line with UNDP-Mongolia's Country Cooperation Framework's third thematic area, UNDP's sub-program on sustainable resource management, which aims to ensure that environmental considerations are integrated into planning and development processes at the national, regional and local levels.

The national institutional and legal framework is described in Part 5 of Section III.

Part 2. Strategy

The Government of Mongolia's approach to sustainable development while conserving biodiversity, and its national commitment to these goals fully recognizes that the well being of the country depends upon the continued health of the country's natural environment. The Good Governance for Human Security Programme, approved by the Government in 2000, supports policy formulation, operationalization and implementation of the Government's Action Programme of which priority no. 7: "to implement environmental policy aimed at providing sustainable development and ecological balance by harmonization of biodiversity conservation with regional socio-economic development" is relevant for this project.

The project has also been designed in line with UNDP-Mongolia's Country Cooperation Framework's third thematic area, UNDP's sub-program on sustainable resource management, which aims to ensure that environmental considerations are integrated into planning and development processes at the national, regional and local levels.

The application of landscape-scale conservation practices and perspectives to the productive landscape as a whole and protected areas' within it, constitutes the project's strategic approach to securing the sustainable long-term conservation of biodiversity in these mountains. Many of the activities proposed, such as integrating biodiversity goals into productive practices and innovative policy tools, involve low or no recurrent costs. Partnerships are a key part of this approach to sustainability and the project seeks to develop low-cost alternatives that rely on existing or newly formed collaborative partnerships among national, ministries, NGOs, *aimag*, *soum* and *bag* officials, and herder communities across the traditional sectoral boundaries. The project is designed to work with partners and programs that are scaled to local institutional and community capacity and emphasizes the long-term sustainability of local institutions. In parallel, the capacity of a cross-section of civil-society (*aimag, soum,* and *bag* offices, herder groups, NGOs and Ministry Departments) will be strengthened to sustain integrated conservation efforts over the long-term.

[1] The Global 200 is a collection of the Earth's most outstanding and diverse terrestrial, freshwater, and marine habitats--areas where the Earth's biological wealth is most distinctive and rich, where its loss will be most severely felt, and where we must fight the hardest for conservation (WWF US: Endangered Spaces - Global 200 habitats of the earth and ocean. Last accessed 8 September 2003). For more information, visit the WWF website: http://www.worldwildlife.org/global200.

The project will focus on helping people to develop sustainable livelihood options by providing business trainings and empowering people to access financial support and small loans. In general, the project avoids creating systems requiring expensive maintenance and upkeep, or establishing new expensive institutions.

The project has been designed to minimize risks associated with management structure and strategic approach and to encourage an integration of best practices. Lessons learned from other projects have been brought to bear on the design of this project and best practice resources have been consulted to improve the effectiveness of the project's design and reduce risk. This project will replicate also its model activities in other parts of Mongolia and in other parts of multi-country Altai-Sayan eco-region. The project develops lessons learned and facilitates the sharing of information and replication of successful diversity of conservation methodologies.

In addition, an important strategy for the project will be to pursue close cooperation with other organizations active in Mongolian part of the Altai Sayan and/or dealing with similar development issues. The project will also strengthen regional cooperation between Russia, Kazakhstan, China and Mongolia for biodiversity conservation in the Altai Sayan through strengthening trans-boundary conservation action and institutional linkages[2].

Part 3. Management Arrangements[3]

Project execution will adhere to UNDP nationally executed project requirements. The Ministry of Finance and Economy (MFE) is the focal point for coordinating UNDP's technical cooperation in Mongolia. The Ministry of Nature and the Environment (MNE) will serve as the Designated Institution (DI) in charge of the project execution. The DI is accountable to MFE and UNDP for the production of outputs and for the achievement of project objectives. To achieve project objectives and produce required outputs, MNE will partner with other "Implementing Agencies" (Ministries and NGOs). The administration of project funds will be the joint responsibility of the UNDP and the MNE.

Project Steering Committee (PSC) will be established and will meet semi-annually to provide overall strategic policy and implementation guidance and support. The PSC will consist of one member from each of the following organizations:

1. Governor of Bayan Olgii *Aimag*
2. Governor of Khovd *Aimag*
3. Governor of Uvs *Aimag*
4. Governor of Khovsgol *Aimag*
5. Parliament Member from Altai region
6. Parliament Member from Sayan
7. Ministry of Nature and Environment
8. Ministry of Food and Agriculture
9. World Wildlife Fund -Mongolia
10. UNDP
11. Representative from Woman's group
12. Herder association
13. Border Guard Service

The PSC's role will be to serve as a forum for stakeholder input and discussion, to oversee project implementation, to resolve any conflicts or disagreements that arise with respect to project activities that cannot be resolved by the project working group and to facilitate the implementation of project activities in their respective organizations.

[2] GEF-funded Eco-region conservation project-proposals are submitted by Kazakhstan and Russia. A Steering Committee composed of stakeholders from all three countries already exists. Its annual meetings will serve as a venue to share experiences and lessons learned.

[3] Implementations arrangements are further elaborated in Section 2.

MNE will appoint a National Project Director (NPD) from a department dealing with strategy, international cooperation, planning, land use management, biodiversity conservation or protected area management. The NPD will chair the PSC. The NPD will be responsible for ensuring the proper implementation of the project on behalf of the Government. In doing so the NPD will be responsible for overseeing proper project implementation for the Government of Mongolia.

The main project office will be established in Khovd city of the Altai Region. According to the Regional Development Policy, Khovd is nominated as a pillar cinter for the Western region of Mongolia. The role of main office would be directed more at strategic and supportive functions for each of the 4 provincial offices. The main office comprises a National Project Manager (NPM), Research Officer, Monitoring &Evaluation Officer, Community Development Officer, Finance Officer. One full-time International Technical Advisor will provide technical assistance and support to the National Project Manager. The methodology and approach to be pursued will be among the strategic functions of the respective team members of the main office. The presence of the main office in the region, while it allows greater access to local and regional stakeholders, might at the same time distract the concerned staff from performing at a strategic level, with a greater tendency to perform at an operational level as their counterparts at the Provincial offices. The project organizational chart is in Annex 8 Section III.

There will be 4 project field offices (PFO) to be established in each of the four provinces in the Altai Sayan region, catering to the day-to-day implementation of the project in the respective provinces. Each provincial office will be staffed by a project local coordinator, a community empowerment and development officer, finance assistant and social mobilizers. These offices will take the lead role in project implementation in their respective provinces. Two technical international volunteer positions, and their local counterparts will be based in the provincial offices. Project Local Coordinators will be managing the PFOs and each will report to the NPM. Over the longer term, it is envisioned that the PFO will facilitate the integration of project-inspired activities into existing programs and practices.

The Project Local Coordinator for Bayan-Ulgii province will be a person who is fluent both in Mongolian and Kazakh and from the area, who and understands the culture. Student interns from the State University in Khovd will also contribute to the project field team.

The UNDP Country Office will support project implementation by assisting in monitoring project budgets and expenditures, recruiting and contracting project personnel and consultant services, subcontracting, procuring equipment, and providing other assistance upon request of the MNE. The UNDP Country Office will also monitor the project implementation and achievement of the project outputs and ensure the proper use of UNDP/GEF funds. Financial transactions, reporting and auditing will be carried out in compliance with national regulations and UNDP rules and procedures for national execution. The UNDP Country Office will carry out its management and monitoring functions through an assigned Programme Officer in Ulaanbaatar, who will be also responsible for the project coordination with the project team.

A GEF logo should also appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The UNDP logo should be more prominent -- and separated a bit from the GEF logo if possible as, with non-UN logos.

Part 4. Monitoring and Evaluation

Please see Annex 3 and Annex 4 of Appendix B.

Part 5. Legal Context

The Project Document shall be the instrument referred to as such Article I of the Standard Basic Assistance Agreement (SBAA) between the Government of Mongolia and the United Nations Development Programme, signed by the parties 28 September 1976. The host country-implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government cooperating agency described in that Agreement.

UNDP acts in this Project as Implementing Agency of the Global Environmental Facility (GEF), and all rights and privileges to UNDP as per the terms of the SBAA shall be extended mutates mutandis to GEF.

The UNDP Resident Representative in Mongolia is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

a) Revision of, or addition to, any of the annexes to the Project Document;
b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangements of the inputs already agreed to or by cost increases due to inflation;
c) Mandatory annual revisions, which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and Inclusion of additional annexes and attachments only as set out here in this Project Document.

Part 6. Budget

Total project costs are USD 4,785,672[4]. Of this amount, USD 2,720,000 will fund project activities related to achieving global benefits and have therefore been provided by GEF. UNDP and the Government of the Royal Netherlands will provide co-financing of USD 2,065,672 in cash to the project. Of this amount, USD 1,865,672[5] (Euro 1,679,105) will be provided by the Dutch Government as co-financing and USD 200,000 by the UNDP Mongolia for the period of 2004-2009. The project funds are summarized in the following table.

Table 1. Summary of funding in USD

Definition of financing	Source of funding	Amount	Total
1. GEF funds		USD 2,720,000	**USD 2,720,000**
2. Co-financing (UNDP managed)	UNDP	USD 200,000	
	Government		
	Dutch	USD 1,865,672	**USD 2,065,672**
3. Other co-financing (not UNDP managed)	Associated financing:		
	WWF	USD 1,500,000	
	MFA	USD 1,595,200	
	MNE	USD 832,350	
	ADB	USD 1,730,000	
	IFAD	USD 750,000	**USD 6,407,550**
			USD 11,193,222

Related financing. Associated financing from other ongoing projects in Altai Sayan region is estimated at USD 6,407,550 over the period of 2004-2009. Letters of Support outlining specific areas of cooperation have been provided in Section III, Annex IV. Related financing has been mobilized from the following sources:

⇨ Government of Mongolia – The Government contributions are estimated at USD 2,477,550. These resources will support the strengthening of agricultural livelihoods through improved range and livestock management, livestock product marketing, etc. Much of this funding is associated with the GoM's loan and grant cooperation with several bilateral and multi-lateral development institutions such as IFAD, ADB, and WB.

⇨ World Wildlife Fund (WWF) – WWF has been active in the Altai Sayan Region since 1997, supporting the Government in the establishment and management of Protected Areas and conservation of endangered species. WWF Mongolia has been involved in the development of the Altai Sayan project from the early stages and is currently developing a new Mongolian Altai Sayan Ecoregion Conservation Plan for 2006 – 2010. In this context, WWF has committed associated financing of USD 1,500,000 to the Altai Sayan project which is an increase of USD 850,000 compared to the amount initially committed during GEF Work Programme entry.

Priority locations of the WWF Altai Sayan Conservation Programme that correspond to the Altai Sayan project's objectives and activities are Sielkem Nuruu, Turgen and Tsagaan Shuvuut, all in the Altai range. Five thematic issues will guide WWF activities in these areas:

- Conservation of Focal species (Altai Argali sheep and Snow leopard),

[4] This figure has been updated from the time when GEF Council approved the project brief.
[5] The Government of the Netherlands approved funding increased from the initial commitment for USD 1,540,000 to USD 1,865,672, which equals to Euro 1,679,105.

- Conservation and management of Key Habitat types (high mountain steppe),
- Support to Ecological processes (connectivity for isolated focal species' populations and safe migration),
- Threat reduction (wildlife trade and mining), and
- Enabling conditions for the four previous themes (Policy and legislation development and public awareness).

Annex 5a explains more in detail how WWF's increased commitment to the Altai Sayan Ecoregion will support the overall objective of the project.

⇨ Asian Development Bank – The Agriculture Sector Development Project promotes sustainable grassland management and alternative livelihood options for pastoralists in five western aimags. The project's estimated associated financing contribution is USD 1.73 million.

⇨ IFAD – The Fund is implementing the Rural Poverty Alleviation Programme (RPRP) from 2003-2009. The programme cost amounts to USD 19.8 million, financed by the Government of Mongolia and an IFAD loan worth USD 14.8 million. Of this total amount, USD750,000 have been accounted as associated financing for the project. This programme is important to the Altai Sayan Project's sustainable baseline because it focuses on developing sustainable grassland management practices and alternative livelihoods for local herders in Khovsgol aimag, located in the Sayan region of Mongolia.

Other related activities: In addition to parallel initiatives which have provided associated financing as outlined above, other activities in the project area which have potential complementarities include:

⇨ World Bank – The Sustainable Livelihood project promotes secure and sustainable rural livelihoods by: 1) helping pastoralists better manage risk associated with livestock production; 2) improving access for pastoralist to financial services, including insurance and 3) improving basic infrastructure through a local investment initiative. The 12-year USD 16-20 million project commenced in 2003. This project overlaps geographically with the Altai Sayan project in Bayan-Olgii and Uvs Aimags.

⇨ NZNI/IPECON – The New Zealand NGO has been active in the Altai region in its capacity to facilitate community empowerment, support institutional building and mediate stakeholder consensus for sustainable resource use and conservation. The organization has expressed its interest in cooperation and partnership to achieve the objectives of this project.

⇨ Irbis Enterprise - Irbis[6] Enterprise (IE) is a project run by Irbis Mongolia, a small Mongolian NGO involved in snow leopard research and conservation. The project offers an income generation opportunity to herders in remote mountainous regions of Mongolia in return for their support of snow leopard conservation efforts. Herders can add value to their livestock products by producing finished items instead of selling the raw wool. In addition, the conservation component of the project leads to better herd-management, with concomitant herd quality and income effects. IE has been working in some of the most remote regions of Mongolia, including the Altai Sayan.

⇨ Mongolian Academy of Sciences – The Academy has expressed its support for this project and willingness to cooperate. Its expertise lies in wildlife conservation, pasture management, and forest studies and its scientists have been active in the Altai Sayan region.

⇨ Canada – The International Development Research Center of Canada is supporting the project "Sustainable Management of Common Natural Resources in Mongolia", which is active in Bayan-

[6] "Irbis" is the Mongolian word for "snow leopard."

Olgii aimag. The project aims to empower local communities and improve their livelihood through a more efficient and equitable use of pastureland and other resources. Its team leader has expressed his support for this Altai Sayan Project and his interest to work in close cooperation on achieving overlapping project objectives.

E. SECTION II: Total Project Work-plan and Budget

TOTAL PROJECT WORKPLAN AND BUDGET

Award ID: MNG10 00036215

Award Title: PIMS 1929 BD FSP: Altai Sayan Eco-region

Project ID: MNG10 00039250 (MON/03/G34/A/G1/99)

Project Title: PIMS 1929 BD FSP: Community-based Conservation fo Biological Diversity in the Mountain Landscapes of Mongolia's Altai Sayan Eco-region

Executing Agency: Ministry of Nature and Environment

GEF Outcomes/Atlas Activuty	Responsible Party (Implementing Agent)	Source of Funds	Atlas Budgetary Account Code	ERP/Atlas Budget description/Input	Total (USD)	Amount 2006 (USD)	Amount 2007 (USD)	Amount 2008 (USD)	Amount 2009 (USD)	Amount 2010 (USD)	Amount 2011 (USD)
Outcome 1. Conservation capacity of productive sector institutions and policies ***Indicators***: 1. Sustainable development commissions successfully complete Land-use Plan for Bayan Olgii and Uvs aimag by end of year 2; Khovd and Khovsgol by end of year 3. 2. Five herder communities (HC) operational by end of year 2. 3. Biodiversity conservation objectives integrated into grazing and land-use policies by end of year 3. 4. CB Indicator: MNE and MoA roles clearly defined and understood in promoting biodiver-sity conservation in productive landscape by end of year 2. 5. CB Indicator: Aimag, soum and border officials knowledge of environmental policy enforcement requirements will be improved by 50% over pre-training knowledge levels. 6. CB Indicators: Economic valuation studies of key biodiversity and ecosystem assets will influence the public policy debate by end of year 4. 7. Level of environmental awareness in children, Government officials and the general public meets campaign goals by years five and eight. ***Means of Verification:*** 1. Land-use plans, reports and project evaluations. 2. Interviews; project progress reports 3. Revised policy documents. 4. Project progress reports, and campaign plans 5. Policy documents; project progress reports. 6. Pre and post-training assessments. 7. Published results of studies; newspaper clippings; interviews with stakeholders. 8. Pre and post-awareness program surveys.	Ministry of Nature and Environment	GEF	71100	ALD (Biodiversity conser. mgmt)	52,500			12,500	20,000	10,000	10,000
			71300	Local consultant (technical, support)	73,500		13,600	17,000	17,000	15,000	10,900
			71400	Service Contracts	46,500		7,000	9,000	10,000	11,000	9,500
			71600	Travel	37,500		17,900	7,500	5,000	4,100	3,000
			72100	Contractual services - institutions	52,500		7,500	15,000	15,000	10,000	5,000
			74500	Miscellaneous (training, workshop)	30,000		6,100	6,000	6,000	6,000	5,900
			73100	rental and maintenance	22,500		3,700	5,000	5,000	5,000	3,800
			74200	Audio & visual	52,500		26,200	8,800	7,500	5,000	5,000
			74500	Miscellaneous	17,500		3,500	5,000	5,000	2,000	2,000
				SUBTOTAL	385,000		85,500	85,800	90,500	68,100	55,100
		Dutch	71300	Local consultants (tech., support)	11,400		2,900	2,000	2,000	2,000	2,500
			71400	Service Contracts	1,300						1,300
			71600	Travel	13,400		3,400	2,500	2,500	2,500	2,500
			72300	materials and goods	12,100		2,400	2,700	3,000	2,000	2,000
			72500	supplies (training, workshop)	8,400			2,900	2,000	2,000	1,500
			75100	(GMS - 5%)	3,275		1,245	545	520	470	495
				SUBTOTAL	49,875		9,945	10,645	10,020	8,970	10,295
		Outcome Total			434,875		95,445	96,445	100,520	77,070	65,395

2. Establish and strengthen information baseline ***Indicators:*** 1. Baseline biological and socioeconomic assessments completed and in pilot areas by year 2; At least presence of priority species and if possible numbers and condition confirmed in pilot areas. 2. Standardized protocols for monitoring of biodiversity and threat levels developed and accepted by end of year one; participatory monitoring in place by end of year 2. 3. Herder resource use patterns in relation to important wildlife habitat understood and mapped for management and herder use, by year 3. 4. CB Indicator: Key staff improve their capacity to manage, access and apply information measurably over pre-training level of knowl-edge. ***Means of Verification:*** 1. Project progress reports; assessments and plans; Survey reports; data sheets. 2:Protocols; field interviews; monitoring records. 3. Database records; Map documents; interviews 4. Before/After training knowledge assessments.	Ministry of Nature and Environment	GEF	71300	Local consultants (tech., support)	50,500		11,000	9,500	10,000	10,000	10,000
			71400	Service Contracts	44,000		4,500	9,000	10,000	11,000	9,500
			71500	UN volunteers (stipend $ allowances)	45,000			15,000	15,000	15,000	
			71600	Travel	30,000		6,500	6,500	6,500	6,500	4,000
			72100	Contractual services - institutions	163,000		5,000	50,000	50,000	30,000	28,000
			72300	materials and goods	142,500			45,000	45,000	45,000	7,500
			72500	supplies (training, workshop)	10,000		1,000	2,500	2,500	2,000	2,000
			73100	rental and maintenance (travel)	15,000			5,000	4,000	3,000	3,000
			74200	Audio & visual equipments	10,000		5,650	2,350	1,000	500	500
			74500	Miscellaneous	15,000		2,500	3,500	3,000	3,000	3,000
				SUBTOTAL	525,000		36,150	148,350	147,000	126,000	67,500
		Dutch	71400	Service Contracts	500						500
			71600	Travel	27,000		5,000	5,500	5,500	5,500	5,500
			72100	Contractual services - institutions	30,000			8,500	8,500	7,000	6,000
			72300	materials and goods	5,000			1,500	1,500	1,000	1,000
			72400	Communication (main & branch)	14,500			4,000	4,000	3,500	3,000
			72500	supplies (training, workshop)	3,000		900	550	550	550	450
			73100	rental and maintenance (travel)	5,000		500	1,500	1,000	1,000	1,000
			75100	(GMS - 5%)	4,252		320	1,078	1,053	928	873
				SUBTOTAL	89,252		6,720	22,628	22,103	19,478	18,323
		Outcome Total			614,252		42,870	170,978	169,103	145,478	85,823
3. Establish landscape-based approach ***Indicators:*** 1. Landscape-level conservation plans completed by end of year 2, updated by year five; 2. Priority species recovery/conservation plans developed and under implementation by end of year 2. 3. CB Indicator: Protected area staffs' knowledge of basic tenets of landscape ecology measurably improved over baseline knowledge levels. 4. Protected areas develop and apply maps of priority species priority habitats across the landscape as part of their conservation program for each protected area by end of year 3. 5. HC designate at least six (6) priority habitats in productive landscape and implement basic	Ministry of Nature and Environment	GEF	71100	ALD (Biodiversity conser. mgmt)	542,500		62,500	120,000	120,000	120,000	120,000
			71200	ST inter. Cons.on habitat cons.	160,000			42,500	40,000	40,000	37,500
			71300	Local consultant (tech., support)	61,000			22,500	15,000	11,500	12,000
			71600	Travel	53,000		6,000	15,000	12,000	10,000	10,000
			72100	Contractual services - institutions	138,500			32,500	40,000	40,000	26,000
			72200	Equipment and furniture	87,500		32,500	25,000	10,000	10,000	10,000
			72300	Materials and goods	152,500			52,500	50,000	25,000	25,000
			72500	supplies (training, workshop)	36,000		7,500	7,500	7,500	7,000	6,500

conservation action by end of year 3. 6. Priority protected area management "re-oriented" to landscape perspective with broad stakeholder consensus and participation by year 3. 7. Milestone: MNE to meet recurrent management costs of priority protected areas. 8. Milestone: MNE/Protected Areas' link to herder communities established and strength-ened. 9. Milestone and CB Indicator: Reputation of protected areas among stakeholders changes measurably for the better, starting with MNE and improving through to project closure. ***Means of Verification:*** 1. Conservation plans and mapping documents; 2. Planning documents. 3. Before/After training knowledge assessments 4. Maps; field interviews of PA staff. 5. Participatory management agreements; 6. Project records; HC maps; Field interviews. 7. Formal agreement prior to MTE and funding by end of year 4. 8. MNE-Herder Community partnership clarified through written agreement prior to MTE. 9. Survey in year 1, year 3 and year 5.			73400	rental and maintenance	22,500		3,500	5,000	5,000	4,500	4,500
			74200	Audio visual and printing	26,500		4,500	6,000	6,000	5,000	5,000
				SUBTOTAL	1,280,000		116,500	328,500	305,500	273,000	256,500
		Dutch	71300	Local consultants (tech., support)	4,500			1,000	1,500	1,500	500
			71600	Travel	12,000			3,500	3,500	2,500	2,500
			72100	Contractual services - institutions	37,000		14,000	7,000	6,000	6,000	4,000
			72500	supplies (training, workshop)	4,500			1,000	1,250	1,250	1,000
			75100	(GMS - 5%)	5,000		1,150	1,075	963	938	874
				SUBTOTAL	63,000		15,150	13,575	13,213	12,188	8,874
		Outcome Total			1,343,000		131,650	342,075	318,713	285,188	265,374
4. Transboundary conservation ***Indicators:*** 1. Milestone: Transboundary Conservation Agreements reached on at least two priority landscape species by end of year 3. Trans-boundary agreements on protected area data sharing and management cooperation by end of year 2. 2. Milestone: Transboundary field-level cooperation in conservation by MTE. 3. Protected areas begin sharing data/lessons learned by end of year 4. ***Means of Verification:*** 1. Signed agreements. 2. Expert evaluator opinion based upon field visits/interviews. 3. Interviews in the field w/protected areas staff.	Ministry of Nature and Environment	GEF	71300	Local consultants (tech., support)	25,000			6,500	6,500	6,000	6,000
			71600	Travel	80,000		3,000	21,000	21,000	16,000	19,000
			73400	rental and maintenance	25,000			7,000	7,000	5,500	5,500
				SUBTOTAL	130,000		3,000	34,500	34,500	27,500	30,500
		Dutch	71300	Local consultants (tech., support)	3,500			500	1,000	1,000	1,000
			71600	Travel	2,000			500	500	500	500
			72500	supplies (training, workshop)	5,000			1,500	1,250	1,500	750
			74210	Printing and publishing	4,500		900	900	900	900	900
			75100	(GMS - 5%)	747		45	170	183	195	154
				SUBTOTAL	15,747		945	3,570	3,833	4,095	3,304
		UNDP	71600	Travel	29,000	2,160		6,900	6,900	6,400	6,640
			72500	supplies (training, workshop)	14,000			3,500	3,500	3,500	3,500
			73100	rental and maintenance	7,000			2,000	2,000	1,500	1,500
				SUBTOTAL	50,000	2,160		12,400	12,400	11,400	11,640
		Outcome Total			195,747	2,160	3,945	50,470	50,733	42,995	45,444
5.Support conservation while improving livelihoods ***Indicators:***	Ministry of Nature and	GEF	71300	Local consultants (tech., support)	13,500		2,500	3,000	3,000	2,500	2,500

1. CB Indicator: 30% percent of the herder population in the pilot areas have adopted project-promoted sustainable grazing practices by end of year 4; 65% by end of year 5. 2. Pasturelands in pilot areas show measurably significant signs of improvement at the end of year 5. 3. CB Indicator: Feasibility of community-based wildlife management demonstrated, and instruments designed and approved by MNE and MFAG by end of year 2, and implemented by end of year 3. 4. CB Indicator: Community-MNE forest management partnerships established and operational by end of year 2; forest management practices on a sustainable footing by end of year 5. 5. CB Indicator: One community learning center established by stakeholders in year 2; Center expands capacity, serving significant numbers of herders and resulting in more efficient use of resources and improved livelihood practices by the end of year 4. Second community learning center established by end of year 5. ***Means of Verification:*** 1. Community agreements, field interviews. 2. Project field records, and progress reports; Field interviews. 3. Partnership agreements; Field interviews. 4. Learning center visits; field interviews; reports. 5. Field visits; Interviews.	Environment		71600	Travel	29,000		7,000	5,500	5,500	5,500	5,500
			72300	Materials and goods	45,000			15,000	15,000	10,000	5,000
			74500	Miscellaneous	12,500			3,500	3,000	3,000	3,000
			74200	Audio visual and printing	5,000		2,500	1,000	500	500	500
				SUBTOTAL	105,000		12,000	28,000	27,000	21,500	16,500
		Dutch	71200	ST inter. Cons. on com.-bsd cons.	180,000			50,000	50,000	80,000	0
			71300	Local consultants (tech., support)	185,000			50,000	50,000	45,000	40,000
			71400	Service contracts	110,600			30,000	30,000	25,600	25,000
			71500	UN volunteers (stipend $ allowan.)	49,000			17,000	17,000	15,000	0
			71600	Travel	76,000		20,000	15,000	15,000	14,000	12,000
			72100	Contractual services - institutions	178,000		20,000	45,000	45,000	38,000	30,000
			72300	Materials and goods	150,000		30,000	50,000	40,000	20,000	10,000
			72400	Communication	19,000		3,000	4,000	4,000	4,000	4,000
			72500	supplies (training, workshop)	33,400		3,000	8,000	8,000	7,400	7,000
			72800	IT equipment	23,000			6,000	6,000	5,500	5,500
			73100	Rental and maintenance	8,500		5,500	1,000	1,000	500	500
			74200	Audio visual and printing	49,500		12,000	15,000	12,500	5,000	5,000
			74500	Miscellaneous	27,000		5,000	5,500	5,500	5,500	5,500
			75100	(GMS - 5%)	54,450		4,775	14,825	14,200	13,350	7,300
				SUBTOTAL	1,143,450		103,275	311,325	298,200	278,850	151,800
		UNDP	72300	Materials and goods	50,000			15,000	15,000	10,000	10,000
			74200	Audio visual and printing	50,000			15,000	15,000	10,000	10,000
				SUBTOTAL	100,000			30,000	30,000	20,000	20,000
		Outcome Total			1,348,450		115,275	369,325	355,200	320,350	188,300
6. Monitoring and evaluation ***Indicators:*** 1. Annual monitoring and evaluation exercises completed, demonstrating acceptable accomplishment of results measuring against milestones and indicators of capacity building. 2. Key decision makers' understanding of adaptive management strengthened and measurably improved over baseline levels in two project site areas by end of year 2 and in remaining site areas by end of year 4. 3. Use of project partners (at herder, bag, aimag,	Ministry of Nature and Environment	GEF	71300	Local consultants (techn., support)	17,000			4,500	4,500	4,500	3,500
			71400	Service Contracts -NPM, proj.coord	100,000			25,000	25,000	25,000	25,000
			71600	Travel	29,000		7,000	6,000	6,000	5,000	5,000
			72100	Contractual services - institutions	10,000			2,500	2,500	2,500	2,500
			72200	Equipment and furniture (main & branch)	68,000		45,000	5000	8000	5000	5000
			72400	Communication (main & branch)	19,000			5,000	5,000	4,500	4,500

national Ministry, and multi-lateral/bi-lateral programs) to replicate the project's outcome in other regions of Mongolia.
4. Milestone: Three or more cases of successful replicating and applying project's useful experience in other places among pastoralists, bag, soum, aimag and national Ministry officials by MTE. At least three more underway by end of project.
5. Knowledge transfer and dissemination of lessons through: (a) the regional Altai Sayan forum; (b) presentations of lessons and best practices at the project's regional conference on Altai Sayan; (c) project results document.
6. Milestone: At least 20 individuals from project partners in MFAg, MNE, IFAD and ADB programs involved in project's lessons learned round-table, training workshops to capture lessons learned and replicate them by the MTE and 20 more by close of project.

Means of Verification:

1. Monitoring and evaluation reports; technical progress reports.
2. Before/After training knowledge assessments.
3. Assessment of who is replicating – which institutions/individuals.
4. Project evaluations and progress reports; Field visits.
5. Proceedings from the regional conference.
6. Training and workshop records; expert evalua-tor, field interviews.

	72500	supplies (training, workshop)	8,000			2000	2500	2500	1000
	72800	IT equipment (main & branch)	16,000		11,000	2000	2000	1000	
	73100	Rental and maintenance-premises	11,000			3,000	3,000	2,500	2,500
	74200	Audio visual and printing	6,000			2,000	1,000	2,000	1,000
	74500	Miscellaneous	11,000		2,500	2,500	2,000	2,000	2,000
		SUBTOTAL	295,000		65,500	59,500	61,500	56,500	52,000
Dutch	71200	ST inter. Consultant	90,000				45,000		45,000
	71300	Local consultants (techn., support)	19,500			6,000	5,000	5,000	3,500
	71400	Service Contracts -NPM, proj.coord	103,000		45,050	15,000	15,000	15,000	12,950
	71600	Travel	40,230		1,500	10,000	10,000	10,000	8,730
	72200	Equipment and furniture (main & branch)	70,000		65,275	4,725			
	72400	Communication (main & branch)	10,000		4,000	1,500	1,500	1,500	1,500
	72500	supplies (training, workshop)	49,500		3,500	15,000	14,000	12,000	5,000
	72800	IT equipment (main & branch)	19,000		14,500	4,500			
	73100	Rental and maintenance	45,000		30,000	5,000	5,000	5,000	
	74100	Prof.services (audit fees, legal fee)	25,000			6,250	6,250	6,250	6,250
	74200	Audio visual and printing	9,100		3,000	2,000	2,000	1,600	500
	75100	(GMS - 5%)	24,018		8,341	3,499	5,188	2,818	4,172
		SUBTOTAL	504,348		175,166	73,474	108,938	59,168	87,602
UNDP	71400	Service Contracts -NPM, proj.coordin, AFA	16,830	5,630	11,200				
	71600	Travel	4,085	85	4,000				
	72200	Equipment and furniture	14,175	10,363	3,812				
	72400	Communication	1,500	280	1,220				
	72500	supplies (training, workshop)	950	270	680				
	72800	IT equipment	8,900	4,000	4,900				
	73100	Rental and maintenance	1,235	235	1,000				
	73400	Rental and maintenance	715	715					
	74000	Miscellaneous operating expenses	1,610	1,610					
		SUBTOTAL	50,000	23,188	26,812	0	0	0	0

		Outcome Total	849,347	23,188	267,478	132,974	170,438	115,668	139,602
Grand Total			**4,785,672**	25,348	656,663	1,162,267	1,164,707	986,749	789,942

Summary of Funds	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**Total**
DUTCH	0	311,201	435,217	456,307	382,749	280,198	**1,865,672**
UNDP	25,348	26,812	42,400	42,400	31,400	31,640	**200,000**
GEF	0	318,650	684,650	666,000	572,600	478,100	**2,720,000**
Total	25,348	656,663	1,162,267	1,164,707	986,749	789,938	**4,785,672**

F. SECTION III. Other Agreements
Cost-sharing endorsement letter

Ambassade van het
Koninkrijk der Nederlanden

UNDP-Mongolia
Mrs. Pratibha Mehta
UN Resident Coordinator/UNDP Resident Representative
United Nations Street 12
Sukhbaatar district 46
P.O Box1009
Ulaanbaatar, Mongolia

Liangmahe Nanlu 4
Beijing 100600

Date	15 September, 2004	Contact	Martien Beek
Our ref	EA/OS-346/04	Tel.	(+86-10) 6532 1131 ext. 243
Page	1/1	Fax	(+86-10) 6532 6922
Encl.	-		martien.beek@minbuza.nl
Re	Approval of the Altai Sayan project		www.nlembassypek.org

Dear Mrs. Mehta,

I have the pleasure to inform you that the Netherlands Embassy has approved the project proposal 'Community based Conservation of the Biodiversity in the Altai Sayan region' in Mongolia.

The total approved budget for the project is one million six hundred seventy nine and one hundred five Euro, EURO 1.679.105, according to a project implementation phase starting in 2004 and ending in 2009 (for details see project proposal).

I like to suggest to sign the contract during my visit to Ulaan Baatar on the first of October at about 17:00 hours (at a location of your choice). The draft contract will be forwarded to your office shortly.

Looking forward to meeting you soon.

Yours sincerely,

Chargé d'Affaires a.i.
Ward JG van Oortere

Dr. Ph. de Heer
Ambassador

Date Recd: 16 SEP 2004	12.50
Ref: MON/00/641	
Action: DRR	Info: BB
Action Taken:	B/Fwrd............

Appendix A: Approved Project Brief

GOVERNMENT OF MONGOLIA
GLOBAL ENVIRONMENTAL FACILITY/UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT NUMBER:
COMMUNITY –BASED CONSERVATION OF BIOLOGICAL DIVERSITY IN THE MOUNTAIN LANDSCAPES OF MONGOLIA'S ALTAI SAYAN ECO-REGION
DURATION: Five (5) years
IMPLEMENTING AGENCY: United Nations Development Programme (UNDP)
EXECUTING AGENCY: Ministry of Nature and the Environment
REQUESTING COUNTRY: MONGOLIA
ELIGIBILITY:
GEF FOCAL AREA: Biodiversity
PROGRAMMING FRAMEWORK:

SUMMARY

Costs and Financing (Million US$)

GEF:

GEF FOCAL POINT ENDORSEMENT:
Name: N. Oyundar, Director, International Cooperation Department, Ministry of Nature and the Environment, Government of Mongolia
DATE:

IMPLEMENTING AGENCY CONTACT:
Name: Mr. Gordon Johnson, Senior Environment Advisor, UNDP/Mongolia

1. Landscape Conservation Rationale and Strategy

For the purposes of this project proposal, "landscape" is defined in cultural and biological terms. Culturally defined, a landscape is "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors (Council of Europe, 2000). Over the centuries, the Altai's rugged and remote terrain produced the semi-nomadic herding lifestyle that is still practiced by people today. In the Altai, people depend upon the local environment for small-scale pastoral production and resources such as medicinal herbs and timber from the surrounding forest. Herders live in family groups and graze their animals on surrounding state grassland and forestland. While grazing has had varying degrees of impact upon the landscape in the Altai over time, few "modern" industrial developments have occurred to date.

However, this is beginning to change; current trends show livestock herds being privatized with herd numbers increasing. Forestlands are being cut without long-term management goals, leading to habitat destruction from ill-conceived cutting and road building. Wildlife is under growing pressure from increased hunting levels due in part to improved firearms and pressure from poachers.

As the GoM focuses on economic development for the Altai region, opportunities for introducing sustainable practices are growing. The use values by which inhabitants of the Altai Mountains measure their landscape's worth (e.g. how many livestock they can graze on a piece of land) are being transformed as new opportunities like community-based wildlife management and tourism emerge. The global popularity of ecotourism and sport hunting gives the Altai a sizeable comparative economic advantage where previously it had little, as does the growing opportunity to pursue environmentally friendly hydropower.

Finally, conservation itself is changing, as is our understanding of ecology, biology and the conservation of species, habitats and landscapes. We know more about minimum habitat size requirements, feeding ecology, migration patterns, seed dispersal, and the ultimate futility of creating protected area islands in a transformed and biodiversity-averse landscape. We understand that landscapes have a pattern consisting of repeated habitat components, and patches, occurring in various shapes, sizes and spatial interrelations[7]. This understanding helps us to conceptualize a more specific ecological definition of a landscape as a "heterogeneous land area composed of a cluster of interacting ecosystems that is repeated in similar form throughout."[8]

The following five main ecological points support the logic of developing a landscape-level conservation approach in the Mongolian Altai:

1) The Altai's existing isolated protected areas are likely to be inadequate *on their own* to ensure the long-term conservation of flora and fauna because they do not fully represent all components of biodiversity in the Altai.

2) Individual protected areas are inadequate to meet the ecological requirements of a number of animal species with small populations, low densities, or patchy distributions. Three types of species are most likely to be inadequately conserved by protected areas alone:

    a) species that have large area requirements and occur at low densities such as large mammals (snow leopards, argali, wolves) and large raptors (eagles, owls, falcons, and vultures). Large areas are required to maintain a viable population of such species.

    b) species that utilize specialized habitat types (e.g. wetlands, rocky outcrops, old-growth forest, and caves) or have specialized food sources (e.g. particular seral stages of vegetation following fire or other disturbance) often occur at low population densities because these resources/habitat types are uncommon or patchily located in the landscape.

    c) species that make seasonal migrations between patchy food sources such as fruit or grass may be inadequately protected by parks and reserves if one of the areas they regularly utilize is outside the protected area network

3) Island biogeography indicates that a progressive loss of species over time will occur from isolated habitats. The presence today of a small population in a protected area does not guarantee that it will persist over the long term. In fact, chances are that it will not.

4) The Altai's protected areas cover only a fraction of the region's forest and grassland habitat, providing ample basis for maintaining biodiversity within the wider productive landscape.

[7] Noss, R.F. 1996. Conservation of Biodiversity at the Landscape Scale. In *Biodiversity in Managed Landscapes: Theory and Practice*, eds.R.C. Szaro and D.W. Johnston, pp. 574-589. Oxford University Press, New York.
[8] Forman, R.T.T. and M. Gordon. 1986. Landscape Ecology. John Wiley and Sons, New York. USA

5) Many communities in the Altai region are dependent upon the land and its natural resources for their livelihood. Consequently, an approach that seeks to ensure conservation within protected areas, as well as extend conservation beyond their boundaries, must recognize the place of human communities, their aspirations, and impacts on the land. This project's landscape approach explicitly recognizes the role of resident people in shaping the landscape and the future character of biodiversity in the region.

Combining the cultural and the biological, the Altai landscape becomes a mosaic of "heterogeneous land forms, vegetation types, and land uses."[9] Moreover, within this mosaic, a process of dynamic change is occurring as clear trends of privatization, modernization, and mechanization emerge. Many opportunities for conservation are inherent in these trends, but so too are threats.

2. Environmental Context

A WWF Global 200 Site, the Altai Sayan Ecoregion stretches east-west for 2,000 km from the eastern-most tip of Kazakhstan to north-central Mongolia and south-central Russia and south-north for 1,500 km from western Mongolia and north-western China to south-central Russia. See Figure 1 in Annex E. For the practical purposes of this project, Mongolia's portion of the Altai-Sayan has been divided into two areas: the Altai Mountains of western Mongolia and the Sayan Mountains of north-central Mongolia.

The Altai. Altai Mountain Arc is located in western Mongolia's Altai Mountains, bordering China on the west and Russia to the north. Within the Mongolian Altai Range, there are 187 glaciers with a total area of 54,000 km^2. Most glaciers are located in the Tavan Bogd Mountains in the far northwest corner of Mongolia where several peaks reach altitudes over 4,000 meters. Mongolia's highest mountain, Mt. Khuiten (Cold Mountain) (4,374 m), is found here along with Nairamdal (Friendship) Peak (4,202 m) on whose summit the countries of Mongolia, China and Russia converge.

Many animal species are widely distributed throughout the Altai region and several subpopulations, if allowed to interact, form a viable population resilient to large-scale stochastic and deterministic disturbances as well as long-term changes. See Figures 2 and 3 in Annex E. Indeed, the Mongolian Altai is known to provide an intact habitat for some of the largest populations of argali, snow leopard and ibex in the greater region. The Altai's distinct physical geography is characterized by snow and ice-capped mountains with steep slopes and rocky outcrops yielding to lower ridgelines and foothills. This rugged terrain provides habitat for a number of internationally recognized priority landscape species (or umbrella) such as the globally endangered snow leopard (*Unica unica*) and its main prey species the Siberian ibex (*Capra sibirica*). Additionally, the threatened argali (*Ovis ammon*), is the umbrella species in the Altai and it's the world's largest wild sheep with horns weighing up to 34 kilograms, inhabits the lower ridgelines and higher foothills.

The area also provides habitat to globally endangered animals such as musk deer (*Moschus moschiferus*), Pallas' cat (*Felis manul*), and whooper swan (*Cygnus cygnus*), as well as other species of national importance including wolverine (*Gulo gulo*), red deer (*Cervus elaphus*), Altai pika (*Ochotona alpina*), black-tailed gazelle (*Gazella subgutterosa*), corsac fox (*Vulpes corsac*), great bustard (*Otis tarda*), Houbara bustard (*Chlamydotis undulata*) and the Altai snowcock (*Tetraogallus altaicus*).

Snow leopard and argali, both species identified by this project for conservation, require large areas of habitat to maintain viable populations. For example, snow leopards in Mongolia are known to move upwards of 12 km per day and can have home ranges as large as 1,590km^2.

[9] Urban, D.L., et al. 1987. "Landscape ecology". BioScience, 37:119-127.

The argali, one of the snow leopards' prey species, are known to make seasonal migrations that can involve transboundary movements. Large tracks of important snow leopard and the argali sheep habitat in the Altai Sayan are becoming increasingly fragmented as incidents of habitat encroachment by domestic stock and poaching have grown in the recent years. If properly managed, however, the Altai Sayan landscape can support these umbrella species for many years to come.

Over 200 plant species are known to exist within the Mongolian portion of the Altai Sayan and of these an estimated 12% are endemic. Forest cover in the Altai is patchy and limited to the moister high mountain cirques and to the northerly exposed, mainly steep slopes. Lush riparian poplar forest flanks the lower and wider section of the Khovd River, whereas the riparian forest at higher elevations has suffered from overgrazing. Although patchy and reduced the forest still provides crucial habitat for wildlife, such as musk deer and red deer.

In addition to rare species, the Altai is home to rare ecological/evolutionary processes that create and sustain biodiversity and that are all but lost in many mountain regions of the world. Characterized by repeated habitat components and patches occurring in different shapes, sizes and spatial interrelations, the Altai Sayan provides relatively intact habitat for seasonal migrations; predator-prey interactions; and natural river flow to occur.

Underlying these ecological processes is a diverse habitat mosaic of grazing pastures, mountain forest patches, mountain meadows, free flowing streams, and scattered protected area "islands" that maintain 48 distinct natural habitat types, each with different aquatic regimes, vegetation cover and soil type. Five of these habitat types are found only in the Mongolian part of Altai Sayan and therefore important for the representation of the biological inventory.

These natural habitats fall within four major vegetation zones found in the Altai Arc region: alpine, steppe, forest steppe, and desert steppe. The high elevation alpine zone is comprised of mountain meadows rich in flowers nourished by small springs and creeks providing valuable refuge habitat for predator and prey. The forest steppe zone is comprised of forest patches situated mainly on steep northern slopes. Dwarf shrubs, grass and herbs dominate the steppe and desert steppe zones.

The Sayan. The Mongolian Sayan area covers an area of 20,605 square kilometers. It consists of a basin dotted with more than 300 lakes at an elevation of 500-1600 m and surrounded on all sides by mountains with peaks up to 3000 meter high. It is in these mountains give rise to the Shishig River, one of the major headwaters of Russia's Yenetsi River, which flows north to the Arctic Ocean and is one of the ten largest river in the world.

Large blocks of natural habitat are resilient to large-scale stochastic and deterministic disturbances as well as long-term changes and crucial to successful ecoregion-based conservation. The sparsely populated Sayan Mountains/Shishig watershed provide large areas of naturally intact and continuous taiga and tundra habitat contiguous to a large protected area in Russia, enlarging the continuous habitat to a size big enough to sustain and maintain viable populations of species.
The eastern side of the mountains is composed by the Khoridol Saridag Nuruu Mountains, which extend from north to south between the Shishig watershed and Khovsgol Lake, the second largest freshwater body in Asia. The north side of the basin is flanked by the Sayan Nuruu Mountains (locally called "Northern Taiga"), and the Ulaan Taiga range fringes the southwestern side. In the Ulaan Taiga Mountains, the Guna and Mungarag rivers originate and eventually form the Shishig River. The Shishig River runs north through the central basin into the Tsagaan Nuur, an area of more than 300 interconnected lakes. These lakes in turn drain through the Khoridol Saridag Nuruu valley into Russia where the Shishig converges with several rivers that originate in the Russian Sayan mountains, forming the Yenetsi.

The watershed lies at the southern edge of the Siberian boreal forest, which results in a strong Siberian influence on the area. The three major vegetation zones in the watershed are tundra, taiga and forest steppe. Tundra and Taiga, both representative of the Siberian biome, are the major vegetation types of the eastern Sayan Mountains. The convergence of these zones with the Central Asian biome's forest steppe and grassland steppe zones, creates a unique transitional environment with an increased number of species, and therefore, interactions that allow evolutionary processes to occur at a higher rate.

The tundra zone is dominant at higher elevations and it's rich moss, lichen and low shrubs are especially adapted to a harsh and cold climate. The thick moss layer retains and stores water thereby ensuring a balanced and continuous water supply throughout the year. Continuous taiga forest, typical and representative of the eastern Sayan, forms on the middle elevation ground between 1200 and 1800 m. The dominant tree species are Siberian larch (*Larix sibirica*), Siberian pine (*Pinus sibirica*), and the Siberian fir (*Abies sibirica*), which is listed in the Mongolian red book. Along the foothills of the surrounding mountains, open meadows intersect with the forest to create the forest steppe. Towards the central plain the tree cover gives way to extensive grasslands. Riparian forest, once extensive throughout the central basin, has almost disappeared, occurring only on inaccessible islands and along sacred springs.

Within the three major vegetation types, tundra, taiga and forest steppe, 19 different landscape types can be identified. The flora and fauna of these zones are typical of the Siberian ecosystem. Reindeer (*Rangifer tarandus*) live in the watershed in the southern most extension of their range. The vast expanses of forest still provide refuge for the globally vulnerable musk deer (*Moschus moschiferus*) sharing its habitat with other prominent species including brown bear (*Ursus artus*), elk (*Cervus elaphus*), moose (*Alces alces*), Eurasian otter (*Lutra lutra*), wolverine (*Gulo gulo*), forest sable (*Martes zibellina*) and smaller flying squirrel (*Tamias sibirica*). There have been recent, unconfirmed sightings of the globally rare Asiatic wild dog (*Cuon alpinus*) that reportedly had disappeared from the area. The forest taiga areas are also home to the rare Altai snowcock (*Tetraogalus altaicus*).

The ichthyofauna of the interconnected lakes and streams in the watershed consists of nine species, representing five (5) families. The most prominent member of the fish community is the Taimen (*Hucho taimen*) the world's largest species of the salmonidae family. The ecology of the Taimen is not yet fully understood, but consensus exists among scientists that transboundary migrations to spawning grounds within this watershed are vital for successful Taimen reproduction. Consequently, the ecological integrity of the Shishig's lakes and rivers in Mongolia is critical for the survival of the Taimen population in the Yenetsi River. Additionally, endemic subspecies, such as the whitefish (*Coregonus lavaretus pidschian*), have evolved in the Shishig watershed apart from whitefish populations in the Yenetsi River.

3. Social and Economic Context

Mongolia's vast grasslands constitute approximately 70 percent of the country's 1.5 million square kilometers and fall into three major ecological zones: mountain-steppe, steppe, and desert-steppe. All three of these zones occur in the Altai Sayan region. Mongolia's grasslands, including those in forested areas, high mountain pastures and true desert, are the basis of livestock production and support 28 million head of livestock (camels, cattle, yaks, horses, sheep and goats). Approximately half of the country's workforce depends on pastoralism or agriculture for their livelihood security. Mongolia's economy relies on extensive livestock production and virtually all of the nutritional needs of Mongolian livestock are met by grazing on wild grasses and forbs or by browsing on shrubs. A small amount of hay is cut and stored in mountain steppe areas like the Altai Sayan, but herders still rely largely upon standing dead forage during the winter and spring seasons when fresh grass is unavailable.

The Altai Arc lies within the boundaries of Mongolia's three western *aimags* (provinces), Khovd, Bayan-Olgii and Uvs. Ethnic Kazakh people, a minority in Mongolia, comprise the majority of the population in Bayan-Olgii, the western most aimag. Ethnic Mongolians comprise the majority of the population in the neighboring two aimags. The population density in the area is low across the whole area but high once the availability of water is factored in. Seventy percent of the population lives in rural areas following the traditional nomadic lifestyle as subsistence herders, the rest lives in the *aimag* or *soum* center. The average age structure shows that 45% of the population is under 16 years with a current population growth rate of 2.4% (Khovd). Education level of the population is relatively high, between 75% and 95% of the *soum*'s population are literate. The official unemployment rate in the rural areas is between 5-10%.

During the last five years the economy has shown signs of revival, registering consistent growth of about 3 to 4% per annum. The swift controlling of inflation, now down to single digit figures and still falling, has helped. Growth and the related benefits are, however, still almost entirely restricted to the main urban areas, where trade and services provide occasions for redistribution of income derived from international trade. Production and employment remain in the doldrums.

The economy is narrowly based on commodity exports and vulnerability to world market trends is high. This dependence is all the more unfortunate as Mongolia suffers from the "twin terrors of isolation and distance" making it exceptionally difficult to compete in markets for bulky and/or low-value commodities. On the positive side Mongolia's highly educated population is a good basis for economic revival and development. However, there are strong indicators that the quality of education is beginning to suffer from long-term under-funding. With over 50 percent of the population under 21 years of age, unemployment among youth is a severe problem. The Mongolian government stresses that its policies are people centered, and that investing in people increases productivity and income, and thus improves the quality of life and reduces poverty.

The financial sector of Mongolia is still growing in its capacity to support the entire market economy. Currently, the sector is fragile and has a limited role in the whole economy. In the last decade, the GoM performed a series of effective measures to reform the structure of the banking sector, to privatize state-owned banks and to generally facilitate institutional development with the help of international financial organizations and donor countries. Although the inflation rate is quite low and interest rates of the Central Bank bonds and deposits have fallen considerably, nominal and real interest rates for bank loans remain exceptionally high. Because of their own shaky history, banks are wary of risks involved in private lending, reducing the contribution it needs to make to restore healthy growth in the whole economy. Indeed, very few firms apply to banks for credit. Banks are almost absent from rural areas. Only the Agricultural and Post Bank maintain basic offices in the aimag centers, though both also support a growing number of *soum* center branches, with AgBank clearly taking the lead in this matter. The insurance business is still in its formative stages. Non-banking financial institutions have been created but they are in an embryonic state, with the exception of XAS Finance Company, which has been expanding rapidly and effectively in covering needs of a growing number of urban poor with assistance from a number of international donors.

Poverty is a serious and stubborn problem, made more acute by the fact that poverty is thought to have been unknown until 1990. By 1995 over one third of the population were estimated to have incomes that placed them below the poverty lines. This proportion has remained almost unchanged till today. There are indications that there is even an increase in absolute poverty, both in urban and rural areas. Today there is a marked feminization of poverty, reflected in the higher incidence of poverty among female-headed households. By 2000, there were over 55,000 female-headed households in Mongolia, 2.5 times the number registered in 1990. One in four of these families have six or more children and at least one half of this group are believed to live in poverty.

The standard of living in the far western *aimags* is generally lower than in the more centrally located provinces. Khovd and Uvs *aimags* are among the poorest in Mongolia; the percentage of the population living below the poverty line (US0.50/day) in Khovd is 43% and in Uvs 34%. A main reason for these higher rates is the high percentage of households with small herds. Four years ago, more than half of the households in Uvs and Khovd had less than 100 animals.

Two ethnic minority groups, the Darhads and the Tsaatan people inhabit the Sayan. The Darhads live a typical Mongolian nomadic pastoralist's lifestyle. The Tsaatan people are a distinctly different ethnic group who inhabit the far northern part of Mongolia and the southern part of Buryat province in Russia, live in the forest, and herd reindeer for their subsistence. They still follow their traditional life in the remote taiga forest and alpine tundra zones, the natural habitat of the reindeer. Tsaatan people live in clan structures and tipi like tents, which are moved seasonally within the mountains.

The Shishig watershed is remote and sparsely populated with only about 9500 inhabitants, or a density of about 0.4 people/km^2. People reside in the central basin itself or about 20% percent of the whole watershed, leaving the mountainous regions virtually without permanent human settlement. The whole territory is divided in three *soum*s all of within Khovsgol *aimag*. Each *soum* has its own administrative center; the southern *soums*, Ulaan Uul and Renchinlhumbe have about 4000 inhabitants each. Eighty percent of the population in Darhad *soum* lives in the countryside in traditional Mongolian gers (yurts) herding livestock, while about 20% of the *soum*'s population lives in the *soum* center. In the northern *soum*, Tsagaan Nuur, about 50% of the people live in the *soum* center, and rely on subsistence fishing as their main livelihood.

4. Baseline Situation

Threats. The primary threats to biological diversity and ecological integrity in the Altai-Sayan are unsustainable use of grasslands, unsustainable forestry practices and over-hunting of wildlife population. These are in turn the driving forces behind land degradation, habitat fragmentation and the extirpation of wildlife population. The determining factors of these threats are summarized below:

Current pastoral land-use in Mongolia can be characterized as a downward spiral of decreasing herder mobility and increasing out-of-season grazing in what were formerly reserve pasture areas. "Herder mobility" means herder movement to seasonal camps seeking better pasture for livestock. Seasonal nomadic movements are a key factor for livestock to gain sufficient weight and fat to overcome harsh winters. This movement has been curtailed in recent years due to (a) urban-based non-herder families taking up herding as a coping mechanism during the transition, (b) increasing numbers of herders and livestock, (c) decreasing availability of water due to a decrease in the numbers of functioning pasture wells and the disappearance of surface water sources and (d) the desire of herder families to avail themselves and their children to education, health services, etc.

The absence of strong formal or informal institutions to regulate and allocate pastureland and its use contributes to pasture degradation and increased poverty. Decreasing mobility means people are forced to remain year round and graze their animals on pasture formerly grazed only a few months of the year. This trend has led to increased densities of domestic animals, and can possibly further lead to exceeding the carrying capacity of local grasslands. Out of season grazing is due in part to inadequate ability of formal and non-formal institutions to enforce the allocation of pasture for specific seasonal grazing purposes. Overgrazing can cause erosion and siltation, inferior plant composition, desertification, retarded forest growth and degraded riparian zones and is evident throughout the two project site areas. In both locations, livestock numbers increased by over 40% in the past decade following Mongolia's economic transition and collapse of its range management institutions in rural areas.

Nationwide, the number of herder households increased from about 75,000 in 1990 to a peak of 192,000 in 2000. Due to three years of drought and *dzud*, many herders left the sector. Since 2000 the number of herder households had fallen back to about 176,000, a decrease about 8 percent.

In the high mountain valleys of the Altai Sayan increased herder and livestock populations has resulted in the expansion of grazing land, encroaching onto wildlife habitat in high mountain pastures. See Figure 4 in Annex E. This is a significant and relatively recent threat, further aggravated by the instability of the current land-use system and a predominant attitude among herders that livestock numbers *per se* are more important than livestock performance. Forage competition between livestock and wild ungulates, such as argali and ibex, can cause habitat deterioration or displacement of wildlife onto marginal habitat, and may result in poor animal condition and low recruitment. Additionally, habitat encroachment accompanied by expanding livestock numbers can also increase instances of conflict between wild predators and domestic livestock herders. As livestock numbers have increased, wild ungulates population appears to be declining. With a reduced prey-base, an increase in livestock depredation by natural predators such as snow leopard and wolf will likely occur, followed by a concurrent increase in the number of retaliatory killings of these predators by herders.

The illegal extraction of timber products is currently a serious threat in the forests of the Altai, and a potential threat in the Sayan. Just as with pastureland resources, the absence of effective formal and non-formal institutions to allocate forest resources for various uses and enforce these allocations is resulting in unsustainable use of forest resources. Uncontrolled exploitation of forest resources by local people for local use in the Altai threatens to destabilize hillsides and reduce habitat diversity in the landscape, which can lead to increased soil erosion and reduced wildlife numbers.

Throughout the Altai-Sayan, habitat loss combined with unsustainable hunting is a devastating combination. Globally significant species such as Argali, Snow leopard, Brown bear, Elk, Musk deer, Marten, Pallas cat, and Lynx are nearing the edge of existence, as their habitat dwindles and hunting pressure reduces population viability. Wildlife population declines can be attributed to two factors: 1) opportunistic hunting accompanied by the expansion of livestock grazing in wildlife habitat, and; 2) increased illegal wildlife trade in remote areas of the Altai Sayan, particularly in the Shishig watershed. The economic value of various wildlife products are widely known to local people and snow leopard pelts and other illegal wildlife products from elk, musk deer, marmot, argali, wolves, and bears are generally available in local markets.

In the absence of an intervention to enable local stakeholders to strengthen traditional institutions for cooperative management of grasslands, wildlife, forests and other natural resources, these trends will likely continue and accelerate, resulting in the loss of globally and nationally significant biological diversity at the species and ecosystem levels.

5. Institutions, Law and Policy

Law and Policy Context: The legal and administrative context of this project concerns mainly land tenure, water, forests, wildlife, protected areas, and organizations. Mongolia's Constitution, adopted in 1992, provides for the State to retain ownership of pastures, forests, subsoil and water resources, thus making private ownership of these resources impossible. The Civil Code provides an overall framework for land legislation in Mongolia, but the centerpiece of natural resource legislation is the Law on Land, passed in 1994.

Primary legislation governing protected areas in Mongolia includes the Law on Land (1994), resolution No. 143, appendix 5 on the "Procedure on the Taking Away of Land for Special Needs (1995), the Law on Special Protected Areas (1995) and the Law on Buffer Zones (1997). In addition, the GoM approved a legislative program in 1998 establishing a plan to increase the area under special protection from its current level of approximately 12% of national territory to 30% by the year 2030. The Law on SPAs sets forth the basic mandate and guidelines for establishing SPAs. It establishes four categories of SPAs: 1) Strictly Protected Areas, 2) National Conservation Parks, 3) Nature Reserves, and 4) Monuments.

With respect to community-based natural resource management, most of the relevant legislation in Mongolia has provisions in favor of piloting the CBNRM models. Article2.2 of the Law on Forests says the "State has the power to grant possession of Forest Reserves to the Capital City, *aimag*, and *soum* and the Hurals of Citizens Representatives have the power to grant citizens, economic entities and organizations the use of forests and forest secondary natural resources for certain periods, fees, and conditions on the basis of a contract of license." The Law on Hunting states "animal habitat may be possessed and/or used by citizens, economic entities or organizations pursuant to relevant laws, regulations and contracts in order to protect and properly use animal reserves and prepare animal parts derived from hunting."

The legal basis for water use is the 1995 Law on Water, which assigns general responsibilities for water and regulates its use and protection. Water in pasture areas is the responsibility of the Ministry of Food and Agriculture. Elsewhere water is the responsibility of the Ministry of Nature and Environment. This vague distinction is problematic for water management practices, as in Mongolia "pasture areas" are virtually everywhere there is water.

Institutional Context: Mongolia is divided into 21 aimags. Each *aimag* is divided into districts, or *soum*, and each district is divided into sub-districts, or *bags*. Under the 1992 Law on Administrative and Territorial Units of Mongolia and their Management, amended in 1999 and 2000, local government is given power over pasture management and land-use. *Aimag*, *soum*, and *bag* legislatures, or *khurals*, are authorized to make decisions about economic and social development activities in their unit. Governors at all three levels have the authority to organize the sustainable use and rehabilitation of natural resources and to control the implementation of relevant legislation. *Aimag* governors are specifically charged with organizing the participation of citizens in, and their control over, livestock development activities such as veterinary and breeding services.

Mongolia provides basis in law for non-governmental institutions and cooperatives. NGOS are regulated under the Law on Non-Governmental Organizations and are registered by the Ministry of Justice and Internal Affairs. Cooperatives are regulated under the Law on Cooperatives and registered by the *aimag* state registration office.

The Ministry of Food and Agriculture is responsible, among other things for livestock and crop sector policies, food security, policies to protect livestock from natural disaster, veterinary and breeding services, utilization of agricultural land, utilization of pastures and the supply of water to pastures, agricultural extension, rodent control, state reserves, and the import and export of products of animal and plant origin. The Ministry of Nature and the Environment is responsible for the protection, sustainable use and rehabilitation of natural resources, for formulating ecological policies, for the conservation of minerals, forests, water and biodiversity, for providing reliable meteorological services to the country and preventing natural disasters, and for land-use planning.

6. Current Land-use Management Practices, Livelihood Development Initiatives

Background: Mongolia covers a vast territory of more than 156 million hectares and has a population of only 2.3 million people. Mongolia is a rural country; most of its territory (125 million ha) is classified as pastureland, followed by forests (18 million ha), drylands (12 million ha) arable land (1 million ha). Urban areas comprise a very small fraction of the total land area. Given that 80 percent of its territory classified as pastureland, land-use management in Mongolia is essentially grazing management.

For the reader to understand the current situation in Mongolia with respect to grazing management, some historical perspective is necessary. Before 1924, the country was divided into approximately 100 hereditary territorial units ruled by nobles. Each noble allocated pasture and regulated the seasonal migrations of herders in his territory. Informal, customary institutions of pasture use enforced by herders themselves coexisted with this formal regulatory system[10]. This type of cooperation (such as the Khot-ail) among herders was common to share labor resources and control grazing use without degrading the environment. From 1924-1990, a Soviet-style socialist government governed Mongolia and established a centrally planned socialist economy. By 1960, all herders had joined livestock collectives (*negdels*) and herded state-owned animals under the supervision of the collective administration, which allocated pasture and regulated its use.
In 1992, herding collectives were dismantled and most state owned livestock was privatized. Pastureland remained state-owned, to be used in common by herders, but herders became responsible for management decisions over their own herds.[11] No new formal regulatory institution to govern pasture use replaced the dismantled collectives and the infrastructure they had provided (transportation for nomadic movements, emergency fodder, veterinary services, and herding labor) also disappeared. The number of herders increased as economic conditions worsened and city-dwellers acquired livestock and moved to the countryside to become herders. As a result, the traditional system of pasture management in Mongolia has not been successfully re-established in Mongolia yet, resulting in a problem of unsustainable and non-traditional grazing practices nationwide, including in the Altai-Sayan.

To most herders, the transformation from coordinated seasonal movements among well-defined grazing areas to ill-defined grazing areas and increased year-round grazing of mountain riparian areas and reserve pastures means reduced certainty and reduced livelihood security. Since livestock are the only form of savings or insurance available, herders increased livestock numbers from 25.2 million in 1993 to 33.6 million in 1999. Overgrazing favors unpalatable plant species and reduces vegetation cover, thereby reducing the moisture content in the soil and accelerating the desertification processes. This increase, combined with three years of drought, has contributed to the degradation of grasslands across the country and in the Altai Sayan.

In the Altai Sayan, Block B fieldwork estimates 20% of grasslands in the project sites are degraded and the clear potential for accelerating degradation is cause for alarm. In the Altai Sayan, the problem of increased numbers of herders and livestock and their more sedentary grazing practices is compounded by inoperable freshwater wells, forcing people and animals to congregate near existing wells or natural water sources and degrading easily accessible pastureland. Seeking better forage for their animals away from densely packed areas, herders engage in *otors* or seasonal explorations into other grazing territories, expanding the grazing grounds into formerly unused higher elevation pastures and "intruding" into crucial wildlife habitat.

[10] Fernandez-Gimenez. 2000. "The role of Mongolian nomadic pastoralists' ecological knowledge in rangeland management." Ecological Applications. 10(5). pp. 1318-1326.
[11] Ibid.

This in turn forces wildlife to compete with livestock or pushes them into marginal habitat, significantly reducing their physical performance. Concurrently, intrusion into wildlife habitat further provokes incidences of predators attacking livestock, and the downward spiral for wildlife numbers continues.

In addition, Mongolia has suffered from two consecutive years of *dzud,* a winter disaster involving the mass starvation and death of livestock. Four and a half million head of livestock perished in these two *dzud*, and 10,000 herding families lost all of their animals. Before the *dzud* events, little investment had been made in developing an alternative strategy for mitigating and responding to *dzud* risk, including the restoration of sustainable, locally determined patterns of pastureland management.

Land-use Laws: This is beginning to change, however, after 10 years of uncertainty in grazing land management and property rights. Land reform is a major development priority and local innovation is emerging as a key element in moving the process forward. The latest iteration of Mongolia's Land Law provides broad regulatory latitude and flexibility for local officials to devise innovative solutions regarding pasture tenure and improved land management. But the law's lack of clarity with respect to the difference between "possession" and "use" of land and poor understanding of its provisions by local herders and local officials constrain the development of innovative, local methods to implement the law, resulting in part in the threats to ecological integrity as described above.[12]

Currently, *soum* governors are reluctant to use the powers they have been given by the Land Law to allocate pasture and regulate its use because they are unaccustomed to moving beyond the bounds of the official language. In addition, many are inadequately trained on how to implement the law and unfamiliar with its provisions, the lack of specific *soum* land use plans.

The Law on Land provides for the leasing of pasture to individuals and groups of herders in accordance with the traditional patterns of seasonal nomadic movements and subject to monitoring using scientific criteria. The law allows the allocation of either individual or group possession rights to pasture land. The governors are to regulate pasture use with a general schedule for winter, spring, autumn, and summer settlements pursuant to traditional systems. They are also to allocate summer, autumn and reserve pastures to *bag* and khot-ail (traditional herder community) for common use.

Article 51 provides rational use and protection of pastureland and delegates authority to *soum* governors to regulate the use of pastureland to ensure the maintenance of ecological integrity, soil fertility, and prevent overgrazing and soil erosion. They must restore eroded or damaged land and prevent activities with potential adverse impacts.

Parliament has passed a regional development concept that emphasizes, among other things, maintaining ecological integrity while promoting regional cooperation among aimags and *soums*. Scholars from Mongolia's Institute of Geography have advanced the "ecologically appropriate region" as the basis for a new spatial and social organization of pastoralism in modern Mongolia (Bazargur, Shirevadja, and Chinbat, 1993 in, Fernandez-Gimenez, 1999).

[12] Fernandez-Gimenez, Maria E., and B. Batbuyan. 2000. "Law and Disorder in Mongolia: Local Implementation of Mongolia's Land Law." Presented at "Constituting the Commons: Crafting Sustainable Commons in the New Millenium", the Eighth Conference of the International Association for the Study of Common Property, Bloomington, Indiana, USA, May 31-June 4.

Forestry: The MNE's Water, Forest and Natural Resource Department is responsible for managing the nation's forests. But it is under-funded, under-staffed and unable to carryout government-driven forest management in the Altai Sayan region. Under Mongolia's Forest Law, forests are protected from cutting if they are saxaul forests, oasis forests, forest patches of 100 hectares or smaller, forests growing on slopes greater than 30 degrees, and riparian forests within 3 km of the river. Based on these definitions, all the forest in the Khovd watershed should be protected and excluded from any use. In reality, however, local people rely on these forests for timber and fuel wood.

What is more feasible and possibly beneficial to both the forest and local forest users is a co-management regime between local officials and local people. Experience has shown in other parts of the world like Nepal, that once local communities are given a cooperative right of use and ownership over what were previously "government-owned" forests, forest management improved dramatically to the benefit of forest ecology and community livelihoods.

Mongolian legislation has provisions that favor piloting the community-based model of natural resource management. The Law on Forests gives the State the power to grant possession of Forest Reserves to the urban areas, *aimags*, and *soums*. It also gives the Ikh Khural the power to lease forest and other natural resources to citizens, economic entities, and/or organizations for certain periods and conditions. The Law on Hunting allows "animal habitat" to be possessed and/or used by citizens, economic entities or organizations pursuant to relevant laws, regulations and contracts in order to protect and properly use animal reserves."

Agriculture/Rural Livelihoods: At the policy level, sustainable development as a concept has received significant attention in Mongolia in recent times. Under a recent UNDP's MAP 21 initiative, the GoM established a National Sustainable Development Commission (SDC) as well as aimag-level advisory bodies or SDCs in each aimag. Each SDC consists of representatives from key stakeholder institutions, including: 1) the Nature and Environment agency, 2) Finance department, 3) and Economy, Trade, and Agriculture department (all under the *aimag* Governor's office), 4) HC, 5) Protected area administrator, 6) Sport hunters, 7) NGOs, and 8) scientists. At the practical level, however, sustainable development has not progressed very far as a concept people understand, much less implement. The SDCs at the aimag level have had little to, in practical terms, since they were established. This may change with the new land law, which requires each aimag and soum to develop annual land-use plans. The SDCs could play an important role in developing these plans.

The four *aimags* that make up the Altai Sayan are an economic development priority for the Government. The sustainable management of grasslands in these places points to the need for government policies that facilitate and encourage the establishment of formal and non-formal or customary institutions to allocate pasture, enforce grazing norms, and enable herders to choose mobility over sedentary production.

Livelihood development efforts in the Altai Sayan focus on strengthening the agricultural sector's formal and customary institutions, while enabling pastoralists and other stakeholders to pursue alternative livelihoods with improved access to micro-finance, training, capacity building and other technical support. With the help of the Asia Development Bank (ADB), Government is implementing an agricultural sector development program that promotes sustainable grassland management alternative livelihoods for pastoralists in five western *aimags*, including Khovd and Uvs Aimags. The project will reduce agricultural price distortions, promote competitive markets for agricultural goods, rehabilitate wells, communications, and other infrastructure, and build the capacity of financial institutions to extend affordable credit to herders. The government will also facilitate more sustainable management by building co-management structures at the *soum* and *aimag* level in Khovd and Uvs *aimags*.

The Government of Mongolia/IFAD *Rural Poverty Alleviation Programme* (RPRP) aims to achieve sustainable and equitable poverty eradication for vulnerable rural household living in areas with increasingly degraded natural resources. The RPRP area comprises four aimags: Arhangai, Khovsgol, Bulgan and Khentii. This programme is important to the Altai Sayan Project's sustainable baseline because it focuses on developing sustainable grassland management alternative livelihoods for local herders in Khovsgol *Aimag*, which encompasses the Sayan region of Mongolia. More specifically it will focus on: 1) strengthening rangeland management and livestock support services; Supporting agricultural extension services; Supporting to alternative income generation and providing rural financial services; and Improving delivery of social services. The programme cost amounts to $19.8 million, financed by the Government of Mongolia and an IFAD loan worth of $14.8 million; The RPRP will be implemented from 2003 to 2009.

With the help of the World Bank, Government is strengthening its "National Household Livelihood Capacity Support Programme." The *Sustainable Livelihood* project promotes secure and sustainable rural livelihoods in several important ways: 1) by helping pastoralists better manage risk associated with livestock production; 2) by improving access for pastoralists to financial services, including insurance and 3) by improving basic infrastructure through a local investment initiative. This project overlaps geographically with the Altai Sayan project in Bayan-Olgii, and Uvs *Aimags*. The 12 year US$ 16-20 million project is slated to begin in 2003. The project will be important to this project's sustainable development baseline in that it is focused on improving pasture management and developing alternative livelihoods.

Irbis[13] Enterprises (IE) is a project run by Irbis Mongolia, a small Mongolian NGO involved in snow leopard research and conservation. The project offers an income generating opportunity to herders in the remote mountainous regions of Mongolia in return for their support of snow leopard conservation efforts. Herders can add to the value of their livestock products by producing finished items instead of selling the wool raw. In addition, the conservation component of the project leads to better herd management, with concomitant herd quality and income effects. IE has three years experience working in some of the most remote regions of Mongolia, including the Altai Sayan.

Tourism has only begun to take hold in the Altai and the Sayan. Several ecotourism companies bring clients to the region each summer season. Altai Tavan Bogd is becoming a popular mountain climbing and alpine camping area. As part of WWF's and NZAID's some preliminary work was done to improve tourism information materials and establish a tourism contact point in Ulaanbaatar within the Society of Protected Areas. WWF identified five tourist tours in the Altai Sayan, four in Altai and one in Sayan. Workshops were conducted for regional tourism coordination and marketing, and more practical training on how to handle tourists and meet their needs.

7. Current Situation With Respect to the Conservation of Biological Diversity

Background: Conservation efforts in Mongolia during the past 10 years are noteworthy for a country going through such difficult social and economic change. The government has placed a high priority on the conservation of biodiversity during this period, passing two important laws and bringing an additional 11.7 million hectares under "protection" since 1992. While in Europe and the United States, agriculture policy has been the more active area of innovation for conservation policy, in Mongolia, conservation action has focused primarily upon designating protected areas and experimenting with buffer zones.

[13] "Irbis" is the Mongolian word for "snow leopard."

Although the development of new national environmental laws and the expansion of the protected area network over the last decade is commendable, many challenges lie ahead for Mongolia's conservation policy.

Today, Mongolia's protected area system encompasses some 20.5 million hectares – roughly 13% of the nation's territory. However, in the long run, a conservation approach limited to protected areas in a country that is 80% pastureland will not succeed. Moreover, access rights of pastoralists and their livestock herds to traditional pasture areas within protected areas are recognized by land use regulations and livestock grazing occurs within the boundaries of many parks (Wingard and Odgerel, 2001). To succeed in Mongolia, conservation will ultimately need to be extended successfully into the agricultural sector. Specifically, conservation objectives should be incorporated into normal grassland management.

Sustainable land and resource use is crucial for maintaining ecosystem integrity and conserving biodiversity. Many areas in the Mongolian Altai Sayan have already lost former ungulate populations in the last century, such as black tailed gazelle (*Gazelle subgutturosa*) and saiga antelope (*Saiga tatarica*), and several wildlife species appear to be following similar extirpation trends in many areas within the region.

Protected Area Laws: Adopted in 1994, the Mongolian Law on Special Protected Areas (MLSPA) establishes four categories of protected areas: Strictly Protected Areas (SPA), National Parks (NP), Nature Reserves, and National Monuments. Both SPA and NP have three internal zones mandated by MLSPA: one core zone and two other multiple use zones permitting a broad range of uses, some of them incompatible with the goals of the protected area.[14]

The Law on Buffer Zones (1997) requires the establishment of buffer zones around SPAs and NPs. The definition of "buffer zone" is flexible in the law, allowing the designation to be of some use in applying a landscape approach to conservation efforts, in terms of identifying migration corridors or priority habitats as buffer zone areas. The law also allows for buffer zone development funds to be established for the benefit of residents. While the concept of sharing benefits with local communities serves as an important precedent in Mongolian law, the practical reality of how to generate benefits, much less share them has proven to be an elusive in Mongolia.

Protected areas in Altai Sayan: The project's four priority protected areas encompass forest steppe, alpine meadows and high peaks in the Altai Arc region of Western Mongolia's three aimags of Bayan-Olgii, Khovd, and Uvs. The protected areas are: Altai Tavan Bogd NP, Siilkhemiin Nuruu NP, and Tsagaan Shuvuut-Turgen Mountain SPA and Myangan Ugalzat. See figure 5 in Annex E.

The largest protected area in the region and the source of the headwaters of the Khovd River is Altai Tavan Bogd National Park. Established in 1996 and covering 636,200 ha, this park forms part of a transboundary Russian-Chinese-Mongolian protected area covering approximately 20,000 km^2 over the central part of the Altai Mountains. Siilkhemiin Nuruu National Park and Uvs *Aimag's* Tsgaan Shuvuut Strictly Protected Area are contiguous to the "Eastern Altai, Central Altai and Mongon Taigan" protected areas of the Altai and Tuva Republics of Russia. In the Mongolian Sayan Mountains, the project's priority protected area is Khoridol Saridag SPA (188,634 ha), which, along with the proposed Tengis-Shishig SPA, is contiguous to Russian priority areas Ush-Beldyrskaya and Sengilenskaya. Khoridol Saridag Strictly Protected Area supports intact forest.

[14] Wingard, J., Odgerel, P. 2001. Compendium of Environmental Law and Practice in Mongolia.

All together, these protected areas cover an area over 10,000 km^2 and range in size from 110 km^2 to 6300 km^2 and provide habitat for viable populations of globally significant and endangered animals. For example, the Turgun Uul Strictly Protected Area in Uvs *Aimag* is widely recognized for stable and healthy population of snow leopards and ibex. In addition, Khovd *Aimag's* Myangan Ugalzat Wildlife Area (70,000 ha) and Bayan-Olgii *Aimag's* Siilkhemiin Nuruu National Park (140,000 ha) both support relatively large populations of argali. These areas were chosen due to their habitat representativeness, priority species presence and absence and their position relative to the greater Altai Sayan landscape and crucial ecological processes like migration and importance to future transboundary collaborative conservation efforts.

Each of these protected areas is located above 1,700 meters and encompasses alpine, forest steppe and desert steppe vegetation zones. These are important for the survival of globally important biodiversity. However, an analysis of the current protected area system shows that these protected areas are too small to fully represent all components of biodiversity in the region, leaving valuable flora and fauna without protection. Managed as if they are separated from the landscape around them, most protected areas may not be able to support viable wildlife populations with large range requirements such as snow leopards or argali. In fact, protected areas alone do not ensure the long-term survival of flora and fauna of the Altai Sayan because they do not encompass adequate critical habitat for protection and regeneration of the flora and fauna.

Existing protected areas are quickly becoming islands in a sea of what local people consider productive pastureland, inhibiting the kind of ecological "connectivity" among protected areas and priority habitats critical for the survival of globally important biodiversity. Furthermore, existing protected areas may not be able to safeguard the habitats and species they are intended to protect because they generally lack sufficient funding, resources, training and personnel to carry out basic management activities. With limited capacity and little support provided from the government the protected areas in Altai Sayan currently depend on outside funding from the WWF and other donor organizations. WWF provides infrastructure for office, radio communication, mobility and technical assistance. Though small information centers have been established in some areas, many are not sufficiently equipped or staffed.

In the Altai region, protected areas are essentially multiple-use areas and include significant seasonal populations of people within their borders. Yet, protected areas in the Altai region were established with minimal involvement of local people, disrespecting local needs for natural resources. Many people were left with no alternative but to violate the law and enter restricted zones of protected areas to access pasture and timber.

Herders and protected area administrations have concluded grazing agreements in protected area limited use zones. But these agreements are no more specific than any grazing agreement in Mongolia currently and grazing user rights in limited use zones are unclear. The agreements do not limit livestock numbers or allow for restrictions on use during important wildlife movement seasons. Enforcement of no-grazing zones outside of limited use zones is weak to non-existent, effectively making any area of national parks open for grazing, and pushing wildlife into higher and more marginal grazing areas or resulting in extirpation of localized wildlife populations. For example, in Altai Tavan Bogd National Park the number of livestock increased 35% in the past seven years. Last year from April to September, 750 herding families grazed more than 200,000 head of livestock on 340,000 hectares -- more than 50% of the protected area. It is at this point that the line between protected areas and productive pastureland in Mongolia blurs and the nexus between pasture land management and protected area management is critical.

Local people and protected area administrations are not working well together and this ineffective management means that protected areas suffer from the adverse effects of overgrazing or uncontrolled forest harvests. Existing land use designations within protected areas are not followed and the park's sporadic, aggressive attempts to enforce the law by levying fines create a hostile relationship between park officials and local people. Rangers with poor equipment and little salary have little incentive to enforce law and regulations at the cost of being a social outcast in a remote rural area.

Further, people living in or around protected areas may be aware of the existence of the protected area, but often know little or nothing about their meaning or significance. Most herders do posses traditional ecological knowledge, but they do not perceive overgrazing or other such activities to threaten their livelihoods or as playing a major role in degrading their environment. With this perspective, people continue the exploitation of natural resources such as grazing and collection of forest products with little understanding of carrying capacity and sustainable limits. Consequently, considerable pressure is exerted on plant and animal communities and their ecological functions and may ultimately jeopardize the natural balance of the whole system.

The GoM recognizes these challenges, and in preparation for this project, cooperated with New Zealand Agency for International Development (NZAID) to begin strengthening participatory approaches. The NZAID supported Altai Tavan Bogd National Park Project (ATBNPP) concentrated on park management and poverty alleviation and was designed as a "Project Development" as per NZ Asia Development Assistance Facility (ADAF) guidelines. ADAF is a department of the NZ Ministry of Foreign Affairs (MFAT). The project targeted the ATBNP and bufferzone area, working with local herding communities, local government, park authorities and women's NGO's, to develop collaborative management of natural resources concepts among all user and stakeholder groups, especially women and poorer households. There were a number of experience sharing exchanges supported with other project regions, most notably with the GTZ Gobi project area. Participation by all stakeholders was emphasized throughout the project.

Information Baseline & Institutional Capacity to Use Information. Planning in Mongolia historically has been a "top-down" exercise. Economic development plans and polices devised in Ulaanbaatar are communicated to the *aimags*, which are then responsible for implementing the provisions in their localities. Some precedent for local "planning" does exist, however. S*oum* Governors are required to submit an annual report called the "Unified Land and Territory Report" to the *aimag* each year, reporting the size, characteristics, assessment, payment and protection activities of land in their territories. These reports are largely *pro-forma* and in their current iteration provide little benefit to local authorities interested in working with local herders to plan sustainable land-use and conservation activities.

A wealth of traditional ecological knowledge is possessed by Mongolian pastoralists and defines accepted norms, values and attitudes toward pasture usage.[15] Herders' knowledge of plant-animal-environment relationships is reflected in part by how they classify pasture resources using different criteria, including the season in which they are grazed, topography and elevation, aspect, ecological zone and plant community, and soil characteristics.[16] However there are gaps in this ecological knowledge that can undermine the potential for local innovation. For example, local officials and herders often fail to understand the linkages between grassland health and economic productivity of rangeland, and lack the organizational skills to cooperate with fellow herders to enhance both.
Incorporating pastoralists' ecological knowledge, understanding of local topography and geography, and animal husbandry skills into land-use plans is necessary for the development of realistic management policies to ensure sustainable resource use and protect local livelihoods.

[15] Fernandez-Gimenez. 2000. The role of Mongolian nomadic pastoralists' ecological knowledge in rangeland management." Ecological Applications. 10(5). pp. 1318-1326
[16] Ibid. 2000.

Additionally, there is a need for scientific analysis and research to help guide a transition to an effective property system without losing the beneficial aspects of mobile herding.

Herders' perceptions of the variability of their environment in space and time are reflected in their nomadic herding strategies and, where surveys have been conducted, herders have clearly articulated the ecological reasons for their mobility. Herders do not appear to recognize a connection between and among overgrazing, future pasture degradation and threats to their livelihoods. Most herders generally share the perception that degradation is either an inevitable process of earthly aging or a temporary and reversible phenomenon and as a result do not perceive an imminent threat to their local environment. This existing body of traditional knowledge and attitudes provides a significant basis that the project could build upon or seek to modify in working with stakeholders to develop practical and appropriate ecosystem management practices.

There are gaps in the scientific knowledge and information baseline that will need to be filled to improve conservation management. The biological and environmental surveys conducted in the region have generated useful data, but it is at least fifteen years old. Basic abundance and location data are not available for most areas and monitoring programs to detect changes in key parameters do not exist. In addition systematic surveys of the flora and fauna have not been conducted in the region and key questions with respect to the distribution pattern of important species, species ecology, and population dynamics of exploited populations and many other aspects of ecological interaction remain poorly understood.

Knowledge Networks, Civil Society, & Education. In recent years, the Mongolian Foundation for Open Society has financed a broad based series of interventions to encourage the free flow of information in Mongolian Society. Rural radio has been encouraged through grant competitions, training provided to enable media organizations to raise funds and maintain independence, and curriculum for journalists developed. In addition, enabling local people across Mongolia to access the internet is another priority for the foundation and work continues on developing a sustainable, appropriate way to do this.

Regional Efforts for Biodiversity Conservation: Russia, China, Mongolia and Kazakhstan signed the Altai Mountain Convention on Sustainable Development "Altai Convention" in Urumqi, China in 1998. The Convention's priorities include:

- Establishing trans-boundary PAs and biodiversity programs, including a joint species conservation strategy;
- Developing ecologically and culturally appropriate, and economically competitive land use systems and support for such land use systems, including traditional knowledge and practices;
- Providing for environmental safety strategies;
- Developing an environmentally sound energy supply and transport/communication infrastructure;
- Sustainable trans-boundary tourism development based on local community involvement;
- Cooperation in the fields of culture, science and education, including protection of sites of cultural, historical and religious significance.

The Altai-Sayan Millennium Initiative was adopted by eight regions of Russia, four Aimags of Mongolia, and by Kazakhstan at the International Forum in October 1999. The initiative:

- Adopts the ecoregion based conservation approach, whereby ecological processes are viewed and protected as a unique entity regardless of administrative boundaries.
- Recognises the link between conservation and social and economic development.
- States that conservation of natural processes should be the main development objective.

- Calls for international support for the conservation of global ecosystem and biodiversity values.

This PDF-B project development process as well as a similar GEF funded project development grants in Russia and Kazakhstan have built upon this regional work and supported productive preparatory consultations on devising a regional program for the conservation of biodiversity in the Altai Sayan. At the last meeting in Almaty in February of 2003, Government and civil society representatives from Russia, Kazakhstan and Mongolia agreed to establish a regional steering committee to facilitate regional cooperation under the respective full projects in each national region of the Altai Sayan.

Baseline Summary: Under the baseline situation, global environmental values are not conserved. Despite the importance of the existing system of protected areas, they are insufficient in their size and connectivity to act as a long-term biodiversity repository for the region. In the meantime, biodiversity is being lost in the productive landscape due to fundamental changes across the landscape (larger, more intensively grazed areas, forest cutting, intensive exploitation of species).

8. Proposed Project Alternative Course of Action

Objective: Conservation and sustainable use of globally significant biological diversity in Mongolia's Altai Sayan ecoregion.

Purpose: The successful completion of the project will result in stakeholders devising innovative and adaptive practices to mitigate and prevent threats to biological diversity by applying new partnerships, conservation tools, information, and sustainable livelihoods to conserve biological diversity.

Immediate Objective 1: Biodiversity conservation objectives integrated into productive sector institutions and policies. (GEF Financed & Co-financed).

Output 1: Conservation Capacity of Productive Sector Institutions and Policies Is Strengthened.

Activity 1.1 Strengthen cross-sectoral Aimag Councils for Sustainable Development (ACSD) to integrate conservation and development in each of the four aimags. Under this activity, project resources will strengthen the four ACSDs by providing them with on-the-job training in the development of land-use management plans. The project will also recommend strengthening Mongolian law by requiring that all *aimag* and *soum* land-use plans address sustainable development goals. The project will ensure that the biodiversity conservation objectives will be incorporated into these plans, strengthening their conservation capacity. ACSD capacity will be strengthened through training for its members in integrated resource management and looking beyond traditional jurisdictional boundaries, facilitating the integration of conservation objectives with those of economic and social development.

The application of these sustainable development plans into *aimag*-level government planning processes will be an important milestone for measurement by the mid-term evaluation of the project. By the end of the project, stakeholders will integrate sustainable development plans into the planning framework at the *aimag* level, guiding land use decision-making by providing an open forum for discussions and debate. Based upon this work, each *aimag* office will compile bi-annually a basic "State of the Landscape" report, printed in Mongolian and Kazakh where appropriate. By making this information readily available to the public and to the press, the ACSD will strengthen the web of accountability within Mongolia's civil society.

Activity 1.2: Herder families form herder communities as a basis for community-based development and participatory management of natural resources. Under this activity, the project will empower herders to establish these "herder communities" (HC) in eight priority areas at their own pace and in their own self-determined way. The purpose of the HCs is to "ground" the landscape conservation in a practical and familiar context for local people to understand and to implement.

Herder communities formed by local people themselves provide the most promising institutional basis for participatory natural resource management and community-based development at the local level. "Community" in this sense means a groups of herding families who agree to coordinate their activities around key, area-based resources such as seasonal camping areas, water points or marsh-land, or to cooperate in marketing of animals or raising fodder. The major advantage of forming "herder communities" is to mobilize bottom-up solutions on spatial land use plans. Herder themselves will present the best suitable ways to increase the value and benefit. To date, WWF, GTZ, and NZ/ADAF, working with the Government, have capitalized upon this tradition and organized communities for cooperative resource access management. Applying the approaches, skills, and experience from these initiatives, the project will work with herder communities to empower grass-roots rural development and conservation organizations.

Expanding upon established models, HCs will be legal entities, registered as a cooperative or an NGO (whichever is most appropriate for each specific locale), allowing for the transfer of limited natural resource management rights from the Government to the legal entity. Although community-based management programs allow for the transfer of a suite of rights to the community, in certain areas particular resources are of higher value or interest to community members. Examples of rights to be transferred include wildlife management and hunting, pastureland management and grazing, tourism and timber harvest management. HCs will demonstrate innovative, sustainable methods of ecosystem management focusing upon these resources, as described in Outcomes #3&4.

The project will enable HCs, working with *soum* and *aimag* authorities, to develop simple resource use consultation and conflict resolution structures appropriate to specific locales. People will define the ecosystem in their own terms, describe the goods and services being provided by the ecosystem, and decide upon trade-offs in how to manage them sustainably.

Activity 1.3: Integrate biodiversity into productive sector policies and strengthen policy enforcement. In rural Mongolia, herder organizations and local branches of NGOs are emerging as innovators in co-managing grasslands and protected areas together with *soum* governments, the MNE, private enterprises and PA authorities. The purpose of this activity is to strengthen existing policies and institutional practices in support of this promising trend.

1.3.1 Enable the MNE and MFAg to define clearly their key roles in promoting conservation in the productive landscape and strengthen their cross-agency collaboration for the same. Under this activity, stakeholders will review the existing policy framework with respect to protected areas, buffer zones, law enforcement and securing benefits of sustainable resource use for local populations. Policies will be revised to support the promising trends in community-oriented management and local initiative and to facilitate responsible community-government partnerships. This will include specific community-based management pilot program initiatives.

Biodiversity related guidelines, criteria and codes of practice will be formulated and incorporated into sectoral programs such as regional development plans, forestry, water, and agriculture management, and environmental impact assessment practice.

This will include action points for maintaining the natural habitat mosaic across the Altai Sayan landscape, including: 1) specific actions forest managers can take to maximize habitat diversity within a forest; 2) specific actions herders can take to manage grazing to maintain mountain meadows to encourage habitat diversity in an pastoral ecosystem context.

1.3.2 Strengthen informed decision making. In this activity stakeholders at the national and aimag government levels will strengthen informed decision-making and results monitoring by developing and applying policies that mandate adequate public and professional input (best available science) prior to decision-making. For example, the current sport hunting policies will be revised to ensure they provide adequate safeguards and adequate conservation funding. Policies will create linkages between the harvest of biodiversity resources and requisite knowledge of the existing resource base to make certain wildlife off-take remains within sustainable limits.

1.3.3 Strengthen environmental law enforcement. Under this activity, stakeholders will establish cross-agency policy enforcement agreements and capacity among the border patrol, soum and bag inspectors, and the police. Project resources will help strengthen cooperation between enforcement officials and local communities and herder groups. The project will support a comprehensive campaign to educate local stakeholders regarding existing and proposed policies and solicit broad involvement in policy formulation. This will include supporting the translation of policies into Kazakh to increase accessibility and knowledge. Focus will be upon three target groups: aimag and soum center residents, school age children and herders living within protected area boundaries. Input from local people will be sought on how to better enforce environmental laws through the use of incentives and disincentives.

Project resources will help the Ministry of Nature and Environment (MNE) improve its environmental review function with respect to economic development (forestry, tourism, water management) practice. *Enforcement requirements of existing laws will be clarified* for all Ministries. Training will be given to *aimag* and *soum* environmental inspectors as well as Border Authority Staff. The project will conduct annual training courses and seminars in each *aimag* of concern. Example topics to be covered include: environmental law enforcement principles; biological monitoring and survey techniques; CITES implementation; principles of forestry and rangeland management; and community outreach and public awareness.

Activity 1.4: Build constituency for sustainable development and conservation.

1.4.1 Quantify values and benefits of biodiversity and ecosystem health. *Under this activity, economic studies will be conducted to bolster the rationale for conservation of biodiversity.* This kind of information gives stakeholders a more complete perspective on the value of biodiversity and therefore to recognize trade-offs being made as part of the normal decision making process, to assess the long-term consequences of those trade-offs, and to design and implement effective policies to minimize them. Experience in other parts of the world shows that highlighting the values and benefits of biodiversity can be a catalyst for tipping the policy and decision making process in favor of sustainable use and conservation.

The following is an indicative list of the type of studies that will be conducted:

- Quantifying “dollar value” of ecosystem services and the “costs” of activities that degrade them to highlight trade-offs inherent in decision-making.
- Market attributes & economics of extractive use and non-extractive use;
- Tourists’ willingness to pay increased protected area entrance fees.
- Feasibility of environmental service-based finance mechanism.

- True value and cost of maintaining world-class sport hunting resource.

1.4.2 Program to strengthen HC and NGO roles as conservation advocates. The project will work with HCs and partner NGOs like the Women's Federation, the Youth Association and the Children's Centre to introduce conservation and sustainable development to civil society and to build a constituency for its basic tenets. An education campaign will emphasize simple landscape conservation and sustainable development concepts such as basic ecology, resource management and sustainable development.

Public interest and advocacy groups' capacity to advocate for ecosystem management and to hold policy makers accountable will be strengthened so they are able to play a "watchdog" role, ensuring that an equitable approach is taken by promoting open planning processes, organizing and informing constituents, requiring accountability from government at all levels, financial institutions, international organizations, and companies.

1.4.3 Enhance the youth constituency program through innovative education programs for schools and other youth organizations. Part of this work will build on the teacher training programs initiated by the International Snow Leopard Trust and US Peace Corps and will be expanded to include each of the four aimags under the project. In cooperation with the Mongolia Foundation for Open Society (Soros Foundation), the project will sponsor two one-year ecology and sustainable development seminars to be taught at MSU- Khovd. At the same time, the project will work with local protected area administrations to expand the use of protected areas as places of learning.

1.4.4. Establish community education centers. The project will develop model community environmental education centers in Bayan-Olgii and Renchinlhumbe. In Bayan-Olgii, the dedicated site will serve as a community-meeting center. It will feature display space, library facilities, and internet access. A wetlands area proximate to the city and along the Khovd River will be preserved as an outdoor learning center utilized by area school children. This activity will occur with the support of the Mongolia Foundation for Open Society (Soros Foundation).

<u>Output 2: Information baseline established and strengthened as basis integrating conservation into productive sectors.</u>

Activity 2.1: Conduct biodiversity and socio-economic surveys and targeted research to support proactive management. To supplement the existing information baseline, basic aerial photographic and/or satellite imagery coverage of priority areas within the Altai Arc and Sayan Basin will be secured. Ground-truthing surveys and assessments will be conducted in the same areas in order to establish the basis for ongoing survey, research and monitoring.

Field surveys of priority species, habitats, and environmental parameters will be conducted over the lifetime of the project to build on the information baseline. Types of surveys will include:

a) Species inventories: distribution, abundance, and condition of key species;
b) Forest type condition, and extent of coverage. Riparian habitat condition, and extent.
c) Rangeland condition and carrying capacity,
d) Resource use patterns, including gender and resource use and traditional knowledge; and
e) Key socio-economic parameters of people in priority areas, including herd sizes, income levels, educational opportunities, and transhumant migration patterns.

By the end of the first six months, the project will have established a cooperative agreement among MCC, HC, Mongolian State University in Khovd, the Academy of Sciences, *aimag* and *soum* Environmental Agencies, appropriate NGO's, Protected Area Authorities, and qualified NGOs for conducting field surveys. The surveys will be designed and conducted in a way that is sustainable in the Mongolian context. Surveys and monitoring will be conducted with outside technical support in an appropriate manner to strengthen the capacity of partner institutions. Project resources will enable MNE to devise a survey methodology that is standardized, low cost, participatory and that strengthens local capacity. As a long-term capacity building measure, project resources will also serve to strengthen research and information exchange partnerships among Mongolian institutions and between Mongolian and foreign academic and non-profit research institutions.

Limited, targeted research also will be conducted to more clearly define or understand the conservation landscape in the Altai Sayan:

a) Species ecology (habitat needs, species ecology, movement, feeding patterns);
b) The question of competition between wild and domestic herbivores over grassland resources;
c) Trends in species composition of rangeland plant communities and forest habitats;
d) Wildlife harvest and trade in the region. Will apply lessons from the Eastern Steppes Project;
e) Threatened umbrella species and associated habitats. Will build upon the current activities of organizations such as the Denver Zoological Foundation and the International Snow Leopard Trust. Work will focus upon border regions and areas of HC activity. Initial effort will cover three Argali populations, two snow leopard areas and one brown bear location.

Data will be compiled in standardized map and report formats and the survey methodology will follow recommended best practices and accepted international standards. Surveys will be designed to be as participatory and educational as possible. For example, resource-use assessments could involve youth organizations and/or NGOs to help map the boundaries of forest or grassland use in priority habitat areas.

Activity 2.2 Design and establish participatory monitoring and management protocols for data gathering, and analysis and management. Under this activity, monitoring of key biological, ecological and economic parameters will be conducted. Standardized protocols for monitoring and assessment – for data gathering, analysis and manipulation – will be designed and piloted in a network of four monitoring sites in the Altai Arc and two in the Sayan Basin. Monitoring will also be carried out to measure changes in selected populations of wildlife, in species composition, structure, and density, and the impacts on threatened habitats, species from, grazing, logging, and hunting. To minimize recurrent costs and maximize the potential for local stakeholders to contribute, the protocols will involve local organizations, where feasible, in the monitoring of key indicators of ecosystem health, species condition, number, and location.

The most important aspect of the participatory nature of this monitoring will be the involvement of the HC in monitoring/mapping to support improved livestock management. HC will be enabled to gain a better understand of grazing patterns, livestock numbers and carrying capacity in their own local areas by mapping the boundaries of their customary seasonal grazing areas, forest use, and wildlife habitat areas in their own way. Resources such as wells, salt licks, calving/lambing sheds, and water sources will also be mapped. Project resources will facilitate a process in which each HC develops a simple way of estimating the carrying capacity of grasslands for livestock and wildlife.

Data management systems will be strengthened in the project area in an appropriate manner. Basic data management is crucial to an institution's ability to access and use the information to inform decision-making processes.

Under this activity, GEF resources will support stakeholders in strengthening their existing nascent GIS capacity. This work was already begun by WWF as part of their contribution to PDF B process. Data needs will be reviewed and management protocols standardized within MNE and especially among the four aimag protected area offices. Existing databases and GIS software will be incrementally upgraded, ensuring that they are adequate to manage data gathered by survey and monitoring efforts and are compatible with international databases. The upgrade will promote the use of the data by decision makers and planners across sectors, including the private sector.

Activity 2.3 Conduct training to enable government and local herders and other stakeholders to incorporate basic biodiversity conservation information into their productive sector work. To effectively integrate conservation and development, decision makers and managers need to know where to access and how to apply information to policy development and resource management. Uncertainty and lack of information are constraints that decision makers must face daily. To be able to incorporate information into the decision making process, one has to be able to learn while doing: to manage adaptively. Project resources will strengthen the capacity of key decision makers at the national, regional and municipal levels to utilize information for management purposes through hands-on practical demonstrations. Key staff from the main Ministerial departments will receive training in adaptive management. Knowledge testing administered before and after training sessions will assess training results.

Information management and data analysis training will bolster the capacity of:

- Ministry of Nature and Environment (MNE), including the National Forest & Water Department, Protected Area Directorates, and aimags and soums to collect and analyze data on forest biodiversity and forest resource use patterns, timber, non-timber forest product use, and socioeconomic data and inform decision makers on forest resource management.
- Ministry of Finance, Ministry of Infrastructure to apply information to the management of economic development planning, including "best practices" for infrastructure engineering.
- Key decision makers at the local level – HC leaders, aimag officials, PA authorities, and aimag and soum governors – to enable them to understand how they can effectively utilize this information for management purposes through hands-on practical demonstrations.

The project will also offer training programs as required to maximize the positive effects of basic GIS capabilities. The project will work with the key decision makers at the local level – HC leaders, *aimag* Nature Agency officials, PA authorities, and *soum and bag* governors – to enable them to understand how they can effectively utilize this information for management purposes through hands-on demonstrations.

Immediate Objective 2: To strengthen "traditional" protected area-based approaches by expanding their scope to include the landscape around them.

Output 3: Landscape-based approach to conservation established and operational

Activity 3.1. MFAg, NGO and protected area stakeholders construct landscape-level biodiversity conservation plans for Altai Arc and Sayan Basin. Applying the landscape species approach[17], these management plans will define "conservation landscapes" in the Altai Arc and the Sayan Basin. Each will apply landscape ecology principles to determine ecological needs and specifying biodiversity conservation activities to be implemented within each of the priority protected areas[18].

[17] Sanderson, E.W. et. al.

[18] Priority Protected Areas: Altai Mountains: Altai Tavan Bogd NP, Siilkhemiin Nuruu NP, Tsagaan Shuvuut SPA, Turgen Uul SPA. In Sayan Mountains, Khoridol Saridag SPA and proposed Tengis- Shishgid SPA.

Each plan will identify priority habitats for conservation and essential linkages among them in order to enhance landscape connectivity, including transboundary linkages.

The biological requirements of priority species and plant or animal communities (home range, feeding or refuge areas, nesting) will be overlaid on landscape maps in order to identify key habitats supporting these species and illustrate their location and across the landscape. For example, the priority habitats of local argali and snow leopard populations will be identified and mapped – from cover areas to grazing/hunting – as will habitats providing services such as watershed protection and erosion control. Landscape-scale biodiversity conservation priorities will then be compared to the corresponding human landscape (land-use type and intensity, land ownership, etc.). Stakeholders will develop these plans for Altai Arc and Sayan Basin through a collaborative process among academic institutions, MNE and MFAg, NGOs, and HCs that will be able to draw upon existing knowledge and supplemental surveys and analysis conducted under Output 2.

These two landscape conservation plans will provide the conceptual framework for confirming the selection of the 3-4 priority protected areas and for identifying priority habitats linked to or nearby these priority protected areas. The project will refer to these combined areas – protected areas and habitats in the productive landscape – as "priority conservation areas." These priority conservation areas will then serve as demonstration sites where community-based management, sustainable resource use and other practices are piloted.

Activity 3.2 Devise and Implement Conservation and Recovery Plans for priority landscape species and ecosystems. Under this activity, species conservation plans will be devised and implemented by the second year of the project for argali, snow leopard, musk deer and for other priority species by year 4. The plans will describe the necessary steps to be taken in order to insure long-term species conservation.

The planning process will use vegetation maps, occurrence data, and published life-history information to create habitat-based distribution maps for rare and priority taxa. Strategic habitats in the areas among the priority protected areas will be identified by applying priority species population goals to habitat distribution maps. Information generated under Output 2 will support the development of the plans and their habitat-based distribution maps for rare and priority taxa. The plans will identify habitats that could satisfy the minimum conservation goal or significantly enhance the survival potential of inadequately protected taxa. These strategic habitats could include a mix of large and small habitat patches, in the form of "corridors' or stepping-stone connections among habitat patches.

To ensure the effective protection of critical habitats, this process will use vegetation maps, data on species numbers and location, and published life-history information to create habitat-based distribution maps for rare and priority taxa. The project will work with each HC, as part of their annual planning exercise, to identify habitats that will support viable population sizes and enhance the survival potential of inadequately protected taxa. The SDCs will incorporate these plans into process of guiding forestry, water, grassland/agriculture, and conservation work.

Activity 3.3 Strengthen priority protected areas' ability to apply landscape principles to conservation action. This activity will strengthen PA management's capacity to enhance the ecological connectivity between each priority protected area and its surrounding landscape as well as to plan and act outside of the protected area "box." This will entail strengthening the ability of each aimag PA office and PA manager to look beyond the boundaries of a protected area by emphasizing that protected areas are not islands unto themselves and that PA management should therefore reach out to surrounding stakeholders to develop long-term sustainable management approaches.

This will include training for protected area staff in the basic elements of landscape ecology, conservation biology, participatory management, and empowering communities and strengthening the national training program by incorporating the principles of landscape ecology.

As part of this capacity building activity, the borders of the priority PAs will be reviewed vis-à-vis landscape conservation priorities defined under Output 3: The borders of each PA, as well as the multiple-use zone within each area, will be reviewed to determine how effectively each area is being managed to incorporate critical habitat, based on an assessment of the ecological requirements of "umbrella" species. "Critical habitat" is defined as that habitat necessary for feeding or calving, mineral licks, and to facilitate movement or disbursement across the landscape (corridors and patches). Management will then be re-aligned and re-defined as necessary to promote landscape connectivity and biodiversity conservation linkages within protected areas and between protected areas and their surrounding landscape.

This effort will build upon the field assessment and monitoring conducted under Output 2 and the extensive work done with herder groups by the NZAID and WWF partners during the PDF-B period regarding livelihood development and natural resource and protected area management.

Activity 3.4. Herder communities designate priority habitat areas in the landscape around each priority PA and develop local priority habitat conservation plans. Building upon Activity 3.1 this activity will "ground" and decentralize the implementation of the landscape plans by enabling stakeholders to designate their priority habitats in support of the plan. The conservation planning process under Activity 3.1 provides the strategic framework and conservation rankings for stakeholders to designate at least three priority conservation areas in the area around each priority protected area or between two or more of them. These conservation areas would be priority habitats in the productive forest, grassland and aquatic/riparian landscape and will encompass the highest conservation values in each area.

The project will support each partner HC in identifying priority habitats and developing habitat management plans for their respective use areas. This will involve bringing stakeholders together at the *soum*-level to construct and implement habitat conservation agreements for the priority areas. These plans will cover issues such as pasture allocation and enforcement, forest management; each plan will differ according to the issues that are particularly important to each HC. The plans will serve as models for habitat conservation planning and management throughout the Altai-Sayan.

Activity 3.5. Building upon Activity 3.4, local HC will develop simple and practical participatory management agreements for each priority landscape area. Essential to successful management of these areas is the interlinking of area management with that of the surrounding landscape through effective, community conservation partnerships among PA, *soum*, HC and NGO leaders. To do this, the project will:

- provide the resources necessary to bring stakeholders together in a collaborative effort to construct and implement ten-year agreements for each priority area. These simple and practical management agreements will emphasize enhancing the value of pasturelands for wildlife use and movement by establishing a pastureland management regime that is "wildlife friendly" in different habitat types during different seasons (e.g. Fall rutting grounds or calving habitat in the Spring). These management plans will be an integrated part of the landscape-based approach. Working together, national officials and local stakeholders will phase in participatory management of these areas progressively as appropriate, based on each stakeholder conservation agreement.

- secure agreement among stakeholders on the special management status to be applied to each priority area based upon its biodiversity values and the environmental services it provides. For example, agreement between herder groups, *Soums* for joint management of a biologically unique site might be secured. Or, a steep slope could be declared a watershed conservation area to maintain water quality. These habitat agreements will become part of the each HC's pilot sustainable development work under Output 5.

- build capacity at the regional and municipal levels for participatory conservation and natural resource management. Work under this activity will benefit tremendously from the models and experiential support provided by the GTZ Buffer Zone Development Project's body of work and staff, in building grass-roots conservation capacity outside protected areas in the "productive landscape." As pilot programs become self-supporting, the project will assist communities in additional priority areas to replicate and improve the pilot programs. Project partner NGOs will build capacity by building trust with local groups, disparate NGOs and *soum* governments to enable effective long-term collaboration. Project resources will support people-to-people learning for local leaders on participatory protected area management and conservation as well as organizing fora for sharing of lessons learned and best practices.

- establish Community Conservation Agreements on resource use within protected area borders. Under this activity, PA administrations, with assistance from the project, will realign the current multiple-use zones within the priority protected areas by working with local stakeholders to strengthen the current use agreements negotiated with herders. The project will support the expansion of the use of these agreements to involve groups of herders (HCs) rather than individuals. In addition, the project will work with the stakeholders to make certain the resulting "community conservation agreements" clearly define responsibilities and limits on time, space, and livestock as will the penalties resulting from failing to adhere to the agreement.

Activity 3.6 Strengthen priority PA infrastructure and staff capacity. Infrastructure of protected areas will be modestly strengthened at a scale allowing for park user fees and government budgetary resources to cover maintenance costs. The project will support the improvement of visitor centers, placing them in locations that increase effectiveness of information distribution and coverage for enforcement activities. The project will design and implement regular training programs for protected area staff built upon the lessons learned by GTZ, UNDP/GEF, WWF and the NZ/ADAF.

Training will be conducted to strengthen enforcement in two ways. First, by making better use of existing resources through cross-agency authorization for enforcement of protected area regulations. Second, by emphasizing collaborative enforcement through public-private, national/local alliances, and community and NGO partnerships for collaborative management.

Output 4: Strengthened Transboundary Conservation Action and Institutional Linkages.

Activity 4.1. Establish regional coordination committee for transboundary cooperation. This activity follows directly from recommendations issued by the representatives of Russia, Kazakhstan, and Mongolian Governments, NGOs, and UNDP during their final meeting of the Block B preparatory period in Almaty, Kazakhstan. The three Governments agreed to form a regional coordination committee to further transboundary work under this and other full projects. Committee members will work within their respective countries to improve coordination of conservation effort among border patrol, protected areas, *aimag*s and *soums*, community groups, academic institutions, and Government Ministries.

Activity 4.2 Elucidate trans-boundary conservation agreements for landscape conservation and regional planning objectives. The agreements should cover the following aspects of transboundary cooperation and clearly describe methods of implementation:

1) Regional/cross-border conservation programs for priority species (e.g. argali, snow leopards, taimen) and habitats;
2) Developing transboundary agreements for the collaborative management of protected areas and species and sharing of "best practices;"
3) Monitoring and enforcement procedures;
4) Poaching and illegal trade in wildlife and endangered species;
5) Border Inspection and Poaching Alleviation: developing and implementing a comprehensive border inspection program with training and enhanced enforcement;
6) Regional information management protocols;
7) Alleviation of negative, trans-frontier impacts such as pollution.

Activity 4.3. Regional Conservation & Sustainable Development Conference. To promote regional cooperation and understanding, the project will organize and sponsor one Altai Sayan conservation conference with participants from each of the four Altai-Sayan nations.

Immediate Objective 3: To successfully demonstrate how to integrate biodiversity into resource management and economic development practice & Policy. (GEF Financed & Co-financed).

Output 5: Grazing, forest-use, sport hunting management, and tourism, are re-oriented to support conservation while improving livelihoods.

Activity 5.1: Demonstrate community-based pasture management and livelihood improvement. How can herders balance pasture and grazing animals in space and time, in order to increase livestock productivity, herder well-being, pasture health, and the health of wildlife habitat and wildlife populations? The purpose of this activity is to enable stakeholders to demonstrate new answers to this question – new approaches to developing an effective integrated conservation approach in Mongolia: In so doing, the project will mitigate overgrazing, one of the main root causes of habitat degradation and biodiversity loss in the Altai Sayan. The project will work with local herders to strengthen existing associations by establishing model HCs, or in places where communities have not formed, to help herders mobilize themselves into HCs.

5.1.1 Strengthen existing customary forms of cooperation among herders through HCs. Priority areas within the Altai Sayan will be assessed for their pastureland management needs, stakeholder interest and potential, and wildlife habitat value. The project will then select three-four model pastureland management areas where HCs will be strengthened or established working with local herders, *soum* and *bag* leaders. Within the parameters established by Mongolia's Land Law, each HC will be developed by stakeholders to serve the function of a customary regulatory institution to allocate pasture and enforce sustainable grazing norms in the HC's grazing area. Funding from non-GEF partner sources will support the following kinds of activities:

- Delineate and map the boundaries of their customary seasonal grazing areas and key point resources (e.g. wells, salt licks), and secure formal recognition of this delineation from *soum* and *bag* leaders;

- Forge co-management agreements between each HC and their respective *aimag* and *soum* officials for each customary grazing area, clearly defining tenure rules allowing for flexibility and reciprocity of pasture use with other herder associations in times of need.

- Enable HC to improve productivity of their livestock by accessing knowledge, technology, and financing currently unavailable to them. For example: improved livestock quality by better breeding; marketing advice; micro-credit, contingent financing, and veterinary assistance.

- Allocate and manage water points and permanent structure areas to minimize land degradation and erosion, and/or unreasonable pressure by domestic animals on priority wildlife habitat.

- Develop simply system for herder communities to monitor current condition and trend in seasonal pastures to support adaptive grazing management, protection and rehabilitation.

Incremental GEF funding will:

- Develop a simple, yet effective method to measure the carrying capacity of their grasslands for both livestock and wildlife;

- Develop pastureland management plan for the customary grazing area that would establish sustainable pasture use parameters, seasonal wildlife habitat conservation areas and where appropriate establish practical ways to restore riparian zones within each grazing area;

- Test and implement viable inexpensive predator aversion techniques. In addition, the project will facilitate the implementation of a predator loss compensation program by cooperating with the International Snow Leopard Trust's ongoing initiative.

- Facilitate herder-to-herder learning through an annual workshop bringing together "model" herders, community leaders and technical experts from the region to discuss new concepts and lessons learned and best practices. This will include giving an annual award recognizing the herding family that best represents ideal sustainable biodiversity-friendly grazing management practices.

- Supplement agricultural extension services with information regarding ecosystem supportive livestock management practices;

- Develop model grassland restoration efforts to serve as learning areas for replication. Working with local institutions, the project will identify and conduct habitat rehabilitation activities, in riparian, forest, and pastureland areas.

5.1.2 Improve livelihood opportunities for herder communities*:* HC's that successfully establish themselves and work through issues highlighted above will be eligible for additional assistance in improving their domestic herding economies by having access to:

1. Orientation and training for how to access available micro-credit resources through UNDP, XAS Bank, ADB and the GoM.

2. Training through Irbis Enterprises' for producing finished yarn, felt, and hand-knit items from raw livestock products such as wool or camel hair. This would include marketing support from Irbis Enterprises, based upon market conditions.

3. Technical and organizational support for establishing a livestock bank consisting of a number of herds of livestock. Herders borrow animals, the offspring and produce from which they keep. They must return an equal number of young healthy animals to the bank after a specified period of time. Thus the bank maintains its assets by always having a young healthy herd and increases them through the natural breeding of livestock remaining with the Bank. One potential home for such a bank could be a local school. Schools maintain herds as sources of revenue and food for staff and pupils anyway; basing a livestock bank in a school would have the triple benefit of helping herders improve their livestock, helping local schools finance local children's education and finally allowing model herding to be used as a practical educational/vocational tool to encourage proper herd management with minimal herd loss and environmental impact.

Activity 5.2: Pilot areas are established for community-managed hunting program. The purpose of this activity is to enable stakeholders to demonstrate decentralized, community-based solutions to the conundrum: How can wildlife populations be managed on a sustainable basis? In so doing, the project will demonstrate solutions that involve local stakeholders and give them an incentive to mitigate over-hunting, a key threat to ecosystem integrity in the Altai Sayan. The project will work with MNE officials, local herders, and *soum* and *bag* leaders to develop wildlife HCs or community-managed hunting programs, in Myangan Ugalzat and/or Khokh Serkhiin Nuruu pilot areas. These areas historically supported relatively high numbers of argali. Despite declining argali populations in the Altai Sayan, recent surveys conducted during the Block B phase indicate viable populations of animals still exist in both pilot areas mentioned above. These areas have been used periodically as international sport hunting destinations for nearly two decades.

Under the current system, hunting permit fees go largely to Government coffers in Ulaanbaatar. The GoM charges US$18,000 for the privilege of hunting an Altai argali and US$700 for an Altai ibex. In 2000, twelve permits for Altai argali and 153 permits for Altai ibex were sold, generating US$275,000. This is a significant sum in rural Mongolia, where the daily income is approximately US$1-2/day.

Although a percentage of these fees are returned to the respective *aimag*, it is relatively small and there is no mechanism for this benefit to be reinvested back in the local areas where the trophy animals live, providing little incentive for local people to maintain viable populations of argali or any other game species, including ibex, and elk. Under this activity, the project will work with MNE to pilot community-based wildlife management to demonstrate the "win-win" results possible. Stakeholder communities would be created, modeled upon model CBWM programs in southern Africa and southwest Asia. The project will supply the initial technical support to organize community members, devise a mechanism whereby the local communities' share of revenues generated through sport hunting permits is equitably shared among all stakeholders. Project input will also help to establish sustainable off-take levels, and a participatory monitoring program.

Activity 5.3: Sustainable forest management practices are demonstrated. How can forests be managed on a sustainable basis in a region where there is little to no commercial harvest, but ample subsistence wood-use? The purpose of this activity is to enable stakeholders to demonstrate community-based forest management in Mongolia by applying Mongolia's tradition of forming herding communities to forest management. Community-based management of forests has been shown to effectively give local people an incentive to sustainably manage local forest resources.

The project will work with Ministry of Nature and the Environment officials, HCs, and *soum and bag* leaders to develop forest HCs, or community forest programs, in two pilot areas.

The priority areas identified under Output 3 will be assessed for their forest management needs, stakeholder interest and potential, and wildlife habitat value. The project will then select two model forest management areas where HCs will be established to work with local herders, *soum and bag* leaders. Within the parameters established by Mongolia's Land Law, and Forest Law each forest HC will be developed by stakeholders to serve the function of a customary regulatory institution to allocate forest and enforce sustainable harvesting norms in the HCs community forest area. More specifically, the project resources will be applied to help each forest HC:

- Delineate and map the boundaries of community forest areas and secure formal recognition of this delineation from national, *soum and bag* government stakeholders;

- Forge co-management agreements between each forest HC and their respective *aimag* and *soum* officials for each community forest area, allowing for flexibility and reciprocity of forest use with other resource associations in times of need. The project will work to build upon current re-forestation projects established by WWF. This will include building limited exclosures around important wetland and riparian habitats, training programs in forest restoration and developing community managed tree nurseries.

- Develop a simple, yet effective forest management practices to maintain forest ecosystem health and wildlife habitat while harvesting lumber on a sustainable basis for domestic, fuel-wood and construction purposes;

- Develop method for equitably distributing the benefits of sustainable forest management to stakeholders. Increase accountability and policy enforcement, including better control of harvest volumes through taxes, permits, and self-regulation.

Successfully established and operating forest HC's will be eligible for additional assistance in improving fuel-use efficiency, distributing efficient stoves, and building more efficient homes. Non-GEF partner funding will be applied to work with forest HCs to:

- Distribute and sell fuel-efficient stoves in the Altai mountain regions as a means to generate conservation revenue and conserve fuel wood where forests are under high pressure from fuel-wood cutting. Fuel-efficient stoves are manufactured and available in Ulaanbaatar through a GEF sponsored small-project. The project will assist forest HCs to distribute these in priority demonstration areas.

- Design and construct homes using sustainable building practices and alternative building materials. The project will provide technical assistance to HC members to access appropriately scaled techniques providing for increased insulation qualities while alleviating unsustainable harvest of limited wood product resources. In so doing, this project will benefit from lessons learned during the WWF home brick firing and UNDP-GEF sponsored straw-bale house projects.

Activity 5.4: Cultivate the emergence of apex institution for learning among community groups in the Altai-Sayan. At the community level, the project will build upon lessons learned by the GTZ Gobi Project, which has shown that experience sharing between herder communities and/or their representatives is the most effective mechanism to create dialogue among different actors in other areas and mobilize local community initiatives for livelihood development[19]. Drawing upon this experience, the project will establish a pilot community learning/training center to support and eventually provide fee for service support to herder communities across the Altai region. Such a center would learn from ongoing initiatives in the region and would draw upon the existing community learning center in Gobi. The center would serve as an "apex institution" for community groups fostered under this project and would be a place of learning for advanced organizational development skills in community-based conservation and resource management, appropriate technology, and more.

Such a learning center would help to overcome several knowledge and risk-aversion barriers that prevent people from pursuing alternative livelihood practices. Project support for this learning center would include:

- Conducting an economic analysis to determine the feasibility viable economic alternative options that diversify the current Altai-Sayan economy while limiting adverse impacts to the ecosystem. This will include: tourism, micro-enterprise development, value-added meat processing, and other value-added agricultural opportunities.

- Enabling the center to cultivate links with existing financial instruments like micro credit, insurance, and contingent loan financing programs into the rural areas where HCs have been established. This will enable people to finance ecologically sustainable business development and value-added agricultural programs.

- Facilitating linkages with the Irbis Enterprises handcrafts program by working with the International Snow Leopard Trust to improve access to national and international markets. Irbis Enterprises is a performance based conservation program that provides local people in snow leopard habitat with training and markets for the production and sale of felt and other woolen handcrafts in return for community commitment toward snow leopard, prey species and habitat conservation.

- Establishing model tourism trekking routes (building upon WWF's work) within priority areas in Altai Arc (e.g. Altai Tavan Bogd National Park) and the Sayan Basin and helping herders understand the realistic potential for and benefit of such kinds of tourism.

Activity 5.5: Enhance and re-orient existing revenue generation mechanisms for sustainable financing of conservation programs. The project's strategy is to mainstream biodiversity into productive sector practices, thereby "piggybacking" conservation on productive sector investments. Principle investments in land-use and resource-use management over the long term will have to come from re-oriented development expenditures. However, there will be additional ongoing, recurrent costs associated with mainstreaming biodiversity into productive sector practices.

Under this activity, the project will work to secure co-funding for the recurrent costs associated with applying biodiversity conservation objectives to productive sector activities. An important funder in the future of this kind of community and NGO-based work will be the Mongolian Environmental Trust Fund (METF), which is project to have $1.5 million in funding by the end of 2003.

[19] Schmidt, S. January 2003. GTZ Project Manager "Nature Conservation and Buffer Zone Development in and around Gobi Gurvan-Saikhan National Park". Personal Communication.

The project will work with METF to ensure that METF grant making guidelines support community-based conservation and practices that mainstream biodiversity conservation objectives into productive sector activities.

In addition, under this activity, the project will identify new fiscal tools and generate cost-recovery mechanisms community-based conservation and management and sustaining additional information sharing and trans-boundary management duties. The project will investigate options, including grazing fees and recreational use fees, assessing the feasibility of applying such fees, the willingness to pay, and the cost of implementation. During project implementation, cost recovery measures will be identified and matched to the activity. Project resources will support the design of these instruments and Government's agreement to test them will be a primary indicator for review during the mid-term evaluation. Examples of revenue sources include natural resource use fees, including grazing, forestry, mining, hunting and water use fees, and customs fees. A major anticipated source of funding will be the Government's reorientation of a portion of sport hunting license fees from the general state budget to local conservation efforts. In this respect, this activity overlaps with Activity 5.2

Immediate Objective 4: To implement a project that learns from it's successes and failures and shares these lessons and replicates best practices effectively among it's own stakeholders and with others.

Output 6: Monitoring and evaluation is applied as tool for adaptive management, assessment of project impact/progress, and replication of best practices.

Activity 6.1. Monitor and evaluate project activities and outputs on an annual basis. Each year a project management consultant with experience and knowledge of the project's design and history will work with the project manager and steering committee to monitor the project's performance and make any adjustments necessary. Evaluations will be conducted three times during the five-year lifespan of the project, beginning at the end of year one, end of year three, and end of year five. The project will utilize its M&E inputs as capacity building tools to encourage "learning while doing" among stakeholder groups. Following an agreed methodology, stakeholders will participate in expert-led analyses of project progress, assessing indicators of success and project progress milestones and identify adaptations to current practices to reach agreed goals.

Activity 6.2. Sharing lessons learned and replication of best practices. While this is described here as discrete separate grouping of activities they are, in fact, not. They are largely integrated into the project's design that focuses on local herder institutions and prioritizes working with many different partners. The projects approach is first to share lessons learned and then to replicate those practices with the most traction and utility, as rated by stakeholders themselves. First, lessons learned will be disseminated to a learning portfolio of projects (GEF-financed and others) of a similar nature or with similar components (e.g. grassland and grazing management, forest management, landscape approaches, ecotourism). Second, the project will use M&E outputs and project reports as inputs to facilitate larger cross-project learning and capacity building. This will include elements such as a portfolio analysis of lessons learned, publication in Mongolian and English of lessons learned papers, and learning portfolio round table discussions and field visits.

Replication of best practices: Replication of knowledge and best practices will build upon the sharing of lessons learned process described above and will be closely linked with the project's many partners and their larger productive sector programs as well as the project's other activities that build local capacity through herder-to-herder exchanges, encourage knowledge transfer by strengthening regional and transboundary cooperation and capacity building for individuals and institutions.

MFAg and MNE will be important partners in replication, given their national scope and mandate and especially MFAg's large ongoing programs in grazing and grassland management support by ADB and IFAD, among others. Working with these partners, lessons and experiences will be replicated in different geographic areas and/or scaled-up, whereby the project's lessons and experiences will be replicated within the same geographic area but funded by other sources.

This activity will utilize a mechanism proven to work under GTZ's project in the Gobi to replicate knowledge and practice through herder-to-herder extension programs, including work described in the different activities under Output 5, such as in Activity 5.4. Information will also be disseminated and shared through other channels such as those of NZAID, GTZ and WWF's regional NGO network. To ensure that this work receives the attention it requires, a full time position will be created in year two to direct the project's knowledge management and replication, using feedback from M&E activities.

Activity 6.3. Adaptive Management Training. Adaptive management will be practiced and managers given practical training in it. An understanding of the ecological context of each protected area will be instilled in protected area managers and stakeholders. The project will organize in each of the a*imag*s of concern, an annual one-week training program for a*imag* and *soum* and *bag* stakeholders. The purpose of these seminars will be to present lessons learned during the previous year and to introduce new and existing political leaders to general conservation and sustainable development concepts.

9. Project's Conformity with Other GEF Priorities

Country-drivenness: The Government of Mongolia fully recognizes that the well being of the country depends upon the continued health of the country's natural environment. The Good Governance for Human Security Programme, approved by the Government in 2000, supports policy formulation, operationalization and implementation of the Government's Action Programme of which priority no. 7: "to implement environment policy aimed at providing sustainable development and ecological balance by harmonizing protection of biodiversity with regional socio-economic development" is relevant for this project. Specifically, the project contributes to achieving sub-objectives 7.1 "to improve environmental management, monitoring and information mechanism in relation with the regional development concept" and 7.3 "to increase participation of citizens, economic entities, and NGO's through undertaking environmental awareness and ecological education programmes".

Further, the Government of Mongolia fully recognizes the importance of the country's grassland ecosystems, as animal husbandry and a growing tourism industry both depend directly on a healthy environment. Mongolia's National Biological Diversity Conservation Strategy (NBDCS) accords the Altai Mountains and the Sayan Mountains a high priority for conservation and describes the Altai Sayan as one of the country's most unique and biologically important areas in terms of species richness, presence of endemic and/or rare taxa, and overall species diversity. The NBDCS also lists the Altai Sayan as a top priority region for establishment of new protected areas. This project furthers practically every one of the NBCDS priority focal areas: land and resource management; protected areas; unprotected lands; sustainable resource management; habitat restoration; legislative initiatives; conservation administration and policy; research and technical support; environmental education; ecotourism; and collaborative partnerships. Notably, the NBCDS stresses the need to "better integrate the management of land, water and biological resources in order to protect and renew the ecological processes on which biodiversity depends." The project furthers the objectives of the National Economic Development Plans in that it is designed to promote innovation in developing improved sustainable agricultural livelihoods.

Conformity of project to GEF Programmatic Framework: The project is fully responsive to and conforms to the GEF Operational Program (OP) #4 Mountain Ecosystems and is also relevant to OP#3 Forest Ecosystems and OP#12 Ecosystem Management.
The project is fully in line with the GEF's Strategic Priority 2 for the Biodiversity Focal Area - "Mainstreaming Biodiversity in Production Sectors and Landscapes". The project will mainstream biodiversity in the production landscapes and relevant sectors by integrating biodiversity conservation principles and promoting sustainable natural resource management within the pastoral economy, which is the mainstay of the national and local economy. The project will also influence sector policies and programmes in agriculture, forestry, fisheries, and tourism sectors through support to systemic and institutional capacity building in government agencies and promotion of integrated planning and management approaches at the central, *Aimag*, and local community levels. The project is also relevant in part to Strategic Priority 1 – "Strengthening Protected Area Systems" – in view of its efforts to increase the long-term sustainability and effectiveness of PAs by improving management regimes, promoting partnerships between PA management and local communities, promoting connectivity to enhance coverage and address species protection needs, and by strengthening transboundary conservation (in coordination with parallel projects under development in Russia and Kazakhstan).

The project conforms with the CoP eligibility criteria by:

- promoting conservation and sustainable use of biodiversity in environmentally vulnerable areas including mountainous areas and forests;
- promoting conservation and/or sustainable use of endemic species;
- applying an ecosystem approach as the primary framework for action;
- supporting capacity building for local communities.

Project's Link to UNDP-CCF: This project has been designed so that it capitalizes upon and is complementary to UNDP-Mongolia's Country Cooperation Framework. UNDP's Mongolia's CCF has three thematic areas: democratic governance, economic transition and poverty reduction, and sustainable natural resource management. Within this third area, UNDP's sub-program on sustainable resource management aims to ensure that environmental considerations are integrated into planning and development processes at the national, regional and local levels. This goal is in harmony with priority 7 of the GoM's current program of action – Good Governance for Human Security – which promotes 'sustainable development by harmonizing the protection of biodiversity with regional socio-economic development.

10. Implementation Arrangements

Government's Role: Project execution will adhere to UNDP nationally executed project requirements. The Ministry of Finance and Economy (MFE) is the focal point for coordinating UNDP's technical cooperation in Mongolia. The Ministry of Nature and the Environment will serve as the Designated Institution (DI) in charge of the project execution. The DI is accountable to MFE and UNDP for the production of outputs and for the achievement of project objectives. To achieve project objectives and produce required outputs, MNE will partner with other "Implementing Agencies" (Ministries and NGOs). The administration of project funds will be the joint responsibility of the UNDP and the MNE. More specifically, MNE project finance and management responsibilities will include: 1) certifying expenditures under approved budgets and work plans; 2) tracking and reporting on procurement and outputs; 3) coordinating the financing from UNDP and GEF with that from other sources; 4) assisting in preparing Terms of Reference for contractors and required tender documentation; and 5) chairing the Project Steering Committee.

Funds for the activities in which partner organizations have primary responsibilities will be devolved to them in lump sum, under approved annual work plans and budgets. Each partner will then be responsible for certifying their own expenditures under approved budgets and workplans.

Implementing Agency: Under UNDP's NEX guidelines, there may be more than one implementing agency. Implementing Agencies may include government institutions, non-governmental organisations (NGOs), other UN agencies or private firms. The Implementing Agencies are designated to deliver specific inputs to the project through an agreement with the Designated Institution and UNDP CO. The roles of the Implementing Agencies are as follows:

a) The Implementing Agency provides services and carries out activities such as the procurement and delivery of project inputs and their conversion into outputs;

b) The Implementing Agency is accountable to the DI for the quality, timeliness and effectiveness of the services it provides and the activities it carries out. It is also accountable for the use of funds provided to it. The Implementing Agency reports to the DI.

The Ministry of Food and Agriculture, the World Wildlife Fund and the Initiative for People-Centered Conservation (IPECON) will be important Implementing Agencies. UNDP has contractual agreements devised specifically to accommodate NGO partners in projects like this and this is the mechanism that will be used to involve NGOs as full partners in implementing most field-level activities under Outputs 1-5.

UNDP's Role: The UNDP Country Office will support project implementation by monitoring project budgets and expenditures, recruiting and contracting project personnel and consultant services, subcontracting, procuring equipment, and providing other assistance upon request of the MNE. Project implementation arrangements will streamline and decentralize UNDP's normal service delivery procedures in the interest of cost-effective and time-efficient project management. The UNDP Country Office will also monitor project implementation and achievement of the project outputs and ensure the proper use of UNDP/GEF funds. Financial transactions, reporting and auditing will be carried out in compliance with national regulations and UNDP rules and procedures for national execution. The UNDP Country Office will carry out its day-to-day management and monitoring functions through an assigned Project Officer in Ulaanbaatar, who will be also responsible for the day-to-day coordination with the project team.

Project Steering Committee (PSC): A PSC will be established and will meet semi-annually to provide overall strategic policy and implementation guidance and support. The PSC will consist of one member from each of the following organizations:

5. Governor of Bayan Olgii *Aimag*
6. Governor of Khovd *Aimag*
7. Governor of Uvs *Aimag*
8. Governor of Khovsgol *Aimag*
9. Ministry of Nature and Environment
10. Ministry of Food and Agriculture
11. World Wildlife Fund -Mongolia
12. UNDP
13. Representative from Woman's group
14. Herder association
15. Border Guard Service

The PSC's role will be comprised of four main responsibilities: First, when required, the PSC will serve as a forum for stakeholder input and discussion. Second, the PSC will oversee project implementation, meeting on an annual basis to review project progress. Any major changes in project plans or programs will require approval from the PSC in order to take effect.

And thirdly, the PSC will resolve any conflicts or disagreements that arise with respect to project activities that cannot be resolved by the project working group. Fourth, PSC members will facilitate the implementation of project activities in their respective organizations, ensure that cooperative activities are implemented in a timely manner, and facilitate the integration of project-inspired activities into existing programs and practices.

National Project Director (NPD): MNE will appoint an NPD from a department dealing with strategy, planning, land use management, biodiversity conservation or protected area management. The NPD will chair the PSC. The NPD will be responsible for ensuring the proper implementation of the project on behalf of the Government. In doing so the NPD will be responsible for overseeing proper project implementation for the Government of Mongolia.

Project Working Groups: On a day-to-day level, the project will rely upon the more frequent and "informal" input of two project working groups (PWG): one in Altai and one in Sayan. The PWG will be comprised of officials from the PSC institutions and other institutions when appropriate. The PWGs' role will be much more "hands-on." It will meet frequently to catalyze the cross-agency coordination and collaboration by working out the details of how this will be done with respect to specific project activities in Ulaanbaatar and in the *aimags*. . The project manager will chair each PWG and will coordinate workplans through the group as well. A proactive PWG will be crucial to the project's successful outcome. Over the longer term, it is envisioned that the PWG will facilitate the integration of project-inspired activities into existing programs and practices. To streamline collaboration with MFAg/IFAD's rural poverty alleviation programme in Khovsgol *Aimag*, (the Sayan region), this project's PWG will be based within MFAg/IFAD's project office in Khovsgol *Aimag*. In the Altai region, project coordination meetings will be held semi-annually between the PWG and MFAg/ADB project office.

Project Staff: All staff will be hired in an open and fair competitive basis following UNDP standard hiring procedures. The main project office will be established in the Altai region and staffed by a project manager and three support staff. The project manager will be based in Khovd, but will spend at least 30% of his/her time in UB. According to the Regional Development Policy, Khovd is going to be pillar center for the Western region. Two technical international volunteer positions, and their local counterparts will be based in Khovd. The officer for the project in Bayan-Ulgii will be a person who is fluent in Kazakh, from the area and understands the culture. Student interns from the State University in Khovd will also contribute to the project team. A satellite project office will be established in UB, where the project manager will work when in UB and where the bulk of the administrative and accounting support for the project will be done.

The project manager will be a full time employee of the project and will report to the NPD and UNDP. The project manager will be in charge of overseeing day-to-day project implementation and management of project activities, organizing and overseeing national and international consultant input, and confirming the quality of the project's outputs. One of the most important responsibilities of the project manager will be working effectively with members of the PWG to ensure that project-inspired activities proceed on schedule within each partner Ministry and non-governmental organization. The project manager will also provide substantive technical input per his/her individual area of relevant expertise.

Aimag-level Implementation: Project implementation at the aimag level will complement the existing aimag administrative structure. The project office will be located in Olgii. Project-inspired activities will be implemented at the aimag level through the Aimag Sustainable Development Committees for aimag-wide activities and directly with herder groups and soum and bag governors in the priority areas under the landscape conservation plan.

These various institutions provide a forum in which stakeholders can express and discuss views on natural resource management issues, facilitate project implementation and serve as conduits for the two-way flow of information from the project to local communities and *vice versa*.

The timetable for implementation may be revised during the inception phase of the project.

11. Financial Arrangements

Budget 1 –(Co-financing breakdowns to be refined during project inception workshop).

Project Outputs	Co-financing	GEF	Total (US$)
1. Conservation Capacity of Productive Sector Institutions and Policies Is Strengthened.	**475,000**	**385,000**	**860,000**
Strengthen aimag-level Sustainable Dev. Commissions to integrate conservation and development	20,000	90,000	110,000
Stakeholders form Herder Communities	210,000	110,000	320,000
Law and policy framework's support for community-based conservation and development is strengthened.	145,000	40,000	185,000
Strengthen policy enforcement	100,000	45,000	145,000
Build constituency for community-based conservation.	0	100,000	100,000
Quantify values and benefits of biodiversity and ecosystem health.	**tbd**		**tbd**
2. Information baseline established and strengthened as basis integrating conservation into productive sectors.	**194,000**	**525,000**	**719,000**
Conduct biodiversity surveys/ research to support proactive management	114,000	210,000	324,000
Design and establish participatory monitoring protocols	80,000	160,000	240,000
Upgrade information management and GIS & Information use training.	0	75,000	75,000
Train staff and local stakeholders in information use.	0	80,000	80,000
3. Landscape scale conservation achieved "on-the ground"	**600,000**	**1,280,000**	**1,880,000**
Landscape-level biodiversity conservation plans	60,000	150,000	210,000
Devise/implement conservation plans for landscape species & habitats	80,000	240,000	320,000
Strengthen PA's ability to apply landscape principles to conservation action.	150,000	170,000	320,000
HCs designate priority habitat areas in landscape around PA	140,000	80,000	220,000
HCs develop & implement management plans & conservation agreements	171,500	330,000	501,500
Strengthen PA infrastructure.	178,500	310,000	488,500
4. Strengthened transboundary conservation action	**170,000**	**130,000**	**300,000**
Establish regional coordination committee	60,000	50,000	110,000
Develop trans-boundary conservation agreements & sponsor conference.	110,000	80,000	190,000
5. Grazing, forestry, sport hunting, and tourism are re-oriented to support conservation while improving livelihoods.	**6,279874**	**105,000**	**6,384,874**

Project Outputs	Co-financing	GEF	Total (US$)
Demonstrate HC-based sustainable pastureland management	3,396,542	15,000	3,422,542
Establish pilot community-managed hunting areas	501,850	50,000	551,850
Demonstrate model forest management practices	331,500	15,000	346,500
Establish apex community institution for learning and capacity building	590,000	15,000	605,000
Re-orient existing financing mechanisms for conservation support.	1,460,000	10,000	1,470,000
6. Monitoring and evaluation applied as a tool for capacity building	**30,348**	**295,000**	**849,348**
Monitor and evaluate project activities annually	175,000	125,000	**300,000**
Share lessons learned; cross-site learning; cross-project learning	245,000	120,000	**265,000**
Adaptive management training	25,000	50,000	**75,000**
Total	**8,473,222**	**2,720,000**	**11,193,222**
PDF B Costs	262,500	350,000	612,500
Total w/ PDF B	8,735,222	3,070,000	11,805,7222

12. Sustainability of Project Results

Sustainability: During the process of designing this project, the discussion of "sustainability" focused on the question, "What does it take for conservation to be sustainable in Mongolia, and how can we design a project to make a contribution to that?"[20] As a result this project has been designed to enable the continuation of project-inspired changes in practice upon completion of the project itself. The project's design reflects four overriding assumptions related to the question of sustainability: 1) that the project's outputs and activities are largely achievable with existing institutions, financial resources and personnel through strengthened partnerships with NGOs and local community groups; and 2) that the integration of conservation objectives into "normal" productive sector practice will further enhance sustainability, and 3) the GoM's inherent funding limitations rule-out any long-term support of an overly expensive conservation program; and 4) Mongolian Environment Trust Fund will be partially funded and operational by 2004 and fully funded by 2009.

The project is designed to work with partners and programs that are scaled to local institutional and community capacity and emphasizes the long-term sustainability of local institutions. Existing institutional capacity will be strengthened through training and partnership building. The ability to implement these activities sustainability will be ensured by building the capacity of a cross-section of civil-society (*aimag*, *soum* and *bag* offices, Herder groups, NGOs, Ministry departments, and Women's Development Committees). Over the life of the project, partnerships among the government and local herder communities will be an important element in ensuring sustainability. Partnerships will strengthen the capacity of existing institutions to sustain integrated conservation efforts over the long-term. Sound methods for resolving conflicts, together with strong institutions and human resources for the planning and management of conservation activities, are also important.

[20] Smith, S.E. & Martin, A. 2000. "Achieving Sustainability of Biodiversity Conservation – Report of a GEF Thematic Review. Global Environmental Facility". Washington, D.C. USA.

More specifically, the project scope looks beyond protected areas at the overall landscape and the productive grasslands and forests therein and seeks to integrate conservation into the fabric of productive activities. The project is designed to inspire activities with low or no recurrent costs or costs that will be borne as a matter of doing business in the productive sector. Many of the activities proposed, such as integrating biodiversity goals into productive practice and innovative policy tools, involve low or no recurrent costs. Partnerships are a key part of this approach to sustainability and the project seeks to develop low-cost alternatives that rely on existing or newly formed collaborative partnerships among national, ministries, NGOs, *aimag, soum and bag* officials, and herder communities across the traditional sectoral boundaries. The project will also integrate conservation into ongoing community development practice, fostering local capacity for implementation and enhancing sustainability. For example, project preparatory work has carefully aligned project inspired conservation activities with proposed herder community-based approaches to improve grazing practice.

The alternative livelihood activities, such as improved livestock management have been proven by UNDP to be self-sustaining in other part of Mongolia. The project will focus on helping people develop sustainable livelihoods by providing business training and empowering people to access financial support and small loans. In general, the project avoids creating systems requiring expensive maintenance and upkeep, and establishing new, expensive institutions and by the end of the project, the Government budgets will absorb and fund the sustainable development baseline costs because these are key to poverty alleviation.

The project reflects a commitment to refined results-oriented indicators and effective monitoring and evaluation systems provide implementation discipline. The project seeks to strengthen commitment to biodiversity conservation in many ways, in particular by: a) including those directly affected by the condition of biological resources in the management of those resources by providing a means for stakeholders to participate in and have control over decision-making about biodiversity; b) strengthening pasture and forest land property rights at the local level; and, c), creating a sense of equitable distribution of the benefits and costs of biodiversity conservation through piloted community based wildlife management.

A recent GEF study[21] found that a lengthy and sustained process is necessary to achieve sustainability for biodiversity conservation. Despite the extraordinary lengths this project goes to maximize sustainability and minimize recurrent costs, there will be new and additional costs associated with the long-term conservation of biological diversity in the Altai Sayan – with monitoring, with maintaining improved management of protected areas, and with capacity building and training. At the international level, the net present value of future global biodiversity benefits is relatively high because the industrialized high-income countries have low economic discount rates. In Mongolia, the net present value of future global biodiversity benefits is relatively low. With this in mind, the project takes the realistic view that the Government of Mongolia will be unable to adequately fund these recurrent costs in the foreseeable future.

The project assumes that the Mongolian Environmental Trust Fund (METF) will be fully operational and funded by 2009, in time to be able to cover a relatively modest $30,000/year of total estimated $90,000 in re-current costs associated with landscape-scale biodiversity conservation in the Altai Sayan. In fact, the METF will be partly funded ($1.5 million) by January 2004, allowing this project time to work with the METF to ensure its funding criteria include: community-based conservation, replication and mainstream-ing, and landscape-scale conservation surveys and research. The remaining approximately $60,000 in estimated re-current costs will be absorbed into Government and large sectoral program budgets as a matter of normal agricultural and program practice.

[21] Smith,S.E., Martin, A. 2000. “Achieving Sustainability of Biodiversity Conservation: Report of a GEF Thematic Review”. Monitoring and Evaluation Working Paper 1. Global Environmental Facility. Washington D.C.

The project also recognizes the trend whereby ecological assets will become increasingly monetized through newly emerging markets – the emerging market for carbon storage, for example. Such assets hold great, if uncertain, promise for a country like Mongolia, and the project will produce policy recommendations on how to access these emerging markets for funding of conservation work in the Altai Sayan and in Mongolia in general.

Project Risks: The project has been designed to minimize risk, from the management structure to the strategic approach, to the integration of best practices. Lessons learned from other projects have been brought to bear on the design of this project and best practice resources have been consulted to improve the effectiveness of the project's design and reduce risk. These include many lessons highlighted in GEF's recent OPS-2 report and discussed under "Lessons Learned" below.

One risk facing the project is that SARS could significantly dampen the eco-tourism outlook for Mongolia. However, while tourism could and should play an important supportive role in driving sustainable use in the Altai region, the project's design does not assume that this role will be crucial, emphasizing instead improving the traditional year-round economic activities related to agriculture and pastoralism.

Another risk is the potential for a sudden shift in governmental priorities. The project is designed to maximize sustainability in the face of a change in governmental priorities. The potential for this risk scenario is moderate given the frequency with which Mongolia's government changes. The project mitigates this risk by emphasizing local initiative and local capacity strengthening. The project also mitigates this risk by strengthening existing laws and policies to incorporate biodiversity conservation as part of normal economic practice, making biodiversity conservation practice more resilient to changing priorities. Stakeholder involvement and support also provides a good buffer against shifting political winds. The project emphasizes decentralized, local action through partnerships with local officials, communities, and the private sector, giving conservation far more than only "one leg" to stand upon.

Lessons Learned: UNDP will require the project to apply adaptive management techniques to project implementation. Double-loop learning is crucial in order to "close the loop" of the project cycle (design, implementation, evaluation, review, design) and steadily improve the quality of GEF and UNDP project design. Sound methods for resolving conflicts, improved management of protected areas, strong institutions for the planning and management of development activities, and clear legal mandates are important in order to successfully integrate the activities of diverse sectors. This project has been designed to capture these lessons and share them with other, future project development and design work. Lessons learned suggest that a two-track approach be used to build capacity at the national and regional policy level (regulations and institutions) while at the same time integrating implementation activities at the local and community level.

Legal mandates must be clear in order to successfully integrate the activities of diverse sectors. This project will work to secure a supportive policy framework while focusing most of its efforts at the local, site level. Effective public-private partnerships have been found to be a strategic component of biodiversity projects. These partnerships are crucial to the strategic approach and practical viability of this project's design. The project has also learned from lessons related to sustainability and these are covered in the sustainability section above.

GEF's OPS-2 review uncovered the following lessons learned from GEF biodiversity project experience. 1) Basic implementation capacity should be in place prior to the project being launched. Implementation capacity, within NGOs, Government institutions, UNDP and local institutions is in place. 2) Funding should be compatible with the absorptive capacity of the target areas and implementation organizations.

This project was intentionally designed to be on the smaller side of GEF's full project window given the modest absorptive capacity of the project's main government and community-based partner institutions. 3) Objectives should be realistic and time and funding allocated should be adequate to achieve the intended changes. This project's objectives have been carefully conceived, based upon a thorough evaluation of the situation.

The project design process has learned important lessons from the experiences of other projects implemented in Mongolia. For example, the GTZ project entitled "Nature Conservation and Bufferzone Development in and around Gobi Gurvan Saikhan National Park" has shared some important lessons with the GEF project development team with respect to sustainability and the strengthening of local grass-roots capacity for people-centered rural development and sustainable natural resource management. They have discovered that a project must allow enough time for self-determination, self-help initiative to take effect. This means planting the "seeds" of new ideas and new concepts, tending those "seeds" with minimal technical and logistical support and allowing enough time for these things to take root and grow. This project will learn from this lesson and will build upon these experiences as it cultivates local capacity for sustainable development and natural resource management.

The project has also learned important lessons from and will build upon the accomplishments of the NZAID ATBNP project. The NZAID ATBNP project was designed in line with and in cooperation with this UNDP-GEF Altai-Sayan Block B project development effort. Using UNDP's Altai Sayan's project as a guideline for project "model" development. In a formal agreement between NZAID/ADAF and UNDP Mongolia, the UNDP/GEF Altai Sayan project would take up the ATBNP project models as the downstream funding agencies. Without this formal agreement of cooperation, it is unlikely NZ would have supported a project development in this area.

13. Monitoring, Evaluation & Replication

Monitoring. This project has a comprehensive monitoring and evaluation program included in its overall design. An information baseline on biodiversity condition and ecosystem health and socioeconomic conditions will be established during the first year of the project to provide a basis for future monitoring and evaluation. Project progress will be monitored using annual reviews and implementation milestones following UNDP rules and procedures. Specific indicators of biodiversity health/reduction in threat levels will be developed after baseline surveys are completed in the project's second year. Baseline surveys will: 1) conduct ecological surveys within the site areas to determine size and condition of key habitats and richness of habitat mosaic; 2) conduct attitude and awareness level surveys of key stakeholder groups, from top-level policy makers to local level stakeholders; and 3) conduct economic surveys of local communities around site areas to quantify their use of grassland and wildlife resources and their current income levels. Monitoring will be ongoing, involving data collection and assessment of the project's field implementation and will involve key project staff meeting annually to review operations and field implementation and assessing whether new priorities require a shift in project implementation.

In addition to this the project will be subject to standard UNDP/GEF monitoring requirements. The UNDP-CO will conduct monitoring field visits at least twice per year. The PM will prepare and submit quarterly narrative and financial reports to the NPD and UNDP. The project manager will be required to produce an Annual Project Report (APR). The report is designed to obtain the independent views of the main stakeholders of a project on its relevance, performance and the likelihood of its success. The APR then supports an annual Tripartite Review (TPR) meeting -- the highest policy-level meeting of the parties directly involved in the implementation of a project. Decisions and recommendations of the TPR will be presented to the PSC.

Evaluation: Outcomes will be evaluated by measuring indicators of mainstreamed biodiversity, strengthened capacity, ecosystem integrity and function, threat reduction, and sustainable use. Annual external evaluations are scheduled during the project's lifetime as part of UNDP's annual Project Implementation Review (PIR) process. Two other inputs will be crucial to the project's M&E practice: 1) annual participatory evaluation exercises will be undertaken with key stakeholders, including local communities, NGOs, and partner organizations, and 2) the regular, annual input of an adaptive management advisor. There are multiple purposes for this position – 1) to provide "cradle-to-grave" support for adaptive management, best practice assessment and implementation support for the project; 2) to enable the project to maintain strategic direction during implementation by helping project management remain focused on overall results and the quality of those results, in addition to the day-to-day implementation concerns; 3) to ensure that the project is an active member of a learning network of GEF projects; 4) to sharpen the project's focus on quality outputs, and 5) to catalyze a learning and adaptive approach to project management and implementation.

Two independent evaluations will be conducted of the project – one mid-term and one final evaluation. These independent evaluations of project performance will match project progress against predetermined success indicators. Each evaluation of the project will document lessons learned, identify challenges, and provide recommendations to improve performance. The logical framework for this project sets out a range of impact/implementation indicators that will be used to gauge impact. Success and failure will be determined in part by monitoring relative changes in baseline conditions established in the biological, ecological and economic arenas at the beginning of the project. Baseline conditions will be defined with respect to levels of key threats in priority areas; habitat size and condition and population size of indicator species to ensure that viable populations of these species are present in perpetuity. Indicator species sensitive to increased fishing or collecting pressure will be monitored. If populations of rare species are shown to be in decline, measures will be taken to identify the reason for the decline, and alternative management strategies will be developed to ensure the long-term health of populations and incorporated into site management.

Replication. In this project's effort to mainstream biodiversity conservation concerns into productive sector activities, replication will the measure of its success. In Khovsgol *Aimag*, the project's collaboration with MFAg/IFAD in four *soums* will serve as a pilot activity for participatory planning and rangeland management activities that would be replicated in the remaining *soums* in Khuvsgol as well as in Arhangai, Khentii and Bulgan *Aimags*.

This project has been designed to apply significant effort in overcoming informational barriers to replicating model activities in other parts of Mongolia and in other parts of multi-country Altai Sayan region. The project develops lessons learned and facilitates the sharing of information and replication of successful diversity conservation methodologies. Through a "lessons learned" activity that cuts across the project's five main outputs, the project links the demonstrations of grassland management to the relevant agricultural extension programs and local civil society to enhance the mainstreaming of biodiversity into the productive sector. The same is true for other demonstrations, including community-based management of wildlife sport hunting resources and protected areas. The more involved these institutions are in these developments the more the lessons from them can be mainstreamed into sectoral and infrastructure planning and investment across Mongolia.

The project will build upon others' successful experiences in replicating and sharing of lessons-learned in Mongolia. Bilateral organizations such as GTZ, as well as one of the project's partner NGOs have both had great success in supporting herder-to-herder workshops for sharing lessons learned and replication of best practices. Many of the project's activities are designed to strengthen linkages and encourage replication within the greater Altai Sayan region.

For example, the project will sponsor a regional conference on biodiversity conservation to share lessons learned among Russian, Mongolia, Chinese and Kazakh counterparts. In another example, the project will enable local stakeholders to establish learning centers of the kind gradually and successfully built up by stakeholders themselves in GTZ's Gobi project. These learning centers play a crucial role in spreading the word and know-how – in replication of project best practices. Project activities in the Altai Sayan will empower local people to preserve and maintain their traditional knowledge of biodiversity and to incorporate it into community-based co-management regimes. These kinds of activities are replicable throughout Mongolia, as people seek to improve their livelihoods and the quality of their environment by better managing their natural resources.

Annexes to the project brief

Annex i: Incremental Cost Analysis

1. Broad Development Objectives

1.1. The Altai Sayan region is one of Mongolia's most beautiful and poorest regions. Economic development and poverty alleviation are priority development objectives for the Government here. Agriculture, trade, natural resources, and tourism are important sectoral vehicles for this. At the same time, the Government is committed to utilizing these resources wisely and is supporting significant new investments to bolster the development of these sectors in an environmentally responsible way.

2. Global Environmental Objectives

2.1 Global environmental benefits include significant indirect use (option and insurance) and passive use (existence) values derived from Altai Sayan's biological diversity. The global existence value arises from nontrivial per capita existence values multiplied by the hundreds of millions of developed country citizens who hold these values and live outside of Mongolia.

2.2 The project proposes to conserve these global biological diversity values in the Altai Sayan through a landscape-scale approach by strengthening priority protected areas through collaborative community-based management and by integrating diversity management objectives into existing productive sector grazing, forestry, and tourism practices. Diversity conservation policies, programs and practice will be developed for eventual application across other pastoral landscapes. The project will demonstrate them in two sub-regions of the Altai Sayan encompassing the full spectrum of species and habitat diversity within the Altai and Sayan mountain areas.

3. Overview

3.1 Baseline and Incremental costs have been assessed temporally, over the planned five-year time frame of the GEF intervention, and geographically by the boundaries of the project areas and by the administrative borders (*aimag, soum*) crossing those sites. Thematically, the analysis covers the range of interventions necessary to ameliorate the proximate threats to biodiversity, based on the diagnostic assessments performed during project formulation.

3.2 Ongoing programs and projects overlapping geographically with the project's Altai Sayan region and thematically with the project's design constitute the baseline. Although it is expected that new projects financed by NGOs, Government and donors are to develop new activities within the region, estimates of such support have not been considered in calculation of the baseline. The total project incremental cost is comprised of a combination of re-oriented baseline activities and new and additional investments needed for securing the biodiversity conservation objectives within the Altai Sayan Region.

4. Baseline Scenario

4.1 In the Altai Sayan region, current natural resource use/grazing practices are resulting in the unsustainable use of natural resources, including grasslands. Over use of grasslands and forest resources causes the degradation and loss of habitat and the direct exploitation of species. Five primary anthropogenic threats contribute to this problem. These threats, along with their myriad root and underlying causes, interact in the major habitats of the Altai Sayan, thereby diminishing the long-term viability of the Altai Sayan's biological diversity; of individual species, communities of species, and ecological processes such as seasonal migration and predator-prey interactions.

4.2 In the Altai Sayan region, according to this project's baseline program analysis, approximately US$44 million will be spent over the course of the next 5 years to improve local economies and create jobs primarily by helping herders improve their livestock and range management practices as well as agricultural product marketing practices and by exploiting natural resources. While these programs are seeking to help people establish more sustainable resource use practices, they will not be enough unto themselves, to conserve global benefits. Eighty-percent of the landscape is classified as grazing land, even much of the land within the existing protected areas in the region. Livestock and rangeland management must incorporate biodiversity conservation concerns if conservation is to have any hope of achieving long-term, meaningful results. Indeed, the whole justification for this project is that GEF's incremental investment can serve to re-orient a much larger baseline of productive sector work in order to generate both national and global benefits.

5. Baseline cost analysis

5.1 Baseline costs listed in the IC matrix are related to activities that influence and directly impact the GEF Project outcomes. For instance pasture management under the baseline scenario does not fully take biodiversity conservation issues into account, however current grassland management activities are relevant and could play an important foundation role if only re-oriented to be more "biodiversity friendly."

5.2 The baseline costs associated with this project are largely borne by the Government of Mongolia through the Ministry of Food and Agriculture, Ministry of Nature and Environment, the Ministry of Finance. Ninety-four (94%) of baseline program costs are related to strengthening agricultural livelihoods, through improved range and livestock management, livestock product marketing, and so on. Much of this funding originates from the GoM's loan and grant cooperation with several bi-lateral and multi-lateral development institutions, including IFAD, ADB, WB, and UNDP. Most of this baseline is related to the project's Output #5. The remaining six percent (6%) of baseline costs are related to environment, natural resource management (forestry, wildlife, water) and protected area management. Most of this baseline is related to the project's Outputs 1-4.

6. Global Environmental Objective/GEF Alternative

6.1 By financing the incremental cost of the activities proposed under the GEF alternative the Mongolian Government would be able to address the main threats and their underlying causes hereby ensuring the conservation and sustainable use of globally significant biological diversity in Mongolia's Altai Sayan ecoregion. By the end of the project, stakeholders will be devising innovative and adaptive practices to mitigate and prevent threats to biological diversity by applying new partnerships, conservation tools, information, and sustainable livelihoods to conserve biological diversity.

6.2 The design of the proposed alternative reflects a strategic choice to ensure a greater involvement of local people in conservation and sustainable development. The alternative is designed to emphasize the decentralization of responsibility and incentive in order to encourage sustainable management of natural resources and the conservation of biological diversity. However, the Government of Mongolia cannot at present cover all costs associated with the management and conservation of the regions biodiversity of global importance. The project seeks to establish strategic partnerships among non-traditional partners in the rural landscape: herders, protected area managers, soum and bag governors, national government and NGOs.

The GEF Alternative is organized into six outputs:

Output 1: Conservation Capacity of Productive Sector Institutions and Policies Is Strengthened. More specifically, under this output, the project will: 1) Strengthen *aimag* Councils for Sustainable Development (ACSD) to integrate conservation and development in each of the four *aimags*; 2) Herder families form herder communities (HC) as a basis for community-based development and participatory management of natural resources. 3) Integrate biodiversity into productive sector policies and strengthen policy enforcement. 4) Build constituency for sustainable development and conservation. Quantify values and benefits of biodiversity and ecosystem health; Strengthen HC and NGO Roles as Conservation Advocates; Enhance the youth constituency program through innovative education programs for schools and other youth organizations.

Output 2: Information baseline established and strengthened as basis integrating conservation into productive sectors. More specifically the project will i) Conduct biodiversity surveys and targeted research to support proactive management. ii) Design and establish participatory monitoring protocols for data gathering, and analysis. iii) Upgrade information management and geographic information system (GIS).

Output 3: Landscape-based approach to conservation established and operational. More specifically: 1) MFAg, NGO and protected area stakeholders construct landscape-level biodiversity conservation plans for Altai Arc and Sayan Basin 2) Devise and Implement Conservation and Recovery Plans for priority landscape species and ecosystems. 3) Strengthen priority protected areas' ability to apply landscape principles to conservation action 4) Herder communities designate priority habitat areas in the landscape around each priority PA and develop local priority habitat conservation plans; and 5) Each local HC will develop simple and practical participatory management agreements for each priority landscape area. Provide the resources necessary to bring stakeholders together in a collaborative effort to construct and implement ten-year agreements for each priority area; build secure agreement among stakeholders on the special management status to be applied to each priority area based upon its biodiversity values and the environmental services it provides; capacity at the regional and municipal levels for participatory conservation and natural resource management; establish Community Conservation Agreements on resource use within protected area borders; and 6) Strengthen priority PA infrastructure and staff capacity

Output 4: Strengthened Transboundary Conservation Action and Institutional Linkages. More specifically the project will: 1) Establish a regional coordination committee for transboundary cooperation; 2) Elucidate trans-boundary conservation agreements landscape conservation and regional planning objectives covering key aspects of transboundary cooperation and methods of implementation; 3) Promote regional cooperation and understanding by organizing and sponsoring one Altai Sayan conservation conference with participants from each of the four Altai-Sayan nations.

Output 5. Grazing, forest-use, sport hunting management, and tourism, are re-oriented to support conservation while improving livelihoods. More specifically the project will: 1) Demonstrate model sustainable rangeland and livestock management practices; 2) Demonstrate model community-based wildlife management; 3) Cultivate the emergence of an apex institution for learning among herder groups and local stakeholders; 4) Enhance and re-orient existing revenue generation mechanisms for sustainable financing of conservation programs.

Output 6. Monitoring/evaluation applied as tool for capacity building of stakeholders. More specifically, the project will: Monitor and evaluate project activities and outputs on an ongoing basis. Evaluations will be conducted three times during the five-year lifespan of the project, beginning at the end of year one, end of year three, and end of year five.

7. Incremental cost

7.1 The matrix below summarizes the baseline and incremental cost expenditures during the full project period. The total cost of the GEF project is US$10,483,222 (excluding the PDF-B) with a GEF contribution of US$ 2,720,000 (26% of project total cost).

Incremental Cost Matrix

Outputs/Activities	Baseline	Alternative	Increment
Output 1: Conservation Capacity of Productive Sector Institutions and Policies Is Strengthened.	MNE: 150,000 MFAg: 175,000 **Total: 325,000**	**1,185,000**	MNE: 100,000 MFAg: 115,000 WWF: 110,000 Dutch: 50,000 IFAD: 50,000 ADB: 50,000 GEF: 385,000 **Total: 860,000**
Output 2. Information baseline established and strengthened as basis for integrating conservation into productive sectors.	MNE: 208,000 **Total: 208,000**	**927,000**	MNE: 104,000 MCC: 90,000 GEF: 525,000 **Total: 719,000**
Output 3. Landscape-based approach to conservation established and operational	MNE: 170,000 **Total: 170,000**	**2,050,000**	WWF: 450,000 MNE: 150,000 GEF: 1,280,000 Total: 1,880,000
Output 4. Strengthened Trans-boundary Conservation Action and Institutional Linkages	MNE: 80,000 **Total: 80,000**	**360,000**	WWF: 40,000 MNE: 80,000 GEF: 110,000 UNDP: 50,000 **Total: 280,000**
Output 5. Grazing, forest-use, sport hunting management, and tourism, are re-oriented to support conservation while improving livelihoods.	ADB 10,695,000 IFAD 14,800,000 MFAg 13,322,637 MNE 353,700 WB-GoM 5,000,000 METF 1,555,000 Total: 45,726,337	**51,524,887**	MFAg: 1,480,200 ADB: 1,730,000 IFAD: 750,000 Dutch: 1,490,000 UNDP: 150,000 MNE: 176,850 MNE/IDRC: 150,000 GEF: 80,000 **Total: 5,798,550**
Output 6. Monitoring/ evaluation applied as tool for capacity building of stakeholders.	 Total: -0-	**595,000**	MFE: 50,000 MNE: 50,000 WWF: 50,000 Dutch: 105,000 GEF: 340,000 **Total: 595,000**
Totals:	MFAg 13,497,637 WB-GoM 5,000,000 MNE 961,700 ADB 10,695,000 IFAD 14,800,000 METF 1,555,000 Total: **46,509,337**	**56,666,887**	MFAg 1,595,200 MFE 50,000 Dutch 1,540,000 MNE 832,350 ADB 1,730,000 IFAD 750,000 WWF 650,000 UNDP 200,000 MCC 90,000 GEF 2,720,000 **Total: 10,157,550**

Annex ii: Logical Framework Matrix

Objectives	Indicator	Means of verification	Assumptions & Risks
Overall Objective: Conservation and sustainable use of globally significant mountain biological diversity in Mongolia's Altai Sayan Ecoregion.			
Purpose The successful completion of the project will result in stakeholders devising innovative and adaptive practices to mitigate and prevent threats to biological diversity by applying new partnerships, conservation tools, information, and sustainable livelihoods to conserve biological diversity.	1. Beginning year 4, stabilization and/or reduction in levels of threat to landscape biodiversity in priority habitat areas and in priority protected areas compared to project start levels. 2. Condition of grassland in each pilot area maintained or improved over starting baseline at project closure through measurement of presence/absence of indicator species for grassland health by end of year 5. 3. Numbers and distribution of landscape species [argali, snow leopard, taimen] is same or increased within priority areas by project closure (year 5) through measurement of presence/absence and/or numbers/location/condition. 4. Similar condition or measurable improvement in forest, and riparian quality in pilot areas by end of project. 5. **Milestone**: 50% of the pilot area herders have adopted at least one project-promoted sustainable practice by MTE; 50% by project closure. 6. **Milestone**: Transboundary surveys and conservation action underway between Mongolian and Russian counterparts by MTE. 7. **Milestone**: at least three project partners mainstreaming biodiversity objectives into their productive sector programs policies and practice	1. Threats analysis from field interviews/ most appropriate wildlife survey techniques. 2. Field surveys. 3. Biannual biological surveys. Visual sightings, scat/track surveys, other methods as appropriate. 4. Environmental monitoring studies and sampling surveys. 5. Field Surveys; Interviews; project records. 6. Agreement documentation/Interviews; 7. Forestry and agricultural policy and practice field review and interviews; Expert evaluator opinion. 8. Formal agreement between local communities and MNE; expert conclusion after field visit. 9. Field and mapping assessments; expert evaluator opinion/conclusion.	➢ GoM remains committed to environmental protection, and sustainable development programs ➢ No significant increase in environmental/climate disruptions (global warming, wildfires) ➢ Priority sites will be sufficient to maintain connectivity. ➢ GoM continues/increases support of NGO involvement and democratic processes in conservation work ➢ In practice, local people are willing to change grazing, forest-use practices.

Objectives	Indicator	Means of verification	Assumptions & Risks
	by middle of Year 3 and three more partners by end of Year 4; progress satisfactory by MTE and reasonably complete by project closure. 8. **Milestone**: Community-based wildlife management in one pilot area based upon re-oriented sport hunting license fees by MTE with agreement to replicate this activity in another place by end of Year 4. 9. **Milestone**: 1,000 km^2 brought under improved management by MTE and 2,000 km^2 by project closure.		
OUTPUT 1: Conservation Capacity of Productive Sector Institutions and Policies Is Strengthened.	1. Sustainable development commissions successfully complete Land-use Plan for Bayan Olgii and Uvs aimag by end of year 2; Khovd and Khovsgol by end of year 3. 2. Five herder communities (HC) operational by end of year 2. 3. Biodiversity conservation objectives integrated into grazing and land-use policies by end of year 3. 4. **CB Indicator:** MNE and MoA roles clearly defined and understood in promoting biodiversity conservation in productive landscape by end of year 2. 5. **CB Indicator:** Aimag, soum and border officials knowledge of environmental policy enforcement requirements will be improved by 50% over pre-training knowledge levels. 6. **CB Indicators:** Economic valuation studies of key biodiversity and ecosystem assets will influence the public policy debate by end of year 4. 7. Level of environmental	1: Land-use plans, reports and project evaluations. 2. Interviews; project progress reports 3. Revised policy documents. 3: Project progress reports, and campaign plans 4. Policy documents; project progress reports. 5. Pre and post-training assessments. 1. Published results of studies; newspaper clippings; interviews with stakeholders. 2. Pre and post-awareness program surveys.	➢ Continuity in local leadership provides for adaptive learning ➢ Government institutions open to awareness-raising ➢ Institutional ambivalence to cross- sector collaboration can be overcome ➢ Education institutions will collaborate with awareness activities ➢ Institutions willing to carry out policy and regulatory reform

Objectives	Indicator	Means of verification	Assumptions & Risks
	awareness in children, Government officials and the general public meets campaign goals by years five and eight.		
Output 2: Information baseline established and strengthened as basis for integrating conservation into productive sectors.	1. Baseline biological and socioeconomic assessments completed and in pilot areas by year 2; At least presence of priority species and if possible numbers and condition confirmed in pilot areas. 2. Standardized protocols for monitoring of biodiversity and threat levels developed and accepted by end of year one; participatory monitoring in place by end of year 2. 3. Herder resource use patterns in relation to important wildlife habitat understood and mapped for management and herder use, by year 3. 4. **CB Indicator:** Key staff improve their capacity to manage, access and apply information measurably over pre-training level of knowledge.	1: Project progress reports; assessments and plans; Survey reports; data sheets. 2:Protocols; field interviews; monitoring records. 3. Database records; Map documents; interviews 4. Before/After training knowledge assessments.	➢ Community and other stakeholder conflicts can be resolved ➢ Minimum infrastructure exists to support local information management ➢ Local communities will share information regarding resource practices, economics, etc.

Objectives	Indicator	Means of verification	Assumptions & Risks
Output 3: Landscape-based approach to conservation established and operational	1. Landscape-level conservation plans completed by end of year 2, updated by year five; 2. Priority species recovery/conservation plans developed and under implementation by end of year 2. 3. **CB Indicator:** Protected area staffs' knowledge of basic tenets of landscape ecology measurably improved over baseline knowledge levels. 4. Protected areas develop and apply maps of priority species priority habitats across the landscape as part of their conservation program for each protected area by end of year 3. 5. HC designate at least six (6) priority habitats in productive landscape and implement basic conservation action by end of year 3. 6. Priority protected area management "re-oriented" to landscape perspective with broad stakeholder consensus and participation by year 3. 7. **Milestone:** MNE to meet recurrent management costs of priority protected areas. 8. **Milestone:** MNE/Protected Areas' link to herder communities established and strengthened. 9. **Milestone and CB Indicator:** Reputation of protected areas among stakeholders changes measurably for the better, starting with MNE and improving through to project closure.	1.Conservation plans and mapping documents; 2.Planning documents. 3.Before/After training knowledge assessments 4.Maps; field interviews of PA staff. 5.Participatory management agreements; 6.Project records; HC maps; Field interviews. 7.Formal agreement prior to MTE and funding by end of year 4. 8.MNE-Herder Community partnership clarified through written agreement prior to MTE. 9.Survey in year 1, year 3 and year 5.	➢Political and economic will exists to "internalize" environmental costs. ➢Local communities will have incentives to support protected areas ➢Local populations are receptive to policy and regulatory prescriptions
Output 4: Strengthened Transboundary Conservation Action	1. **Milestone:** Transboundary Conservation Agreements reached on at least two priority landscape species by end of	1. Signed agreements. 2. Expert evaluator opinion based upon field visits/interviews.	➢Political situation between Russia & Mongolia will continue to

Objectives	Indicator	Means of verification	Assumptions & Risks
and Institutional Linkages.	year 3. Trans-boundary agreements on protected area data sharing and management cooperation by end of year 2. 2. **Milestone:** Transboundary field-level cooperation in conservation by MTE. 3. Protected areas begin sharing data/lessons learned by end of year 4.	3. Interviews in the field w/protected areas staff.	encourage trans-boundary coopera-tion.
Output 5. Grazing, forest-use, sport hunting manage-ment, and tourism, are re-oriented to support conserva-tion while improving livelihoods.	1. **CB Indicator:** 30% percent of the herder population in the pilot areas have adopted project-promoted sustainable grazing practices by end of year 4; 65% by end of year 5. 2. Pasturelands in pilot areas show measurably significant signs of improvement at the end of year 5. 3. **CB Indicator:** Feasibility of community-based wildlife management demonstrated, and instruments designed and approved by MNE and MFAG by end of year 2, and imple-mented by end of year 3. 4. **CB Indicator:** Community-MNE forest management partnerships established and operational by end of year 2; forest management practices on a sustainable footing by end of year 5. 5. **CB Indicator:** One community learning center established by stakeholders in year 2; Center expands capacity, serving significant numbers of herders and resulting in more efficient use of resources and improved livelihood practices by the end of year 4. Second community learning center established by end of year 5.	6.Community agreements, field interviews. 7.Project field records, and progress reports; Field interviews. 8.Partnership agreements; Field interviews. 9.Learning center visits; field interviews; reports. 10. Field visits; Interviews.	➢Local land tenure conflicts are resolvable ➢Climatic conditions will not counteract pasture restoration/ sustainable grazing efforts.

Objectives	Indicator	Means of verification	Assumptions & Risks
Output 6. Monitoring and evaluation is applied as a tool for adaptive management, assessment of project impact/progress and replication of best practices.	1. Annual monitoring and evaluation exercises completed, demonstrating acceptable accomplishment of results measuring against milestones and indicators of capacity building. 2. Key decision makers' understanding of adaptive management strengthened and measurably improved over baseline levels in two project site areas by end of year 2 and in remaining site areas by end of year 4. 3. Use of project partners (at herder, bag, aimag, national Ministry, and multi-lateral/bi-lateral programs) to replicate the project's outcome in other regions of Mongolia. 4. **Milestone:** Three or more cases of successful replicating and applying project's useful experience in other places among pastoralists, bag, soum, aimag and national Ministry officials by MTE. At least three more underway by end of project. 5. Knowledge transfer and dissemination of lessons through: (a) the regional Altai Sayan forum; (b) presentations of lessons and best practices at the project's regional conference on Altai Sayan; (c) project results document. 6. **Milestone:** At least 20 individuals from project partners in MFAg, MNE, IFAD and ADB programs involved in project's lessons learned round-table, training workshops to capture lessons learned and replicate them by the MTE and 20 more by close of project.	1.Monitoring and evaluation reports; technical progress reports. 2.Before/After training knowledge assessments. 3.Assessment of who is replicating – which institutions/individuals. 4.Project evaluations and progress reports; Field visits. 5.Proceedings from the regional conference. 6.Training and workshop records; expert evaluator, field interviews.	

Annex iii: STAP Review and Response to STAP Review

Review by Dr Andrew Tilling

Abstract

The proposed project takes an integrated landscape approach to biodiversity conservation that offers a more realistic way of conserving habitat and endangered species than a fragmented, *ad hoc* approach. More attention needs to be paid to understanding community needs and aspirations, underlying conditions and trends and the 'problem situation' as these are fundamental to the formulation of a strategy and specific activities. Much will depend on the commitment by government to foster a collaborative management approach and the uptake of it by herder communities, and also on inter departmental, transboundary and donor collaboration. The devolution of decision-making and the realisation of tangible, equitably distributed community benefits will be fundamental to the success of the project. Suggestions are made on how these issues can be addressed.

1 Introduction

1.1 Terms of reference

This review is of a Working Draft dated 2 June 2003 of the Project Brief. In the absence of specific terms of reference for this review the standard for technical reviews is generally followed. The analysis will focus on the rationale for and philosophy of the project and the proposed steps to deal with the identified issues, to assess whether they are sufficient and realistic given the background situation and socio-economic and environmental trends.

1.2 The existing situation

The Altai Sayan Ecoregion extends east-west for 2,000 km from the eastern-most tip of Kazakhstan to north-central Mongolia and south-central Russia and south-north for 1,500 km from western Mongolia and north-western China to south-central Russia. It is understood that this is a very biodiverse region, providing the intact habitat for large populations of globally threatened argali (*Ovis ammon*), the snow leopard (*Unica unica*) and its main prey the Siberian ibex (*Capra sibirica*) and other endangered animals.

The Mongolian Sayan area comprises a basin containing hundreds of lakes surrounded by mountains with elevations up to 3,000 metres. These form a watershed where two major vegetative zones associated with the southern edge of the Siberian boreal forest: the tundra and taiga converge with the grassland steppe zone. This creates a unique transitional environment with a greater incidence of species.

A large proportion of Mongolia (70%) comprises grasslands, falling into three major ecological zones: mountain-steppe, steppe, and desert-steppe, all of which occur in the Altai Sayan region. These grasslands, including those in forested areas, high mountain pastures and true desert, are the basis of livestock production and the mainstay of the rural economy. (Approximately half of the country's workforce depends on pastoralism or agriculture). Pastoralism relies on extensive grazing and practically all of the nutritional needs of Mongolian livestock are met by grazing on wild grasses and forbs or by browsing on shrubs.

A brief description of the two ethnic groups in the Sayan reveals that population numbers and density are low and that they have a comparatively high literacy rate. The Darhad are typical nomadic pastoralists whilst the Tsaatan live in the forests on either side of the border with Russia, herding reindeer. No quantified socio-economic data or indicators are presented about the socio-economic well-being of these groups or the state of the rural economy. Demographic information is also scant. Migration and settlement trends for instance cannot be deduced.

Generalised, non-quantified, information is provided about the deterioration in the overall economic situation. Apparently it has worsened since the collapse of Soviet style central planning in 1990 and the dismantling of herding collectives in 1992. Livestock was privatised but pasture remained State owned, to be used in common by herders who became responsible for management decisions over their own herds. However, this took place in a period of institutional collapse and lack of clear alternative management and service arrangements and State support.

1.3 The problem situation

The Project Brief identifies the primary threats to biodiversity and ecological integrity in the Altai-Sayan to be:

> Unsustainable use of grasslands,
> Unsustainable forestry practices and
> Over-hunting of wildlife populations.

These are claimed to be the "driving forces" behind land degradation, habitat fragmentation and the depletion of wildlife.

Crucially, it is stated that the loss of regulatory institutions, State infrastructure and services and the failure to re-establish traditional pasture management systems produce unsustainable and non-traditional grazing practices.

The Project Brief characterizes current pastoral land-use in Mongolia as:

> *A downward spiral of **decreasing herder mobility and increasing out-of-season grazing** in what were formerly reserve pasture areas. The absence of strong formal and informal institutions to regulate and allocate pasturelands and its use contributes to pasture degradation and increased poverty* (pp 9).

2 Critique

2.1 The concept and rationale

A cultural and biological concept of landscape conservation is adopted in the project proposal. Landscape is culturally defined as "*an area, as perceived by people whose character is the result of the action and interaction of natural and/or human factors*". This is entirely appropriate as 80 percent of Mongolia is classified as pastureland and, except in the high mountains, human-nature interactions have taken place for centuries, if not eons. People are dependent on the natural environment for their livelihoods; thus they cannot and should not be divorced from it and biodiversity conservation has to take an integrated, rather than an exclusionary approach.

The rationale for adopting an area-wide landscape ecology approach to conservation in the Altai Sayan is very valid and pertinent. All the elements necessary to justify this landscape level approach appear to exist and are stated succinctly in the chapter dealing with the landscape conservation rationale and strategy (pp 4).

2.2 Scope

The breadth of the issues covered is notable. The crucial link between rural livelihoods, institutional and political factors and environmental degradation is well recognised. Clearly, the causes of the loss of biodiversity and the means of dealing with them are complex.

However, the lack of hard socio-economic data makes it impossible for the reader to gauge the state and condition of the rural population, on-going trends, the magnitude and extent of poverty and the relative significance of present resource management practices. This makes it difficult to determine causes and effects. For instance, is the deteriorating socio-economic situation and institutional arrangements leading to increased livestock numbers, or are increasing stock numbers and unsustainable grazing leading to deteriorating economic conditions and the loss of biodiversity? Or are some other factors more important?

2.3 The focus

The proposed integration of biodiversity conservation into productive sector institutions policies is critical and commendable. In this way, good management practices should become second nature to pastoralists.

However, the lack of clarity eluded to in para 3.2 above clouds the formulation of a future strategy to deal with the perceived problems. Unless the root cause of the loss of biodiversity are thoroughly analysed and explicitly stated, alternative actions cannot be rigorously defended. Clearly, this affects the selection of project components and proposed activities.

An example will illustrate the point. It is stated that

> *In the high mountains of the Altai Sayan increased herder and livestock populations require expansion of grazing land and now encroachment onto wildlife habitat in high mountain pastures. This is a significant and relatively recent threat, further aggravated by the instability of the current land-use system,* (Threats, pp 9).

The assertion that increased livestock populations requires an expansion of grazing land is unsubstantiated. The alternative might be to improve livestock condition and productivity by better pasture management, through techniques such as rotational grazing and pasture improvement through increased inputs of fertilisers and veterinary services, i.e., more intensive stock management. Whether this is economically and financially feasible or socially and culturally acceptable needs to be argued in order to rule this option in or out of the equation. Herders' attitudes to animals as a form of wealth are crucial. Are livestock numbers *per se* more important than livestock performance? If the latter, improved livestock performance could be substituted for increased livestock numbers. Expansion of herds and grazing areas might not be inevitable.

Furthermore, the perceived "instability" of the land-use system and the absence of a regulatory system have influenced the project designers to advocate the development of land-use plans. These may help clarify which areas are appropriate for different uses. They will probably take some time to produces if the community is to be fully involved. However, for on-going resource management practices such as forestry and pastoralism, physical plans are of limited use in dealing with dynamic, cumulative impacts and day-to-day management issues. Management plans will be required and should be provided for in the budget. Two unstated factors might undermine physical plans. In times past, under the command authority of the socialist state or when traditional authority carried some weight, a resource management system might have been enforced. Now that times have changed and institutions are weak, re-establishing formal controls or the "traditional" system may be extremely difficult. The "traditional" system may no longer be appropriate or may require considerable modification to suit the rapidly changing situation. Furthermore, in times of poverty and limited alternatives, financial returns from "illegal" activities, such as out-of season grazing, encroachment into protected areas and poaching of high value wildlife may tempt resource users to ignore plans and regulations (especially if these are not enforced). Tangible alternative incentives or benefits are almost certainly going to be needed to change individual and societal values and deleterious land-use practices. This is amplified below (para 3.4).

This is not to say that the chosen course of action is inappropriate. Just that caution is recommended when making bold assertions, which are not substantiated by facts or clear justification.

Having said that, it is encouraging to see the proposed budgetary emphasis on Immediate Objective 3, Output 5 as this focuses on institutional arrangements and financial mechanisms. This, though, should be underpinned by better socio-economic baseline data. Provision for this could be made under Activity 1.4 or as a new activity under Output 2. Monitoring and analysis is rightly identified as an associated activity (Activity 2.2). However, as well as monitoring key indicators of ecosystem health, species condition, number and location, budgetary provision needs to be made for participatory assessment, monitoring and evaluation (PAME) of community objectives and activities. Communities themselves should determine the latter, which hopefully would cover livelihood issues such as health and economic well-being.

2.4 The participatory approach

Collaborative management of natural resources has much to commend it. Whilst it is true that forest management has improved in countries like Nepal where previously nationalised forests have been handed back to user groups, this has been achieved through greater community control over resources and a more equitable distribution of resource benefits. Since local communities have assumed control (but not freehold ownership) of forests, they have had a vested interest to manage natural resources and carry out protective activities themselves.

The devolution of decision-making to user groups has been a prerequisite. Unless long term access to resources and their use is guaranteed by some formal arrangement, such as through legally binding management plans setting out rules and obligations, it is doubtful that attempts to set up collaborative management systems will work. In Mongolia, where top-down decision-making and central planning is prevalent, devolution of decisions and vesting of control of resources to herder communities (HC) could prove to be a major issue.

From personal experience in Nepal and South Africa, the determination of primary and secondary stakeholders can be a major task and the source of internal divisions and conflicts. This delayed the hand-over of forests and other natural resources in South Africa and, in Nepal, in some cases necessitated the re-negotiation of user-group membership. In South Africa, after three years of negotiations by an Irish, then a DFID funded project, not one woodlot had been handed over to the local community. Establishing who had a legitimate interest was a difficult and involved process requiring the identification, by census survey of primary stakeholders. The formation of legal entities was also a cumbersome process, whereas in Nepal a less formal cooperative process sufficed. In the latter case, the management plan was the binding agreement with the government and the community. This experience was with sedentary groups. Nomads who not only move their herds but also their dwellings could pose an even greater problem, especially if traditional resource boundaries are no longer recognised and centrally planned grazing restriction are no longer observed.

The Project Brief gives light treatment to these issues, stating that the establishment of HC will be at the herders' "own pace and in their own self-determined way" and that the experience of other projects will be drawn upon. However, this is probably going to be a much more extensive and complicated project than its predecessors, so caution is advised. Bearing in mind that the formation of HC is a prerequisite to the successful establishment of collaborative resource management arrangements, and that the project only has an initial lifespan of five years, it is considered that the budget for this item (Activity 1.2) should be increased. Furthermore, leaving herders to determine the pace at which the HC are established is very open-ended. A road map with milestones and target dates is a better approach. If communities cannot agree after protracted negotiations it might be better to find an alternative group to work with.

In order to ensure that equity prevails, freely elected and representative Herder Communities should be established. Annual elections and reporting should be encouraged. The project should consider making these a pre-condition of assistance.

2.5 Linkages to other programmes and action plans at regional or sub-regional levels

In view of the aim to integrate biodiversity conservation objectives into the productive sector, the paucity of baseline data and information and the stated intention to apply the approaches, skills and experience of other project initiatives, it is surprising that formal linkages with other donors programmes is not highlighted as a specific activity, except as part of a learning/training centre (Activity 5.4).

The dovetailing of operational plans and activities, including research should be formerly addressed as donors might find that they are working at cross-purposes or that activities are not synchronised. This linkage with other programmes also offers the potential to be more cost effective than working in isolation.

3 Project's conformity with GEF priorities

The project appears to be in line with GEF goals and strategies.

4 Sustainability of the project

4.1 Institutional sustainability

The proposal clearly recognises the importance of strengthening the capacity of productive sector institutions and policies. In view of the comments made above, more intensive initial training and assistance in formulating land use plans and in forming HC seems warranted. Management plans will also be required. If plans are not realistic and reflective of community desires and HC are not representative, the project will likely flounder. A re-evaluation of the budget for these items is thus warranted.

4.2 Other institutional issues.

Inter and intra-departmental cooperation and transboundary working relationships has not been identified as an issue. Existing international agreements are outlined (under Activity 4.1). Since partnerships are stated to be the key to the sustainability of the project, the consequences of these not working out as desired or expected should be addressed.

4.3 Financial sustainability

It is concurred that financial sustainability is more likely to be achieved if the project can avoid the creation of systems that require expensive maintenance and upkeep or the establishment of new institutions. Although time consuming and initially seemingly costly to set-up, in the long run a collaborative approach should be more robust and financially cost effective than continuing with the existing system.

4.4 Economic sustainability

Mechanisms and activities are proposed to support the development of alternative livelihoods. If the successes that reportedly have been achieved in other parts of the country can be replicated in the Altai, requiring low long-term inputs, the project should be sustainable. However, only time will tell. The fact that the project places emphasis on improving traditional economic activities related to pastoralism and agriculture and that single activities such as tourism are not crucial, augurs well.

4.5 Social sustainability

Social sustainability will be more likely if the project is truly participatory. This will be dependent on the devolution of decision-making to HC and the uptake of the participatory approach by all stakeholders.

Benefits need to be forthcoming in a relatively short period of time and be equitable distributed to maintain community interest.

4.6 Ecological sustainability

A more holistic approach to biodiversity conservation is proposed than exists at present. This is based on a landscape approach rather than discreet protected area projects, recognising specific needs of species and linkages between habitats. Since humans are integral to the environment and 80% of the country is classified as pastureland anyway, integrating biodiversity objectives into the productive sector should be axiomatic. The fact that this provided for and encourage by this proposal can only be beneficial. It will more likely lead to the successful achievement of ecological sustainability than continuance with the *status quo*.

5 Risks

Major risks arise if the devolution of decision-making and/or the formation of HC is thwarted or held up by bureaucratic or community processes. These need to be addressed and ways of minimising them devised.

RESPONSE TO STAP REVIEW

Comment #1 (paragraph 1): The devolution of decision-making and the realisation of tangible, equitably distributed community benefits will be fundamental to the success of the project.

Response #1: Indeed these are fundamental to the success of the project, which is why the project focuses 80% of its resources on bottom-up kinds of activities and the remaining 20% on top-down activities related to re-orienting natural resource management programs and policies so local communities can experience tangible benefits from local control.

Comment #2 (paragraph 6): No quantified socio-economic data or indicators are presented about the socio-economic well-being of these groups or the state of the rural economy. Demographic information is also scant. Migration and settlement trends for instance cannot be deduced.

Response #2: This kind of information has been bolstered in under the socio-economic context section of the brief. As for migration trends, these are referred to in the description of threats and root causes in that many herders have been unable to make seasonal transhumant migrations due to the collapse of their cooperative institutions and the ensuing absence of support infrastructure and equipment.

Comment #3 (paragraph 11): The rationale for adopting an area-wide landscape ecology approach to conservation in the Altai Sayan is very valid and pertinent. All the elements necessary to justify this landscape level approach appear to exist and are stated succinctly in the chapter dealing with the landscape conservation rationale and strategy (pp 4).

Response #3: This is good to note, since the landscape approach is so important to this project.

Comment #4 (paragraph 12): The breadth of the issues covered is notable. The crucial link between rural livelihoods, institutional and political factors and environmental degradation is well recognised. Clearly, the causes of the loss of biodiversity and the means of dealing with them are complex. However, the lack of hard socio-economic data makes it impossible for the reader to gauge the state and condition of the rural population, on-going trends, the magnitude and extent of poverty and the relative significance of present resource management practices. This makes it difficult to determine causes and effects. For instance, is the deteriorating socio-economic situation and institutional arrangements leading to increased livestock numbers, or are increasing stock numbers and unsustainable grazing leading to deteriorating economic conditions and the loss of biodiversity? Or are some other factors more important?

Response #4: As noted under Response #2, this kind of information has been bolstered in under the socio-economic context section of the brief. This information clarifies the situation by highlighting that is indeed the deteriorating socio-economic situation and institutional arrangements that have lead to increased livestock numbers; people responded to a deteriorating economic situation and the loss of institutional support by increasing livestock numbers. This was and still is their only way of reducing economic risk to which they are exposed.

Comment #5 (paragraph 13): The proposed integration of biodiversity conservation into productive sector institutions policies is critical and commendable. In this way, good management practices should become second nature to pastoralists.

Response #5: None required.

Comment #6 (paragraph 16): The assertion that increased livestock populations requires an expansion of grazing land is unsubstantiated… Herders' attitudes to animals as a form of wealth are crucial. Are livestock numbers *per se* more important than livestock performance? If the latter, improved livestock performance could be substituted for increased livestock numbers.

Response #6. The choice of the word "requires" is unfortunate. The meaning intended here is that increased livestock populations have resulted (not "requires") in the expansion of grazing lands and the encroachment upon wildlife habitat. This editorial change has been made in the brief. Herders attitudes are crucial and well known/well investigated in Mongolia. This information has been clarified in the Threats section of the brief. Indeed, the project's co-funders' interventions recognize this fact and are designed to help herders increase livestock performance (quality) and decrease numbers (quantity).

Comment #7 (paragraph 17): The "traditional" system may no longer be appropriate or may require considerable modification to suit the rapidly changing situation…Tangible alternative incentives or benefits are almost certainly going to be needed to change individual and societal values and deleterious land-use practices.

Response #7: This is certainly true. The project is designed to provide these alternative incentives and benefits in the form of assistance in improving livelihoods. All of Output 5 is related to this.

Comment #8 (paragraph 19): It is encouraging to see the proposed budgetary emphasis on Immediate Objective 3, Output 5 as this focuses on institutional arrangements and financial mechanisms. This, though, should be underpinned by better socio-economic baseline data.

Response #8:
Better socio-economic data will be gathered as part of the project's work to establish an information baseline by the end of year one of the project. This baseline will be used for monitoring and evaluation during the life of the project.

Comment #9 (paragraph 21):In Mongolia, where top-down decision-making and central planning is prevalent, devolution of decisions and vesting of control of resources to herder communities (HC) could prove to be a major issue.

Response #9: Indeed, this is an important issue, which is why the project is designed to address it w/respect to community-based wildlife management, forest management and protected area management.

Comment #10 (paragraph 23). The Project Brief … states that the establishment of HC will be at the herders' "own pace and in their own self-determined way" and that the experience of other projects will be drawn upon. However, this is probably going to be a much more extensive and complicated project than its predecessors, so caution is advised. Bearing in mind that the formation of HC is a prerequisite to the successful establishment of collaborative resource management arrangements, and that the project only has an initial lifespan of five years, it is considered that the budget for this item (Activity 1.2) should be increased.

Response #10: A significant amount of resources are being dedicated to the establishment of HCs under Output 3 and Output 5. Most of the funding for this will come from co-funding partners, not the GEF. The project takes a very realistic approach to this effort, thanks in part to the guidance provided to and experience shared with the Block B team by GTZ/GoM's Gobi Buffer Zone project. The project recognizes that to establish these HCs successfully, local people must proceed at their "natural" pace. Of course there will be workplans and milestones, but the groups themselves will establish these during the first year of the project.

Comment #11 (paragraph 24): In order to ensure that equity prevails, freely elected and representative Herder Communities should be established. Annual elections and reporting should be encouraged. The project should consider making these a pre-condition of assistance.

Response #11: This will be considered, although with most of these groups, the numbers of people involved are so low as to make elections unnecessary, as most local, able-bodied adults will be participating already in their respective HCs.

Comment #12 (paragraph 25): It is surprising that formal linkages with other donors programmes are not highlighted as a specific activity, except as part of a learning/training centre (Activity 5.4).

Response #12: These formal linkages are highlighted under the Implementation Arrangements and will be detailed as part of the process in cooperatively developing workplans as the project begins operations. For example, in the Sayan region, this project will share office space and dovetail operational plans and activities with the IFAD-GoM poverty reduction project there.

Comment #13 (paragraph 28): Inter and intra-departmental cooperation and transboundary working relationships has not been identified as an issue. Existing international agreements are outlined (under Activity 4.1). Since partnerships are stated to be the key to the sustainability of the project, the consequences of these not working out as desired or expected should be addressed.

Response #13: Strengthening cross Ministry and inter-departmental cooperation is very important to the project and is emphasized under Activities 1.3.2 and 1.3.3. Activity 1 is also related to cross-agency cooperation; by strengthening the ACSDs, the project is strengthening cross-agency collaboration as well.

Comment #14 (paragraph 30): Mechanisms and activities are proposed to support the development of alternative livelihoods. If the successes that reportedly have been achieved in other parts of the country can be replicated in the Altai, requiring low long-term inputs, the project should be sustainable. However, only time will tell. The fact that the project places emphasis on improving traditional economic activities related to pastoralism and agriculture and that single activities such as tourism are not crucial, augurs well.

Response #14: No response needed other than to confirm that the Block B took a hard-headed look the potential for tourism in the Altai Sayan and that while it is promising, it is not the panacea. Rather, the traditional economy of pastoralism and related activities holds the most promise.

Comment #15 (paragraph 31). Social sustainability will be more likely if the project is truly participatory. This will be dependent on the devolution of decision-making to HC and the uptake of the participatory approach by all stakeholders. Benefits need to be forthcoming in a relatively short period of time and be equitable distributed to maintain community interest.

Response #15: These are very good points which will be uppermost in the minds of the project implementation team as well as project evaluators. The project has been designed to devolve decision making on natural resource use and strengthen participatory approaches.

Comment #16 (paragraph 32): A more holistic approach to biodiversity conservation is proposed than exists at present. This is based on a landscape approach rather than discreet protected area projects, recognising specific needs of species and linkages between habitats. Since humans are integral to the environment and 80% of the country is classified as pastureland anyway, integrating biodiversity objectives into the productive sector should be axiomatic. The fact that this provided for and encourage by this proposal can only be beneficial. It will more likely lead to the successful achievement of ecological sustainability than continuance with the *status quo*.

Response #16: No response needed.

Comment #17 (paragraph 33). Major risks arise if the devolution of decision-making and/or the formation of HC is thwarted or held up by bureaucratic or community processes. These need to be addressed and ways of minimising them devised.

Response #17: This is very true and is one of the main tasks at hand for the project. This is why the project is designed to pilot the very kinds of activities that lead to the devolution of decision making.

Annex iv: Letters of Interest

See separate file

Annex v: Illustrative Maps

See Separate File

Annex vi: Detailed Budget with Co-Financing Breakdown

Project Outputs	GEF	Co-financing	Co-funders							Total (US$)
			MNE, MFE	MFAg	IFAD	ADB	Dutch	UNDP	Others	
1. Conservation Capacity of Productive Sector Institutions and Policies Is Strengthened.	**385,000**	**475,000**	**100,000**	**115,000**	**50,000**	**50,000**	**155,672**	**0**	**110,000**	**860,000**
Strengthen aimag-level Sustainable Dev. Commissions to integrate conservation and development	90,000	20,000					20,000		20,000	110,000
Stakeholders form Herder Communities	110,000	210,000			50,000	50,000	50,000		60,000	350,000
Law and policy framework's support for community-based conservation and development is strengthened.	40,000	145,000	50,000	65,000			5,672		30,000	215,000
Strengthen policy enforcement	45,000	100,000	50,000	50,000						185,000
Build constituency for community-based conservation.	100,000	0					80,000			110,000
2. Information baseline established and strengthened as basis integrating conservation into productive sectors.	**525,000**	**194,000**	**104,000**	**0**	**0**	**0**	**70,000**	**0**	**90,000**	**719,000**
Conduct biodiversity surveys/ research to support proactive management	210,000	114,000	54,000				50,000		60,000	324,000
Design and establish participatory monitoring protocols	160,000	80,000	50,000						30,000	240,000
Upgrade information management and GIS & Information use training.	75,000	0								75,000
Train staff and local stakeholders in information use.	80,000	0					20000			80,000
3. Landscape scale conservation achieved "on-the ground"	**1,280,000**	**600,000**	**150,000**	**0**	**0**	**0**	**60,000**	**0**	**450,000**	**1,880,000**
Landscape-level biodiversity conservation plans	150,000	60,000					30,000		60,000	210,000

Project Outputs	GEF	Co-financing	Co-funders							Total (US$)
			MNE, MFE	MFAg	IFAD	ADB	Dutch	UNDP	Others	
Devise/implement conservation plans for landscape species & habitats	240,000	80,000							80,000	320,000
Strengthen priority PA's ability to apply landscape principles to conservation action.	170,000	50,000							50,000	220,000
HCs designate priority habitat areas in landscape around PA	80,000	60,000							60,000	140,000
HCs develop & implement practical management plans & conservation agreements	330,000	171,500	71,500				30,000		100,000	501,500
Strengthen PA infrastructure.	310,000	178,500	78,500						100,000	488,500
4. Strengthened transboundary conservation action	**130,000**	**170,000**	**80,000**	**0**	**0**	**0**	**20,000**	**50,000**	**40,000**	**300,000**

Establish regional coordination committee	50,000	60,000	40,000				20,000		20,000	110,000
Develop trans-boundary conservation agreements & sponsor conference.	80,000	110,000	40,000					50,000	20,000	190,000
5. Grazing, forestry, sport hunting are re-oriented to support conservation while improving livelihoods.	**105,000**	**5,693,550**	**348,350**	**1,480,200**	**650,000**	**1,680,000**	**1,455,000**	**150,000**	**0**	**5,798,550**
Demonstrate HC-based sustainable pastureland management/Improved pastureland management	15,000	2,810,200	150,000	480,200	550,000	1,080,000	530,000	50,000		2,825,200
Establish pilot community-managed hunting areas	50,000	501,850	176,850				275,000	50,000		551,850
Demonstrate model forest management practices	15,000	331,500	21,500		100,000		180,000	50,000		346,500
Establish apex community institution for learning	15,000	590,000				200,000	390,000			605,000
Re-orient existing financing mechanisms for conservation support.	10,000	1,460,000		1,000,000		400,000	80,000			1,470,000
6. Monitoring and evaluation applied as capacity building tool	**295,000**	**305,000**	**100,000**		**50,000**		**105,000**		**50,000**	**600,000**
Monitor and evaluate project activities annually	125,000	175,000	50,000		50,000		50,000		25,000	300,000
Share lessons learned; cross-site learning; cross-project learning	120,000	105,000	50,000				30,000		25,000	225,000
Adaptive management training	50,000	25,000					25,000			75,000
Total	**2,720,000**	**7,763,222**	**882,350**	**1,595,200**	**750,000**	**1,730,000**	**1,865,672**	**200,000**	**740,000**	**10,483,222**
PDF -B:	350,000	262,500								
Sub total	3,070,000	7,700,050								
Total w/PDF -B costs		10,770,050								

Appendix B: (Related to Sections I-II)

Annex 1 Terms of Reference

List of proposed project staff

I. Government staff (part of co-funding inputs):

1. National Project Director (NPD, MNE)

II. Main office staff:

2. National Project Manager (NPM), 1
3. International Technical Advisor on Biodiversity Conservation (ITA), 1
4. Project Officer for Research (POR), 1
5. Project Officer for Training and Community Development (POTCD), 1
6. Monitoring and Evaluation Officer (MEO), 1
7. Finance Officer (FO), 1

III. Field office staff:

8. Project local coordinators (PLC), 4
9. Community empowerment and development officer (CEDO), 4
10. Finance and administrative assistant (FAA), 4
11. Social mobilisers (SM)15, number dependent on eventual area coverage
12. Local drivers, 4
13. International UNV on research,
14. International UNV on community-based natural resources management

IV. Support staff:

15. Admin Assistant, 1
16. Secretary and interpreter, 1
17. Drivers, 2

The costs of programme staff will be shared between GEF, Dutch Government and UNDP. Posts 2-7, 14-17 will be funded by GEF. Funding for posts 8-13 will be from the Dutch Government.

Short-term consultants (national and internationals) will be funded by either GEF or the Dutch, depending on the assignment.

Project Steering Committee:

The Project Steering Committee (PSC) will be chaired by the Ministry of Nature and Environment (MNE). As outlined in the management arrangements (Section 1) and in the implementation arrangements (Section 2), the PSC will consist of one member from each of the following organizations: Governors of Bayan-Olgii, Khovd, Uvs and Khovsgol aimags, 2 Parliament Members elected from Altai and Sayan regions, MNE, MFAg, WWF, UNDP, a representative from women's group, from herder association and from border guard services. Appointments to the PSC will be on an honorary basis and no fees will be paid. The PSC is expected to meet semi-annually and perhaps more frequently in the beginning of the project.

The primary task of the PSC will be to provide overall strategic policy and implementation guidance and support. Specifically, the responsibilities of the PSC are the following:

1. To monitor project implementation in terms of effectiveness and timeliness of inputs and in terms of the success of project activities.
2. To oversee and provide guidance to project activities and ensure such activities address national priorities.
3. To monitor project implementation to ensure that it remains in-line with the approved project document, goals and objectives of the Global Environment Facility, financial rules and regulations of UNDP and requirements of any other donors providing co-funding.
4. To provide a forum for ensuring an integrated approach to project activities and serve as a forum for stakeholder input and discussion.
5. To resolve any conflicts or disagreements that arises with respect to project activities that cannot be resolved by the project working groups.
6. To facilitate implementation of project activities in their respective organizations.
7. To review annual workplans and budgets for project activities and consider proposed changes as recommended.
8. To participate in a Tripartite Review and to review Annual Project Reports (APRs).

Short-term International Consultants:
Short term international consultants will be recruited to provide services in the specific area of the project during implementation. The acquisition of such services will bring about experiences of landscape level of conservation from other parts of the would into the Altai Sayan Eco-region, in the area of biodiversity conservation, habitat conservation, community-based conservation. The services of international consultants will also be acquired for conducting reviews, evaluations and impact assessments.

National Consultants:
Short term national consultants will be hired to work together with the project team for a limited period in the area where external assistance would require, for example, review of national policies and systems, preparation of manuals and working guidelines related to micro-enterprise, resource mobilization and training, development of baseline, setting up sustainability strategies, and establishing monitoring and evaluation system.

Services of national consultants will be acquired to assist the team led by international consultants.

Sub-contracts:
Provision of subcontract is made for those activities that require relatively longer period of accomplishment and involve people from more than one field to work together. Researches like field surveys of priority species, habitats, and environmental parameters, inventory and resources surveys, skill development training would be sub-contracted to national NGOs and CBOs on the ground of their proved capacity to work effectively in the specific field.

I Government staff

1. National Project Director

Duties and Responsibilities
The National Project Director *(NPD*), appointed by the Ministry of Nature and Environment, is the principal representative of the government at the project level and will assume the overall responsibility

for the successful implementation of the project, and accountability to the Mongolian Government and all co-financiers for the proper and effective use of project resources.

Specifically, the NPD's major responsibilities, in close collaboration with *UNDP CO* and the *Designated institution* are:

(a) Undertake project advocacy at the policy level (high officials of the parliament, cabinet, line ministries, government agencies and other public sector institutions, civil society, private sector and the donor community) to ensure national commitment and contribution to the project objectives;
(b) Undertake policy level negotiations and other activities to facilitate effective and efficient project implementation and maximize its impact;
(c) Provide policy guidance to the PIU congruent with national policies, including for the selection of local consultancy, training and other specialist services;
(d) In consultation with the *Ministry of Finance and Economy* (MOFE) and the Designated institution concerned, ensures that requisite financial allocations are contained in the national budget, in accordance with the in-kind, cash or cost-sharing budgets, and the established schedules of payment;
(e) Ensures that the project document revisions requiring Government's approval are processed through the MOFE (as a Government's Coordinating Authority), in accordance with established procedures;
(f) Be responsible for the achievement of the outputs and hence, the objectives of the program; ensuring that the Project Implementation Unit (PIU) is established as an integral entity working within the Ministry of Nature and Environment (MNE) to ensure full ownership by MNE and to facilitate eventual transition within its institutional structure;
(g) Participate in the finalization and approve the Project Annual and Quarterly Work Plans and budget, in close discussion with the UNDP, to maximize the leverage of the project resources in order to achieve the desired overall state of development and immediate objectives set out in the project document; s/he may also approve individual payments on a day-to-day basis.
(h) Supervise and approve the project budget revision and NEX delivery report;
(i) The NPD will be responsible for managing the implementations of the project, which includes personnel, subcontracts, training, equipment, administrative, financial and reporting.
(j) Review jointly with the PIU success indicators and progress benchmarks against expected project outputs so that progress can be assessed, and review and clear Annual Project Progress and Terminal Reports;
(k) Conduct regular monitoring sessions with UNDP and the PIU, including Project Appraisal Committee (PAC) Meeting, Annual and Terminal Tripartite Review Meetings to measure progress made or achieved towards the project objectives, and comment on Project Review and Evaluation Reports;
(l) Report regularly to the Project Steering Committee on the project progress, in conjunction with the PIU staff;
(m) Assess on regular basis staff work performance in the PIU, including that of National Project Manager, Administrative & Finance Assistant and other staff;
(n) Establishes close linkages with other UNDP and UN supported as well as other donor or nationally funded projects/programmes in the same sector
(o) Ensure that the Antional Project Manager is empowered to effectively manage the project and the other staff to perform their duties effectively.

II Main office staff:

2. National Project Manager

The National Project Manager (NPM) will be responsible for the overall management and implementation of the project on a day-to-day basis, including financial management. As the certifying authority for the project, the NPM will be responsible for the effective and efficient use of resources. Working closely with two Project Officers, one for research and one for training and outreach, as well as with national and international technical consultants and other project personnel (both in the field and in Ulaanbaatar), the NPM will keep both the National Project Director (NPD) of the Ministry of Nature and Environment (MNE) and the United Nations Development Programme (UNDP) informed on a regular basis.

Functional Responsibilities:
Planning

- Preparing the annual and quarterly workplans, training plans, travel plans and procurement plans to facilitate the implementation of the project;
- Ensuring that the workplans contain a time-phased listing of project activities/tasks to be performed and the outputs that should result from these activities; and
- Ensuring that the workplans are in line with and serve to achieve the objectives of the project as set out in the project document.

Mobilization of Inputs

- Setting up and managing the project office, including staff facilities and services, in accordance with the project's workplan;
- Preparing terms of references for national and international, short-term and long-term technical personnel, identifying potential candidates (advertising, organizing a selection board, conducting examinations/interviews, arranging medical examinations, and obtaining approval of the appropriate authorities) and recruiting personnel in accordance with national execution (NEX) guidelines;
- Preparing technical specifications for equipment required under the project and procuring such equipment in accordance with NEX guidelines; maintaining an inventory and ensuring the proper operation, maintenance and appropriate distribution of such equipment;
- Preparing terms of references for subcontractors and short-term consultants, identifying potential contractors (advertising, organizing a contract committee, recommending a contractor, and obtaining approval of the appropriate authorities) and awarding the subcontract in accordance with NEX guidelines;
- Preparing training programs (in consultation with UNDP), with particular emphasis on developing an overall training plan, including types of training activities, individuals to be designated, priorities and venues and costs involved; and
- Monitoring work progress and certifying of satisfactory services delivery.

Project Implementation

- Ensuring timely mobilization and utilization of project personnel, subcontracts, training and equipment inputs, including ones utilized by the Implementing Agencies;
- Exercising overall technical, financial and administrative oversight of the project, including supervising national and international personnel assigned to the project;
- Guiding and supervising the Project Officer for Training and Community Outreach to implement project activities involving the Park Management Authority of the Altai Sayan Special Protected Area and the buffer zone communities, including schools;
- Guiding and supervising the Project Officer for Research of the Academy of Sciences to implement project activities involving biodiversity assessment, monitoring and research;
- Guiding and supervising the Project Local Coordinators to facilitate project implementation (considering the culturally diverse environment);
- Coordinate project implementation among different implementing agencies and partners;

- Collaborating with the Park Management Authorities of the Altai Sayan Protected Area, other donors, the Academy of Sciences and other academic institutions, and national and local government representatives in implementing project activities;
- Promoting collaborative efforts with Russian, Kazakhstan and if possible, China, through the Ministry of Nature and Environment on conservation of umbrella species in the Altai Sayan Eco-region; and
- Assessing the impacts and lessons learned to be disseminated and integrated into future activities.

Financial Management

- Preparing financial forecasts, based on quarterly workplans;
- Certifying that project expenditures are in accordance with the project document and workplans and that funds are available in the relevant lines of the project budget;
- Certifying payment requests, including for quarterly advances of funds (where applicable) on the basis of budget availability;
- Assuming direct responsibility to the NPD and UNDP and possibly other donor agencies for the funds provided under the project, consistent with the relevant financial and accounting rules and procedures; and
- Initiating budget revisions, on the basis of actual delivery.

Reporting

- Preparing quarterly progress reports, containing assessment of progress in implementing activities, including reasons for delays, if any, and recommendations on necessary improvements to project design and implementation;
- Reporting to the NPD and UNDP periodically on the status and constraints, if any, of the project;
- Monitoring the physical and financial performance of the project and updating the workplan at least quarterly;
- Preparing detailed annual review and evaluation reports, i.e. Project Implementation Review (PIR), containing a description of overall project progress, an assessment of the efficacy of institutional arrangements for the implementation, and recommendations on improvements that should be made, if any, to project design and implementation; and
- Ensuring timely preparation and submission of required reports, including technical, financial and study tour/fellowship reports

Project Termination

- Preparing a draft Terminal Report for consideration and comments by NPD and UNDP at least 12 weeks before the completion of the project and, later, assisting in its finalization;
- Making a final check of all equipment purchased under the project through a physical inventory, indicating the condition of each equipment item and its location; discussing and agreeing with MNE and UNDP on the mode of disposition of such equipment and implementing these decision; and
- Ensuring all terminal arrangements relating to the project personnel are completed at the final closure of the project.

Managerial Responsibilities

- Facilitating the work of international and national personnel and certifying their satisfactory performance;
- Supervising the work of two Project Officers and project support personnel, including certifying attendance sheets and annual performance appraisal;
- Supervising financial monitoring and reporting, as well as record keeping under the responsibility of the Administrative Assistant;
- Performing other coordinating tasks, as appropriate, for the successful implementation of the project in accordance with the project document and workplans;

3. International Expert on Biodiversity Conservation

The International Expert will undertake research on biodiversity issues and provide advisory services to the National Project Manager (NPM). The expert will closely liaise with the Project Officers for Research, Community Development and Evaluation and Monitoring, and report to the NPM. The expert has the following tasks:

- Provide overall strategic scientific advice on biodiversity and conservation management to the NPM and the Altai Sayan SPA management authorities;
- Plan, in consultation with NPM, Project Officer for Research, the Academy of Sciences, Park Authorities and other relevant entities, all annual R&D activities in connection with biodiversity management in the Altai Sayan protected areas and assist in implementation;
- Assist the NPM and Project Officer for Research in preparing work-plans for activities related to biodiversity research, assessment and monitoring;
- Assist the NPM in reviewing the status of the project and identifying issues that have arisen during implementation and suggesting approaches to resolve them;
- Provide direction, coordination and technical backstopping to the work of the Project Officer for Research and Community;
- Coordinate with project partners, including donors and national and international non-government organizations;
- Assist in preparing detailed Terms of References for technical consultants and supervise such consultancies and contracts, as needed;
- Participate in the annual Tripartite Review meeting, as requested;
- Develop a framework for on-going biodiversity assessment and monitoring;
- Ensure all technical scientific standards of both, short-term and long-term scientific activities within the project objectives are met, and/or support government institutions in that respect;
- Write and publish peer-reviewed research articles in scientific journals;
- Comment on reports, analyses and other documents prepared under the project;
- Provide detailed briefing and training as required to government officials, park management staff, buffer zone councils, local communities and others on biodiversity conservation;
- With a national expert and the Project Officer for Research, take a leading role in devising a landscape level biodiversity conservation plan;
- Advice on how to integrate biodiversity considerations and landscape level management techniques into national, regional and community plans and policies, specifically the productive sector policies;
- Quantify the values and benefits of biodiversity and ecosystem health (as outlined in Section 2, Output 1);

Advice on the necessary scientific elements necessary for the planned ten year agreement to be designed among stakeholders for priority areas.

4. Project Officer for Research

The Project Officer for Research (PO Research) will be responsible for the day-to-day management of project activities related to biodiversity assessment, monitoring and research, under the guidance of the National Project Manager (NPM). The PO Research works closely with national and international technical scientific consultants. He/she reports to the NPM.

Planning

- Assisting in the preparation of the annual and quarterly workplans, training plans, travel plans and procurement plans to facilitate the implementation of the project;
- Ensuring that the workplans contain a time-phased listing of project activities/tasks to be performed and the outputs that should result from these activities; and

- Ensuring that the workplans are in line with and serve to achieve the objectives of the project as set out in the project document.

Mobilization of Inputs

- Preparing terms of references for national and international, short-term and long-term technical personnel, identifying potential candidates (advertising, organizing a selection board, conducting examinations/interviews, arranging medical examinations, and obtaining approval of the appropriate authorities) and assisting in the recruitment of personnel in accordance with national execution (NEX) guidelines;
- Preparing technical specifications for equipment required under the project and assisting in the procurement of such equipment in accordance with NEX guidelines; maintaining an inventory and ensuring the proper operation, maintenance and appropriate distribution of such equipment;
- Preparing terms of references for subcontractors and assisting in identification of potential contractors (advertising, organizing a contract committee, recommending a contractor, and obtaining approval of the appropriate authorities) and facilitation the issuance of subcontracts in accordance with NEX guidelines;
- Preparing training programs (in consultation with UNDP), with particular emphasis on developing an overall training plan, including types of training activities, individuals to be designated, priorities and venues and costs involved; and
- Monitoring work progress and certifying of satisfactory services delivery.

Project Implementation

- In cooperation with the NPM, ensuring timely mobilization and utilization of project personnel, subcontracts, training and equipment inputs, including ones utilized by the Implementing Agencies;
- Collaborating with the Park Management Authorities of the Altai Sayan Protected Area, other donors, the Academy of Sciences and other academic institutions, and national and local government representatives in implementing project activities;
- Promoting collaborative efforts with Russian and Kazakhstan, if possible China, through the Ministry of Nature and Environment on conservation of umbrella species in the Great Gobi; and
- Assessing the impacts and lessons learned to be integrated into future activities.

Financial Management

- Preparing financial forecasts, based on quarterly workplans;

Reporting

- Assisting in the preparation of quarterly progress reports, containing assessment of progress in implementing activities, including reasons for delays, if any, and recommendations on necessary improvements to project design and implementation;
- Reporting to the NPM periodically on the status and constraints, if any, of the project;
- In cooperation with the NPM, monitoring the physical and financial performance of the project and updating the workplan at least quarterly;
- Assisting the preparation of annual review and evaluation reports, i.e. Project Implementation Review (PIR), containing a description of overall project progress, an assessment of the efficacy of institutional arrangements for the implementation, and recommendations on improvements that should be made, if any, to project design and implementation; and

Project Termination

- Assisting in the preparation of the Terminal Report for consideration and comments by NPD and UNDP at least 12 weeks before the completion of the project and, later, assisting in its finalization;

The PO Research ensures that project objectives related to biodiversity conservation measures and the application of the landscape conservation concept to the Altai Sayan region are fulfilled. S/he will be responsible for information collection and analysis for biodiversity conservation and planning (as outlined in Section 2, Output 2) including conducting biodiversity surveys and targeted research to support proactive landscape level management, designing and establishing participatory monitoring protocols for data gathering and analysis and upgrading information management and geographic information systems. The Officer will also be responsible that biodiversity conservation measures are applied at a landscape level to enhance connectivity and strengthening the protected areas system (as outlined in Section 2, Output 3). This will include liaising with partners to facilitate the development of a landscape-level biodiversity conservation plan, devising and implementing Conservation and Recovery plans for priority landscape species and ecosystems, and providing advice to HC, park management and government on biological and ecological concepts and practices.

5. Project Officer for Training and Community Development

The Project Officer for Training and Community Development (PO Community) will be responsible for the day-to-day management of project activities related to alternative livelihoods, capacity building and training and community outreach and public awareness, under the guidance of the National Project Manager (NPM). The PO Community works closely with national and international technical consultants. He/she reports to the NPM.

Planning

- Assisting in the preparation of the annual and quarterly workplans, training plans, travel plans and procurement plans to facilitate the implementation of the project;
- Ensuring that the workplans contain a time-phased listing of project activities/tasks to be performed and the outputs that should result from these activities; and
- Ensuring that the workplans are in line with and serve to achieve the objectives of the project as set out in the project document.

Mobilization of Inputs

- Preparing terms of references for national and international, short-term and long-term technical personnel, identifying potential candidates (advertising, organizing a selection board, conducting examinations/interviews, arranging medical examinations, and obtaining approval of the appropriate authorities) and assisting in the recruitment of personnel in accordance with national execution (NEX) guidelines;
- Preparing technical specifications for equipment required under the project and assisting in the procurement of such equipment in accordance with NEX guidelines; maintaining an inventory and ensuring the proper operation, maintenance and appropriate distribution of such equipment;
- Preparing terms of references for subcontractors and assisting in identification of potential contractors (advertising, organizing a contract committee, recommending a contractor, and obtaining approval of the appropriate authorities) and facilitation the issuance of subcontracts in accordance with NEX guidelines;
- Preparing training programs (in consultation with UNDP), with particular emphasis on developing an overall training plan, including types of training activities, individuals to be designated, priorities and venues and costs involved; and
- Monitoring work progress and certifying of satisfactory services delivery.

Project Implementation

- In cooperation with the NPM, ensuring timely mobilization and utilization of project personnel, subcontracts, training and equipment inputs, including ones utilized by the Implementing Agencies;
- Collaborating with the Park Management Authorities of the Altai Sayan protected areas, other donors, other community outreach and training institutions, and national and local government representatives in implementing project activities; and
- Assessing the impacts and lessons learned to be integrated into future activities.
- Implement the recommendations from the reviews, research and surveys on sustainable agriculture, pastoralism, sport-hunting management and ecotourism.

Financial Management

- Preparing financial forecasts, based on quarterly workplans;

Reporting

- Assisting in the preparation of quarterly progress reports, containing assessment of progress in implementing activities, including reasons for delays, if any, and recommendations on necessary improvements to project design and implementation;
- Reporting to the NPM periodically on the status and constraints, if any, of the project;
- In cooperation with the NPM, monitoring the physical and financial performance of the project and updating the workplan at least quarterly;
- Assisting the preparation of annual review and evaluation reports, i.e. Project Implementation Review (PIR), containing a description of overall project progress, an assessment of the efficacy of institutional arrangements for the implementation, and recommendations on improvements that should be made, if any, to project design and implementation; and

Project Termination

- Assisting in the preparation of the Terminal Report for consideration and comments by NPD and UNDP at least 12 weeks before the completion of the project and, later, assisting in its finalization;

The PO Community is responsible for the day-to-day management of the projects activities related to improving the human capacity of the SPA management authorities, developing a framework for community involvement in landscape level ecological management, conducting community outreach and education programs and delivering alternative livelihood models. The Officer will be responsible to strengthen institutions (and policies) specifically at the community level working towards integrated sectoral planning and resource management (as outlined in Section 2, Output 1). This will involve strengthening aimag Councils for Sustainable Development to integrate conservation and development issues into the plans of each of the four project aimags, providing advice on how to integrate biodiversity into productive sector policies and how to strengthen policy enforcement and enhancing youth constituency programs through innovative educational programs for schools and other youth organizations. S/he will also be partially responsible for re-orienting grazing practices, forest use, sport hunting practices and tourism to support conservation while improving livelihoods (as outlined in Section 2, Output 5). This will include cultivating the emergence of an apex institution for learning among herder groups and local stakeholders, establishing demonstration models for community-based wildlife management and advising on how to re-orient existing revenue generation mechanisms for sustainable financing of conservation programs.

6. Monitoring and Evaluation Officer (MEO)

The Monitoring and Evaluation Officer will work under the supervision of and report to the PNM. S/he will be responsible for developing and implementing the project's monitoring and evaluation (M&E) system and overseeing all components and activities of the project that relate to information/data collection and management. S/he will work in close collaboration with other project staff, subcontractors/consultants, government institutions, and project partners to ensure a coordinated approach in M&E and information management to support landscape-level conservation of the Altai Sayan. S/he will also be responsible for working with the MNE to build up its capacity in and ensure in institutionalization of centralized management and institutionalization of research, M&E and information management for the Altai Sayan Pas prior to project completion.

The specific responsibilities of the MEO include the following:

- Project overall technical guidance and oversight to the development and delivery of the project's monitoring and evaluation system and information management system, integrating GIS technology in a holistic approach.
- Oversee and be responsible for development and monitoring of biological and socioeconomic indicators to measure efficiency, effectiveness, impact and sustainability working in close collaboration with other project staff and consultants.
- Oversee the design and establishment of a sustainable community-based monitoring and data collection system, linked with the overall M&E system, including training community members in data collection, with assistance/inputs from other project staff and consultants.
- Facilitate a coordinated and collaborative approach to research, monitoring and information management among relevant programs and institutions, including the development of common protocols in monitoring and information sharing and capitalizing on different institutions' expertise, resources and facilities.
- Develop procedures/guidelines for: data collection, process monitoring, participatory M&E system, periodic reporting, and internal evaluation framework.
- Based on the advice of the NPM, liaise with the concerned government agencies and other agencies such as I/NGOs working in this area, in order to better coordinate data collection related to baseline establishment and ongoing M$E research, and formulate plans and execute activities.
- Identify training needs of and organize training provision for central and field-level government staff in undertaking monitoring and information management activities and applying monitoring results and research findings in adaptive management of Pas.
- Provide guidance and support to the Research Officer in the development of planning tools, including landscape, habitat, species management plans.
- Oversee analysis and interpretation of geographical, biological, socio-economic data, applying them to management and policy recommendation.
- Oversee and be responsible for all data storage, management and retrieval.
- Assist in the development of Terms of References of the subcontracting agencies.
- Prepare and implement a program for enhancing the M&E and GIS usage/application capacities of project team members and relevant partner institutions, including organizing and conducting workshops.
- Establish mechanisms for linking monitoring feedback with the project's decision-making processes, including periodic review and assessment exercises, and adaptive management strategies.
- Act as facilitator or trainer in areas of his/her knowledge, as required
- Keep abreast of new methods and techniques with regard to M&E of biodiversity conservation initiatives globally.
- Provide additional support as requested by the NPM and as required.

7. Finance Officer (FO)

The Project Finance Officer will be responsible for providing administrative support to the Project and will report directly to the NPM. S/he is expected to manage and collate three separate sets of accounts each for the Government of Mongolia, UNDP/GEF and the Dutch Government.

The specific responsibilities of the FO will include the following:

- Set up a financial accounting, transactions and reporting system for the project in accordance with the Mongolian Government, UNDP's and the Dutch Government's financial rules and regulations.
- Advise the NPM on the budgetary implications of project management decisions.
- Ensure that all financial transactions, both in project field and main offices, are in compliance with the applicable financier rules and procedures.
- Supervise the Finance Assistance in all aspects of financial management.
- Assist in the preparation of financial/budgeting components of annual and quarterly work plans and other required reports.
- Prepare payment requests for submission to applicable financier though the NPM.
- Facilitate audits of project accounts conducted by external auditors.
- Assist with the preparation of tender documents for subcontracts and procurement of goods and services.
- Maintain updated the accounting books and related documentation to monitor and control the project budget to prevent over-expenditures.
- Prepare the needed budgets and financial reports, ensuring fiscal and financial accountability, to be submitted to the co-funders, through the National Project Director.

Qualifications:
The candidate should have at a least a graduate degree in Business Administration and/or Accounting plus a minimum of five years experience in administering large-scale projects. S/he must have excellent computer skills, especially in spreadsheet manipulation and work planning, skills and proven abilities in English writing. S/he should have demonstrated ability to learn and adapt to on the job demands.

III Field Office Staff

8. Project Local Coordinators x 4
Duty Station: Khovd, Uvs, Bayan-Ulgii, Khuvsgul
Duration: 5 years

Responsibilities
At the onset, four Project Local Coordinators (PLC) are envisaged one in each four target provinces. Each project local coordinators will work under the supervision and guidance of NPD and NPM. S/he will be the principal representative of executing the overall activities at field level and report to NPM. The major role of the Project Local Coordinators will be to establish strong coordination and linkages amongst all the major stakeholders in the field and at the center level to ensure that the project activities are implemented successfully. The Project Local Coordinators will each be responsible for managing the field-level project implementation and for achievement of the field level outputs.

The specific responsibilities of the Project Local Coordinators will include the following:

- Set up and manage the project office at the field level with the project work plan.
- Implement the project activities in within his/her respective area of responsibility as per the annual work plan and budget
- Ensure that the implementation of work plan is consistent with the envisaged outputs and objectives of the project document
- Ensure a coordinated and collaborative approach is undertaken among project partners at field-level in implementing project interventions and achieving desired outcomes.
- Assist the NPM in assessment and organization of required skills training and capacity building of government agency staff, local authorities, and key stakeholders in intersectoral/interagency coordination, planning, management at local and regional levels.
- Assist the NPM in ensuring field-based project staff receive relevant skills training and knowledge development required for effective and efficient project administration and implementation.
- Update and report to NPM on a regular basis about the progress and constraints and try to resolve implementation problems, if any, in consultation with other project staff members and with advice/guidance of the NPM.
- Act as a field level representative, as called upon by the PC, during review meetings, evaluation and discussions.
- Prepare annual work plan, quarterly progress report, annual progress report and other plans as required, with assistance/inputs of other project staff and ensure timely submission to the PIU.
- Oversee the work of other project staff and consultants in developing field-based indicators to measure the project efficiency, effectiveness, impact and sustainability.
- Assist the NPM regarding the need for subcontracts/consultancies and the recruitment and oversight of subcontracts in the targeted landscape.
- Provide additional support to PIU as required.

9. Community Empowerment and Development Officer x 4

Duty Station: Khovd, Uvs, Bayan-Ulgii, Khuvsgul
Duration: 5 years

Responsibilities:
Community Empowerment and Development Officer (CEDO) will work under the direct supervision of Project Local Coordinators. S/he will be responsible for motivation and mobilizing local communities within the assigned project sites to implement project activities. S/he will work closely with community members to undertake and implement project activities to ensure communities activeness in conservation and improvement of their livelihoods.

Specific Responsibilities:

- Assist PLC as required, particularly in the areas of project planning, reporting and financial management
- Plan and implement project activities in the assigned target areas as laid in the project outputs (log frame)
- Work towards establishing a good rapport with herder communities, and mobilize groups for the effective implementation of the field activities
- Be responsible for the formation of various user groups and strengthen capacity of local institutions, CBOs and user's groups for understanding local biodiversity assessment, monitoring, diversity and management of agrobiodiversity resources for conservation decisions.
- Conducts need assessment of communities in enhancing their capacities to make them functional and self-reliant.

- Contribute to baseline inventories, socioeconomic surveys, mapping and documentation on biodiversity resources and associated knowledge
- Design and provide training to target clientele particularly local level trainings
- Supervise and backstop social mobilizers in conducting regular meetings with herder groups and community members for group mobilization and sensitization.
- Assist LPC in developing work plans, conducting trainings, study tours and conservation awareness programs
- Participate in local meetings and contribute in technical and non-technical matters for smooth field implementation of project activities
- Be responsible for conducting conservation and awareness programs, training, etc.
- Be responsible for encouraging community groups to meet their basic needs and other IGA opportunities.
- Supervise and monitor project activities in the assigned areas ensuring timely planning and successful implementation
- Undertake any other job assigned by PLC.

10. Social Mobilizers (SM) x 15

Duty Station: Based in the community of the selected project sites; identified by local community
Duration: 5 years

Responsibilities:
The Social Mobilisers will work under the overall supervision of Project Local Coordinator and in direct supervision of the Community Development Officer. S/he will be responsible for motivating and mobilizing local communities within the targeted landscape to implement landscape level conservation activities. S/he will assist the local communities to undertake and implement conservation and self-reliant community development activities with the aim of making the local communities more proactive towards conservation and improving their livelihood means.

Specific Responsibilities:
- Be responsible for the formation of herder groups, functional organizations, regularization of their meetings to undertake collective development activities of community members
- Identify and assess the various needs particularly in enhancing their capacities to make them functional and self-reliant
- Conducting regular meetings with the aim of mobilizing herder groups to undertake socially acceptable saving and asset development programs
- Be responsible for conducting village meetings, study tour, conservation and awareness programs, training etc
- Be responsible for mobilizing and effectively involving special target groups in overall conservation and development programs
- Keep daily records of project activities, trails and other project activities
- Monitor and supervise research trials and demonstration sites
- Build strong rapport with communities for ensuring the greater viability of the program
- Be responsible to perform other duty as assigned by the immediate supervisors.

Annex 2 Outline Workplan

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
1. Institutions are strengthened and policies devised at national, regional and community level for integrated sectoral planning and resources management.					
1.1 Strengthen aimag-level Sustainable Dev. Commissions to integrate conservation					
1.2 Stakeholders form Herder Communities					
1.3 Law & policy framework's support for community-based con & dev strengthened.					
1.4 Strengthen policy implementation					
1.5 Build constituency for community-based conservation.					
1.6 Quantify values and benefits of biodiversity and ecosystem health.					
2. Information collection and analysis for biodiversity conservation and planning					
2.1 Conduct biodiversity surveys/ research to support proactive management					
2.2 Design and establish participatory monitoring protocols					
2.3 Upgrade information management and GIS & Information use training.					
2.4 Train staff and local stakeholders in information use.					
3. Biodiversity conservation measures are applied at landscape level to enhance connectivity and strengthen PAs					
3.1 Landscape-level biodiversity conservation plans					
3.2 Devise/implement conservation plans for landscape species & habitats					
3.3 Strengthen PA Administation skills to apply landscape principles to conservation action.					
3.4 HCs designate priority habitat areas in landscape around PA					
3.5 HCs develop & implement management plans & conservation agreements					
3.6 Strengthen PA infrastructure.					
4. Strengthened transboundary conservation action					
4.1 Establish regional coordination committee					
4.2 Develop trans-boundary conservation agreements & sponsor conference.					
5. Grazing, forestry, sport hunting, and tourism are re-oriented to support conservation while improving livelihoods.					
5.1 Demonstrate HC-based sustainable pastureland management					
5.2 Establish pilot community-managed hunting areas					

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
5.3 Demonstrate model forest management practices					
5.4 Establish apex com inst for learning & capacity bldg & livelihoods					
5.5 Re-orient existing financing mechanisms for conservation support.					
6. M&E applied as a tool for adaptive management, impact/progress assessment, and replication of best practices					
6.1 Monitor and evaluate project activities annually					
6.2 Share lessons learned & replication of best practices.					
6.3 Adaptive management training					

Annex 3 Monitoring and Evaluation[22]

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provide by the project team and the UNDP Country Office with support from UNDP/GEF. The Logical Framework Matrix in Annex 2.2 provides performance and impact indictors for project implementation along with their corresponding means of verification. These will form the basis on which the project's Monitoring and Evaluation system will be built.

The project will be subject to a Tripartite Review (TPR) at least once a year by representatives of the Government of Mongolia, the executing agency and UNDP. The first such meeting will be held within the first twelve months of the start of full implementation. In accordance with GEF requirements, a harmonized Quarterly progress report will also be provided during the first two year of the project to ensure that design and inception activities are closely monitored. Separate reviews of each site component will be conducted.

Project Monitoring Reporting

The Project Manager in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. Items (a) through (f) are mandatory and strictly related to monitoring, while (g) through (h) have a broader function and the frequency and nature is project specific to be defined throughout implementation.

(a) Inception Report (IR)

A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed Firs Year/ Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

(b) **Annual Project Report (APR)**

The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self -assessment report by project management to the CO and provides input to the country office reporting process and the ROAR, as well as forming a key input to the Tripartite Project Review. An APR will be prepared on an annual basis prior to the Tripartite Project Review, to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work.

[22] Issues related to monitoring, evaluation and replication are further elaborated in Part 13 Section III.

The format of the APR is flexible but should include the following:

- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome
- The constraints experienced in the progress towards results and the reasons for these
- The three (at most) major constraints to achievement of results
- AWP, CAE and other expenditure reports (ERP generated)
- Lessons learned
- Clear recommendations for future orientation in addressing key problems in lack of progress

(c) Project Implementation Review (PIR)

The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the CO together with the project. The PIR can be prepared any time during the year (July-June) and ideally prior to the TPR. The PIR should then be discussed in the TPR so that the result would be a PIR that has been agreed upon by the project, the executing agency, UNDP CO and the concerned RC.

The individual PIRs are collected, reviewed and analysed by the RCs prior to sending them to the focal area clusters at the UNDP/GEF headquarters. The focal area clusters supported by the UNDP/GEF M&E Unit analyse the PIRs by focal area, theme and region for common issues/results and lessons. The TAs and PTAs play a key role in this consolidating analysis.

The focal area PIRs are then discussed in the GEF Interagency Focal Area Task Forces in or around November each year and consolidated reports by focal area are collated by the GEF Independent M&E Unit based on the Task Force findings.

The GEF M&E Unit provides the scope and content of the PIR. In light of the similarities of both APR and PIR, UNDP/GEF has prepared a harmonized format for reference. Please refer to Annex H-3.

(d) Quarterly Progress Reports

Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team. See format attached.

(e) Periodic Thematic Reports

As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

(f) Project Terminal Report

During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

(g) ***Technical Reports*** (project specific- optional)

Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the

framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

(h) ***Project Publications*** (project specific- optional)

Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

Evaluation

Annual external audits are scheduled during the project's lifetime as part of UNDP's annual Project Implementation Review (PIR) process. Two other inputs will be crucial to the project's M&E practice: 1) annual participatory evaluation exercises will be undertaken with key stakeholders, including local communities, NGOs, and partner organizations, and 2) the regular, annual input of an adaptive management advisor.

Two independent evaluations will be conducted of the project – one mid-term and one final evaluation. These independent evaluations of project performance will match project progress against predetermined success indicators. Each evaluation of the project will document lessons learned, identify challenges, and provide recommendations to improve performance.

TABLE G-1 : INDICATIVE MONITORING AND EVALUATION WORK PLAN AND CORRESPONDING BUDGET

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project staff time*	Time frame
Inception Workshop	▪ National Project Manager ▪ UNDP CO ▪ UNDP GEF	7,000	Within first two months of project start up
Inception Report	▪ Project Team ▪ UNDP CO	None	Immediately following IW
Measurement of Means of Verification for Project Purpose Indicators	▪ National Project Manager ▪ will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members	To be finalized in Inception Phase and Workshop. Indicative cost 15,000	Start, mid and end of project
Measurement of	▪ Oversight by Project GEF Technical	To be determined as	Annually prior to

Means of Verification for Project Progress and Performance (measured on an annual basis)	Advisor and National Project Manager ▪ Measurements by regional field officers and local IAs	part of the Annual Work Plan's preparation. Indicative cost 25,000 (average 5,000 per year)	APR/PIR and to the definition of annual work plans
APR and PIR	▪ Project Team ▪ UNDP-CO ▪ UNDP-GEF	None	Annually
TPR and TPR report	▪ Government Counterparts ▪ UNDP CO ▪ Project team ▪ UNDP-GEF Regional Coordinating Unit	None	Every year, upon receipt of APR
Steering Committee Meetings	▪ National Project Manager ▪ UNDP CO	Indicative cost 7,200 (average 1,200 a year)	Following Project IW and subsequently at least once a year
Periodic status reports	▪ Project team	5,000	To be determined by Project team and UNDP CO
Technical reports	▪ Project team ▪ Hired consultants as needed	15,000	To be determined by Project Team and UNDP-CO
Mid-term External Evaluation	▪ Project team ▪ UNDP- CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	50,000	At the mid-point of project implementation.
Final External Evaluation	▪ Project team, ▪ UNDP-CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	50,000	At the end of project implementation
Terminal Report	▪ Project team ▪ UNDP-CO ▪ External Consultant	None	At least one month before the end of the project
Lessons learned	▪ Project team ▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc)	12,500 (average 3,000 per year)	Yearly
Audit	▪ UNDP-CO ▪ Project team	25,000 (average $5,000 per year)	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	▪ UNDP Country Office ▪ UNDP-GEF Regional Coordinating Unit (as appropriate) ▪ Government representatives	15,000 (average one visit per year)	Yearly
TOTAL INDICATIVE COST *Excluding project team staff time and UNDP staff and travel expenses*		US$ 226,700	

Annex 4 Inception Arrangements

Steps in Project Inception

1. Put Project Team in place
   - ⇨ Full-time National Project Director employed by the Designated Agency (MNE)
   - ⇨ Full time NPM employed
   - ⇨ Set-up Project Office
   - ⇨ Project Administration and Finance Staff seconded to Project Office
2. Establish Project Office Arrangements, including bank account etc
3. Project Steering Committee (PSC) selected (including Chair) and agreed between MNE and UNDP
4. Review and revise the project workplan and prepare workplan for first year.
5. Organize project Inception Workshop and at the meeting revise the project indicators
6. Cost and set-out inputs for each budget activity and obtain agreement from UNDP and MNE
7. First PSC meeting held to:
   - ⇨ Approve first year workplan (including expected sub-contracts)
   - ⇨ Approve sub-contracts

A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDO-CO and representation from the UNDP-GEF Regional Coordinating Unit, as well as UNDP-GEF (HQ) as appropriate.

A fundamental objective of the Inception Workshop (IW) will be to assit the project team to understand and take ownership of the project's goal and objectives, as well as finalize preparation of the project's first annual workplan on the basis of the project's logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan (AWP) with precise and measurable performance indicators and in a manner consistent with the expected outcomes for the project.

Additionally, the purpose and objective f the Inception Workshop will be to: (i) introduce project staff with the UNDP-GEF expanded team which will support the project during its implementation; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis a vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings.

The IW will also provide an opportunity for all parties to understand their roles, functions, and responsi-bilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all each parties responsibilities during the project's implementation phase

Contracts (including TORs) to be Prepared:
The National Project Manager will have overall responsibility to develop TOR's and procurement and arrange for the following sub-contracts and/or individuals:

Quantify values and benefits of biodiversity and ecosystem health. Economic studies will be conducted to bolster the rationale for conservation of biodiversity. This kind of information gives stakeholders a more complete perspective on the value of biodiversity and therefore to recognize trade-offs being made as part

of the normal decision making process, to assess the long-term consequences of those trade-offs, and to design and implement effective policies to minimize them. The following is an indicative list of the type of studies that will be conducted:

a) Quantifying "dollar value" of ecosystem services and the "costs" of activities that degrade them to highlight trade-offs inherent in decision-making;
b) Market attributes and economics of extractive use and non-extractive use;
c) Tourists' willingness to pay increased protected area entrance fees;
d) Feasibility of environmental service-based finance mechanism;
e) True value and cost of maintaining world-class sport hunting resource.

Biodiversity and socio-economic surveys and targeted research to support proactive management. To supplement the existing information baseline, basic aerial photographic and/or satellite imagery coverage of priority areas within the Altai Arc and Sayan Basin will be secured. Ground-truthing surveys and assessments will be conducted in the same areas in order to establish the basis for ongoing survey, research and monitoring. Field surveys of priority species, habitats, and environmental parameters will be conducted over the lifetime of the project to build on the information baseline. Types of surveys will include:

a) Species inventories: distribution, abundance, and condition of key species;
b) Forest type condition, and extent of coverage. Riparian habitat condition, and extent;
c) Rangeland condition and carrying capacity;
d) Resource use patterns, including gender and resource use and traditional knowledge; and
e) Key socio-economic parameters of people in priority areas, including herd sizes, income levels, educational opportunities, and transhumant migration patterns.

Limited, targeted research also will be conducted to more clearly define or understand the conservation landscape in the Altai Sayan:

a) Species ecology (habitat needs, species ecology, movement, feeding patterns);
b) The question of competition between wild and domestic herbivores over grassland resources;
c) Trends in species composition of rangeland plant communities and forest habitats;
d) Wildlife harvest and trade in the region (applying lessons from the Eastern Steppes Project);
e) Threatened umbrella species and associated habitats, building upon the current activities of organizations such as the WWF the International Snow Leopard Trust. Work will focus upon border regions and areas of HC activity. Initial effort will cover three Argali populations, two snow leopard areas and one brown bear location.

Participatory monitoring and management protocols for data gathering, and analysis and management. Monitoring of key biological, ecological and economic parameters will be conducted. Standardized protocols for monitoring and assessment – for data gathering, analysis and manipulation – will be designed and piloted in a network of four monitoring sites in the Altai Arc and two in the Sayan Basin. Monitoring will also be carried out to measure changes in selected populations of wildlife, in species composition, structure, and density, and the impacts on threatened habitats, species from, grazing, logging, and hunting. To minimize recurrent costs and maximize the potential for local stakeholders to contribute, the protocols will involve local organizations, where feasible, in the monitoring of key indicators of ecosystem health, species condition, number, and location.

Facilitate and train HC and stakeholders in developing local Priority Habitat Conservation Plan. Provide training and support HCs in identifying priority habitats and developing habitat management plans for their respective use areas. This will involve bringing stakeholders together at the *soum*-level to construct

and implement habitat conservation agreements for the priority areas. These plans will cover issues such as pasture allocation and enforcement, forest management; each plan will differ according to the issues that are particularly important to each HC. The plans will serve as models for habitat conservation planning and management throughout the Altai-Sayan. These plans will be part of a landscape-level management plan.

Community-based natural resource management. Develop practical workbook or guidelines for the project stakeholders and HC on sustainable community-based natural resource management. It will include grazing, forest-use, sport hunting management, and tourism, which are re-oriented to support conservation while improving livelihoods. Under this contract, community-based pasture management and sustainable forest management practices will be demonstrated and the establishment of community-managed hunting program supported.

Annex 5 GEF Council Comments and responses

GEF Council Comments from Switzerland

General Commentaries
The proposal centers on the sustainable management of the mountain landscapes of Mongolia's Altai Sayan Ecoregion which appears to be increasingly threatened by grazing pressure from growing livestock herds, habitat fragmentation and poaching which also affects the legally protected areas of the region. The system approach adopted by the project is in line with progressive spatial land use planning philosophy combining people needs with long-term conservation objectives for an area that is rich in unique biodiversity, diversified landscapes and traditional lifestyles.

Project emphasis is on sustainable habitat conservation for flagship, keystone and threatened species such as snow-leopard, Argali sheep and large raptors. This is proposed to be achieved through (a) participatory land-use planning involving local stakeholders, (b) co-management agreements for land located in support zones and corridors of the existing protected areas, (c) strengthening the existing protected areas; (d) institutional strengthening on all levels, (e) enhancement of pertinent legal and policy framework, (f) capacity development for improved range use, and (g) environmental awareness building.

In general, the proposal complies with GEF's operational strategy in the focal area of Biodiversity and with the Operational Program 4 aiming at the protection of Mountain Ecosystems. The proposal appears consistent with GEF principles regarding stakeholder participation, capacity development and a holistic approach to integrated and sustainable land-use management. The overall project objectives are relevant and meet global and national priorities. Although the proposal provides sufficient scientific and technical background information to justify interventions in the Altai Sayan Ecoregion there is concern regarding the interventions as presented in the proposal.

Main Concerns
The semi-nomadic people of the very isolated target area that is characterized by extremely harsh climatic conditions have evolved with their livestock in harmony with wildlife over centuries. The culture of the typical pastoralists of this region has formed the landscape features of the Altai Sayan which has prevailed until today in spite of past attempts to settle people, provide alternative lifestyles and regulate land use. Traditional grazing pattern in the target area and the typical lifestyle of the herders have changed very little over time. Against this background the proposed interventions with focus on spatial land use planning and the resulting land- and resource use policies have to be assessed.

It appears that the proposed interventions are driven by traditional Western thinking patterns aiming at the conversion of Mongolia into a market economy with all its ramifications. This is reflected by the western standards applied to the "poverty" definition for typical herder families in the rural areas as described in the proposal. The Western definition of poverty ignores the fact that herder families which constitute the majority of the population in the target area have been self-sufficient for centuries living off their herds and the land without demands on western amenities and who will undoubtedly continue to do so without western interference. It therefore appears prudent to approach "assistance" to rural families with utmost cultural sensitivity and not to introduce market oriented thinking and profit maximization into a rural society that likes to maintain its traditional lifestyle and which is well adjusted to the extreme environmental conditions of the Altai Sayan Region. The alleged overall increase in livestock numbers over the past decade may already be the first indicator of the negative influence of a market-driven economy. Some of the activities proposed in this document may make it worse.

Although the proposal is well written it lacks depth and only insufficiently addresses the cultural uniqueness of the area. The proposed activities focus on plans, planning, policies and institutions rather than the people. Typically, the project does not provide any tangible benefits to the herders, except for the two CBNRM pilot projects which unfortunately appear on the sideline instead of becoming the focal area of the project. Furthermore, the five year proposed duration is much too short to achieve the described targets.

In summary, it appears very doubtful that land use planning and new land use policies and co-management agreements according to "Western style" without offering tangible benefits will be successful in a rural society that has learned to be self-sufficient and to depend on each other for centuries. It is suggested that a stronger focus on the protection of existing protected areas and the enhancement of the current system of protected areas-- the recognized "backbone" of biodiversity conservation- in combination with new CBNRM areas which allow for true equity sharing would be more sensible in the long run.

Conclusions and Recommendations

Although the project should be supported in principle, it is recommended to: (a) adopt a more practical approach for the proposed action program, (b) provide local people with tangible benefits (i.e., equity sharing from highly lucrative trophy hunting and sustainable forest utilization), (c) to place a stronger focus on sustainable protection of the existing protected areas and adding new protected areas, and (d) to create CBNRM areas that will provide tangible benefits to the people and at the same time benefit conservation goals.

Further Comments

- Page 4, last paragraph: This should read "seral" not "serial" stages of vegetation.
- Page 6: "trans-boundary migration" does not imply a" distance" per se
- Page 6: Why call Argali a "keystone" species?
- Page 8, paragr. 4: "Unemployment" rarely exists in a rural area in Mongolia. Misleading statement.
- Page 8, paragr. 5: The statement of "poverty" related to the target area needs qualification. Poverty does not apply to the target area as stated. Western perspective on poverty does not apply here.
- Page 9, "causes": Is there supporting evidence that the number of herders is increasing? It appears that one of the key root causes that forced herders and their livestock into areas not used before -- including protected areas—were several consecutive years of drought resulting in poor primary production followed by harsh winters which killed millions of livestock (See also page 10, paragr. 2).
- Page 9, causes:…"economic instability as result of the ongoing transition process to a market economy": that appears to be exactly the reason why a market economy Western style should not be promoted in this mostly Buddhist influenced culture.
- Page 10, first paragr.: Please explain why there is"decreasing herder mobility". Is this induced by the transition process and reforms wanted by the West (i.e., settling herders in central places in order to deliver education, provide social infrastructure and develop a market economy)?
- Page 20 pp: It is commendable to form "herder committees"; but spatial land use plans are of limited value in an area where semi-nomadic herders change their locations more than 50 times per year!
- Page 22, 1.3.3.: how to "train" people who are tending their herds and who are continuously moving?
- Page 23, output 2: Highly ambitious and cannot be done within a five years project duration. Long-term monitoring appears more appropriate. Field surveys in the target area as proposed proved to be of little value in the past.
- Page 24: Past census/research/wildlife census efforts resulted in highly biased outcome. Surveys in such extreme terrain are highly biased. Activity 2.2. What to do with all the field data collected? Without data storage and processing facilities data collection is of little use: not very practical, too theoretical.

- Page 27. Activity 3.5: Why would local herders support this scheme without receiving tangible benefits? 5.1.1. What about allocating winter and summer pastures when "privatizing" or allocating land to individual families?
- 5.1.2: Micro-credits for what?
- 5.2: Good idea but is the central Government willing to delegate and would it be interested in true equity sharing (i.e., allowing herders to keep profit from selling licenses?).
- Page 31, second bullet: to map "virtual" boundaries for community forests is easy, to make the government accept the implications and let keep communities the revenues is a different story altogether.
- Page 35 UNDP-CCF: an economic transition and reforms imposed on Mongolia by foreigners and through external loans which increase the country's foreign debts but contribute little to the real needs. The basic question is whether reforms and transition is really wanted by Mongolia and Mongolians.
- Page 41, project outputs: 25% of GEF funds allocated to research: why so much?, 50% allocated to the elaboration of management plans (not to the implementation of the plans!): out of proportion; less than 5% of the total budget allocated to income generating opportunities: why so little? 15% of total budget spend on project monitoring and "lessons learned": out of proportion. In summary, the budget appears very unbalanced.
- Page 42: …"Financial sustainability will be achieved for the PAs through the proposed "Trust Fund" expected to be fully operational by 2009..": how realistic is this in a highly competitive global market; where numerous countries are trying to do the same thin hence competing for limited international funds available for that purpose.
- STAP review: why would the re-establishment of traditional grazing systems not be appropriate?

Overview of Response to Switzerland

The Government of Switzerland's detailed and thoughtful review of the Mongolia's proposed Altai Sayan project is appreciated. The Swiss comments have been fully considered by the project design team and have been taken into account in the preparation of the UNDP project document. This resulted in several adjustments to the project document as described below.

Overall, it was noted that Switzerland acknowledged the proposed project as being in line with GEF's operational strategy, consistent with GEF principles, relevant for global and national priorities and backed with sufficient scientific and technical background information.

It was also noted that Switzerland was concerned about the proposed project's apparent "Western" orientation with regard to culture, poverty, markets, land-use policies, etc. To an extent many these concerns are valid: the design team, the Government of Mongolia, UNDP and GEF itself undoubtedly bring cultural biases into the process of project development.

On the other hand, some of the concerns expressed in the Swiss commentary do not seem to be based on a full understanding of Mongolia's current development situation, especially during the past dozen years and in the proposed project areas.

This response paper therefore summarizes how the Swiss comments have been taken into account in the UNDP project document and, in certain instances, why some comments might have been off target due to lack of information. That additional information is provided.

Response to Main Concerns of Switzerland

In the main, it appears that most concerns expressed by Switzerland are based on the assumption that Mongolian herding has "changed very little over time," has "evolved in harmony with wildlife over centuries" and has been "self-sufficient for centuries." This assumption may have been true up until the early part of the 20th century, but beginning with the nationalist/socialist revolution in 1922, the situation changed dramatically for Mongolian herders.

First, as a growing ally of Soviet Russia and especially following Russia's split with Communist China, Mongolia became heavily dependent on Soviet subsidies and Soviet markets for most of the 20th century. It is estimated that by 1985, about one-third of Mongolian GDP was accounted for by Soviet subsidies to infrastructure, health, education, defense, etc. The growing strength of the socialist movement in the 1920s, mass arrests during the 1930s, and world war during the 1940s all affected traditional herding society.

Second, Mongolia's population has quadrupled during the past century. Although Mongolia remains one of the least densely populated country on earth, this increase has meant that herder mobility has become more and more restricted over time. In the early 20th century herder migration in search of better pastures could cover hundreds of kilometers or even more. Today, most herders range no more than 50 kilometers over the course of a year.

Third, state collectivization during the 1950s completely subsumed traditional patterns of herding life. Before collectivization most herders where indeed more or less self-sufficient. The herder cooperatives that emerged in the 1950s, however, came to provide herders with inputs and outlets that most had never seen before. Inputs included not only hay, fodder, veterinarians, and breeding programs, but kindergartens, schools, clinics, cultural centers and pensions as well. Outlets included the huge COMECON market to which Mongolia products, according to state plan, were produced and exported. In the end, very few Mongolian herders remained self sufficient.
Finally, the market reforms beginning in the early 1990s turned collectivization on its head and introduced a whole new set of problems to Mongolia. As the herder cooperatives were dismantled and the state industrial sector collapsed, the number of herder households increased from about 75,000 in 1990 to more than 150,000 in 1993. Without the cooperative support system, the only form of security the herders then had were animals. The number of livestock in Mongolia therefore increased from 25 million in 1992 to 33 million in 1999. This put increasing pressure on land, water, forests and wildlife.

In summary, traditional patterns of herding in Mongolia have changed dramatically over the past 80 years, herders have not been self-sufficient since the collectivization of the 1950s, and traditional harmony of Mongolian herding with nature was thrown completely out of balance in the early 1990s. For these reasons – reasons that are no fault of the herders themselves – Mongolia's environment and wildlife are increasingly under threat. The challenge of this project is to face Mongolian realities in history and culture deriving from the past 80 years rather than from the distant, idyllic past.

With this in mind, detailed responses to the Swiss commentary are provided below.

Detailed Response to Switzerland

ISSUES AND RESPONSE	Reference in the Project Document
Comments: The proposed interventions are driven by traditional Western thinking pattern aiming at the conversion of Mongolia into a market economy with all its ramifications **Responses:** Like many of the Eastern Bloc countries in the post-Soviet era, Mongolia made a hasty and poorly-planned transition from a centrally-planned to a free market economy. Landlocked, with few natural, economic, or managerial resources of its own, Mongolia's transition to a market-based economy has encountered severe problems. In spite of this, the Government of Mongolia and the vast majority of Mongolians are committed to the changes and, therefore, to adapting to the new market system. Having said this, neither the project nor the government will disturb anyone who is satisfied with his or her traditional lifestyle. Rather the project aims to assist those who recognize a need to adapt to a new environment in which centralized state planning and state-controlled cooperatives are not part of the picture.	Sections relevant to Herder communities, collaborative natural resource management practices throughout Outputs 1-Outputs 5.
Comments: The Western definition of poverty ignores the fact that herder families, which constitute the majority of the population in the target area, have been self-sufficient for centuries living off their herds and the land without demands on western amenities and who will undoubtedly continue to do so without western interference. **Response:** Please see above. This lifestyle may have been adequate a century ago or even under the old political system when all livestock were Government property and the herders were the Government's employees. At that time, the Government managed a coordinated, top-down system of natural resource utilization. This system collapsed however when the livestock were privatized in the early 1990s. Self-sufficiency was not a reality. With regard to definitions of poverty, Mongolians are quite capable of distinguishing between rich and poor herders, and the fact is that the vast majority of herders, owning less than 100 head of animals, are considered to be poor by Mongolian standards.	Please refer to Section 4. Baseline Situation Analysis in the Project Brief (para 2-4); Section 6. Current Land Use Management Practices and Livelihood Development Initiatives (Para 2-5).
Comments: The proposal lacks the depth and only insufficiently addresses the cultural uniqueness of the area. **Response:** This is probably correct. The worldview of local people is very deep rooted in their culture and tradition. Primarily they will rely on their own way of understanding. Thus the project has incorporated activities related to learning the culture of the particular communities. One of the target area is Bayan-Ulgii province, where ethnic Kazakh	

ISSUES AND RESPONSE	Reference in the Project Document
people, a minority in Mongolia, comprise the majority. We intend to hire local project manager that is fluent in Kazakh and is from the area and understand the culture.	
Comments: The proposed activities focus on plans, planning, policies and institutions rather than the people. **Response:** The project encourages a bottom-up approach by enabling community people to participate fully in tackling the problems that beset their lives. The main principle of the project is that the community people are the greatest resource to preserve the existing natural resources. Special efforts will be made to enable participation of young people to establish environmental friendly attitudes, knowledge and practices in target communities.	Please refer to Project Outputs 1-6.
Comments: The project doesn't provide any tangible benefit to the herders. **Response:** We must respectfully disagree with this assertion. The project leverages over US$5 million to fund livelihood and income generating activities under Output 5. The project will pilot new community-based wildlife management initiatives that have the potential for yielding significant benefits from sport hunting profit sharing. This project's work will be centered at the local level and will be based on genuine local participation. Herders will be active participants in this project, receiving training (new skills, knowledge) and jobs. The capacity and resources of the target communities will be strengthened to draw upon programmes to manage their resources.	Again pls refer to Project Outputs 1-6.
Comments: The five-year proposed duration is much too short to achieve the described targets. **Response:** Taking into the account the work of other agencies in Altai Sayan Ecoregion, it is estimated that five years will be sufficient to produce real outcomes. However, like any development intervention, the project recognizes that the long-term outcomes will depend on the long-term sustainability of project interventions, which is one of the major reasons the project was designed to maximize partnerships and to integrate conservation objectives and practice into the productive sector. The project also plans that METF will play an important role in sustaining certain protected area management activities after the project has ended.	
Comments: Page 4, last paragraph: This should read "seral" not "serial" stages of vegetation. **Response:** Done.	
Comments: Page 6: "trans-boundary migration" does not imply a	

ISSUES AND RESPONSE	Reference in the Project Document
"distance" per se **Response:** Noted.	
Comments: Page 6: Why call Argali a "keystone" species? **Response:** The distinct physical geography of the Altai provides habitat for Argali sheep, the world's largest sheep. Argali inhabit lower ridgelines and foothills. For Mongolians, the Altai and Argali are inseparable. In addition, Argali are one of the few species of charismatic megafauna that is distributed across the whole Altai Sayan ecoregion. However, we double-checked the comment with Dr. Rich Reading, Denver Zoo, and Argali sheep is not a key stone species, but it can be classified as an umbrella species. So we changed the term in the text.	Please refer to section on Environmental Context Para 3. The comment has been taken into account and the required change has been made accordingly (keystone species reformulated as umbrella species)
Comments: Page 8, para. 4: "Unemployment" rarely exists in a rural area in Mongolia. Misleading statement. **Response:** Corrected.	
Comments: Page 8, para. 5: The statement of "poverty" related to the target area needs qualification. Poverty does not apply to the target area as stated. Western perspective on poverty does not apply here. **Response:** Please see above. The statement has been qualified as suggested, but once again, even by Mongolian standards, most herders in the target areas are considered to be poor.	Please refer to Para 8 in Socio-economic context.
Comments: Page 9, "causes": Is there supporting evidence that the number of herders is increasing? It appears that one of the key root causes that forced herders and their livestock into areas not used before – including protected areas – were several consecutive years of drought resulting in poor primary production followed by harsh winters which killed millions of livestock (See also page 10, paragraph 2). **Response:** Nationwide, the number of herder households increased from about 75,000 in 1990 to a peak of 192,000 in 2000. Due to three years of drought and *dzud*, many herders have left the sector. Since 2000 the number of herder households has fallen back to about 176,000, a decrease about 8 percent.	See Para 4, Baseline Situation Analysis provided in the Project Brief.
Comments: Page 9, causes: "economic instability as result of the ongoing transition process to a market economy": that appears to be exactly the reason why a Western-style market economy should not be promoted in this mostly Buddhist influenced culture. **Response:** The Government and people of Mongolia themselves made	

ISSUES AND RESPONSE	Reference in the Project Document
the decision to abandon central planning and adopt democratic and markets mechanisms in the early 1990s. The project isn't so much promoting market economics as it is assisting local people to adapt to this reality.	
Comments: Page 10, first para.: Please explain why there is "decreasing herder mobility". Is this induced by the transition process and reforms wanted by the West (i.e., settling herders in central places in order to deliver education, provide social infrastructure and develop a market economy)? **Response:** "Herder mobility" means herder movement to seasonal camps seeking better pasture for livestock. Seasonal nomadic movements are a key factor for livestock to gain sufficient weight and fat to overcome harsh winters. This movement has been curtailed in recent years due to (a) urban-based non-herder families taking up herding as a coping mechanism during the transition, (b) increasing numbers of herders and livestock, (c) decreasing availability of water due to a decrease in the numbers of functioning pasture wells and the disappearance of surface water sources and (d) yes, the desire of herder families to avail themselves and their children to education, health services, etc.	Para 2, Baseline Situation section has been cited for the response below.
Comments: Page 20 pp: It is commendable to form "herder committees"; but spatial land use plans are of limited value in an area where semi-nomadic herders change their locations more than 50 times per year! **Response:** First, herder households typically move 3-4 times per year. Second, there are traditional and recognized patterns of migration. Third, the Government has recently allowed herders to actually own the land on which their traditional winter shelters are located. Fourth, and most importantly, the major advantage of forming "herder communities" is to mobilize bottom-up solutions on spatial land use plans. Herders themselves will present the best suitable ways to increase the value and benefit.	
Comments: Page 22, 1.3.3.: how to "train" people who are tending their herds and who are continuously moving? **Response:** Herders typically move within certain distances or within common pastureland. Usually herders have 3-4 seasonal camps and every year they move around these camps. So generally it's not a problem to identify where the herder is camping.	
Comments: Page 23, output 2: Highly ambitious and cannot be done within a five years project duration. Long-term monitoring appears more appropriate. Field surveys in the target area as proposed proved	Please refer to Section on Management Arrangement.

ISSUES AND RESPONSE	Reference in the Project Document
to be of little value in the past. **Response:** This is correct. It is hoped that results will continue to accrue long after the 5-year project is completed. The biggest reason for including such an ambitious output is to strengthen the capacities of professional partner institutions in the first year of the project. These institutions will do the survey and targeted research works. Particular focus will be given to the capacity building of the Mongolian State University in Khovd.	
Comments: Page 24: Past census/research/wildlife census efforts resulted in highly biased outcome. Surveys in such extreme terrain are highly biased. Activity 2.2. What to do with all the field data collected? Without data storage and processing facilities data collection is of little use: not very practical, too theoretical. **Response:** Good point. The project document incorporated the need to strengthen data storage and processing facilities of stakeholders.	This activity is and was included under Output #2.
Comments: Page 27. Activity 3.5: Why would local herders support this scheme without receiving tangible benefits? 5.1.1. What about allocating winter and summer pastures when "privatizing" or allocating land to individual families? **Response:** The herders will designate priority habitat areas and develop conservation plans. The conservation plan would include number of tangible works like building/rehabilitating wells that will prevent overgrazing, etc	Please refer to Activities 5.1.1.
Comments: 5.1.2: Micro-credits for what? **Response:** The project will facilitate herders to look at existing opportunities for viable income generation activities that add value to locally-produced raw materials from livestock. The project will work to create access to micro-loans, so herders can buy hand/manual equipment to process raw wool, milk, wood, etc.	Please refer to Activities 5.1.2.
Comments: 5.2: Good idea but is the central Government willing to delegate and would it be interested in true equity sharing (i.e., allowing herders to keep profit from selling licenses?). **Response:** Good question. This initiative is quite innovative, so it requires agreement and support from the Government. The project will work with Ministry of Nature and Environment to pilot community-based wildlife management.	It is a subject to the Community Based Natural Resource Management Practice provisions.
Comments: Page 31, second bullet: to map "virtual" boundaries for community forests is easy, to make the government accept the implications and let the communities keep the revenues is a different	Please refer to Activity 5.3.

ISSUES AND RESPONSE	Reference in the Project Document
story altogether. **Response:** Because of this reason the project will work with Ministry of Nature and the Environment officials, and *soum and bag* leaders to receive their support.	
Comments: Page 35 UNDP-CCF: an economic transition and reforms imposed on Mongolia by foreigners and through external loans which increase the country's foreign debts but contribute little to the real needs. The basic question is whether reforms and transition is really wanted by Mongolia and Mongolians. **Response:** It is not correct to say that the "transition and reforms" were imposed on Mongolia by foreigners. Following Gorbachev's *perestroika* during the 1980s and popular demonstrations in 1990, the Mongolian *Ikh Khural* actually voted to abandon a one-party state and a centrally-planned economy.	
Comments: Page 41, project outputs: 25% of GEF funds allocated to research: why so much?, 50% allocated to the elaboration of management plans (not to the implementation of the plans!): out of proportion; less than 5% of the total budget allocated to income generating opportunities: why so little? 15% of total budget spend on project monitoring and "lessons learned": out of proportion. In summary, the budget appears very unbalanced. **Response:** The reviewer has misunderstood the budget summary on page 41 of the project brief. Allow us to explain: 1) Regarding Output 2, 25% of the GEF funds are not allocated to research. Twenty-percent of GEF funds are allocated to "Establishing and strengthening an information baseline." This is far more than research. It is training staff in information use. It is monitoring and training local stakeholders in monitoring. It is directly related to results management, which is being strongly emphasized by the GEF Council for all projects. 2) Fifty percent of the budget is allocated to Output 3, NOT to the elaboration of plans. Indeed, planning is an important part of implementation in the field and "on-the-ground" and so planning is an important part of Output 3. However, calculated as an overall percentage of the total budget, perhaps 10% is allocated to plans directly. The remainder under Output 3, as can be seen in the budget summary on page 41, is allocated to implementation of those plans, capacity building, strengthening of infrastructure and so on. 3) With respect to GEF funding of income-generating activities (Output 5), we designed this project intentionally so that GEF funds would play a small, incremental role in this critical component of the project. Please remember GEF's incremental cost rule. Please note, however, that the project has successfully leveraged 200% of the total GEF budget for income generating activities.	

ISSUES AND RESPONSE	Reference in the Project Document
4) With respect to monitoring, evaluating, and lessons learned, ten percent of the GEF budget (not fifteen) is allocated to these tasks. We respectfully assert, given the importance of these activities to GEF's overall mission and strategic priorities, that this is a necessary and reasonable sum.	
Comments: Page 42: "Financial sustainability will be achieved for the PAs through the proposed "Trust Fund" expected to be fully operational by 2009..": how realistic is this in a highly competitive global market; where numerous countries are trying to do the same thing hence competing for limited international funds available for that purpose. **Response:** The Mongolian Environmental Trust Fund was established in late 1997 and has been capitalized with more than $1.5 million. The target for full capitalization and self-sufficiency is $10 million. While it is true that this progress is slower than expected, it is hoped that support for the METF will pick up in the coming years with the pending recruitment of a new Executive Director. The Trust Fund is not the only arrow in the project's sustainability "quiver." Equally or more important is the project's strategy of nesting conservation activities within product sector programs so that they will be applied in the future without additional funding.	Please refer to Activity 5.5.

GEF Council Comments from U.S.

Mongolia Community-based Conservation of Biological Diversity in the Mountain (UNDP) – This proposed project aims to mitigate unsustainable resource use practices such as overgrazing, inappropriate forest-use, and excessive hunting and will also aim to conserve biodiversity. The project will promote community-based management and conservation tools that empower herder communities to resolve forest and grassland management problems, conserve biodiversity and improve livelihoods.

There is an M&E component to this project. During the first year of the project, an information baseline on biodiversity condition and ecosystem health will be established. Project progress will be monitored using annual reviews and implementation milestones following UNDP rules and procedures. Two independent evaluations will be conducted of the project – one mid-term and one final evaluation.

Performance indicators include: beginning in year 4, stabilization and/or reduction in the levels of threat to landscape biodiversity in priority habitat areas and in priority protected areas compared to project start levels; condition of grassland in each pilot area maintained or improved over starting baseline through measurement of presence/absence of indicator species for grassland health by end of year 5; numbers and distribution of landscape species; and, similar condition or measurable improvement in forest and riparian quality by end of project.

Comments: Need baseline data, quantitative targets and timeline for all indicators. Some of these indicators do not lend themselves to easily being measured. Would have been useful to see performance indicator that also measures improvement of livelihoods such measures of income or GDP within the region.

Overview of Response to United States

The U.S. technical comment of the project brief was focused on results measurements. The U.S. would like to see that the project is consistent with the GEF-3 replenishment agreement: baselines, quantitative target outputs and outcomes, deadlines for when the target is expected to be achieved, a strong monitoring and evaluation framework, and annual reporting of outcomes.

Response to Main Concerns of the United States

ISSUES AND RESPONSE	Reference in the Project Document
Comments: Need baseline data, quantitative targets and timeline for all indicators. Some of these indicators do not lend themselves to easily being measured. **Response:** Baseline on biodiversity condition and ecosystem health will be established during the first year of the project to provide a basis for future monitoring and evaluation. Baseline survey will: 1. Conduct ecological survey within the site areas to determine size and condition of key habitats and richness of habitat mosaic. 2. Conduct attitude and awareness level surveys of key stakeholder groups, from top-level policy makers to local level stakeholders. 3. Conduct economic surveys of local communities around site areas to quantify their use of grassland and wildlife resources. After baseline surveys are completed, specific indicators of biodiversity health/reduction in threat levels will be developed in the project's second year.	Section II, part 8, Proposed Project Alternative Course of Action, Output 2, Activity 2.1.
Comments: Would have been useful to see performance indicator that also measures improvement of livelihoods such measures of income or GDP within the region. **Response:** Survey on key socio-economic parameters of people in priority areas will be conducted in the first year to build on the information baseline. After the socio-economic surveys the performance indicator will be developed. Baseline survey will include: - Herd size - Income and expenditure levels - Educational opportunities - Transhumant migration patterns	Section II, part 8, Proposed Project Alternative Course of Action, Output 2, Activity 2.1.

Annex 5A GEF Secretariat comments dated 25 October 2005 and response

GEF Secretariat Comments:

"UNDP submitted a revised cofinancing package that now includes an additional US$ 1,035,672 of cofinancing than was in the original project proposal. The Secretariat is appreciative of the increase in cofinancing.

UNDP is requested to resubmit the proposal and make the necessary changes in the project documentation to reflect the application of the additional cofinancing.

The project will be recommended for CEO endorsement upon clarification of the use of the additional cofinancing."

UNDP response:
WWF's increased co-financing USD 850,000 mainly applies to the implementation of a new Altai Sayan Conservation Plan for 2006 – 2010, where five thematic issues will guide WWF activities. These thematic areas complementary to the GEF/UNDP Altai Sayan project's outputs as specified in the brackets:

1. Conservation of Focal species e.g. Altai Argali sheep and Snow leopard (GEF/UNDP Outputs 1, 3 and 5)
2. Conservation and management of Key Habitat types e.g. high mountain steppe (GEF/UNDP Output 3)
3. Support to Ecological processes e.g. connectivity for isolated focal species' populations and safe migration (GEF/UNDP Output 2 and 3)
4. Threat reduction e.g. wildlife trade and mining (GEF/UNDP Output 4)
5. Enabling conditions for the four previous themes e.g. policy and legislation development and public awareness (GEF/UNDP Output 1 and 6)

Specifically, GEF/UNDP project areas of Sielkhem, Tsagaan Shuvuut and Turgen Mountains will benefit greatly from WWF's additional co-financing in our Outputs 3 and 4. These outputs will be contributed by WWF Monitoring Programme of the Argali sheep migration between Russia and Mongolia. The aim of this monitoring programme is to develop and implement a long-term conservation management plan for the Argali sheep population such as establishing community-based wildlife management reserves in Mongolia and a new protected area in Russia. These activities are of particular value to the GEF/UNDP project as they increase the coverage of addressing trans-boundary issues through WWF collaboration with Russia.

Secondly, GEF/UNDP Altai Sayan project's community development component (Outputs 1, 5 and 6) will be greatly facilitated with added inputs of WWF "Rural Development and Environmental Education" project in Khar Us Nuur National Park and its buffer zone that commenced in 2004. The key objective of this project is to increase the value addition of livestock income while promoting sustainable pasture management practices through strengthening of herder communities. Close cooperation in sharing of best practices and lessons learned between herder communities supported by the two projects will create a basis for community-based development and participatory management of natural resources in the Western region of Mongolia.

Thirdly, WWF institutional expansion by establishing fully functioning field office in Khovd (under thematic area five) will contribute to management efficiency in terms of collaborating with local partners of the Altai Sayan field office teams and immediate stakeholders of the GEF/UNDP project.

The remaining portion of the increased co-financing USD 1,035,672 came from the Government of Netherlands which is the difference of the initial commitment and approved amount. This increased funding will be applied to the support of the project management at four project field offices. Project field offices will be in-charge of the day-to-day implementation of the project in the respective provinces. By

having such a strong representation in local level, the project will ensure supporting institutional capacity development at sub-national levels and building partnership with local partners from the very beginning of the project.

Annex 6 Local Programme Advisory Committee (LPAC) Meeting

The meeting was held 23 September 2003 from 4:00pm to 5:30pm at the UNDP Country Office. Overall, the participants expressed their approval on the project document.

The paper summarizes the issues raised by participants and how these have been or will be addressed.

List of Participants:

- Melaia Vatucawaga, DRR, UNDP
- Tito Santos, Portfolio Manager, Biodiversity and International Waters, UNDP-GEF Regional Coordination Unit for Asia and Pacific
- Gordon Johnson, Senior Environmental Advisor, UNDP
- Mirjam Schnupf, Environmental Economist, UNDP
- B. Batkhishig, Rural Development Specialist, UNDP
- B. Ganbaatar, GEF SGP Coordinator, UNDP
- Toshiya Nishigori, Private Sector Development Officer, UNDP
- S. Oyuntsetseg, Programme Management Officer, UNDP
- L. Munkhjargal, Programme Assistant, UNDP
- E. Erdenebat, Officer, International Cooperation Department, MNE
- J. Chimeg, Director, WWF
- B. Munkhtsog, Wildlife Biologist, Mongolia Irbis Center
- Ms. Bayarjargal, Irbis Enterprises
- Keith Swenson, IPECON
- David Dyer, International Technical Advisor, Sustainable Grassland Management Project
- G. Erdenechimeg, ADB-Integrated Regional Development Planning, TA
- Chultemnamdag, President, Mongolian Association of Conservation Nature and Environment

Description of Meeting
The DRR opened the meeting and briefly introduced the project, after which the project's goal, objectives, implementation arrangements and budget were presented. After the presentation, participants provided comments and observations on the project.

Participants raised the following issues:

1. What is the impact on economic and social development? Estimates on impact on these? Did the project design consider the regional development policy where Hovd is a center?

Estimates on the impact have not been done. GEF funding is concerned with conserving global environment values (biodiversity). Objective 3 is targeted toward redirecting economic activities. Regional development policy has not been considered and should be updated. Social impact - project will focus on herder communities. Businesses development services will be provided and partnering with micro finance institutions

2. Outputs divided between grazing and then sport hunting and tourism.

The latter two are different target audiences. Sport hunting is a policy issue (where fees are paid, etc) and tourists would be happy if fees go to the community. However, grazing and forestry are other kind of issues involving herders. (Two different policy issues). This will be addressed during project implementation.

3. Livelihood that support conservation. How do we ensure this and how do we manage this tension. How do we keep abreast in terms of dialogue with stakeholders and others?
Examples exist how to do this. Irbis Enterprises has established an example. It is a question of costs and benefits e.g. hunting licenses are sold in UB. It takes effort to bring together the communities and the government to analyze what they can do and requires continued dialogue. GEF is funding a package. GEF is bringing in others to address issues such as livelihoods and micro credits (financed by UNDP). All these address economic development GEF to conserve biodiversity. People need an alternative to conserve these resources other than poaching.

4. Logistic wise and management-wise Bayan Ulgii would be the least suitable location for the Project Office. Bayan Ulgii was chosen since the PAs are mainly located there, so most of the time will be spent there. Project Managers will spend more time in the field and bring lessons learnt to UB to influence policy. This is a challenge and we will try to push to ensure that the weight of the project is in Byaan Olgii and not in UB. Khovd is the best option for the project office. The capacity and infrastructure in Khovd is better, there is a State University doing research in the Altai Sayan eco-region. This will be reconsidered in the project document reflecting advantages/ disadvantages.

5. Personnel Component for project: are there other modalities to field international advisors, e.g. initially for one year and then only GEF has agreed to long-term advisor but we can reconsider. Challenge will be to find an advisor willing to spend his/her time full-time in Bayan-Olgi. Suggestion to leave it now and then reevaluate as the project unfolds periodically. Full-term international advisor for the whole project may not be necessary.

6. In first year USD70,000 is budgeted for vehicles, when project is finished after five years, nothing is left there (same with other equipment), this should be reconsidered. This recommendation will be reviewed and considered

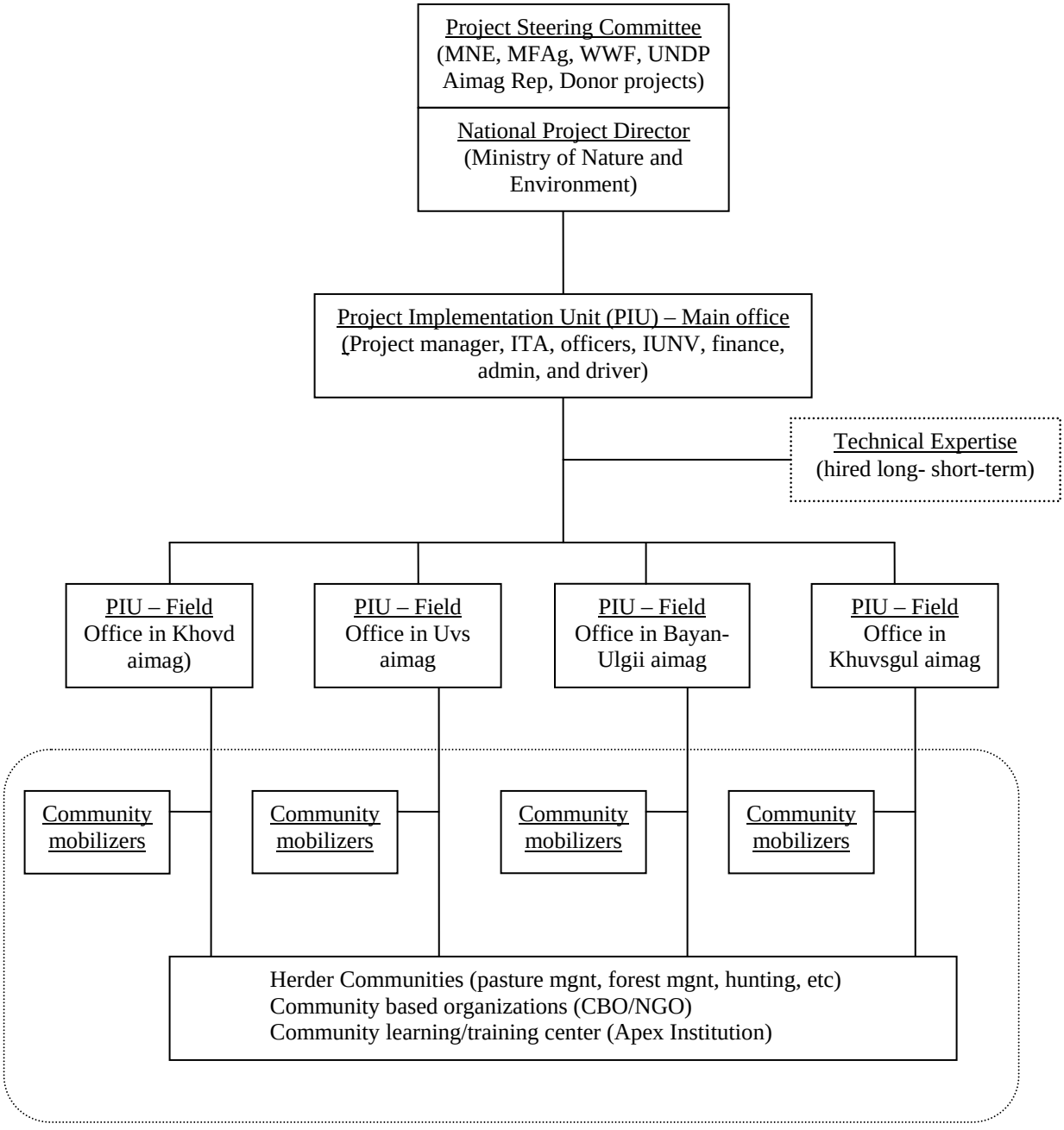
7. Community based resource management cost should be reconsidered. Community based management funding mentioned shows only GEF funding not Dutch and UNDP contribution. Significant funding for community based natural resource management was allocated in the Dutch and UNDP contribution.

8. Country Office Administration Cost is 3%. It needs to be included in the budget.

Annex 7 Revised Incremental Cost Matrix

Outputs/Activities	Baseline	Alternative	Increment	
Output 1	MNE: 150,000 MFAg: 175,000		MNE MFA WWF Dutch IFAD ADB GEF	100,000 115,000 237,500 49,875 50,000 50,000 385,000
	Total: 325,000	**1,312,375**		**987,375**
Output 2	MNE: 208,000		MNE WWF Dutch GEF	104,000 85,000 89,250 525,000
	Total: 208,000	**1,011,250**		**803,250**
Output 3	MNE: 170,000		WWF MNE GEF Dutch	705,000 150,000 1,280,000 63,000
	Total: 170,000	**2,368,000**		**2,198,000**
Output 4	MNE: 80,000		WWF MNE GEF UNDP Dutch	210,000 80,000 130,000 50,000 15,750
	Total: 80,000	**565,750**		**485,750**
Output 5	ADB 10,695,000 IFAD 14,800,000 MFAg 13,322,637 MNE 353,700 WB-GoM 5,000,000 METF 1,555,000		MFA ADB IFAD WWF Dutch UNDP MNE GEF	1,480,200 1,680,000 650,000 85,000 1,143,450 100,000 348,350 105,000
	Total: 45,726,337	**51,318,337**		**5,592,000**
Output 6			MNE WWF Dutch UNDP GEF IFAD	50,000 177,500 504,347 50,000 295,000 50,000
	Total: -0-	**1,126,847**		**1,126,847**
	MFAg 13,497,637 WB-GoM 5,000,000 MNE 961,700 ADB 10,695,000 IFAD 14,800,000 METF 1,555,000		MFA Dutch MNE ADB IFAD WWF UNDP GEF	1,595,200 1,865,672 832,350 1,730,000 750,000 1,500,000 200,000 2,720,000
	Total: 46,509,337	**57,702,559**		**11,193,222**

Annex 8 The Project Organizational Chart



Soum level activity: Close coordination with soum government

H. UNDP Corporate Signature Page

Country: Mongolia

UNDAF Outcome(s)/Indicator(s): *(Link to UNDAF outcome., If no UNDAF, leave blank)*	_____
Expected Outcome(s)/Indicator (s): *(CP outcomes linked t the SRF/MYFF goal and service line)*	Goal 3. Energy and environment for sustainable development. Service line 3.1 Frameworks and strategies for sustainable development_____
Expected Output(s)/Indicator(s): *(CP outcomes linked t the SRF/MYFF goal and service line)*	To ensure that environmental considerations are integrated into planning and development processes at national, regional and local
Implementing partner: *(designated institution/Executing agency)*	Ministry of Nature and Environment
Other Partners: *(formerly implementing agencies)*	_____ _____

Programme Period:	**2006-2011**
Programme Component:	
Project Title:	**PIMS 1929 BD FSP:Community-based Conservation of Biological Diversity in the Mountain Landscapes of Mongolia's Altai Sayan Eco-region**
Project ID:	**00036215/ 00039250**
Project Duration:	**5 years**
Management Arrangement:	**NEX**

Budget:	**USD 4,696,830**
General Management Support Fee (on Dutch funds only):	**USD 88,842**
Total budget:	**USD 4,785,672**
Allocated resources:	
• Government	_____
• Regular	**USD 200,000**
• Other:	
o GEF	**USD 2,720,000**
o Netherlands	**USD 1,865,672**
o Donor	_____
• In kind contributions	_____
Unfunded budget:	_____

Agreed by (Government): _____

Agreed by (Implementing partner/Executing agency):_____

Agreed by (UNDP):_____