MONGOLIA

UNDP CO IN MONGOLIA

ENERGY AND ENVIRONMENT GROUP

OUTCOME EVALUATION REPORT

Final

Ulaanbaatar, March 2006

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LIST OF ACRONYMS

ADB	Asian Development Bank
ALAGC	Administration of Land Affairs, Geodesy and Cartography
APR	Annual Project Report
BAP	Biodiversity Action Plan
BZ	Buffer Zone
CCA	Common Country Assessment
CCF	Community Conservation Fund
DMM	Disaster Mitigation and Management (short name for Strengthening the Disaster Mitigation and Management System in Mongolia)
DRR	Deputy Resident Representative
EGPRS	Economic Growth and Poverty Reduction Strategy
EIA	Environmental Impact Assessment
EMCAA	Eastern Mongolian Community Conservation Association
EMPAA	Eastern Mongolia Protected Area Administration
EPA	Environmental Protection Agency
ESBP	Eastern Steppe Biodiversity Project (short name for Biodiversity Conservation and Sustainable Livelihood Options in the Grasslands of Eastern Mongolia)
GEF	Global Environment Facility
GEF SGP	Global Environment Facility Small Grant Program
GG	Great Gobi (short name for the project Developing a Model Conservation Programme – Conservation of the Gobi Desert Using Wild Bactrian Camels as an "Umbrella Species")
GGHS	Good Governance for Human Security
GIS	Geographical Information System
GTZ	Gesellschaft für Technische Zusammenarbeit (German cooperation agency)
HMEM	Hydrometeorology and Environmental Monitoring
IPECON	Initiative for People Centered Conservation
IRBM	Integrated River Basin Management
MDG	Millennium Development Goals
METF	Mongolian Environmental Trust Fund
MFA	Ministry of Food and Agriculture
MI	Ministry of Infrastructure
MNE	Ministry of Nature and Environment
MNT	Mongolian National Tugrug (national currency)
MYFF	Multi-Year Funding Framework
NCP	National Conservation Park
NCSD	National Committee for sustainable Development
NCV	National Community Volunteers
NEMA	National Emergency Management Agency
NDVI	Normalized Difference Vegetation Index
NEX	National Execution
NGO	Non Governmental Organization
NM	Natural Monument
NPC	National Project Coordinator
NPD	National Project Director
NPM	National Project Manager
NR	Natural Reserve
NRM	Natural Resource Management
NSSD	National Strategy for Sustainable Development
NUNV	National United Nations Volunteers
NZNI	New Zealand Nature Institute
PA	Protected Area
PAA	Protected Area Administration

PDF	Project Document Facility
PIR	Project Implementation Report
SBHP	Straw Bale House Project (short name for the project Commercialization of Super-Insulated Buildings in Mongolia)
SGMP	Sustainable Grassland Management Project
SPA	Strictly Protected Area
SRF	Strategic Result Framework
SSSA	State Specialized Supervision “Inspection” Agency
ToR	Terms of Reference
TPR	Tri-Partite Review
TRAC	Target for Resource Assignment from the Core (UNDP regular funds)
UMENGO	Union of Mongolian Environmental NGOs
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNDP CO	United Nations Development Program Country Office
UNDP DRR	United Nations Development Program Deputy Resident Representative
UNDP HQ	United Nations Development Program Headquarters
UNOPS	United Nations Operational Program Service
UNV	United Nations Volunteers
USAID	United States Agency for International Development
WCS	World Conservation Society
WWF	World Wildlife Fund

A few Mongolian words

Aimag	Province
Soum	County
Bagh	Small rural settlement
Ger	Traditional round felt tent
Dzud	Winter disaster

1. EXECUTIVE SUMMARY

1.1. Context and purpose of the outcome evaluation

The outcome evaluation is conducted one year before the end of the current country programme which ends in 2006. Therefore, the purpose is to learn lessons for the formulation of the next country program for the period 2007 – 2011, through assessing how and why the specified outcomes for the current program have or have not been achieved in Mongolia's context and the role UNDP has played. The outcome evaluation must also help to clarify underlying factors affecting the situation, highlight unintended consequences (positive and negative), examine the relevance to the current policy priorities and action plans, recommend actions to improve performance in future programming, recommend future orientation for the Energy and Environment Program of UNDP CO to align with new needs and priorities in Mongolia, and generate lessons learned.

As stated in the ToRs, the two main objectives of this outcome evaluation are:

1. To assess the progress toward the three outcomes, and the extent to which UNDP has contributed to those outcomes through its project or non-project activities.

2. To provide substantive contribution towards the new Country Programme.

The three following outcomes have been selected for the outcome evaluation:

MYFF 2004-2007	1. *Environmental considerations are integrated into planning and development processes at national, regional and local levels through multi-sectoral approaches.*
	2. *The threat to Mongolia's grasslands and livestock sector decreased through the refinement and expansion of a model for sustainable management at the community level.*
	3. *The country's system for managing large-scale natural disasters to which it is prone is strengthened.*

These outcomes are part of the nine outcomes identified by UNDP CO for their first Multi-Year Funding Framework (MYFF) document as the main strategic directions for the country program for the period 2004-2007. For each outcome, targets and baselines are identified to allow the monitoring of progress made towards its achievement.

However, the projects whose contribution to these outcomes is to be evaluated were initiated well before the adoption of the MYFF 2004-2007: Biodiversity Conservation and Sustainable Livelihood Options in the Grasslands of Eastern Mongolia (MON/97/G35) started in 1998, Commercialization of Super-Insulated Buildings in Mongolia (MON/99/G35) started in 2002, Sustainable Grassland Management (MON/02/301) started in 2002, Conservation of the Great Gobi and its Umbrella Species (MON/02/G35) started in 2003, and the first phase of the project on Strengthening the Disaster Mitigation and Management System in Mongolia (MON/02/305) started in 2002. Therefore, this outcome evaluation has to consider as well the outcomes identified in the Strategic Result Framework (SRF) for the 1999–2003 period, which corresponds to the early implementation of these projects, as these projects were designed as an integrated programme to reach them and to address problems and gaps that were identified in the previous planning process (CCA – UNDAF – Country Programme). It was therefore decided in accordance with the UNDP environmental program staff (Environmental Cluster Manager and Program Officer) to consider the outcomes of the environment program of the SRF 1999–2003 and to consider 1999 as the baseline year for the assessment of the outcome changes.

SRF 1999-2003	1. *Environmentally sustainable development is integrated in national development planning and linked to poverty reduction through a comprehensive approach.*
	2. *Capacity of national / sectoral authorities to plan and implement integrated approaches to environmental management and energy development that respond to the needs of the poor are improved.*

1.2. Level of achievement of outcomes.

Outcome 1. *The integration of environmental considerations into planning and development processes at national, regional and local levels through multi-sectoral approaches is ensured.*

Rating: partial - according to any set of indicators

It is not really feasible to clearly assess whether this outcome has been achieved or not or to what extent progress was made towards its achievement. This outcome is so broad that it is obviously too ambitious for a 4-year work plan. A lot of achievements have indeed contributed to it, especially the outcomes of the ESBP, but it was not always possible to assess what had been achieved on the country's scale. This first MYFF outcome, as it is formulated, does not provide appropriate guidance to design Energy and Environment UNDP' initiatives that are relevant to the country's context and needs. It is so broad (multi-level, multi-sector, development and planning processes…) that it encompasses very diverse initiatives, and does not refer to a result that can be achieved satisfactorily within the framework of a programme which is around 4 years. However, when the outcome is dissected along the indicators, the project outcomes are relevant to the country's needs and gaps (even if this is not fully reflected in the actual exercise as it is focused on the programme outcomes as formulated in the MYFF and the SRF). Significant and numerous achievements have been accomplished over 7 years and a few observations can be drawn from the indicators.

There is no institution above sector ministries in charge of developing, coordinating and following-up on sustainable development policies. There is no institutionalized participatory process to define priorities on sustainable development or environmental issues at national and local levels.

The environmental legal framework is rather comprehensive as it even includes laws related to payments for ecological services and use of natural resources. The achievements for the period were in terms of amendments and building knowledge to ensure the implementation of the existing body of law.

Tools to integrate environmental considerations in the planning processes were developed: guidelines and model to elaborate land use plans that integrate biodiversity considerations (although biodiversity is dealt with as a separate issue), guide to elaborate PA management plans according to international standards, and construction norms for straw-bale buildings.

Tools and capacities to plan land use while integrating environmental considerations were developed, at least in the 51 soums that were involved in the UNDP projects ESBP, GG and SGMP. It was not possible to do this assessment of the national scale.

Environmental considerations are much more integrated in the latest Government Action Programme than in the previous ones, but are dealt with as a separate issue in *soum* land use planning (separate chapter on biodiversity conservation in the annual land use plan development regulation) and in the Sustainable Development Program of the Eastern Region (includes a separate chapter on biodiversity conservation).

Where local authorities were actively involved in the implementation of an environmental conservation project (ESBP) which increased their awareness and capacities, environmental concerns were integrated in their policies.

Local funds are set up to support the implementation of BZ plans, the improvement of pastures or the development of alternative livelihood options. As these funds are set up to implement plans that take into account environmental considerations, they contribute to the outcome.

Communities, especially herder groups, are becoming important partners for the sustainable use of natural resources and for biodiversity conservation. This could be assessed in the locations where UNDP had implemented the projects ESBP, GG and SGMP. However, it must be kept in mind that this result is limited to the communities that get directly involved with the projects and that the development of income-generating activities with the support of local funds is a major incentive for their commitment.

Wildlife in Mongolia is threatened by illegal hunting (World Bank, 2005) which could undermine or wipe out UNDP projects achievements in terms of biodiversity conservation. A strategy to reinforce the implementation of the law based on the replication of the tag system developed by ESBP in collaboration with EPA/SSSA should be developed and implemented.

Outcome 2. *The threat to Mongolia's grasslands and livestock sector decreased through the refinement and expansion of a model for sustainable management at the community level.*

Rating: partial - according to any set of indicators

It was also difficult to assess changes to the indicators of this outcome on a national basis, except for fire occurrence and pasture condition. Many actors play a part in this domain and it was not possible to do the necessary investigations within the limited scope of this assignment. Therefore, most changes assessed are limited to those that UNDP projects brought about.

Major conclusions are that while pasture condition is still deteriorating on a national scale, it is improving in the soums where UNDP projects are/were implemented, and that while occurrence and extent of fires are not significantly reduced on a national scale, there is a striking improvement in the soums where UNDP projects are/were implemented.

Many achievements in the field of sustainable pasture management have a good demonstration value (have shown positive results) and must be disseminated, replicated and expanded to increase benefits at the national scale.

Additional engineered-designed wells are available to rural populations. On the national scale, their number has more than doubled, increasing from 8,183 to 19,189 between 2000 and 2003. UNDP's contribution is very limited in terms of number of wells, but the long-term maintenance of the wells is ensured by the communities' financial contribution to their cost and the signature of contracts between herder communities and soum governors making herders responsible for the maintenance, while ensuring herders' right to use them.

However, in the face of mining and industrial development in Mongolia, land /pasture use rights may be threatened and do not secure adequately herders' labor investments for pasture or land improvement. Currently, local-level decisions on land use rights made by the co-management committees are integrated at the administration level. 15 of the 21 aimags have started their strategic planning to develop their land use plan. These aimag-level plans should be consistent with soum-level decisions as, according to the law, aimag land use plans require the approval of the soum Khural Representative (who, as a member of the co-management committee, will stand up for soum-level participatory decisions). Now, mining authorities deliver mining exploration and exploitation licenses after negotiations with aimag governors, without requiring the formal approval of the soum or bagh authorities and without having to comply with land use plans.

A new law on Land Use should open opportunities to solve such land use conflicts at the soum or bagh levels as the soum governor will be given responsibility to make a formal decision on such issues.

Outcome 3. *The country's system for managing large-scale natural disasters to which it is prone is strengthened*

Rating: achieved

The National Framework of Action for disaster reduction comprises the revised law on Disaster Protection (2003), the National Disaster Management Policy and the Strategy and Action Plan on Disaster Management that were drafted in 2004.

Capacity of NEMA and its local units was strengthened in UB and in 18 aimags. A training program on Disaster Mitigation was developed and an educational film was produced and distributed to local disaster management agencies working at the grassroots level.

A methodology for Disaster Protection Planning at the Soum level was developed and tested in the soum that was the most highly impacted by winter disasters in the country.

The vulnerability of rural populations to disaster is reduced, notably through improved pasture management, preparation of fodder reserves, improved water accessibility, diversified livelihood options for herder communities, and implementation of fire management plans involving local population participation, which resulted in a reduction of the frequency and extension of human-caused fires.

1.3. Recommendations

- Scope of the outcomes and outcome formulation. Outcome 1 formulation provides an unclear statement about intended development change and is unrealistic regarding UNDP's range of activities. Outcomes are developmental changes that occur as a consequence of the completion of a series of outputs (operational results) and that contribute to the achievement of an impact (long-term result). These results or outcomes must be specific, measurable, realistically achievable in a given time, and relevant to identified needs. The wording of the outcomes must express a real developmental change.
- Indicators The choice of relevant indicators must allow the monitoring of the advancement towards desired developmental changes. All indicators and targets need to be revised.

First outcome

- Wildlife in Mongolia is threatened by illegal hunting (World Bank, 2005) which could undermine or wipe out UNDP projects achievements in terms of biodiversity conservation. The reinforcement of the implementation of the law based on the scaling up and nationwide implementation of the tag system developed by ESBP in collaboration with EPA/SSSA, and setting up networks of community anti-poaching units should be implemented.
- Further efforts are needed, especially to include local stakeholders' consultation in the EIA procedure and to mainstream environment in long-term sector policies which are yet to be developed. In addition, specific EIA sector guidelines should be prepared to aid developers and consultants in the preparation of EIA reports.

Second outcome

- Many achievements in the field of sustainable pasture management have a good demonstration value (have shown positive results) and must be disseminated, replicated and expanded to increase benefits at the national scale. Pasture use plans must take into account and be integrated into a large scale land management plan.

- Interviews with herders and soum authorities seem to denote a lack of awareness about the necessity to limit herd size according to pasture and environment carrying capacity. The concept of “pasture carrying capacity” must be further expounded to all stakeholders and efforts intensified to raise the awareness of herders and *Soum* authorities about the necessity of limiting herd sizes according to pasture and environment carrying capacity and to convey a strong message that too many livestock can have disastrous effects on the environment.
- Efforts must be intensified to develop diversified alternative livelihood activities with funding from the GEF SGP, considering the integration of tested innovative activities.
- Threats leading to land and water resources degradation and depletion should be addressed water resource through IRBM approach, in particular issues related to mining activities and deforestation.

Partnerships

- Improve partnership with the GEF Small Grant Program to develop synergies with medium- and full-size projects, through focusing on the replication of best practices developed in the medium- and full-size projects. Revise GEF SGP criteria to allow the implementation of projects that would give rise to such synergies.
- To implement project components involving the establishment of community organizations such as comanagement committees, BZ councils, herder groups, associations and cooperatives, rely on partnerships with stakeholders who have acquired a strong experience in this field to get the maximum benefits from their experience and to provide a solid training to newly established community organizations and to project staff who could later replicate and expand lessons learned. Avoid learning on the job.
- Development and implementation of microfinance and micro-business project components must rely on appropriate institutional partnerships to improve efficiency, benefit from sound experienced guidance, and increase chances of sustainable successes. Avoid learning on the job especially when local people’s commitment is at stake.
- For the implementation of community-based NRM projects, replicate and expand the successful approach based on hiring and training local people as National Community Volunteers to establish the missing link between local communities and local governments and agencies, and to disseminate environmental information and knowledge at the local level.

2. INTRODUCTION

2.1. UNDP support to Mongolia

UNDP was the first international organization to support environmental conservation and protection in Mongolia through the Mongolian Biodiversity Project (1992–1998) which permitted the development of the National Biodiversity Conservation Action Plan and of a corpus of environmental laws, most of them being adopted by the Government in 1994 and 1995. This framework has permitted the consecutive implementation of a series of community-based natural resource management projects based on lessons learned from the GTZ project which introduced community-based conservation in northern Khentii (mountainous ecosystems) and in the Gobi (desert ecosystem) to improve PAs and BZs management. UNDP also supported Mongolia to develop its environmental policy in the “Mongolian Action Programme for the 21st Century” and meet its commitment to Agenda 21 sustainable development principles.

The Government of Mongolia’s approach to sustainable development and its national commitment to these goals fully recognize that the well being of the country depends upon the continued health of the country’s natural environment. UNDP is supporting the

Government of Mongolia in this endeavour through the implementation of a cluster of Energy and Environment projects consisting of the following three integrated programme components:

- Sustainable Resource Management: Through the process of promoting a balance between environmental protection and development;
- Energy Efficiency and Pollution Control: Through the process of supporting efforts to improve energy efficiency in public buildings through the use of super insulated straw-bale buildings technologies;
- Disaster Management: Through the process of helping Mongolia to strengthen its system of disaster preparedness and management.

The Energy and Environment thematic area projects focus on biodiversity conservation, natural resources management, community development, energy efficiency, and disaster management. It ensures that project implementation is undertaken by national personnel through national institutions. The expected results of this process are to protect and regenerate the environment and natural resources asset base for sustainable human development.

2.2. Outcomes selected for the evaluation

The three following outcomes have been selected for the outcome evaluation:

MYFF 2004-2007	1. *Environmental considerations are integrated into planning and development processes at national, regional and local levels through multi-sectoral approaches.*
	2. *The threat to Mongolia's grasslands and livestock sector decreased through the refinement and expansion of a model for sustainable management at the community level.*
	3. *The country's system for managing large-scale natural disasters to which it is prone is strengthened.*

These outcomes are part of the nine outcomes identified by UNDP CO for their first Multi-Year Funding Framework (MYFF) document as the main strategic directions for the country program for the period 2004-2007. For each outcome, targets and baselines are identified to allow the monitoring of progress made towards its achievement.

The overarching goal of UNDP's support is achieving the MDGs and reducing human poverty. The outcomes selected for this evaluation were identified under the specific goals 3: Energy and environment for sustainable development, and 4: Crisis prevention and recovery. They correspond to UNDP's service lines and contribute to core results as indicated below:

Specific goal	***Service line***	***Core result***	***Country Programme Outcome***
3. Energy and environment for sustainable development	*3.1 Frameworks and strategies for sustainable development*	*Sustainable management of environment and natural resources incorporated into poverty reduction strategies, key national development frameworks and sector strategies*	*Environmental considerations are integrated into planning and development processes at national, regional and local levels through multi-sectoral approaches*
	3.4 Sustainable land development to combat	*Appropriate and innovative land management practices proposed*	*The threat to Mongolia's grasslands and livestock sector is decreased through the refinement and expansion of a*

	desertification and land degradation		*model for sustainable management at the community level*
4. Crisis prevention and recovery	*4.5 Natural disaster reduction*	*National, regional and/or sector-specific expertise developed covering disaster preparedness planning and/or mitigation of risks and vulnerabilities*	*The country's system for managing large-scale natural disasters to which it is prone is strengthened.*

However, the projects whose contribution to these outcomes is to be evaluated were initiated well before the adoption of the MYFF 2004-2007: Biodiversity Conservation and Sustainable Livelihood Options in the Grasslands of Eastern Mongolia (MON/97/G35) started in 1998, Commercialization of Super-Insulated Buildings in Mongolia (MON/99/G35) started in 2002, Sustainable Grassland Management (MON/02/301) started in 2002, Conservation of the Great Gobi and its Umbrella Species (MON/02/G35) started in 2003, and the first phase of the project on Strengthening the Disaster Mitigation and Management System in Mongolia (MON/02/305) started in 2002. Therefore, this outcome evaluation has to consider as well the outcomes identified in the Strategic Result Framework (SRF) for the 1999–2003 period, which corresponds to the early implementation of these projects, as these projects were designed as an integrated programme to reach them and to address problems and gaps that were identified in the previous planning process (CCA – UNDAF – Country Programme). It was therefore decided in accordance with the UNDP environmental program staff (Environmental Cluster Manager and Program Officer) to consider the outcomes of the environment program of the SRF 1999–2003 and to consider 1999 as the baseline year for the assessment of the outcome changes.

SRF 1999-2003	1. *Environmentally sustainable development is integrated in national development planning and linked to poverty reduction through a comprehensive approach.*
	2. *Capacity of national / sectoral authorities to plan and implement integrated approaches to environmental management and energy development that respond to the needs of the poor are improved.*

2.3. Purpose of the evaluation

The outcome evaluation is conducted one year before the end of the current country programme which ends in 2006. Therefore, the purpose is to learn lessons for the formulation of the next country program for the period 2007–2011, through assessing how and why the specified outcomes for the current program have or have not been achieved in Mongolia's context and the role UNDP has played. The outcome evaluation must also help to clarify underlying factors affecting the situation, highlight unintended consequences (positive and negative), examine the relevance to the current policy priorities and action plans, recommend actions to improve performance in future programming, recommend future orientation for the Energy and Environment Program of UNDP CO to align with new needs and priorities in Mongolia, and generate lessons learned.

As stated in the ToRs, the two main objectives of this outcome evaluation are:

1. To assess the progress toward the three outcomes, and the extent to which UNDP has contributed to those outcomes through its project or non-project activities.

2. To provide substantive contribution towards the new Country Programme.

2.4. Expected products from the evaluation

The expected product is a comprehensive report that includes:

- A rating on progress towards outcomes and progress towards outputs,
- A rating on the relevance of the outcome to the country situation as stated in the CCA,
- Strategies for continuing or concluding UNDP assistance towards the outcome,
- Recommendation for formulating future assistance framework,
- Lessons learned concerning best and worst practices in producing outputs linking them to outcomes and using partnerships strategically.

The team's preliminary conclusions were discussed at a debriefing meeting with UNDP Mongolia CO staff members. The results should be used to help the formulation of the next country programme for 2007 – 2011.

2.5. Methodology of the evaluation

The evaluation is structured in four components:

- progress made towards the outcomes,
- factors affecting the outcomes,
- key UNDP contributions, and
- UNDP's partnership strategy.

In order to assess the four components of the evaluation, the evaluation team followed a methodology which included (i) desk review of existing documents, (ii) interviews with beneficiaries, stakeholders, partners, as well as major actors involved in the environmental sector, (iii) field visits to selected sites of the four projects to verify the outcomes produced by UNDP projects, and (iv) debriefing session with UNDP CO staff.

To guide field visits and interviews with stakeholders and the collection of relevant information relative to each project, the evaluation team prepared tables, indicating for each project objective, the expected outcome, intended beneficiaries, relevant cross-cutting issues, indicators, source of information, method for data collection and data location. The tables are presented in Annex 5.

The UNDP Energy and Environment Outcome Evaluation was carried out jointly with the terminal evaluation of the ESBP and the mid-term evaluation of the GG project, and was allocated a total of 40 working days between November 2005 and February 2006. The evaluation team consisted of three members: one independent international consultant and team leader, Dr Dominique ROBY and two independent national consultants, Mr ENKHBOLD Sumiya and Dr KHULDORJ Balganjav.

2.6. Indicators

Progress towards the outcomes was assessed on the basis of indicators identified in the MYFF for 2004–2007, the SRF for 1999–2003, and on indicators identified by the evaluation team based on the deconstruction of the outcomes to give a more comprehensive account of UNDP's achievements towards the outcomes. In addition, SRF and MYFF targets were also used as it appears that they were used as supplementary indicators, or as annual output indicators that are not necessarily related to the outcome indicator.

The indicators identified in the MYFF 2004–2007 and the SRF 1999–2003 for the selected outcomes are as follows:

Outcome	Indicator	Target
SRF 1999-2003		
1. Environmentally sustainable development is integrated in national development planning and linked to poverty reduction through a comprehensive approach	Adoption by the Government of a National Strategy for Sustainable Development (NSSD) with national implementation targets	End target: Through GGHS, NSSD fully developed and mainstreamed in the national plan integrating environment and natural resource management and poverty alleviation. Implementation advanced, resulting in changes in development approach.
2. Capacities of national / sectoral authorities to plan and implement integrated approaches to environmental management and energy development that respond to the needs of the poor are improved	Central co-ordinating body for NSSD implementation is operational e.g. with high level political support; participation of local authorities, civil society and the private sector	End target: NCSD strengthened with power to oversee a new action programme for NSSD to be developed under GGHS. The capacity and power of local authorities, the community and the private sector built to implement NSSD in an interlinked and integrated manner.
MYFF 2004-2007		
1. Environmental considerations are integrated into planning and development processes at national, regional and local levels through multi-sectoral approaches	Adoption by the Government of amendments to environmental laws, (including Land law), management plans for some SPAs (Great Gobi/Eastern Steppes) and Construction norms and standard codes for straw bale buildings	Targets for 2005: 1. Amendments to environmental laws (including Land law) reviewed and submitted for Parliamentary approval;
		2. A model Management Plans for specially protected areas (SPAs) finalized and management plans for some SPAs drafted (Great Gobi/Eastern Steppes);
		3. Capacity for Sustainable NRM at both national and local levels strengthened (Great Gobi, Altai-sayan, Eastern Steppes, Grassland projects);
		4. Construction norms and standard codes for straw bale buildings reviewed, improved and submitted for Government approval;
		5. A proposal for reviewing national construction norms and standard codes in terms of energy efficiency developed in collaboration with the Government;
		6. Cross-sectoral and multi-stakeholder dialogue in promoting energy and environment for sustainable development facilitated;
		7. A joint project proposal for improving access of the poor to water and sanitation services developed and financial sources negotiated
		8. 25 approved GEF small grants projects at various stages of implementation
		9. Energy efficient housing promoted and advocated through the establishment of and support to Energy Conservation Centers. CO_2 pollution reduced by 324 tons (45 houses with $50m^2$)
2. The threat to Mongolia's grasslands and livestock sector decreased through the refinement and expansion of a model for sustainable management at the community level	Restoration of traditional methods for monitoring of vegetation cover in a least 6 soums	Targets for 2005: 1. Grassland resource monitoring system established and operationalized in target sites for measuring vegetation changes
		2. Community-to-community training system on sustainable grassland management strengthened
		3. Alternative fuel sources to prevent land degradation in dry ecosystems tested for future replication
3. The country's system for managing large-scale natural disasters to which	National Disaster Mitigation and Risk Reduction Partnership design developed;	Targets for 2005: 1. National Framework of Action for 2005-2015 on disaster reduction developed

Outcome	Indicator	Target
it is prone is strengthened	Community-based disaster management initiated in 4 aimags	2. Capacity of newly established National Disaster Management Agency (NDMA) and its local units strengthened
		3. National Disaster Mitigation and Risk Reduction Partnership strategies initiated
		4. Community-based disaster management training program designed and training activities started
		5. Pilot monitoring tools introduced at local government levels to facilitate community and government partnership in forecasting and preventing disasters. (through Poverty Monitoring Project)

As recommended in the Outcome Evaluation Methodology[1], additional indicators were identified by the evaluation team, based on the understanding of the various dimensions of the MYFF outcomes 1 and 2 as the one or two indicators provided in the SRF or MYFF are unlikely to yield sufficiently relevant evidence of change in the outcome. No additional indicator was developed for the SRF outcomes as these two outcomes may be linked to the first MYFF outcome. It was not deemed necessary to develop additional indicators for the third outcome.

Dimensions of outcome 1:

To assess changes in the integration of environmental considerations into planning and development processes between the baseline year (1999) and the current period, the assessment of this outcome examines the documents which guide planning and development processes:

- National, regional and local action plans,
- The policy framework that relates to environmental issues, comprising international conventions and national environmental and development policies for important sectors (mining, energy, agriculture), and
- Management and land use plans at local levels (aimag and soum).

This assessment must also consider the requirements to achieve such integration, which include:

- The development of appropriate capacities at national, regional and local levels to integrate environmental considerations into planning and development processes in terms of
  - Human capacities,
  - Institutional capacities,
  - Legal and policy framework (laws, policies, international conventions)
  - Access to relevant information (knowledge development, environmental databases),
  - Tools, models and guidelines to integrate environmental considerations into development, management and land use plans,
  - Sustainable financing mechanisms for environmental protection,
  - Development of environmental advocacy.
- The integration of environmental considerations into planning and development processes using multisectoral approaches goes necessarily through a participatory approach based on effective partnerships to ensure the participation of stakeholders and beneficiaries concerned with environmental considerations. This requires:
  - Partners capacity development,

[1] UNDP Evaluation Office (2002) Guidelines for Outcome Evaluators: Monitoring and Evaluation Companion Series, #1.

- Public awareness and education on environmental issues,
- Community groups and co-management committees,
- Development of a sense of ownership and accountability over natural resources and environment.

In accordance with this rationale, the following additional indicators were also considered in order to assess the multiple branching of this outcome:

1. An appropriate legal framework allows the successful implementation of sustainable environmental management and protection
2. Sectoral policies integrate environmental considerations: Mining, Rural development, Tourism, Energy, Roads and transportation.
3. Development of skills and competencies to integrate environmental considerations into planning and development processes at national level, at regional level, at local level,
4. Information / databases on environmental conditions and natural resources is available and accessible to relevant stakeholders at all decision-making levels
5. Tools, models and guidelines are available to implement actions that would contribute to environmental conservation and integrate environmental considerations into development, management and land use plans at all levels (national, regional, aimag, soum)
6. Integrity of Protected areas is maintained or increased
7. Sustainable financing mechanisms contribute to environmental protection
8. Local communities are acting as effective partners as their ownership and accountability over natural resources and environment are developed
9. A network of community organizations have been established to exercise their constitutional rights and participate in the protection of environment and natural resources
10. A broad partnership strategy allows a wide collaboration amongst stakeholders leading to regional and national networks contributing to an efficient planning and implementation of environmental protection and sustainable NRM
11. Public participatory mechanisms influence significantly government's decisions in favour of environmental protection

Dimensions of outcome 2:

In order to assess the change in the threats to grasslands and livestock, one must include the most important threats:

- Pasture degradation due to overstocking and high concentration around water sources and urban areas, unsustainable use of pastures, and high occurrence of fires,
- Uncontrolled fires, as too frequent fires are detrimental to pasture condition,
- Climatic conditions: drought and dzud, strong winds, and
- Lack of winter preparedness: fodder and hay reserves, shelters.

The refinement of a model for sustainable management must address the contributing factors to unsustainable livestock management:

- Restricted access to market – as low market values may lead to overstocking to reach a minimal level of benefits
- Livestock diseases – related to insufficient access to veterinarian services
- Rural development and agriculture "policy" encouraging increasing of livestock beyond pasture carrying capacity
- Loss of traditional knowledge on pasture management techniques
- Lack of water points to access unused pastures

Finally, a refined community-level management model must notably:

- Secure herders' user rights over pastures and resources,
- Take into account pasture condition and carrying capacity,
- Establish community structures to strengthen herders negotiation power with local authorities and service providers,
- Include provisions and options for intensification, appropriate livestock composition (ratio goat – sheep)
- Have access to an early warning system of pasture and environmental condition.

In accordance with this rationale, the following additional indicators were also considered to assess the second outcome:

1. The Government action programme includes a policy promoting sustainable pasture management
2. Community-level sustainable pasture management model taking into account pasture carrying capacity and condition is promoted
3. Pasture degradation is reduced or equal to baseline condition (long-term average) as shown Drought Index[2]
4. Fire occurrence is reduced or equal to baseline condition
5. Herders' rights for pasture use and pastoral resources are formally recognized
6. Additional operational wells improve access to unused pastures and maintenance of wells is ensured
7. State and community reserves for the winter (fodder and hay) are increased
8. Possession of winter shelters by herders is ensured
9. Brandt's vole population levels are controlled using ecological approaches based on the understanding of the population ecology. Consequently, the use of Bromadiolone (tons and total treated area) is reduced.

2.7. Cross-cutting issues

In addition, ToRs requested to give attention to the following cross-cutting issues as drivers of development effectiveness, throughout the evaluation of the outcomes, to help connecting UNDP's substantive results to larger intended national development outcomes:

- Developing national capacities in all dimensions: human, institutional and systemic
- Enhancing national ownership
- Advocating and fostering an enabling policy environment
- Forging partnerships for results (with beneficiaries, stakeholders, other donor organizations – developing capacities of beneficiaries and other stakeholders to establish a better network)
- Promoting gender equality
- Enhancing local governance by promoting access to information, participation of civil society in policy-making and access to justice through judicial and administrative procedures (additional request, not in the ToR).

[2] The Drought Index weighs NDVI variation over a given period of time relatively to the long-term maximal amplitude of variation of NDVI, thus providing a comparison of a period-specific NDVI with a long term average, which reveals whether productivity in a given region, for a given period, is typical, increasing, or decreasing. The NDVI is an indicator of vegetation stress due to drought and environmental degradation based on satellite image processing. The analyses of the Drought Index and of fire occurrence and extent were carried out by the National Remote Sensing Center of the Information and Computer Center.

3. THE DEVELOPMENT CONTEXT

3.1. Programme implementation period guided by the outcomes

The three MYFF outcomes were identified by UNDP CO as the main strategic directions for the country program for the period 2004-2007. However, we consider that UNDP began working towards the first outcome in 1999 as the two outcomes identified in the Strategic Result Framework are closely related to it, and the projects whose contribution to the outcomes must be assessed were planned and initiated during the previous program. Therefore, this outcome evaluation includes as well the outcomes identified in the Strategic Result Framework (SRF) for the 1999–2003 period and considers 1999 as the baseline year for the assessment of the outcome changes.

The selected MYFF outcomes were designed to meet the UNDAF 2002-2006 goal 4 – "Environmental concerns are incorporated into development planning and activities", and goal 5 – "The national system for disaster preparedness and response management is strengthened". UNDAF is the primary planning framework for UN operations in the country for a specific period. It is based on the findings and recommendations of the UN's Common Country Assessment (CCA) for Mongolia which was finalized in 2001. The CCA was elaborated by working groups composed of UN agency staff members, government officials from line ministries and government agencies and representatives from bilateral donors, NGOs and the private sector. The UNDAF process also involved the participation of all stakeholders. As highly participatory processes, the development of the CCA and the UNDAF helps to build consensus amongst participants about the primary development challenges in the country. The CCA document had identified 4 focal areas among which the Environment and Natural Resource Management. However, the Disaster Management focal area was added in the UNDAF to reflect a concern within Mongolia over the continuing disasters experienced in Mongolia in the previous years.

3.2. Problems that the outcomes are expected to address

The problems that the outcomes are expected to address are identified in the CCA 2001. All three outcomes recognize the fragility of Mongolia's environment related to its low productivity, the high dependence of people's livelihood on natural resources, and the weak environmental governance.

<u>First outcome</u>

The first outcome calls for a balance between environmental protection and development in answer to the challenges identified in the CAA, including low productivity due to climatic conditions, land degradation, reduction of water, reduction of forest resources due to illegal and uncontrolled logging, and low energy efficiency.

Mongolia's many different ecosystems provide a habitat for a variety of plant and animal species that have adapted to the harsh climate of this region. Mongolia has taken notable steps to protect this biodiversity through legislation and the establishment of protected areas. However, limited capacities to enforce laws, to develop and implement management plans, to regulate hunting and plant collection has placed wild fauna and flora as well as their habitats under pressure and are leading to loss of biodiversity. In addition, Mongolia's natural resources and the measures taken to protect them, including the creation of protected areas, are threatened by national and regional industrial and agricultural development. For example, an inter-governmental agreement signed in 1995 for the industrial development of the Tumen River Watershed, which covers part of the Eastern Steppe, includes activities such as surface-stripped uranium mining, oil exploration and extraction, a transnational gas pipeline and iron ore mining, infrastructure development (roads, communications and services) and support for thousands of employees.

According to the CCA (2001), the leading environmental concern is inadequate environmental governance. While the Government of Mongolia has invested a considerable effort in developing policy, legislation and regulations, actual implementation and enforcement of mining and forestry regulations, of measures to ensure environmental impact mitigation and to guarantee compliance with the law at the national and local level, have been weak. The mismanagement of natural resources and environment reflects insufficient capacities of human resources, lack of enabling conditions for civil society participation in environmental governance, absence of community-based organisations that can play an active role in local natural resource management, and lack of adequate financial resources. Monitoring and enforcement is difficult in Mongolia due to the vast distances involved, the lack of resources and incentives for officials to carry out their work, and a weak court system. In addition, the widely dispersed population and the nomadic lifestyle in rural areas pose real challenges to effective public participation in NRM and other public affairs. The capacity of the community needs to be developed, and the customary and traditional mode of cooperation among people for natural resources use and management needs to be strengthened.

To face the many challenges posed by the economical and political transition of the country, a systemic approach integrating environmental concerns in every development sector is required as well as a clarification of the roles of the state, local governments, community groups and NGOs in environmental protection. Proper management of natural resources cannot be separated from social and economic development issues.

Energy is one of the development sectors where the absence of concern for environmental issues has major impacts. Current energy production patterns (using largely low-grade coal and fuel wood) make Mongolia one of the highest global CO_2 producers on a per capita basis. In Ulaanbaatar, three large thermal stations burn approximately 5 million tons of coal a year which discharge daily 4.14 tons of ash and 6,700 kg of sulphur oxides into the air, causing a high concentration of pollutants such as SO_2, NO_x, CO_2 and CO. In addition, the *ger* households situated in large settlements around the city continuously burn fuel throughout the winter months contributing to the poor air quality. Air pollution is also a noticeable issue in secondary cities such as Erdenet, Darkhan, Choibalsan and Murun, where industry and comparatively large populations are concentrated.

High fuel consumption and the problems that follow are in great part attributable to the absence of a policy for energy conservation and efficiency. Underinsulated buildings were constructed in an era when efficiency was not a major concern and when energy costs were subsidised. Heating systems in the buildings are inefficient and frequently in disrepair. Mongolia continues to use these buildings and inefficient central heating systems since the financial resources for replacement are lacking. Cold schoolrooms and health centres have become a major issue in the quality of basic social services. The promotion of appropriate and cost-effective heating systems and better insulating materials was identified to contribute to lower quantities of fuel burned and have positive effects for both the environment and human health.

Another environmental threat was related to the mining sector. Intensive mining operations, especially for gold, were also contributing to land degradation. Around 600 sites were under exploration and 200 were being mined. While these activities were positively contributing to economic growth, they were at the same time degrading large areas of land, since rehabilitation of the land by the mining companies, in accordance with the provisions of the Law on Mining, was not taking place.

Second outcome

In spite of extensive land resources, agricultural productivity remains low due to a very short growing season and lack of water. Much of Mongolia's land is relatively unproductive and ecologically quite fragile. The top soil is thin with an average depth of 20 cm, rendering it vulnerable to wind and water erosion. In recent years, land degradation and deterioration of

pastures through overgrazing have become a major cause for concern given the important role of livestock in the economy. The livestock herd of over 30 million was concentrated in market areas and around remaining water points, as many wells had fallen into disrepair since transition. This led to severe overgrazing with consequent soil degradation. Poor grazing resulted in poor animal productivity which in turn affected rural incomes.

In the CCA (2001), it was said that many analysts had placed a limit to the number of livestock which may be environmentally supportable, but that very few of these estimates had been rigorously researched as the concept of environmental carrying capacity is very complex. Nevertheless, some localised areas of Mongolia were clearly reaching limits, but much of the problem might have been connected with the way land was managed rather than with the current overall carrying capacity of the land. Following the dismantling of cooperatives in 1991 and privatization of livestock herds, a significant number of herders have emerged with little understanding and little inclination to follow cooperative forms of pasture management, which led to a weakening of sustainable grazing patterns. Furthermore, many herders preferred to live close to the rural *aimag* centres rather than move their herds from place to place. An additional problem was the poor maintenance of wells, following the collapse of the cooperatives, leading to fewer available water points and hence concentrating animals within a limited area. Weakness in livestock marketing systems also led to concentration around markets. An additional issue has been the expansion in the number of goats kept by individual herders following the success of cashmere production. Goats are more destructive in their grazing habits than other forms of livestock including sheep, and this factor can also be identified as contributing to localised degradation of grazing land. Poverty is the enemy of conservation. Measures need to be taken to increase the productivity of livestock and crop farming and improve the quality of life of the herders and the crop farmers.

Third outcome

The third outcome recognises that the disasters suffered by Mongolia in the years 1999 to 2001 will continue in the future. Following drought conditions in many parts of the country during the summer of 1999 that reduced the fodder crop for animals, unusually heavy snowfall and ice conditions prevented millions of livestock from grazing. By May 2000, 2.6 million livestock or 7.8% of the entire herd had perished. The following winter was even more severe and entailed the loss of over one million livestock. These two consecutive years of drought and *dzud* undermined the food security of large numbers of people, especially nomadic herders, contributing to exacerbate inequities between rural and urban populations, and had a dramatic effect on the effectiveness of development efforts. Mongolia has also experienced several other disasters including wildfires and animal disease outbreaks.

3.3. Key partners

Main partners include beneficiaries, implementation stakeholders, and donor agencies. The projects established multiple partnerships with national and international institutional or individual stakeholders to achieve jointly agreed or common objectives. Partners have cooperated with UNDP projects through in kind or financial contributions or have been subcontracted to provide services or achieve some of the project's activities.

Target beneficiaries (as well as implementation partners):

- Local herders, with a focus on poor households and, in certain projects, on BZ herders
- Local people in *soum* and *bagh* centers, with a special focus on poor households and, in certain projects, on BZ *soums*
- Buffer Zone Councils
- National Community Volunteers (NCV) and United Nations Volunteers (UNVs)

- *Aimag* and *soum* governors and agencies, including the Environmental Protection Agencies, the State Specialized Inspection Agencies, the Hydrometeorological and Environmental Monitoring Centers, and the Protected Area Administrations
- PAA staff, especially rangers (ESBP and GG)
- Border Guards Division (ESBP and GG)

Implementation partners:

- Parliament Standing Committee on Environment and Rural Development
- MNE (GG and ESBP national executing agency), GEF focal point
- MFA (SGMP national executing agency)
- MI (SBP national executing agency)
- State Board for Civil Defense (DMM)
- UN Disaster Management Team (DMM)
- PA Administration and staff, EMPAA (ESBP implementation agency)
- SSSA
- Agency of Land Affairs and Geodesy Cartography
- the Union of Mongolian Environmental NGOs (UMENGO)
- Mongolian scientific institutions:
  - Institute of Biology – Mongolia Academy of Sciences (GG co-implementation agency)
  - Institute of Botany, Mongolian Academy of Science
  - University of Agriculture
  - Veterinarian Research Center
  - Geological Research Center
  - Biological Faculty, National University of Mongolia
  - State Pedagogical University
  - Mongolian Wild Fauna and Flora Fund (GG project)
  - Red Deer Conservation Society
  - Mongolian Marmot Society
  - Information and Computer Center
- Non-Mongolian organisations
  - WB (collaboration in the preparation of a national rural development strategy)
  - ADB (collaboration in the organization of national workshops)
  - GTZ (collaboration in the organization of national workshops)
  - USA Wildlile Fund (GG project)
  - WWF (collaboration in the organization of national workshops)

Donors:

- GEF (contributor to ESBP, GG)
- Government of Finland (UNVs in ESBP),
- Government of Norway (contributor to SBHP and to the METF in ESBP),
- Government of Netherlands (contributor to SGMP)
- Government of Luxembourg (contributor to DMM)
- GTZ (ESBP, GG)
- US Peace Corps (volunteers in ESBP and GG)
- Denver Zoological Foundation and Mongolian Conservation Coalition (parallel funding agencies for GG)
- WCS (ESBP)
- International Bear Association (GG)

- Wild Camel Protection Foundation – Captive Wild Camel Breeding Programme Mongolia (collaborates with GG project)

4. FINDINGS

4.1. Status of the outcomes

4.1.1. Level of achievement

The level of change for each outcome for the period covered was assessed for UNDP's indicators and targets, and for the additional indicators selected by the evaluation team. Baseline is given in UNDP's programs for their indicators, and identified by the evaluation team for the additional indicators. Findings are presented in the following tables. To facilitate the assessment of UNDP's contribution to the observed changes, the related information is included in the tables.

Intended country programme outcomes in the SRF (1999 – 2003):

1. *Environmentally sustainable development is integrated in national development planning and linked to poverty reduction through a comprehensive approach*
2. *Capacity of national / sectoral authorities to plan and implement integrated approaches to environmental management and energy development that respond to the needs of the poor are improved*

Intended country programme outcome 1 in the MYFF (2004 – 2007):

1. *The integration of environmental considerations into planning and development processes at national, regional and local levels through multi-sectoral approaches is ensured.*

UNDP outcome indicators / targets	1999 baseline	2005 situation	UNDP contribution
SRF outcome 1: Indicator: Adoption by the Government of a National Strategy for Sustainable Development (NSSD) with national implementation targets End target: Through GGHS, NSSD fully developed and mainstreamed in the national plan integrating environment and natural resource management and poverty alleviation. Implementation advanced, resulting in changes in development approach.	▪ The Mongolian Action Programme (MAP-21) was developed at national and local (*aimag*) levels following a participatory approach involving stakeholders at all levels, and approved by the government in 1998. It sets goals, targets and standards for sustainable development.	▪ The NSSD is not integrated in GGHS which has been approved by Government in 2000, and the concept of sustainable development is not yet mainstreamed in policy documents such as the GGHS	---
	▪ A National Biodiversity Action Plan (1996)	▪ Action programs in the National Biodiversity Action Plan are partially implemented	▪ The GG and ESBP contributed to implement the Biodiversity Action Plan
	▪ A model Protected Area Management Plan developed	▪ Guidelines to develop PA Management Plans according to international standards have been drafted in 2005	▪ The guidelines to develop PA management plans according to international standards were prepared with UNDP support.

UNDP outcome indicators / targets	1999 baseline	2005 situation	UNDP contribution
SRF outcome 2: Indicator: Central co-ordinating body for NSSD implementation is operational e.g. with high level political support; participation of local authorities, civil society and the private sector End target: NCSD strengthened with power to oversee a new action programme for NSSD to be developed under GGHS. The capacity and power of local authorities, the community and the private sector built to implement NSSD in an interlinked and integrated manner.	National council for Sustainable Development established under the chairmanship of the Prime Minister but not acting as central coordinating body for MAP21 and other sustainable development initiatives.	The National Council of Sustainable Development has not been operational since 1996	---
MYFF Indicator (2004 – 2007): Adoption by the Government of amendments to environmental laws, (including Land law), management plans for some SPAs (Great Gobi/Eastern Steppes) and Construction norms and standard codes for straw bale buildings	**MYFF baseline : 2004** UNDP: Environmental considerations are not consistently integrated into national policy instruments	See targets 1,	

UNDP outcome indicators / targets	1999 baseline	2005 situation	UNDP contribution
Targets for 2005: 1. Amendments to environmental laws (including Land law) reviewed and submitted for Parliamentary approval;	**Outcome evaluation baseline: 1999** 24 laws related to environment were adopted from 1994 to 1999 – the list is in the annex 6	▪ The laws related to environment have been extensively reviewed and amendments have been drafted and submitted for Parliament approval. ▪ Amendments have been adopted for 6 existing laws to improve their implementation, among which the Law on Environment Protection in 2005. ▪ 7 new laws related to the environment were adopted since 1999.	▪ GG and ESBP have organized or contributed to workshops and conferences to discuss research results and specific issues with stakeholders in order to improve the implementation of existing laws. Amendments for 19 laws have been drafted and submitted for Parliament approval.
2. A model Management Plan for specially protected areas (SPAs) finalized and management plans for some SPAs drafted (Great Gobi/Eastern Steppes);	A model Protected Area Management Plan was developed	▪ Guidelines to develop PA Management Plans according to international standards have been drafted in 2005 ▪ 20 PA management plans have been developed and submitted ▪ 9 PA management plans have been developed – of which one for the Eastern Steppes, Nomrog was approved. (The Great Gobi PA part A management plan was also adopted early January 2006).	▪ The guidelines to develop PA management plans according to international standards were prepared with UNDP support. ▪ 9 PA management plans for the Eastern Steppes and one for Great Gobi A were developed with UNDP support and submitted ▪ If we include GG PA whose management plan was adopted early January 2006, 2 PA management plans developed with UNDP support were approved.
3. Capacity for Sustainable NRM at both national and local levels strengthened (Great Gobi, Altai-sayan, Eastern Steppes, Grassland projects);	Undefined baseline	▪ The assessment of the change in capacity for sustainable NRM at the national level cannot be correctly done within the scope of this evaluation, since capacities and stakeholders are not defined ▪ This aspect could not be assessed for the locations that benefited from other projects not supported by UNDP.	▪ At local levels, capacity for Sustainable NRM is improved in all aimags where UNDP projects (ESBP, GG, SGMP) were implemented, especially for aimag environmental agencies, soum authorities, SPA administration staff including rangers, BZ Councils, and herders.

UNDP outcome indicators / targets	1999 baseline	2005 situation	UNDP contribution
4. Construction norms and standard codes for straw bale buildings reviewed, improved and submitted for Government approval;	▪ Building standards were modified in 1998 to introduce new technologies and materials to save energy and were related to wall insulation outside buildings	▪ Standards developed and approved by the Ministry of Infrastructure in 2001 ▪ Simplified construction norms and standard codes for straw bale buildings submitted to Ministry of Construction and Urban Development for approval in 2005	▪ Construction norms and standard codes for straw bale buildings were developed with the support of SBHP
5. A proposal for reviewing national construction norms and standard codes in terms of energy efficiency developed in collaboration with the Government;	Undefined baseline	▪ A PDF grant has been approved by GEF to develop a project proposal to improve energy efficiency through adopting appropriate building codes	▪ The preparation of the PDF was supported by UNDP
6. Cross-sectoral and multi-stakeholder dialogue in promoting energy and environment for sustainable development facilitated;	Some actions identified in MAP-21 programme are being implemented	▪ No mechanism facilitating cross-sectoral and multi-stakeholder dialogue in promoting energy and environment for sustainable development	▪ n.a.
7. A joint project proposal for improving access of the poor to water and sanitation services developed and financial sources negotiated;	Undefined baseline	▪ No information could be collected on that target	▪ n.a.
8. 25 approved GEF small grants projects at various stages of implementation	GEF SGP not yet initiated in Mongolia	▪ 94 GEF small grant projects have been approved since July 2003 and are at various stages of implementation ▪ The results / outcomes of these projects have not been evaluated.	▪ UNDP is the GEF implementing agency

UNDP outcome indicators / targets	1999 baseline	2005 situation	UNDP contribution
9. Energy efficient housing promoted and advocated through the establishment of and support to Energy Conservation Centers. CO_2 pollution reduced by 324 tons (45 houses of 50m^2).	*Evaluation team baseline estimation*: ▪ Straw bale houses were built for poor people and a few ones burnt as they had not been built according to buildings specifications, which gave them a bad reputation, ▪ No Energy Conservation Center was set up in 1999. ▪ Yearly CO_2 emissions in 1999 were 3.1 metric ton per capita*, therefore 7,775,000 tons for a 2.5 million population. * Source: UNEP – Ozone Secretariat	▪ 3 Energy Conservation Centers were set up and 2 are still operational, although their sustainability is not ensured. A total of 3,250 people have visited these centers. ▪ For the year 2005, CO_2 pollution was reduced by 2,480.6 tons.	▪ Energy Conservation Centers were set up with the support of UNDP ▪ This reduction of CO_2 emissions is calculated from the annual reports of the SBHP for 2003 to 2005 (179 energy-efficient houses of which 31 are insulated with straw bale, 53 are retrofitted with straw bale, and 95 are insulated with other insulating materials)

MYFF (2004 – 2007) Outcome 1:

- *The integration of environmental considerations into planning and development processes at national, regional and local levels through multi-sectoral approaches is ensured.*

Evaluation team additional indicators	**1999 baseline**	**2005 situation**	**UNDP contribution**
Skills and competencies to integrate environmental considerations into planning and development processes are improved - at national level - at regional level - at local level	This baseline could not be assessed	▪ Based on the interviews conducted with the relevant stakeholders, capacity to use and update GIS environmental database, integrate biodiversity issues in land use plans and implement land use policy, and develop and implement PA and BZ management plans (PA administrations, *aimag* agencies in charge of environmental issues, BZ Councils, *soum* officials and local communities) using participatory approaches were greatly improved in 34 soums of the 3 eastern *aimags* in (Dornod, Sukhbaatar, and Khentii). ▪ Local communities have been empowered and their capacities developed to effectively plan and implement a sustainable management of their pastures and wildlife resources.	Capacities were greatly improved for the specified stakeholders ▪ in 34 *soums* of the 3 eastern *aimags* (Dornod, Khentii, and Sukhbaatar) through ESBP activities, ▪ in 5 *soums* of 2 *aimags* (Bayankhongor and Gobi-Altai) through GG activities, ▪ in 12 *soums* of 3 *aimags* (Bayankhongor, Uvurkhangai, Selenge aimags) through SGMP activities, mostly related to sustainable management of pastures for herder groups.
		▪ One semester course on straw bale technology has been developed including training materials and 75 students have attended the course	▪ Straw Bale House Project has provided support for the development of the university level training on straw bale technology.

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
An appropriate legal and policy framework allows the successful implementation of sustainable management of natural resources and environmental protection	▪ From 1993 to 1999, the Government of Mongolia invested considerable efforts in developing policy and legislation for environmental protection, accessing or ratifying 10 international conventions, adopting 10 environment-related policy documents and 24 environment related laws (see annex 6). ▪ Law on Land (1995) creates separate categories of land designated for various purposes including forest resources, water resources, and reserve lands. Provisions are included for efficient and rational land use and protection. ▪ Law on Water (1995) includes provisions for the protection, sustainable use and restoration of water resources, and rights and duties of water users. ▪ Law on Forests (1995) includes measures for the protection and restoration of forests, and forest fire protection. ▪ Law on Hunting (1995) regulates the protection and sustainable use of mammals, birds, and fish of hunting significance, including prohibited hunting seasons. ▪ Law on Air (1995)	▪ The laws related to environment have been extensively reviewed and amendments for 19 laws have been drafted and submitted for Parliament approval. ▪ 7 new laws related to environment were adopted. New laws were adopted to regulate export and trade of endangered species and their raw materials, import, export, and transportation of harmful wastes, and household and industrial waste. ▪ Amendments have been adopted for 6 existing laws to improve their implementation, notably to the Law on Water to introduce the concept of IRBM, and to the Law on Environment Protection in 2005 to give right to local community groups to use and possess natural resources in specific areas, make benefit from their use, and transfer to them the obligation to protect resources from fire, illegal logging, and illegal hunting. ▪ 5 national policy documents related to environment adopted about Climate Change, Protection of Argali wild sheep, Protection and Rational Use of Rare Plants, the hydrologic and meteorological sector and quality and management of environmental sector (see annex 6) ▪ 2 international conventions related to environment accessed or ratified (see annex 6) ▪ Government (MNE) passed resolutions to ban commercial gazelle hunting in 2000, commercial and subsistence marmot hunting for 3 years in 2004, and timber export. ▪ Government drafted a Law on Energy Efficiency in 2003 – has not yet been	▪ GG and ESBP have organized or contributed to workshops and conferences to discuss research results and specific issues with stakeholders in order to improve the implementation of existing laws or to devise resolutions aiming at protecting the environment and natural resources (re: ban on gazelle and marmot hunting) ▪ One of the main outcomes of GG and ESBP is the improved implementation of existing laws (specially the laws on Hunting, EIA, PA, BZ, and Reinvestment of Natural Resource Use Fees for Conservation and Restoration of Natural Resource) through the development of GIS databases on natural resources, on illegal activities, through the support to the setting up and strengthening of BZ councils and BZ funds as required in the law.

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
	Regional level policies: No regional development policy integrates environmental concerns	Regional level policies: The Eastern Regional Action Programme developed for 2003-2008 includes a whole chapter on biodiversity conservation	▪ A large part of the activities planned in the Eastern Regional Action Programme developed for 2003-2008 integrate ESBP outcomes.
	Local level policies: The 1996–2000 Governor's Action Program for Dornod *aimag* concerns for environment are limited to plans for reforestation, for creation of financial resources for environment protection and rehabilitation from natural resource use payments, and for the improvement of the monitoring of gazelles and marmots	Local level policies: The Economic and Environment policy of the 2004–2008 Governor's Action Program for Dornod *aimag* plans ▪ to implement environmental and biodiversity conservation activities of MAP-21 ▪ to prohibit marmot hunting for 2 to 3 years and to reintroduce marmots in specific soums ▪ to establish new protected areas for gazelle reproduction and for the protection of endangered water birds	▪ Dornod authorities have integrated the concerns for environmental and biodiversity conservation following the goals and objectives of ESBP, based on the findings of the studies carried out by the project

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
	▪ Financial constraints and lack of awareness amongst authorities of the importance of environmental conservation limit the possibilities for implementation of environmental laws and regulations. ▪ The capacity to develop and implement BZ management plans and models for the sustainable use of grassland ecosystems, and to implement an adequate monitoring and inspection programme for all protected areas, is limited as the regular budgets of the PA administration and local government administration are insufficient.	▪ Regular budgets of the PA administrations and local government administrations are still limited. However, BZ funds were set up as a sustainable financing mechanism to support the implementation of the BZ management plans. ▪ Government has appointed additional rangers to SPAs	▪ BZ funds were set up in 10 soums with the support of ESBP and GG ▪ A revolving fund was set up to to provide a sustainable source of funding to the BZ funds in the eastern aimags while developing alternative livelihood options

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
	▪ The enforcement of the Law on Hunting was limited by an insufficient number of rangers, border guards and environment inspectors who lacked the appropriate training in ecosystem, wildlife and PA management.	▪ The new tagging system has been successfully implemented since 2003. It enables the law enforcement personnel to inspect traders at major road checkpoints, markets, and border ports, and to confiscate products of illegally hunted wildlife. The Director of the Environmental Inspection Department of the SSSA reported that about a hundred thousand marmot skins without tags had been confiscated at traders warehouses in Ulaanbaatar before being shipped illegally to China.	▪ ESBP has contributed to introduce the tagging system to enforce the Law on Hunting and to develop amendments to the law, based on the findings of a study carried out by the project on hunting activities in the eastern aimags ▪ A cooperation agreement between ESBP and EPA and later with the SSSA to take measures to prevent illegal hunting through improved legislation and policy, included *i*) the development of a regulation to use the tagging system, *ii*) the establishment of an anti-poaching unit, *iii*) the publication of a hunter's newsletter, *iv*) the training of environmental inspectors, *v*) the improvement of inter-agency coordination to control wildlife product trade, and *vi*) coordination with relevant agencies to develop international transboundary cooperation.

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
Sectoral policies integrate environmental considerations: - Mining	▪ The following laws related to mining sectors integrate environmental considerations: - Underground Resources - Petroleum - Mineral Resources ▪ No long-term sectoral policy for Mining has been adopted.	▪ A policy document for the Mining sector (2002) - consolidates existing laws and regulations concerning impacts of mine development and production, processing and rehabilitation into a separate Mining Law, - designs and introduces regulations for mine-site rehabilitation and waste management, - creates regulations *to improve opportunities for conducting geological explorations in specially protected areas* and state-border zones, - creates regional development policies to *promote exploration and mining in remote regions.* ▪ National Government Action Programme for 2004–2008 plans to upgrade the system of issuance of licenses for the exploitation of mineral deposits on the basis of an EIA, and to make environment protection and rehabilitation compulsory.	---
Sectoral policies integrate environmental considerations: - Energy	▪ Activities identified in MAP-21 plan to decrease heat loss of older buildings using new technologies and to expand the initiative to construct straw-bale houses as they are environmentally friendly and capable of retaining heat.	▪ No long-term sectoral policy for Energy has been adopted yet. ▪ National Government Action Programme for 2004–2008 plans to create a legal environment to promote economical use of energy, reduce inefficient consumption, and create economic mechanisms to promote energy conservation	--------

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
Sectoral policies integrate environmental considerations: - Roads and transportation		▪ No long-term sectoral policy for roads and transportation has been adopted yet.	---------
Sectoral policies integrate environmental considerations: - Tourism		▪ The Tourism Law (2000) relies on tourism organizations to develop "environmentally-friendly" tourism that will contribute to the socio-economic development of Mongolia, with no other environmental concern. ▪ No long-term sectoral policy for tourism has been adopted yet. ▪ National Government Action Programme for 2004 to 2008 plans to secure a favourable environment for ecotourism development linking tourism with community-based environment protection efforts	A study on ecotourism feasibility (2005) was conducted by GG
Sectoral policies integrate environmental considerations: - Rural development	The "Basic Guidelines on Rural Policy" (1996) as the government's agriculture and livestock policy, comprise environmental concerns in connection with rural population distribution, crop cultivation, extensive livestock and intensive livestock production, and promote increases in livestock production and productivity and measures to prevent the concentration of livestock to minimize environmental impacts.	▪ National Government Action Programme for 2004 to 2008 plans to create favourable legal environment for the sustainable management and ownership of pastures, increase fodder production, and improve livestock resilience to natural disasters.	-----

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
	Local level policies: Each *aimag* has adopted its own "Governor's Guidelines for Development, 1997-2000" incorporating environmental concerns such as land use management and planning, enforcement of environmental laws, afforestation and soil conservation around soum centers. They also address participation in the National Plan on Sustainable Development for the 21st Century, surveys of medicinal plants, natural disaster response capabilities, ecotourism, support to international protected areas to protect migratory species, creation of wildfire databases and promotion of environmental monitoring.	Local level policies: The Economic and Environment policy of the 2004–2008 Governor's Action Program for Dornod *aimag* plans ▪ to improve environmental management based on participatory approaches with herder communities ▪ to improve pasture water supply by protecting water springs and drilling new wells.	▪ Dornod authorities have integrated the participatory approach to sustainable pasture management promoted and implemented by ESBP
Public participatory mechanisms influence significantly government's decisions in favour of environmental protection	The MAP-21 was developed by national and local governments following a participatory process to help define choices, goals, targets and standards of sustainable development. Lack of adequate resources limited its implementation.	No participatory process to define priorities on development or environmental issues at national and local levels has become institutionalized.	---

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
	No public hearing on environmental issues has ever been held in Mongolia	▪ In 2003, a public hearing was held to discuss the results of the EIA on the construction of the Numrug Bridge, and a national forum was organized to discuss legal and administrative status of the PAs in Mongolia. ▪ As a result of the public hearing and the national forum, the Parliament made the decision to refuse any proposal on declassifying existing PA.	▪ ESBP organized the public hearing ▪ ESBP organized the national Forum in collaboration with WWF and GTZ
Integrity of Protected Areas is maintained or increased	▪ Total surface of 41 protected areas is 18,251,000 ha (11.7% of total country)	▪ Total surface of 56 protected areas is 21,006,378 ha (13.4% of total country)	▪ ESBP contributed to expand 1 PA and to upgrade 1 PA ▪ As a result of the National Forum, all proposals for declassification of existing PA were denied.
Local communities are acting as effective partners as their ownership and accountability over natural resources and environment are developed	▪ Opportunistic and individualistic approach to exploit wildlife resources is widespread amongst rural and urban populations. ▪ No legal base to own or lease land resources (land tenure issue) ▪ No incentive for local communities to adopt measures for the sustainable management of their pastures	▪ Local people have signed individual contracts to respect the bans on marmot and on gazelle hunting and to protect them in the eastern aimags ▪ Local people are involved in voluntary fire-fighting and anti-poaching teams in the eastern aimags ▪ Local communities have possession certificates for a period of 15 years on the pastureland	▪ Local people were actively involved in the implementation of ESBP activities, which is in great part due to the mediation led by National Community Volunteers. ▪ ESBP, GG and SGMP supported community level activities to manage grasslands, protect wildlife resources and reduce fires occurrences in a total of 51 soums distributed amongst 7 *aimags* ▪ Possession certificates for pastoral resources (shelters, pastures, hayfields and hand wells) are issued to members of herder communities with the support of SGMP ▪ The development of income-generating activities with the support of local funds is a major incentive for communities' commitment.

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
Information / databases on environmental conditions and natural resources is available and accessible to relevant stakeholders at all decision-making levels	▪ Information Computer Center (related to environmental monitoring) established since 1971 at national level	▪ National environmental database (Information Computer Center) is available online and additional products include drought, biomass and storm and dust monitoring	---
	▪ HMEM (related to weather information) database established	▪ HMEM updated the methodology to monitor pasture condition in 2001	▪ ESBP supported the development of a comprehensive methodology to monitor grassland condition.
	▪ No database available at regional and local levels	▪ User-friendly regional georeferenced databases established for 3 eastern aimags (EPA, Land Agency, EMPAA and a specific database on illegal hunting for SSSA) and used as a model by MNE to be implemented nation-wide	▪ The user-friendly regional georeferenced databases were established for the 3 eastern aimag environmental agencies by ESBP, which also trained users to access and update the databases ▪ A GIS database on wild camel and other wildlife and resources of the Great Gobi ecosystem was developed by the GG project. Two members of the Institute of Biology of the MAS and GGSPA Administration have been trained to use and update the database.

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
Tools, models and guidelines are available to implement actions that would contribute to environmental conservation and integrate environmental considerations into development, management and land use plans at all levels (national, regional, aimag, soum)	A model Protected Area Management Plan developed (Numrug SPA) No other guideline, tool or model available	▪ Guidelines for planning land use integrating biodiversity considerations are developed and adopted by the Land Agency ▪ Model for soum (Bayandun soum) and aimag land use planning integrating biodiversity considerations available and adopted by the Land Agency ▪ Guidelines for elaborating PA management plans drafted and a stakeholder workshop recommended their adoption by the Ministerial Council in 2005 ▪ Guidelines for BZ management plans were developed by MNE and approved in 2001 ▪ Simplified national building codes and standardization for straw-bale buildings were developed and adopted.	▪ Guidelines for planning land use integrating biodiversity considerations have been developed with the support of the ESBP ▪ Model for soum (Bayandun soum) and aimag land use planning integrating biodiversity considerations has been produced with the support of the ESBP ▪ Guidelines for elaborating PA management plans drafted with ESBP support. ▪ Straw bale project supported to develop National building codes for straw bale buildings
Sustainable financing mechanisms contribute to environmental protection	▪ No sustainable financing mechanism is operational	▪ A law on Reinvestment of Natural Resource Use Fees for Conservation and Restoration of Natural Resources has been adopted in 2000 ▪ BZ funds are set up to support the implementation of BZ management plans ▪ A revolving fund was set up to provide a sustainable source of funding to the BZ funds in the eastern aimags while developing alternative livelihood options	▪ ESBP contributed to national workshops which improved the implementation of existing laws related to environmental issues, of which the law on Reinvestment of Natural Resource Use Fees ▪ BZ funds were set up in 10 soums with the support of ESBP and GG ▪ The revolving fund to support the BZ funds in the eastern aimags was set up by ESBP

Evaluation team additional indicators	**1999 baseline**	**2005 situation**	**UNDP contribution**
	▪ The METF is established and registered in 1997, Management Board and Trust Fund Office established	▪ The METF is not operational and cannot operate on a legal basis since the certificate of the Representative Office expired in January 2001	▪ ESBP provided equipment and over a year salary for the Trust Manager of the Trust Fund Office.
A network of community organizations have been established to exercise their constitutional rights and participate in the protection of environment and natural resources	▪ No grassroot movement related to environmental and natural resources protection	▪ *The total number of community organisations in Mongolia could not be estimated* ▪ A Union of NGOs consolidates local grassroot organizations to protect a river basin (Ongi River)	---
	▪ No comanagement committees existed to manage grasslands	▪ Comanagement committees for the implementation of land use plans have been established	▪ SGMP supported the establishment of the comanagement committees in 12 soums of 3 *aimags*.
	▪ Local herders acted independently and were not held by strong community links to make common decisions	▪ Local herders are organized into community groups to cooperatively manage grassland and wildlife resources	▪ ESBP, GG and SGMP supported the organization of herder communities in 43 soums in 7 *aimags*.
	▪ According to the Law on BZ, BZ councils must be established in each soum included in a BZ. Total number of established BZ councils could not be determined	▪ Total number of established BZ councils in the country could not be determined	▪ ESBP and GG contributed to establish 11 BZ Councils.

Evaluation team additional indicators	1999 baseline	2005 situation	UNDP contribution
A broad partnership strategy allows a wide collaboration amongst stakeholders leading to regional and national networks contributing to an efficient planning and implementation of environmental protection and sustainable NRM	▪ No systematic collaboration amongst various stakeholders to deal with common environmental issues	▪ A regional network including stakeholders at all levels, contributes to an efficient planning and implementation of environmental protection and sustainable NRM in the eastern aimags ▪ National conferences, workshops, forums are organized to discuss common environmental issues and enhances intersectoral consultations and collaborations	The establishment of the Eastern Aimags regional network is one of the most prominent outcomes of the ESBP National conferences were organized with the support of ESBP and GG ▪ "International Gobi bear conservation and management workshop" in 2004 ▪ "Eastern Mongolian Ecosystem" in 2000, ▪ "Legislation and current management statement and future perspectives" in 2002, ▪ "Research project outputs and biodiversity conservation" in 2002, ▪ "Incorporation of biodiversity into local land use planning" in 2004, ▪ "Presentation of Eastern Steppe Biodiversity Project Activities Implemented in Three Eastern Aimags" in 2005. ▪ "Legal and administrative status of protected areas in Mongolia" in 2003 ▪ "International conference on conservation of Mongolian gazelle" in 1999

Intended country programme outcome 2 in the MYFF (2004 – 2007):

2. ***The threat to Mongolia's grasslands and livestock sector decreased through the refinement and expansion of a model for sustainable management at the community level.***

UNDP outcome indicators / targets	Baseline	2005 situation	UNDP contribution
Indicator: Restoration of traditional methods for monitoring of vegetation cover in a least 6 soums	**2003 baseline:** Pastoral status maps of 6 soums and participatory maps of community managed pasture areas (40 herder groups)	▪ Increased capacity of herders and local land officers to assess the condition, map and manage pastures in a sustainable way. ▪ A number of base maps of pastures and pastoral resources elaborated.	▪ The resources and carrying capacity of pastures in the wintering areas in Edryn Ridge used by herders from 5 soums were assessed and mapped with the support of GG through a subcontract to the University of Agriculture. Recommendations were made on maximal livestock and optimal use of pastures and 140 herder families were trained in sustainable pasture management. ▪ 30 pasture use maps had been completed by August 2005 and pasture carrying capacity had been estimated for 5 herder groups with the support of SGMP. ▪ Local land officers and herders trained on methodology to develop pasture management plans by SGMP in collaboration with ALAGC. ▪ With the support of ESBP, 26 herder communities were established and have learned to assess and map the condition of their pasture to improve its condition. They use about 2,000,000 ha of pasture on a rotational basis.

UNDP outcome indicators / targets	Baseline	2005 situation	UNDP contribution
2005 targets Grassland resource monitoring system established and operationalized in target sites for measuring vegetation changes	▪ HMEM agency and ICC have been conducting monitoring of grassland resources throughout the country using satellite images and standard methods since 1971	▪ Herder communities are trained to assess pasture resources – no nation-wide information available on the number of herder communities who benefited such training ▪ A methodology to monitor pasture condition was adopted by the Institute of HMEM in 2001. It is now incorporated into the National Manual for Rangeland Health Monitoring.	▪ ESBP, GG and SGMP have contributed to increase herders capacities to assess pasture conditions in a total of 48 soums distributed in 7 *aimags* ▪ Participatory pasture monitoring and evaluation is conducted in 9 *soums* with the support of SGMP. 32 herders were trained to conduct pasture monitoring and evaluation based on 14 pasture indicators and 2 or 3 indicators of livestock productivity. ▪ The methodology to monitor pasture condition was developed by ESBP.
Community-to-community training system on sustainable grassland management strengthened	Local herders act independently and are not held by strong community links to make common decisions	▪ Community-to-community visits allow to exchange experiences and to demonstrate positive pasture management experiences ▪ Quarterly meetings of soum co-management committees with project and non-project households, allow to reach common agreements on pasture management issues, and to share the outcomes of the management measures ▪ Community-to-community training is now occurring with the support of projects and allows sharing practical and positive experiences.	▪ Co-management committees were set-up with the support of SGMP, and one or two local project officers sit on the co-management committee ▪ For the celebration of yearly achievements, herder communities involved with SGMP have visited each other to share practical experiences, get to see the products and results of their management and benefit training activities conducted on-site. Communities have learnt from each other that leaving the pastures during the early growth season had remarkable effects on later growth.

UNDP outcome indicators / targets	Baseline	2005 situation	UNDP contribution
Alternative fuel sources to prevent land degradation in dry ecosystems tested for future replication	Baseline not defined	▪ Pressed fuel production successfully implemented in one soum ▪ Solar energy system to heat water in public showers has been installed in one soum	▪ The pressed fuel production was developed with the support of the GG project and implemented with the support of the GEF SGP. ▪ Solar energy systems were provided by the GG project.

Evaluation team additional indicators	Baseline	2005 situation	UNDP contribution
Pasture degradation is reduced or equal to baseline condition (long-term average) as shown by Drought Index.	Baseline appears on the figures 1 and 2 in annex 7.	▪ The yearly Drought Index for the whole country shows a trend of slightly increasing drought which reflects a deterioration of vegetation condition. This is paralleled by decreasing precipitations (results not shown) most likely due to climate change. Pasture mismanagement is another important factor contributing to this trend.	▪ The yearly Drought Index for the soums involved in UNDP projects (ESBP, GG, SGMP) are displaying a steady decreasing trend from 2001 to 2005, which reflects an improvement of vegetation condition. Since these soums are exposed to the same environmental factors as the rest of the country, this improvement likely results from the implementation of sustainable management measures.
Fire occurrence and extent is reduced or equal to baseline condition	Baseline appears on the figures 3, 5, 6, 7 and 8 in annex 7.	▪ Between 1999 and 2004, figure 5 shows that the number of human-induced fires in the whole country varied greatly between years, showing a slight trend towards reduction. ▪ Between 1999 and 2005, figure 7 shows a slight but seemingly not significant decrease of yearly burnt area for the whole country.	▪ Between 1999 and 2005, figure 6 shows that the number of human-induced fires in the eastern aimags decreased by a ratio between 3 to 1 and 4 to 1. ▪ Between 1999 and 2005, figure 8 shows a drastic and steady reduction of yearly burnt area for soums that were involved in UNDP projects (ESBP, GG, SGMP). Although for one year only and not as reliable as a trend over years, figures 3 and 4 clearly illustrate this progress.

Evaluation team additional indicators	Baseline	2005 situation	UNDP contribution
Herders' rights for pasture use and pastoral resources are recognized formally	No formal recognition of herders' rights over pasture use and pastoral resources	▪ Following a soum Governor's resolution, 800 ha hayfields were allocated to 43 families according to herd size ▪ Pasture use contracts were signed with 4 communities within one *bagh*, over 8000 ha of pastures	▪ SGMP – pasture use rights contracts, hayfields possession certificates for 3 years and extended to 15 years on the condition of hayfields improvements, gardening plot possession certificates between cooperative association and soum governor ▪ Pasture improvement fund established at soum level - ▪ Possession certificates for pastoral resources (shelters, pastures, hayfields and hand wells) are issued to members of herder communities with the support of SGMP
Additional operational wells improve access to unused pastures	In 2000, there were 8,183 engineered-designed wells and 22,714 simple dug wells for a total of 30,897 wells in the whole country	In 2003, there were 19,189 engineered-designed wells and 20,654 simple dug wells for a total of 39,843 wells in the whole country Source: 2003 Inventory data on wells provided by the MFA, cited in UNDP Mongolia. 2004. Access to water and sanitation services in Mongolia.	▪ GG: 1 new engineered-designed well is accessible to 40 households. The rehabilitation of 6 more wells is planned in 2006. Additional dug wells (3 to 6 m) equipped with hand pumps have also been restored. ▪ ESBP contributed to the rehabilitation of 4 wells (new pump) and building 20 new dug wells ▪ SGMP built at least new 2 engineered-designed wells

Evaluation team additional indicators	Baseline	2005 situation	UNDP contribution
Long-term maintenance of wells is ensured	State did not have adequate financial resources to rehabilitate wells	Contracts between herder communities and soum governors ensure the right of herders to use wells while making them responsible for their maintenance	▪ With the support of SGMP and a 30% contribution from the communities, 2 wells were built. Community contributions are made from community funds raised with profits from economical activities. User fees are charged to outsiders to ensure well maintenance (fuel for pump and salary of the person in charge of maintenance). ▪ With the support of the GG project, a contract between BZ council, *soum* government and project was signed to define each party's responsibilities and rights relatively to the well, including right of access and user fees for BZ *soum* households and for outsiders. Fees paid for using the well are deposited in a separate account of the BZ fund to ensure well maintenance.
State and community reserves for the winter (fodder and hay) are increased	Baseline not defined	No data at national level	▪ SGMP contributes to increase hay production in 3 aimags, by providing access to water (wells) which increased the number of harvests in a year, and credit to build hay storage structure, thereby increasing income of hay producers
Possession of winter shelters by herders is ensured	Baseline not defined	No data at national level	▪ Possession certificates for winter shelters were issued to 48 herder groups (August 2005) in 3 *aimags* with the support of SGMP

Evaluation team additional indicators	Baseline	2005 situation	UNDP contribution
The Government action programme includes a policy promoting sustainable pasture management	No concern for sustainable pasture management in the national policies Government practice to prize high livestock numbers without taking into account pasture carrying capacity (prizes awarded for herders owning over 1,000 livestock)	▪ The economic policy of the Government Action Programme for 2004-2008 includes the creation of a favourable legal environment and sustainable management for pasture utilization and ownership, and increasing fodder production	---
Community-level sustainable pasture management model taking into account pasture carrying capacity and condition is promoted		▪ Recent estimates of pasture carrying capacity is available in 5 herder groups (SGMP) ▪ 30 (SGMP) land use maps have been completed by August 2005	▪ ESBP contributed to develop the capacities of herder communities to develop land use plans to improve their pasture condition through rotational use. Herder communities got formally involved through the signature of contracts to protect pastures and biodiversity in their environment.
Brandt's vole population levels are controlled using ecological approaches based on the understanding of the population ecology The use of Bromadiolone is reduced	The only method used to control Brandt's Voles relied on the use of toxic chemicals	▪ Knowledge of the inefficiency and detrimental effects of toxic chemicals previously used to control Brandt's voles is widespread among all levels of the population. ▪ The use of the toxic chemicals to control Brandt's voles is reduced. ▪ Brandt's vole ecological management implemented and monitored by local communities in 10 soums / 3 aimags	▪ ESBP management-oriented research increased the understanding of the Brandt's vole ecology and identified ecological measures to control the population levels ▪ ESBP organized a successful international conference in association with WCS and WWF-Mongolia during which the MFA agreed to the recommendation to phase out the use of Bromadiolone by 2005.

Intended country programme outcome 3 in the MYFF (2004 – 2007):

3. ***The country's system for managing large-scale natural disasters to which it is prone is strengthened.***

UNDP outcome indicators / targets	Baseline	2005 situation	UNDP contribution
National Disaster Mitigation and Risk Reduction Partnership design developed	The legal framework on disaster management is in place and needs enforcement	The State Board for Civil Defense was merged with other two organizations (State Fire Administration and State Reserve Office) renamed the National Emergency Management Agency which works as a non military agency under the direct coordination of the Minister for disaster Management to implement the law.	
Community-based disaster management initiated in 4 aimags		▪ A pilot programme was designed by the National Animal Husbandry and Grassland Risk Assessment Center national NGO to improve disaster prevention and protection measures at the grassroots level through methods of vulnerability and risk assessment, risk reduction plans, and ICT technology. The model is based on soum, bagh and household inputs. The pilot programme was tested in the soum that was the most highly impacted by winter disasters in the country.	▪ Based on positive response of participants in the pilot, the UNDP project recommended the model to NEMA for further implementation in more soums and aimags
Targets for 2005: 1. National Framework of Action for 2005-2015 on disaster reduction developed		▪ A revised law on Disaster Protection (2003) supersedes the Law on Civil Defense. ▪ The National Disaster Management Policy and the Strategy and Action Plan on Disaster Management were drafted by the National Centre for Policy Research in 2004.	

UNDP outcome indicators / targets	Baseline	2005 situation	UNDP contribution
2. Capacity of newly established NEMA and its local units strengthened		▪ Disaster management training conducted for civil defense and disaster professionals, local authorities, and other organizations related to disasters in UB and in 18 aimags.	
		▪ The Institute of Education held an introductory workshop on the *Disaster Mitigation Training System* to introduce NEMA personal to educational needs.	▪ The project presented the report of the Institute of Education to NEMA for consideration and implementation throughout the formal and non-formal educational system of Mongolia
3. National Disaster Mitigation and Risk Reduction Partnership strategies initiated			
4. Community-based disaster management training program designed and training activities started		▪ A programme of "Disaster Mitigation Training System and Reform of Its Management" was developed for all levels of the public and the non-formal education systems of Mongolia . ▪ An educational film was produced and distributed to local disaster management agencies working at the grassroots level to improve public awareness for disaster risk reduction.	▪ The Institute of Education was contracted by the UNDP project to develop the program ▪ The project prepared the educational film entitled *Don't Forget*
5. Pilot monitoring tools introduced at local government levels to facilitate community and government partnership in forecasting and preventing disasters. (through Poverty Monitoring Project)		▪ A methodology for Disaster Protection Planning at the Soum level was developed and tested by the Great Protection National NGO**.**	▪ The methodology was reviewed and amplified by the project, and submitted to the NEMA for their inputs and implementation.

Evaluation team additional indicators	1999 Baseline	2005 situation	UNDP contribution
Improved pasture management	Opportunistic use of pastures, giving-up of rotational pasture use, concentration of herds around water and service points, loss of traditional knowledge on pasture sustainable management	▪ Development of ownership and accountability of local herder communities for pastoral resources, ▪ Herders capacities for assessing pasture carrying capacity are developed ▪ Herders awareness on the necessity to build consensus for taking pasture management decisions increased	▪ Long-term contracts were signed between herder communities and soum governments on pasture use rights and well use rights with the support of GG and SGMP ▪ Possession certificates are issued to herders for winter shelters, hay storage buildings ▪ Training and awareness activities conducted in the ESBP, SGMP and GG projects, as well as the observation of successful results when recommendations from specialists were implemented and sharing of successful experiences amongst communities all contributed to raise herders awareness about the necessity to manage pastures as their common asset.
Improved water accessibility	In 2000, there were 8,183 engineered-designed wells and 22,714 simple dug wells for a total of 30,897 wells in the whole country	▪ In 2003, there were 19,189 engineered-designed wells and 20,654 simple dug wells for a total of 39,843 wells in the whole country Source: 2003 Inventory data on wells provided by the MFA, cited in UNDP Mongolia. 2004. Access to water and sanitation services in Mongolia. ▪ Development of ownership and accountability of local herder communities for well maintenance, through the signature of contracts with soum governments	▪ GG: 1 new engineered-designed well is accessible to 40 households. The rehabilitation of 6 more wells is planned in 2006. Additional dug wells (3 to 6 m) equipped with hand pumps have also been restored. ▪ ESBP contributed to the rehabilitation of 4 wells (new pump) and building 20 new dug wells ▪ SGMP built at least new 2 engineered-designed wells

Evaluation team additional indicators	1999 Baseline	2005 situation	UNDP contribution
Diversified livelihood options for herder communities	In rural areas, communities rely almost exclusively on their herds, which makes them vulnerable to any disaster affecting them.	▪ Diversified livelihood options are developed for herder communities and local people in BZ soums	▪ With the support of the GG project and the financial support of a GEF small grant, pressed fuel production was initiated in Shinejinst *soum* and 38 families were trained in household-level pressed fuel production. ▪ With the support of the ESBP, 1570 individuals of 325 households have been involved in 32 income generating or alternative livelihood activities. On average, CCF beneficiaries represent 7.5% of *soum* population. The monthly income of households involved in project activities increased on average from MNT 38 800 in 2002 to MNT 50 000 in 2004. ▪ Every local project team with SGMP includes a business development advisor whose main duty is to assist herder communities to improve their livelihood based on their own resources (ex: vegetable gardening, hay- and fodder making, dairy and woollen processing). Communities started in July 2004 and are now fulfilling their own needs. The most successful have started to sell their products and revenues are used in some cases to provide social services such as a kindergarten and a school for the community.

Evaluation team additional indicators	**1999 Baseline**	**2005 situation**	**UNDP contribution**
Reduction of frequency and extension of human-caused fires	Baseline appears on the figures 3, 5, 6, 7 and 8 in annex 7.	▪ Between 1999 and 2004, figure 5 shows that the number of human-induced fires in the whole country varied greatly between years, showing a slight trend towards reduction. ▪ Between 1999 and 2005, figure 7 shows a slight but seemingly not significant decrease of yearly burnt area for the whole country.	▪ Between 1999 and 2005, figure 6 shows that the number of human-induced fires in the eastern aimags decreased by a ratio between 3 to 1 and 4 to 1. ▪ Between 1999 and 2005, figure 8 shows a drastic and steady reduction of yearly burnt area for soums that were involved in UNDP projects (ESBP, GG, SGMP). Although for one year only and not as reliable as a trend over years, figures 3 and 4 clearly illustrate this progress.

4.1.1. Level of achievement (*continued*)

Outcome 1. *The integration of environmental considerations into planning and development processes at national, regional and local levels through multi-sectoral approaches is ensured.*

Rating: partial - according to any set of indicators

It is not really feasible to clearly assess whether this outcome has been achieved or not or to what extent progress was made towards its achievement. This outcome is so broad that it is obviously too ambitious for a 4-year work plan. A lot of achievements have indeed contributed to it, especially the outcomes of the ESBP, but it was not always possible to assess what had been achieved on the country's scale.

Nevertheless, significant and numerous achievements have been accomplished over 7 years and a few observations can be drawn from the indicators.

There is no institution above sector ministries in charge of developing, coordinating and following-up on sustainable development policies. There is no institutionalized participatory process to define priorities on sustainable development or environmental issues at national and local levels.

The environmental legal framework is rather comprehensive as it even includes laws related to payments for ecological services and use of natural resources. The achievements for the period were in terms of amendments and building knowledge to ensure the implementation of the existing body of law.

Tools to integrate environmental considerations in the planning processes were developed: guidelines and model to elaborate land use plans that integrate biodiversity considerations (although biodiversity is dealt with as a separate issue), guide to elaborate PA management plans according to international standards, and construction norms for straw-bale buildings.

Tools and capacities to plan land use while integrating environmental considerations were developed, at least in the 51 soums that were involved in the UNDP projects ESBP, GG and SGMP. It was not possible to do this assessment of the national scale.

Environmental considerations are much more integrated in the latest Government Action Programme than in the previous ones, but are dealt with as a separate issue in *soum* land use planning (separate chapter on biodiversity conservation in the annual land use plan development regulation) and in the Sustainable Development Program of the Eastern Region (includes a separate chapter on biodiversity conservation).

Where local authorities were actively involved in the implementation of an environmental conservation project (ESBP) which increased their awareness and capacities, environmental concerns were integrated in their policies.

Local funds are set up to support the implementation of BZ plans, the improvement of pastures or the development of alternative livelihood options. As these funds are set up to implement plans that take into account environmental considerations, they contribute to the outcome.

Communities, especially herder groups, are becoming important partners for the sustainable use of natural resources and for biodiversity conservation. This could be assessed in the locations where UNDP had implemented the projects ESBP, GG and SGMP. However, it must be kept in mind that this result is limited to the communities that get directly involved with the projects and that the development of income-generating activities with the support of local funds is a major incentive for their commitment.

Wildlife in Mongolia is threatened by illegal hunting (World Bank, 2005) which could undermine or wipe out UNDP projects achievements in terms of biodiversity conservation. A

strategy to reinforce the implementation of the law based on the replication of the tag system developed by ESBP in collaboration with EPA/SSSA should be developed and implemented.

Further efforts are needed, especially to include local stakeholders' consultation in the EIA procedure and to mainstream environment in long-term sector policies which are yet to be developed.

Outcome 2. *The threat to Mongolia's grasslands and livestock sector decreased through the refinement and expansion of a model for sustainable management at the community level.*

Rating: partial - according to any set of indicators

It was also difficult to assess changes to the indicators of this outcome on a national basis, except for fire occurrence and pasture condition. Many actors play a part in this domain and it was not possible to do the necessary investigations within the limited scope of this assignment. Therefore, most changes assessed are limited to those that UNDP projects brought about.

Major conclusions are that while pasture condition is still deteriorating on a national scale, it is improving in the soums where UNDP projects are/were implemented, and that while occurrence and extent of fires are not significantly reduced on a national scale, there is a striking improvement in the soums where UNDP projects are/were implemented.

Many achievements in the field of sustainable pasture management have a good demonstration value (have shown positive results) and must be disseminated, replicated and expanded to increase benefits at the national scale. Pasture use plans must take into account and be integrated into a large scale land management plan. The concept of "pasture carrying capacity" must be further expounded to all stakeholders.

Additional engineered-designed wells are available to rural populations. On the national scale, their number has more than doubled, increasing from 8,183 to 19,189 between 2000 and 2003. UNDP's contribution is very limited in terms of number of wells, but the long-term maintenance of the wells is ensured by the communities' financial contribution to their cost and the signature of contracts between herder communities and soum governors making herders responsible for the maintenance, while ensuring herders' right to use them.

However, in the face of mining and industrial development in Mongolia, land /pasture use rights may be threatened and do not secure adequately herders' labor investments for pasture or land improvement. Currently, local-level decisions on land use rights made by the co-management committees are integrated at the administration level. 15 of the 21 aimags have started their strategic planning to develop their land use plan. These aimag-level plans should be consistent with soum-level decisions as, according to the law, aimag land use plans require the approval of the soum Khural Representative (who, as a member of the co-management committee, will stand up for soum-level participatory decisions). Now, mining authorities deliver mining exploration and exploitation licenses after negotiations with aimag governors, without requiring the formal approval of the soum or bagh authorities and without having to comply with land use plans.

A new law on Land Use should open opportunities to solve such land use conflicts at the soum or bagh levels as the soum governor will be given responsibility to make a formal decision on such issues. In addition, specific EIA sector guidelines should be prepared to aid developers and consultants in the preparation of EIA reports.

Outcome 3. *The country's system for managing large-scale natural disasters to which it is prone is strengthened*

Rating: achieved

The National Framework of Action for disaster reduction comprises the revised law on Disaster Protection (2003), the National Disaster Management Policy and the Strategy and Action Plan on Disaster Management that were drafted in 2004.

Capacity of NEMA and its local units was strengthened in UB and in 18 aimags. A training program on Disaster Mitigation was developed and an educational film was produced and distributed to local disaster management agencies working at the grassroots level.

A methodology for Disaster Protection Planning at the Soum level was developed and tested in the soum that was the most highly impacted by winter disasters in the country.

The vulnerability of rural populations to disaster is reduced, notably through improved pasture management, preparation of fodder reserves, improved water accessibility, diversified livelihood options for herder communities, and implementation of fire management plans involving local population participation, which resulted in a reduction of the frequency and extension of human-caused fires.

4.1.2. Relevance to Mongolia's context and needs, and to UNDP's niche

Mongolia's socio-political and economic context

Project outcomes delivered during the last two programming periods (1999-2003 and 2004-2007) are highly relevant to Mongolia's context and needs. However, if we consider the UNDP's programme outcomes, just as they are stated, this assessment might only apply to the second and third programme outcomes which are sufficiently targeted to be relevant.

1st MYFF outcome (and the two SRF outcomes). Significant and numerous achievements have been accomplished over 7 years. A body of laws related to environment issues have been adopted and amended. Environmental considerations are much more integrated in the latest Government Action Programme than in the previous ones, but are dealt with as a separate issue in *soum* land use planning (separate chapter on biodiversity conservation in the annual land use plan development regulation) and in the Sustainable Development Program of the Eastern Region (includes a separate chapter on biodiversity conservation). However, the comparison of the baseline and the 2005 situation for the various indicators, reveal that the outcome does not target specific national gaps or needs, such as lack of enabling conditions for civil society participation in environmental governance, absence of community-based organisations that can play an active role in local natural resource management, or lack of adequate financial resources, although these gaps had been recognized in the CCA and in the UNDAF. At the time the outcomes were identified, Mongolia was still in the process of building up its market economy and strengthening the democratization process. This transition period required the establishment of new institutional structures, procedures and frameworks to define operational rules. This endeavour was limited by insufficient capacities at all levels to implement sustainable management of natural resources and by a lack of awareness of the importance to take measures to protect biodiversity and the environment. If it was intended to adopt an outcome addressing legal and policy frameworks, it could have focused on strengthening the enforcement of some of the numerous environmental laws that the country had already adopted, or supporting the country to mainstream environmental concerns into specific long-term sectoral policies (which are yet to be developed) in priority sectors such as energy and mining. Further efforts are needed, especially to include local stakeholders' consultation in the EIA procedure and to mainstream environment in long-term sector policies.

This first MYFF outcome, as it is formulated, does not provide appropriate guidance to design Energy and Environment UNDP' initiatives that are relevant to the country's context and needs. It is so broad (multi-level, multi-sector, development and planning processes…) that it encompasses very diverse initiatives, and does not refer to a result that can be achieved satisfactorily within the framework of a programme which is around 4 years. Nevertheless, when the outcome is dissected along the indicators, the project outcomes are relevant to the country's needs and gaps (even if this is not fully reflected in the actual exercise as it is focused on the programme outcomes as formulated in the MYFF and the SRF).

The outcome is relevant to UNDP's niche as the issue is one of the 6 service lines for the theme of Energy and Environment: frameworks and strategies for sustainable development.

2nd MYFF outcome. UNDP projects contributing to the outcomes are / were implemented in a period following the political-economic social transition from a centrally planned socialist system and command economy to a democratic system. The transition involved the privatization of major State assets, including enterprises, livestock, and crop farms. The collapse of the Soviet Union in 1990-1992 entailed the loss of Mongolia's foreign partners and of their support which resulted in the closing down of most enterprises, putting numerous people into the street. This led to a vast urban – rural migration and many inexperienced people became herders.

Also, 70 years of socialist development had obliterated the traditional knowledge required for the sustainable management of the natural resources on which rural populations depend closely. The management of livestock and pastures was planned by the central administration and implemented by the *aimag* and *soum* governments. Each *soum* was corresponding to a livestock cooperative or to a state-owned crop farm and all management decisions were made by *soum* officers and instructed to local herders. Each soum had at its disposal specialists such as veterinarians, zootechnicians, breeding specialists, agronomists, and land managers in charge of pasture who provided professional directions to manage natural resources. The instructions to rotate pasture use and to balance the number and species of livestock according to pasture type and capacity were given to herders. Equipment was provided to help them move around pastureland (to move gers, fences, etc.), make hay, prepare fodder. Well construction and maintenance were funded by the State. This high dependence of the nomad herders on the administration's instructions eroded their sense of initiative and self-reliance, as well as their traditional knowledge. This context underlines the relevance of the second programme outcome.

The outcome is relevant to UNDP's niche as it contributes to one of the 6 service lines for the theme of Energy and Environment: sustainable land management to combat desertification and land degradation. However, as it is focused on agriculture, animal husbandry and poverty reduction for rural populations, it also closely corresponds to FAO's and IFAD's niches.

3rd MYFF outcome. The identification of the third outcome answers more particularly the climatic disasters that Mongolia suffered in the years 1999 to 2001, disasters that had severe direct impacts on rural people but also indirectly in urban areas. Drought conditions during the summer of 1999 reduced fodder crops and unusually heavy snowfall and ice conditions prevented millions of livestock from grazing during the 1999-2000 winter, which resulted in the death of 2.6 million livestock. The following winter was even more severe and entailed the loss of over one million livestock. The populations that suffered the most from these two consecutive years of drought and *dzud* are the rural herders whose only source of livelihood is the traditional nomadic livestock husbandry, which depends entirely on natural conditions. This had the impact of increasing poverty and contributed to a large scale migration of rural herders to urban areas in search of job opportunities and better living conditions. This unplanned and rapid migration exacerbated a whole series of environmental problems related to urbanization. In 2001, 57% of the total population was living in urban areas, of which 56% was concentrated in the capital city, Ulaanbaatar. Mongolia also experienced several other disasters including wildfires and animal disease outbreaks.

This third outcome is relevant to UNDP's niche as the responsibilities of the UN Emergency Relief Coordinator for operational activities for natural disaster mitigation, prevention and preparedness were transferred to UNDP from the Office for the Coordination of Humanitarian Affairs, following a General Assembly decision in 1997 (Resolution A/52/L.72/Rev.1).

Consistency with national environmental and development agenda, and with national/sectoral development plans

The outcomes of the Energy and Environment programme are relevant to the current priorities and action plan of the Grand Coalition Government of Mongolia (2004-2008). The Government of Mongolia's approach and commitment to sustainable development fully recognize that the well being of the country depends upon the continued health of the country's natural environment.

The Country Programme 2002–2006, prepared in 2001, was designed to meet priorities taking root in the UNDP-supported national program of Good Governance for Human Security (GGHS), approved by the Government in 2000, supporting the goals of political development, socioeconomic development and environmental sustainability. The New Grand Coalition Government of Mongolia, formed after the fourth parliamentary elections of June 2004, has defined its National Action Plan for 4 years. The new priorities are not inconsistent with the principles of the former GGHS programme, the first Economic Growth and Poverty Reduction Strategy (EGPRS) of 2003, and the first national Millennium Development Goal (MDG) report of 2004. The 9 priority outcomes of UNDP country programme are well aligned with the national priorities as well as with the EGPRS and the national MDGs.

The GGHS 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 the first UNDP's programme outcome.

The main goal of the Environmental Policy of the Government action plan (2004-2008) is to improve policies for protection, sustainable use and rehabilitation of natural resources and implement ecologically-oriented social and economic policies, to make information relative to natural resources and environment accessible, and to increase public participation and monitoring to protect nature. This goal and many activities designed to reach it are perfectly compatible with the first outcome. Some activities are specifically relevant to the other outcomes, such as "increasing capacities to protect, prevent and eliminate consequences of natural disasters and to carry out rehabilitation measures" which relates to the third outcome, and "creating favourable legal environment and sustainable management for pasture use and ownership, increasing fodder production and improving livestock resilience to natural disasters" which relates to both the second and third outcomes.

Relevance to the country's policies

Rural development: Through contributing to improve livelihoods of herder populations, UNDP is supporting the Government priority for rural development as stated in its policy for the development of regional centers. The improvement of rural livelihood targeting poor households will have the impact of reducing the rural-urban migration of the poor, therefore contributing to reduce the social problems associated with the increase of unemployment in urban areas and the development of informal settlements in slum areas. These informal settlements are causing excessive concentration in urban areas, mostly in Ulaanbaatar, leading to the aggravation of environmental problems such as air pollution from burning low quality coal for heating, waste management, water supply and wastewater collection.

Project Outcomes incorporation into national/sectoral development plans[3]

ESBP:

1. The project cooperated with the Standing Committee on Environmental and Rural Development, State Great Khural (Parliament), GTZ, and WWF to develop a proposal on amendments to the set of environmental laws, which has been submitted to the parliament for consideration. The amendments to the Law on Environmental Protection

[3] Project outcomes are limited to projects for which adequate information has been collected.

have been adopted in November 2005. The amendments to the Law on Forests and to the Law on Protection from Toxic Chemicals were expected to be submitted in the next spring session.

2. The project has organized or contributed to workshops and conferences to discuss research results and specific issues with stakeholders in order to improve the implementation of existing laws or to devise resolutions aiming at protecting the environment and natural resources, notably gazelles and marmots. As a result, the Government (MNE) passed resolutions to ban commercial hunting of gazelle in 2000, commercial and subsistence hunting of marmot for 3 years in 2004, and timber export.
3. In 2003, the project assisted the MNE to carry out a public hearing to discuss the findings of the EIA on the construction of the Numrug Bridge, and a national forum was organized to discuss legal and administrative status of the PAs in Mongolia. As a result of the public hearing and the national forum, the Parliament made the decision to refuse any proposal on declassifying existing PA. All proposals for declassification of existing PA were denied. With the project's direct input, an amendment to the Law on EIA to improve the impact of the public hearings was proposed for the Parliament adoption through the Parliament Standing Committee on Environment and Rural Development.
4. One of the major outcomes of this project results from the study on the impact of hunting on wildlife populations in the Eastern *aimags*. As the results of this study were pointing to the lack of enforcement of the Law on Hunting, a project was developed based on a close collaboration of the SSSA and the ESBP to propose amendments to the Law on Hunting and implement a tagging system to prove that products were hunted legally. The hunting study findings have been used to develop policies and legislation and the new tagging system has been successfully implemented since 2003. According to the amendment to the Law on Hunting adopted by the Mongolian Parliament, everyone who possesses a wildlife product is required to have an official certificate of origin to prove that it has been hunted legally. It enables the law enforcement personnel to inspect traders at major road checkpoints, markets, and border ports, and to confiscate products of illegally hunted wildlife.
5. One of the management-oriented research projects increased the understanding of the Brandt's vole ecology and identified ecological measures to control the population levels. The project organized a successful international conference in association with WCS and WWF-Mongolia during which the MFA agreed to the recommendation to phase out the use of Bromadiolone by 2005. Also, the MNE imposed a ban on hunting red fox (*Vulpes vulpes*) and corsac fox (*Vulpes corsac*), natural Brandt's vole predators, in the three eastern *aimags*.
6. The Eastern Regional Action Programme for 2003 to 2020, in its section on Biodiversity Conservation, integrates a number of actions that are clearly stemming from the project outcomes, such as:
    - incorporation of biodiversity issues into *soum* land use planning,
    - adoption of comprehensive measures to counter illegal actions such as poaching of wildlife,
    - taking Mongolian gazelle main habitats and range in the eastern *aimags* under state protection,
    - wide organization of training and public awareness activities on the importance of protecting biodiversity using information centers,
    - implementation of alternative livelihood projects in the PA buffer zones.
7. The Nature and Environment Policy of the Government Action Programme for 2000 to 2004 announces the Government's intention to intensify efforts to combat rodents by introducing eco-friendly technology and increase by 1.5 times the area where Brandt's vole control will be implemented.

8. Local level policies: The Economic and Environment policy of the 2004–2008 Governor's Action Program for Dornod *aimag* plans
    - to implement environmental and biodiversity conservation activities of MAP-21,
    - to prohibit marmot hunting for 2 to 3 years and to reintroduce marmots in specific soums,
    - to establish new protected areas for gazelle reproduction and for the protection of endangered water birds.

GG:

1. In November 2005, the Parliament adopted a series of amendments to the Environmental Protection Law. These amendments provide a legal recognition of the delegation of rights and responsibilities to community user groups "to increase the public participation in the conservation, sustainable use and restoration of natural resources, and monitoring activities". One of the key changes is that local people, as community groups, are given the right to use and possess natural resources in specific areas, make benefits from their use; at the same time the obligation to protect these resources from fire, illegal logging, and illegal hunting is transferred to them. The outcomes expected by the Government in adopting these amendments are that these specific areas will be better protected and that local people livelihood will be improved through the sustainable use of natural resources.
2. Local level policies: At the Bayankhongor *aimag* EPA's request, the aimag government has approved the decision to create an aimag-level PA of 100,000 ha to protect head waters. Mining activities will be prohibited in this PA.
3. The Bayankhongor *aimag* development program has recently adopted a policy to intensify livestock sector and increase productivity instead of expanding livestock and increasing the demand for pastureland.

4.2. Factors affecting the outcomes

1. Political stability

The sustained commitment from the Government and other stakeholders to the programme and project objectives is a critical factor affecting their outcomes. The period covered by the evaluation has known some political changes. The year of 1996 saw the Mongolian Democratic Coalition election end 75 years of Mongolian People's Revolutionary Party (MPRP) rule. Between 1996 and 2000, the country went through four Prime Ministers, one resigning and two others losing a vote of no-confidence. In 2000, the MPRP was given a strong majority. The election of a new government in 2004 led to a 4-year alliance between the Democrats and the MPRP. This new political setup affected the composition of ministry teams and local governance bodies, and required the appointment of new NPDs, the election of new citizen representatives, and the creation of new institutional structures. The projects developed under the previous governmental team did not get the full support of the new team.

The new ministerial team's lack of ownership of the objectives identified under the previous government limited progress towards the outcome 1 as this led to an insufficient advocacy on the part of the Government to promote the adoption of PA management plans, and to raise the necessary funds and meet the required conditions to establish the METF. This prevented the implementation of important measures to protect Mongolia's biodiversity and led the country to lose this opportunity to establish a sustainable financing mechanism to support environmental conservation and sustainable development.

On the other hand, the Government through the Standing Committee of the Parliament on Environmental and Rural Development, showed its commitment by amending existing laws and adopting new laws reflecting or consolidating projects outcomes, affecting positively the outcome 1.

The sustained commitment and active participation of local officials such as *aimag* and *soum* governments and State Khural Citizen Representatives and of local environmental agencies such as EPA, SSSA, HMEM and land agencies have been a key factor to the achievements towards outcomes 1 and 2.

2. Sustained commitment of local communities to project objectives

Interviews with the local communities that were involved in UNDP projects have shown that they subscribe positively to the principles and solutions promoted by the NRM projects, and adopt them. They get actively and enthusiastically involved in the planning, management and monitoring activities, and even at times, develop solutions that go further. The very high literacy rate of the population has surely facilitated all activities aiming at building their capacities, as they can read and write. Most of the herder communities met for the evaluation have shown a good understanding of the concepts of biodiversity conservation and sustainable development. However, it must be kept in mind that the communities involvement and commitment is for a large part conditioned by the improvement of their livelihood and the development of income-generating activities with the support of the local funds set up with the projects support. This factor has affected positively the outcomes 1 and 2.

Despite the above, some interviews with herders and *soum* authorities were showing a lack of awareness about the necessity to limit herd size according to pasture and environment carrying capacity. According to the information collected in the *soums* visited for the evaluation, herd sizes have recuperated very rapidly after the drastic reduction caused by the *dzud* that occurred in the successive years of 2001 and 2002, and there was hope to exceed the levels prior to the disasters. This observation stresses the urgent need to develop alternative livelihood activities. It is important to convey a strong message that too many livestock can have disastrous effects on the environment and that sustainable pasture management must be based on land management at the ecosystem level as well as pasture carrying capacity at the local scale.

Otherwise, the scattered distribution and individualistic behaviour of the rural population increased the difficulty to carry out various activities, such as raising awareness, building capacity, and setting up groups or communities to plan and implement sustainable NRM. The development of alternative income generating activities was limited by the limited outlets due to the great distance of markets.

3. Poverty and unemployment

Mongolia's transition from a communist system with strict controls over hunting and trade to a faltering free-market economy has resulted in a dramatic increase in illegal hunting and trade. The collapse of the Soviet Union in 1990-1992 entailed the loss of Mongolia's foreign partners and of their support which resulted in the closing down of most enterprises, putting numerous people into the street. This led to a vast urban – rural migration and many inexperienced people became herders. In the years 1999 to 2001, Mongolia suffered climatic disasters that had severe direct impacts on rural people as it entailed the loss of millions of livestock. This sequence of events had the impact of increasing poverty. In 2002, the income of 36% of the population was below the national poverty line according to the Household Income Expenditure Survey and Living Standard Measurement Survey, reaching 43% in rural areas and 30% in urban areas. In this context of increased poverty, populations turn to illegal activities such as illegal mining, hunting, and logging for personal consumption and as a source of additional income.

Lack of capacity to patrol efficiently along vast porous borderlines reduces the country's capacity to enforce its laws protecting biodiversity, and the growing appetite for traditional medicine based on plant and animal products of an immense neighbour whose wealth is ever increasing, are additional factors that multiply opportunities for illegal activities and trade and increase the pressures on Mongolia's natural resources.

4. Climate change and water availability

The impacts of climate change weigh more heavily on people who depend on natural systems for their livelihood, such as herders and rural populations. The warming of the climate has important consequences for the hydrological cycle, particularly in regions where water supply by melting of snow or ice is important, such as Mongolia. It is estimated that 60 to 70% of annual river flow is contributed by glacier melting and seasonal snow melting. A study draws attention to the fact that glacier areas have been decreasing in the last years in Mongolia. Between the 1940s and 2000, the glaciers area reduced of 10 % to 30 % due to climate change (Davaa, 2005), while the average air temperature in Mongolia was increasing by about 1.56 ^{o}C. The consequences in a warmer environment are less winter precipitations and earlier melting of snow in the spring, which shifts peak river runoff away from summer and autumn when demand is highest. Where storage capacities are not sufficient, much of the winter runoff is lost. The consequences of these hydrological changes for future water availability are likely to be severe. According to a survey of surface waters conducted throughout Mongolia in 2003, 12% of rivers, 15% of streams and 18% of lakes and ponds have dried out. As a consequence of the warming of the climate, rainfall has increased slightly but potential for evaporation has increased dramatically.

The surface and groundwater resources play vital roles in the country's economy, especially in agriculture, livestock production, industry (mining) and domestic water supply. Lack of water limits usage of pastureland and crop fields, increases the stress for wildlife, affecting negatively outcome 2, undermining the numerous efforts to improve other conditions affecting the state of natural resources.

4.3. UNDP contribution to the outcomes through outputs

4.3.1. Project outcomes that contributed to the programme outcomes

Outputs and outcomes produced by UNDP projects that contributed to the programme outcomes are presented for each indicator in the tables in section 4.1.1.

Outputs produced through "soft" assistance could not be assessed due to insufficient information on this aspect of UNDP's contribution and the impossibility to interview UNDP's personnel who was involved in the Energy and Environment programme for most of the period covered by this evaluation, as they had left the country office. In addition, it was not possible to assess the contribution of the GEF Small Grants Program to the outcomes since the results (outputs and outcomes) of the 94 projects implemented under the GEF SGP have not been assessed.

4.3.2. Relevance of the UNDP project outcomes to the programme outcomes

Numerous project outcomes are not specifically relevant to the programme outcomes although they may be highly relevant to the country's needs. For example, both GG and ESBP projects had/have a strong research component, which, in the case of ESBP, led to very successful integration and improvement of management measures and enforcement of the laws. The assessment of the project outcomes does not allow to take into account of such positive achievements. It does not seem relevant to attempt to answer this question about the first outcome as it is so broad. However, significant outcomes of the ESBP, GG and SGMP in terms of capacity building for participatory planning and implementing land and pasture sustainable use, community organisation, improving water access have contributed to great achievement towards the second outcome. In the case of the third programme outcome, the question again is not relevant as the DMM project was designed specifically to achieve it.

4.3.3. Efficiency of resource use by UNDP

Since actual project costs by activity were not available, the efficiency of resource use towards achieving each outcome could not be assessed.

4.3.4. Monitoring and evaluation indicators

One of the main findings of this evaluation is that indicators were not appropriate to link outputs to outcomes. In addition, indicators and targets have been mixed up. It appears important to recall here the definitions of indicators and targets.

A performance **indicator** is a particular characteristic, or a quantitative or qualitative dimension used to measure intended program results against a strategic objective or a program outcome. Performance indicators are used to observe progress and to measure actual results compared to expected results. Performance indicators are usually expressed in quantifiable terms, and should be objective and measurable. A performance indicator should be a precise, direct measure of the relevant objective; it should be practical (i.e., data are available or can be generated), and disaggregated (by gender, rural/urban, etc.) where possible and appropriate. If the objective being measured is focused and appropriately limited, only a few (or even only one) performance indicators are needed per strategic objective or program outcome. Performance indicators focus on outcomes, objectives and goals while process indicators, are simply an accounting of the results of individual project activities (outputs).

A **target** is a mark, or reference point to measure the progress or change of a certain indicator towards intended results over a specified period of time by comparing the actual against the baseline and end target. Indicators tell us what we are measuring; targets are the results expected in the context of the specific programme and within a certain time frame. It is often not possible to define targets for lack of sufficient knowledge on the baseline situation at the time of preparing the programme result framework.

MYFF indicator for Outcome 1 *Adoption by the Government of amendments to environmental laws, (including Land law), management plans for some SPAs (Great Gobi / Eastern Steppes) and Construction norms and standard codes for straw bale buildings*

This indicator does not reflect all the components involved in the outcome 1 as formulated, as it is limited to very specific policy and legal aspects. The use of this indicator to monitor progress towards the achievement of the outcome and UNDP contribution does not allow the evaluation to account for the entire progress made nor for UNDP contribution to the outcome.

MYFF targets for Outcome 1

Examples of targets identified for the indicator of Outcome 1:

> *2. A model Management Plan for specially protected areas finalized and management plans for some SPAs drafted (Great Gobi/Eastern Steppes);*
>
> *7. A joint project proposal for improving access of the poor to water and sanitation services developed and financial sources negotiated*
>
> *8. 25 approved GEF small grants projects at various stages of implementation*
>
> *9. Energy efficient housing promoted and advocated through the establishment of and support to Energy Conservation Centers. CO_2 pollution reduced by 324 tons (45 houses with 50m^2).*

These targets repeat the indicator itself (2), are not relevant to any aspect of the indicator (7, 8) or refer to a different dimension (9) of the selected indicator in the MYFF. In addition, the annual ROARs do not monitor the identified targets.

Use of Evaluation team indicators for Outcome 1

The evaluation team identified additional indicators to take better account of achievements made towards the programme outcomes. The use of these indicators have also presented some difficulties such as

- nationwide estimation is not always possible (ex: Development of skills and competencies, Total number of community organisations in Mongolia);
- giving a global assessment of UNDP's contribution can be complex as approaches, scales, methods differ between projects.

UNDP contribution is only known through the projects' information on outputs and outcomes However, contribution of UNDP soft assistance is not clear. Contribution of GEF SGP to the outcomes could not be assessed as the results, in terms of outcomes, are not known.

MYFF indicator for Outcome 2 *Restoration of traditional methods for monitoring of vegetation cover in a least 6 soums*

This indicator does not reflect all the components involved in the outcome 2 as formulated, as it is extremely restricted to one technical aspect. The indicator is actually a target for the indicator that is presented as the first target. Again, this does not allow to take into account the entire UNDP contribution to the outcome.

MYFF 2005 targets for Outcome 2

Examples of targets identified for the indicator of Outcome 2:

Grassland resource monitoring system established and operationalized in target sites for measuring vegetation changes

Community-to-community training system on sustainable grassland management strengthened

Alternative fuel sources to prevent land degradation in dry ecosystems tested for future replication.

These targets do not refer to the indicator selected in the MYFF for Outcome 2 and could actually be rather considered as indicators for this outcome.

4.4. UNDP partnership strategy

4.4.1. Partnership strategy used by UNDP in pursuing the outcomes

As stated in the Guidelines for Outcome Evaluators, "partners are agents or actors with whom UNDP has, or intends to have, a substantive relationship in the pursuit of common outcomes". Partnerships are established for each project with national and international institutional or individual stakeholders to achieve jointly agreed or common objectives. Partners cooperate with projects through in kind or financial contributions or are subcontracted to provide services or achieve some of the project's activities.

UNDP's partnership strategy relied on

- Establishment of the main project partnerships with the relevant ministries as their executing agencies;
- Establishment of partnerships as projects' implementing agencies with the national institutions that will be in charge of pursuing the implementation of the outcomes initiated during the projects, such as EMPAA, EPA, HMEM, and SSSA for ESBP, and the Institute of Biology of the MAS and the Great Gobi "A" SPA Administration for GG;
- Establishment of participatory processes and structures involving grassroots representatives to local government agencies (comanagement committees, BZ councils, herder groups, associations and cooperatives) and implementation of bottom-up approaches to plan land and pasture use, while raising the level of awareness and

developing capacities of the participatory structures and of local communities to enable them to fulfill the role that is expected from them in this participatory scenario;

- Knowledge development and research components awarded as much as possible to national academic institutions and conservation societies, and the Information and Computer Center, through subcontracts;
- Dissemination of knowledge, mostly acquired through projects, to raise decision-makers awareness and contribute to law and policy development and decisions through national and international conferences and workshops co-sponsored by UNDP with the collaboration of WWF, GTZ, ADB, Agency of Land Affairs and Geodesy Cartography and the Union of Mongolian Environmental NGOs;
- Establishment of a cooperation agreement to implement recommendations resulting from studies carried out by projects (ex. EPA and later SSSA to implement ESBP hunting study's recommendations) which aim at improving the enforcement of environmental legislation;
- At the local level, involvement and capacity building of *aimag* governments, *soum* and *bag* governors, as well as Soum Citizen Khural Representatives, to plan and implement land use, pasture use, and PA and BZ management plans;
- Entering into international talks (with China) to develop a common understanding and harmonized solutions to specific threats to biodiversity of global importance;

Volunteerism in the local communities Another aspect of partnership is getting local people actively involved in the implementation of project activities and to stimulate their commitment towards environmental conservation objectives through environmental awareness and education.

ESBP was successful at developing a highly effective partnership between the project, local governments and local populations that will likely contribute to the sustainability of some of the main project outcomes. The establishment of this partnership was activated by National Community Volunteers recruited locally and trained to become key mediators between the project and the local population. The role of NCVs was i) to disseminate project information and results to local governments and communities with the purpose of integrating the project activities at the local level, ii) to conduct public awareness activities on a regular basis, iii) to collect socioeconomic and biodiversity data, iv) to support the local implementation of project's activities, v) to help develop PA and BZ management plans as members of the BZ Councils, and vi) to support the development and implementation of CCF activities. This group of local people, the NCVs, constitutes a capacity that was developed by the project to establish a missing link between local communities and local governments and agencies, and that will continue to disseminate environmental information and knowledge at the local level. Such a successful approach deserves to be replicated and expanded for the implementation of similar community-based NRM projects.

As a result of NCVs' and other project's actions, populations and local governments have developed a sense of ownership, personal commitment and responsibility over the wildlife occurring on their territory which can be illustrated notably by the following examples:

- Herders are involved in the protection of marmots through individual contracts. More than 100 families in 4 *soums* have established agreements with local governments to manage marmot population in and around their pastures;
- Volunteer rangers enrolled in the anti-poaching units run by the local offices of the SSSA to help out to local environmental inspectors and local governments for the monitoring of natural resources and for patrolling activities, thus contributing to enforce laws in the Eastern *aimags*. Over 20 volunteer community patrolling teams have been established and have some funds for their operations. These teams have been conducting regular

patrolling in the BZ of the SPAs. Also, a network of 153 local informants is active in 14 *soums*;

- Local people are actively involved in anti-poaching teams and in voluntary fire-fighting as partners to the local governments to prevent and reduce the occurrence and extent of wild fires in the eastern *aimags;*
- 48 springs are protected with livestock closures and shrubs and bushes have been planted over 4.5 ha for the natural protection of springs;
- Individual contracts were signed by local herders to respect the ban on marmot or on gazelle hunting and to protect them in the eastern *aimags*;
- Two *soum* governments have designated local protected areas at local population's request.

4.4.2. Effectiveness of UNDP partnership strategy

Almost all the measures taken have started to show their positive results in favor of environmental conservation. Most successful measures include participatory planning programmes and activities following bottom-up approaches, wider participation of local stakeholders and involving organizational structures gathering grassroots representatives and local authorities such as buffer zone committees or comanagement committees for pasture management that are chaired by citizen representatives who have full authority to take decision on every activity to be undertaken in their community.

ESBP participatory planning, implementation and evaluation. In this project, a considerable emphasis has been put on local level participation, and adequate budgets have been planned to carry out participatory workshops to plan and evaluate project activities. Institutional stakeholders have been involved at all levels in the planning and implementation of the project activities. This strong participatory approach definitely contributed to establish a successful partnership strategy, ensuring the coordination of the various partners' activities towards common outcomes, based on a shared appreciation of issues and challenges. These partnerships between project stakeholders are likely to persist beyond the project life and will contribute to the sustainability of the project outcomes that stemmed from these joint efforts.

This bottom-up approach could be scaled-up and replicated in other regions of Mongolia, especially where programmes are being implemented following a top-down approach which does not enable addressing the concerns of the most needy people in the absence of backward-forward institutional linkages.

Volunteerism in the local communities The voluntary involvement of civilians in environmental protection and in activities to support their local governments' efforts to pursue the same objective is definitely a strong outcome of ESBP. The sense of ownership and responsibility that local populations developed over their environment, wildlife, and natural resources made a positive shift in people's behavior and attitude, which should greatly contribute to the long-term conservation and sustainable use of biodiversity in Eastern Mongolia.

However, beyond the sense of ownership and responsibility, the motivation for local populations' commitment (including local governments) is largely based on the development of alternative income-generating activities and the prospects they anticipate with the access to the newly established "community" funds (BZ funds, revolving fund, pasture improvement funds). These two components are so important that they may be the keystone of this important outcome. Nevertheless, UNDP developed and implemented these components without solid partners in micro-business development and in microfinance. This strategy of associating microfinance and micro-business development to conservation initiatives is now a widespread practice as we recognize poverty and lack of alternative economic options as underlying factors to unsustainable exploitation and environmental degradation. Unfortunately, there are numerous examples of failure and absence of significant impact, and

these cases were attributed to inexperience. Development of microfinance and micro-business should not be learned on the job, especially when local people's commitment is at stake. Far from attempting to undermine project staff's efforts and results in this respect, this comment suggests that these efforts could have been more efficient, could have benefited from sound experienced guidance, and would have had better chances of leading to sustainable successes. UNDP should seek appropriate institutional partnerships to develop and implement such components in the fields of microfinance and micro-business development.

Community organization. Participatory processes and structures involving grassroots representatives were established (comanagement committees, BZ councils, herder groups, associations and cooperatives) to plan and implement land and pasture use management plans. Projects carried out activities to raise awareness and develop capacities of the participatory structures and of local communities to enable them to fulfill the role that is expected from them in this participatory scenario. These community organizations seem to operate successfully, as long as they benefit from the project support, but the sustainability of these structures and their capacity to fulfill their role on their own without the project assistance is actually unknown, even questioned in some cases. This component of the projects was implemented through learning on the job and experience sharing visits mainly to one project implemented by GTZ and NZNI IPECON who had acquired a strong experience in this field, without involving them as partners. This has reduced the opportunity to get the maximum benefits from their long experience and to provide a solid training to those newly established community organizations and to project staff who could later replicate and expand lessons learned.

Executing agencies. The partnership strategy at the national level with responsible ministries as execution agencies was not always successful. The elections in 2000 disrupted the important partnership with the MNE as the new designated team within the MNE did not subscribe to the project's objectives and approach. This had negative consequences on the achievements of the project's outcomes that relied on the contribution of this partner.

GEF Small Grant Program. An insufficient partnership with the GEF Small Grant Program precludes the establishment of synergies that could result from a coherent and complementary implementation approach of medium- and full-size projects with SGP projects. For example, large projects could focus on PAs and their BZs and SGP projects could focus on the sustainable management of renewable natural resource outside PAs and BZ through the replication of best practices developed in the medium- and full-size projects. Such a coherent implementation would also permit small project staff to benefit from the support and technical advice of the larger project staff.

5. RECOMMENDATIONS

5.1. Recommendations of actions for the future UNDP work in these outcomes

- Scope of the outcomes and outcome formulation. Outcome 1 formulation provides an unclear statement about intended development change and is unrealistic regarding UNDP's range of activities. Outcomes are developmental changes that occur as a consequence of the completion of a series of outputs (operational results) and that contribute to the achievement of an impact (long-term result). These results or outcomes must be specific, measurable, realistically achievable in a given time, and relevant to identified needs. The wording of the outcomes must express a real developmental change.
- Indicators The choice of relevant indicators must allow the monitoring of the advancement towards desired developmental changes. All indicators and targets need to be revised.

First outcome

- Wildlife in Mongolia is threatened by illegal hunting (World Bank, 2005) which could undermine or wipe out UNDP projects achievements in terms of biodiversity conservation. The reinforcement of the implementation of the law based on the scaling up and nationwide implementation of the tag system developed by ESBP in collaboration with EPA/SSSA, and setting up networks of community anti-poaching units should be implemented.
- Further efforts are needed, especially to include local stakeholders' consultation in the EIA procedure and to mainstream environment in long-term sector policies which are yet to be developed. In addition, specific EIA sector guidelines should be prepared to aid developers and consultants in the preparation of EIA reports.

Second outcome

- Many achievements in the field of sustainable pasture management have a good demonstration value (have shown positive results) and must be disseminated, replicated and expanded to increase benefits at the national scale. Pasture use plans must take into account and be integrated into a large scale land management plan.
- Interviews with herders and soum authorities seem to denote a lack of awareness about the necessity to limit herd size according to pasture and environment carrying capacity. The concept of "pasture carrying capacity" must be further expounded to all stakeholders and efforts intensified to raise the awareness of herders and *Soum* authorities about the necessity of limiting herd sizes according to pasture and environment carrying capacity and to convey a strong message that too many livestock can have disastrous effects on the environment.
- Efforts must be intensified to develop diversified alternative livelihood activities with funding from the GEF SGP, considering the integration of tested innovative activities.
- Threats leading to land and water resources degradation and depletion should be addressed through IRBM approach, in particular issues related to mining activities and deforestation.

Partnerships

- Improve partnership with the GEF Small Grant Program to develop synergies with medium- and full-size projects, through focusing on the replication of best practices developed in the medium- and full-size projects. Revise GEF SGP criteria to allow the implementation of projects that would give rise to such synergies.
- To implement project components involving the establishment of community organizations such as comanagement committees, BZ councils, herder groups, associations and cooperatives, rely on partnerships with stakeholders who have acquired a strong experience in this field to get the maximum benefits from their experience and to provide a solid training to newly established community organizations and to project staff who could later replicate and expand lessons learned. Avoid learning on the job.
- Development and implementation of microfinance and micro-business project components must rely on appropriate institutional partnerships to improve efficiency, benefit from sound experienced guidance, and increase chances of sustainable successes. Avoid learning on the job especially when local people's commitment is at stake.
- For the implementation of community-based NRM projects, replicate and expand the successful approach based on hiring and training local people as National Community Volunteers to establish the missing link between local communities and local governments and agencies, and to disseminate environmental information and knowledge at the local level.

ANNEXES

1. Terms of Reference
2. Itinerary of field visits
3. List of persons interviewed
4. List of documents reviewed
5. Guiding document for interviews based on project outcomes
6. Environment-related legal and policy framework
7. Graphs and maps used to assess the change for some indicators of the outcome 2 in the whole country and in the soums that were involved in UNDP projects.

Annex 1. Terms of Reference for Energy and Environment Outcome Evaluation UNDP Mongolia

1. INTRODUCTION

Results-based management (RBM) was introduced in UNDP based on a decision taken by the UNDP Administrator to develop a framework for the measurement and assessment of programme results. In order to demonstrate programme results effectively to the full satisfaction of donors and stakeholders the RMB system being put in place by setting out clear programme and management goals for the organization and establishing indicators to monitor and assess the progress in meeting them.

The key components of the results system include both planning and reporting measurements. The Multi-Year Funding Framework (MYFF) is a planning instrument that sets clear outcomes and targets. A results-oriented annual report (ROAR) and a Multi-year Funding Framework Report (MYFFR) are the reporting instruments of RBM. As part of its efforts in enhancing RBM, UNDP is focusing its project monitoring and evaluation to results-oriented M&E, especially **outcome monitoring and evaluation** that cover a set of related projects, programmes and strategies intended to bring about a certain outcome. An outcome evaluation assesses how and why outcomes are or are not being achieved in a given country context and the role UNDP has played. Outcome evaluation also help to clarify underlying factors affecting the situation, highlight unintended consequences (positive and negative), recommend actions to improve performance in future programming, and generate lessons learned.

2. BACKGROUND

The Government of Mongolia's approach to sustainable development and its national commitment to these goals fully recognize 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 overarching goal of UNDP in Mongolia is to promote equitable and sustainable development. This will be achieved by galvanizing national action through the demonstration of best practices in the fields of natural resource management, economic and social development, and governance. Best practices are to be developed on the ground through UNDP-supported projects and programmes, which will, through their links with the relevant national authorities, be incorporated into national policy development. These lessons will be disseminated within the United Nations system as well as among the international donor community

UNDP is supporting the Government of Mongolia in this endeavour through the implementation of a cluster of Energy and Environment projects consisting of the following three integrated programme components:

- Sustainable Resource Management**:** Through the process of promoting a balance between environmental protection and development;
- Energy Efficiency and Pollution Control: Through the process of supporting efforts to improve energy efficiency in public buildings through the use of super insulated straw-bale buildings technologies;
- Disaster Management: Through the process of helping Mongolia to strengthen its system of disaster preparedness and management.

The Energy and Environment thematic area projects focus on biodiversity conservation, natural resources management, community development, energy efficiency, and disaster management. It ensures that project implementation is undertaken by national personnel through national institutions.

The expected results of this process are to protect and regenerate the environment and natural resources asset base for sustainable human development.

3. OUTCOME TO BE EVALUATED

UNDP Mongolia developed its first MYFF in 2004 which identifies nine outcomes as the main strategic directions for the country programme for the period of 2004-2007. While implemented through a cluster of separate projects, UNDP's interventions in the field of environment were formulated as an integrated programme. The following three outcomes on environment and energy have been selected for the outcome evaluation.

- To ensure that environmental considerations are integrated into planning and development processes at national, regional and local levels through multi-sectoral approaches.
- The threat to Mongolia's grasslands and livestock sector decreased through the refinement and expansion of a model for sustainable management at the community level.
- To strengthen the country's system for managing the large-scale natural disasters to which it is prone.

Currently, the total approved budget under UNDP-supported projects in Mongolia for with regard to the above outcome is around USD 11,598,447 for the period of 1998-2007.

4. OBJECTIVES OF THE EVALUATION

The Outcome Evaluation has two main objectives

1. To assess the progress toward the three outcomes, and the extent to which UNDP has contributed to those outcomes through its project or non-project activities.
2. To provide substantive contribution towards the new Country Programme.

5. SCOPE OF THE EVALUATION

The evaluation should primarily focus on generating lessons learnt, finding and recommendations in the following area:

- Outcome status: Whether or not the outcome has been achieved and, if not, whether there has been progress made towards its achievement;
- Underlying factor: An analysis of the underlying factors beyond UNDP's control that influence the outcome;
- UNDP contribution: Whether or not UNDP's outputs and other interventions can be credibly linked to achievement of the outcome, including the outputs, programmes, projects and soft and hard assistance that contributed to the outcome
- Partnership strategy: Whether UNDP's partnership strategy gas been appropriate and effective.
- Relevance to the current policy priorities: To what extent the objectives of the Energy and Environment programme components and projects are relevant to the current policy priorities and action plans of the Grand Coalition Government of Mongolia (2004-2008), and suggest how to align with new needs and priorities;
- Analyse major achievements and constraints to the effective delivery of the environment projects, and provide with practical recommendations on how to improve the quality of delivery of future projects in the Energy and Environment area.

Besides putting primary focus on the above areas, evaluators will have to concentrate on the following throughout the outcome evaluation process. Outcome analysis will be focused on the five drivers of development effectiveness, as such the five drivers can be considered as cross-cutting issues that need to be emphasized in all outcomes.

1. developing national capacities
2. enhancing national ownership
3. advocating and fostering an enabling policy environment
4. promoting gender equality

5. forging partnerships for results

These drivers of development effectiveness, when taken together, help to connect UNDP's substantive results to larger intended national development outcomes. UNDP will therefore analyze and report on these drivers in parallel to the service lines.

1. Developing national capacities

- How is the national dialogue on energy and environment among key stakeholders supported that leads to broad consensus and agenda-setting
- How is institutional capacity development at national and regional levels promoted for guaranteeing rights and providing services, including through strategy development, policy formulation and application, data collection, analyses and utilization, for implementation, management (staff management, salaries, incentives), monitoring and learning through national results-based management systems.
- Have there been civic engagement of all sectors of society and empowerment of disadvantaged planning and implementing programmes and policies, monitoring progress and learning from experiences
- Have key skills (e.g. visioning, strategic planning, management, analysis, knowledge management) and domain-specific technical skills (training…) been enhanced.
- Have improvement of leadership skills at societal, institutional and individual levels supported in order to drive integrated national and local development agenda.
- Have there been networking system established at a global, national and local levels

2. Enhancing national ownership

- Does the national and local governments take the lead in developing and implementing frameworks and strategies for sustainable development and GEF national capacity self-assessment
- Local adoption and following through on national MDGs and other international commitment; mobilizing national and local resources to meet funding requirements for reaching the targets
- Encouraging and reinforcing the voice and role of government and other national/local actors in claiming and assuming responsibility for a homegrown development agenda, process and implementation
- Helping establish a transparent operating environment and accountability through tying public decision-making and development cooperation to needs of the poor and disadvantaged groups
- Supporting upstream-downstream linkages

3. Advocating and fostering an enabling policy environment

- Are environment and energy dimensions mainstreamed into the key national development documents?
- What are the specific legal, policy and regulatory changes were supported that incorporate human development/poverty considerations

4. Promoting gender equality

- How is gender issues integrated into environmental frameworks and strategies
- How is participation and representation in national and local arena promoted that influence policy decisions

5. Forging partnerships for results

- Is there effective coordination between UNDP, government and other energy and environment partners?
- Are the project stakeholders and local communities involved in planning and implementation of environmental and energy programmes?
- How partnerships were oriented to focus on agreed outcomes and using joint monitoring and review mechanisms.

Projects to be evaluated:

- MON/02/G35 – Conservation of the Great Gobi and its Umbrella Species;
- MON/02/301 – Sustainable Grassland Management;
- MON/97/G35 – Biodiversity Conservation and Sustainable Livelihood Options in the Grasslands of Eastern Mongolia;
- MON/99/G35 – Commercialization of Super-Insulated Buildings in Mongolia;

6. PRODUCTS EXPECTED FROM THE EVALUATION

The product will be a comprehensive report that includes:

- Strategies for continuing or concluding UNDP assistance towards the outcome
- Recommendation for formulating future assistance framework
- Lessons learned concerning best and worst practices in producing outputs linking them to outcomes and using partnerships strategically
- A rating on progress towards outcomes and progress towards outputs
- A rating on the relevance of the outcome

These products will be developed jointly by the team members. The team's preliminary conclusions will be discussed at a debriefing with key stakeholders and relevant civil society organizations, as well as with UNDP Mongolia CO staff members. A draft mission report will be left with the UNDP Mongolia office and the Energy and Environment co-ordinating agency upon the departure of the Team Leader. The full report will be forwarded to UNDP Mongolia, in soft and paper copies, within one week of the departure of the mission.

7. METHODOLOGY OR EVALUATION APPROACH

An overall guidance on outcome evaluation methodology can be found in the *UNDP Handbook on Monitoring and Evaluating for Results* and the *UNDP Guidelines for Outcome Evaluators*. The evaluators should study those two documents very carefully before they come up with the concrete methodology for the outcome evaluation.

Specifically, during the outcome evaluation, the evaluators are expected to apply the following approaches for data collection and analysis: (i) desk review of existing documents and materials, (ii) interviews with partners and stakeholders (including what the partners have achieved with regard to the outcome and what strategies they have used), (iii) field visits to selected key projects, (the purpose of the field visits is mainly to verify the UNDP produced outputs and the impact of the outputs), and (iv) briefing and debriefing sessions with UNDP and the government, as well as with other donors and partners. Of course, the evaluation team has certain flexibility to adapt the evaluation methodology to better suit the purpose of the evaluation exercise.

8. EVALUATION TEAM

The evaluation team will consist of three consultants: one international consultant as a team leader and two national consultants (as team members). The international consultants should have an advanced university degree and at least five years of work experience in the field of sustainable environment and energy development, sound knowledge about results-based management (especially results-oriented monitoring and evaluation). The team leader will take the overall responsibility for the quality and timely submission of the evaluation report in English.

1. Specifically, the international consultant (team leader) will perform the following tasks:

- Lead and manage the evaluation mission;
- Design the detailed evaluation scope and methodology (including the methods for data collection and analysis);

- Decide the division of labor within the evaluation team;
- Conduct an analysis of the first outcome, outputs and partnership strategy
- Draft related parts of the evaluation report; and
- Finalize the whole evaluation report and submit it to UNDP.

2. One national consultant will perform the following tasks with a focus on sustainable energy development:

Review documents;

- Participate in the design of the evaluation methodology;
- Conduct an analysis of the outcome, outputs and partnership strategy (as per the scope of the evaluation described above);
- Draft related parts of the evaluation report.

3. The other national consultant will perform the following tasks with a focus on sustainable environment:

- Review documents;
- Participate in the design of the evaluation methodology;
- Conduct an analysis of the outcome, outputs and partnership strategy (as per the scope of the evaluation described above);
- Draft related parts of the evaluation report.

9. IMPLEMENTATION ARRANGEMENTS

- To facilitate the outcome evaluation, UNDP Mongolia will set up an Evaluation Focal Team (EFT), which will provide both substantive and logistical support to the evaluation team.
- The evaluation will be conducted for 50 days from 1 November to 20 December 2005.
- During the evaluation, UNDP Mongolia will help identify the key partners for interviews by the evaluation team. A total of about 50 days are required for the evaluation, which are broken down as follows:

Activity	Timeframe and responsible party
1. Evaluation design	3 days, by the team leader and evaluators
2. Desk review of existing documents	7 days, by the evaluators
3. Briefing with UNDP Mongolia	1 days, UNDP and the evaluation team
4. Field visits	14 days, by the evaluation team
5. Interviews with partners	7 days, by the evaluation team
6. Drafting of the evaluation report	10 days, by the evaluation team
7. Debriefing with UNDP Mongolia	1 day, UNDP and the evaluation team
8. Finalization of the evaluation report	7 days, by the team leader and evaluators

Annex 2. Itinerary of field visits

Field visits to Conservation of the Great Gobi and its Umbrella Species Project area from the 21st to 28th of November 2005.

Date	Location	Meetings
21 November	UB to Bayankhongor, Bayankhongor *aimag*	Meeting with the Director of Environmental Inspection Agency of Bayankhongor *aimag*
22 November	Jinst *soum*	Meetings for the evaluation of SGMP Meeting with *soum* Governor Visit information center and meeting with Yellowstone herder group
23 November	Jinst *soum* to Bayan Undur *soum*	Meeting with Bayan Undur Buffer Zone Council Meeting with a Soum Citizenship Khural representative Meeting with GGSPA Administration Specialist responsible for patrolling and law enforcement
24 November	Bayan Undur *soum*	Meet with Buffer zone council members, *soum* Governor and project staff Visit information center and meet environmental club members Visit to the deep well
	Bayan Undur *soum* to Bayntooroi *bagh*	Meeting with Park Training Officer Meeting with Project field assistant Meeting with a Park ranger
25 November	Bayntooroi *bagh*	Meetings with *bagh* governor, park staff and project field assistant Visit of the information center at the Park Administration
26 November	Bayantooroi *bagh* to Mother Mountain and back to Bayantooroi	Meeting with Young Environmentalist Club Visit local shower house and hospital Visit tree nursery Visit to Mother Mountain and meeting with Park ranger Visit Captive breeding site of wild camels (Project collaborators on wild camel conservation)
27 November	Bayantooroi to Bayankhongor	Travel
28 November	Bayankhongor	Meeting with the staff of the Environmental Inspection Agency of Bayankhongor *aimag* Meeting with the Deputy Governor of Bayankhongor *aimag*
	Bayankhongor to UB	

Field visits to Conservation of Biodiversity Conservation and Sustainable Livelihood options in the Grasslands of Eastern Mongolia Project area from the 3rd to 14th of December 2005.

Date	Location	Meetings
03 December	UB to Choibalsan, Dornod *Aimag*	
04 December	Choibalsan	Meeting with ESBP staff and all NCVs
05 December		Meeting with Dornod *Aimag* Governor
		Meeting with EMPAA staff
06 December		Meeting with Khentii *Aimag* Officials
		Meeting with project NCV, CCF project team members and introduction of CCF project implementation
		Meeting with project stakeholders. (Dornod *Aimag* EA, Land Agency, SSA, HMEMC)
07 December		Meeting with project stakeholders. (Dornod *Aimag* EA, Land Agency, SSA, HMEMC)
	Choibalsan, Dornod *Aimag* to Sukhbaatar *Aimag*	

Date	Location	Meetings
08 December	Sukhbaatar *Aimag*	Meeting with Sukhbaatari *Aimag* Governor.
		Meeting with project stakeholders. (Sukhbaatar *Aimag* EA, Land Agency, SSA, HMEMC)
		Introduction of CCF project implementation
09 December	Dariganga *soum,* Sukhbaatar *Aimag*	Meeting with Dariganga National Park Administration staff
		Meeting with Dariganga *Soum* Governor.
		Introduction of CCF project implementation
10 December	Erdenetsagaan *soum,* Sukhbaatar *Aimag*	Meeting with Erdenetsagaan NCV. Mr Bat-Erdene and CCF project Team members
		Meeting with Erdenetsagaan *Soum* Governor
		Introduction of CCF project implementation
		Introduction of Zegstei herding community activities
	Erdenetsagaan *Soum* to Matad *Soum* Dornod *Aimag*	Introduction of Environmental Info Center and CCF project implementation. (Tavan-Erdene women's wool processing community)
	Matad to Choibalsan	
11-13 December, 2005	Choibalsan to Dashbalbar *Soum*, Dornod *Aimag*	Meeting with Dashbalbar NCV. Mr Chinbat and CCF project Team members
		Meeting with Dashbalbar *Soum* Governor. Mr Yondonjamts
		Introduction of Undral herding community activities
		Introduction of Chukh Lake herding community activities
		Meeting with CCF project Team members and introduction of CCF
		Meeting with Gurvanzagal *Soum* Governor Project implementation (Environmental Info Center and Community Café)
14 December	Choibalsan to UB	

Field visits to Commercialization of Super-Insulated Buildings in Mongolia and Sustainable Grassland Management Project Area from 28 to 30 December 2005

Date	Location	Meetings
28 December	UB to Bayangol *soum*, Selenge *Aimag*	Meeting with Tsagaanchuluut herder community Visit grassland, hay storage structure and well
		Visit grassland improvement demonstration sites on the way to Bayangol Meeting with *bagh* Governor.
		Meeting with Bayantsogt herder community
		Visit community's achievements: community vegetable storage and deep well Meeting with *bagh* Governor
	Bayangol *soum*	Meeting with *soum* Governor
		Visit local project office and meeting with local project staff to discuss project overall implementation
	Bayangol *soum* to Darkhan City	
29 December	Darkhan City	Meeting with Construction Inspector from State Commission
		Visit families in Darkhan city (2 straw houses, 2 retrofitted houses)
	Darkhan City to Erdenet City	
	Erdenet City	Meeting with the Energy Conservation Centre staff
30 December	Erdenet city	Visit families in Erdenet city (2 straw-bale houses, 1 retrofitted house, 1 non- SB house
		Visit deforestation sites in the Edernet area
	Erdenet city to UB	

Annex 3. List of persons interviewed

Name of person and position	Name of organization
Ulaanbaatar	
Ms. Prathiba Mehta, UN Resident Coordinator and UNDP Resident Representative	UNDP CO in Mongolia
Ms. Tungalag.U., Environment Practice Manager	
Ms. Batkhishig.B., Rural Development Specialist	
Mr. Ganbaatar.B., GEF SGP Coordinator	
Ms. Oyundar.N., Director General, GEF Operational Focal Point, GG Project NPD	Strategic Planning and Policy Coordination Department, MNE
Mr.Khanimkhan I., Director, Sustainable Grasslands Management NPD	External Relations and Cooperation Division, Ministry of Food and Agriculture
Mr. Gankhuu T., Director, Straw-Bale House Project NPD	Construction and Public Utilities Policy and Coordination Department, Ministry of Construction and Urban Development
Mr. D. Enkhbaatar, Officer,	International Cooperation Department, MNE
Mrs. J. Batsukh, Director	MNE
Dr. M. Erdenetuya	National Remote Sensing Center - Information and Computer Center
Mr. L. Bold, Chairman	Ministry of Trade and Industry, Mineral Resources and Petroleum Authority
Dr. C. Enkhzaya, Adviser to the Chairman	Mineral Resources and Petroleum Authority, Ministry of Trade and Industry
Mrs. B. Tuul, Assistant Project Analyst, Environmental Specialist	ADB Mongolia Resident Mission
Mr. D. Bayartsogt, Rural Development Operations Officer	World Bank
Mr. Galragchaa, Senior Officer, Environmental Specialist	GTZ
Mr. Chimid-Ochir, Director	WWF Mongolia Programme Office
Dr. J. Batbold	Union of Mongolian Environmental NGOs (UMENGO)
Mrs. M. Sasaki, Assistant Resident Representative	Japanese International Cooperation Agency Mongolia Office
Mr. Jadambaa, Researcher	GeoEcology Institute
Mr. Gankhuyag R., Head of Cadastral Division	Mongolian Governmental Regulatory Agency – Administration of Land Affairs, Geodesy and Cartography
Mr. Khurelshagai A., Deputy Head, Mongolian Governmental Regulatory Agency	Administration of Land Affairs, Geodesy and Cartography – Land Management, Geodesy and Cartography Department
Dr. Binderya, Dir. School of Civil Engineering	Mongolian University of Science and Technology
Mr. Sambasanchir T., State Secretary	Ministry of Construction and Urban Development
Mrs. Tungalag J., Officer of Foreign Relation and Coordination	
Mrs. Dorjpagma Y., Senior Officer	Construction and Public Utilities Policy and Coordination Department, Ministry of Fuel and Energy
Mr. A. Tsogt, Senior expert	
Mr. C. Radnaa, Chair of the	State Great Khural

Standing Committee on Environment, Member of the State Great Khural	
Mr. Myagmar G., National Project Manager	Commercialization of Super-Insulated Buildings in Mongolia Project
Mr. E. Temuujin, Business and Finance Advisor	
Mr. N. Batjargal , National Project Manager	Sustainable Grassland Management Project
Mr. A. Upadhyay, Alternative Livelihood Development Specialist	
Mrs. B. Munkhjargal, National Programme Officer	Swiss Agency for Development and Cooperation
Dr. Sabina Schmidt, Program Director	New Zealand Nature Institute – Initiative for People Centered Conservation

Conservation of the Great Gobi & Its Umbrella Species	
Bayankhongor *aimag*	
S. Unenbuyan, Vice - Governor	Bayankhongor *aimag* Government
S. Mandal, Chairman	Bayankhongor *aimag*, Environmental Protection Agency
Enkhbayar, Officer	
Tsetsegjargal, Officer	
Bayaraa, Chairman	Bayan Undur *soum* Khural Representatives
Tungalag, Governor	Bayan Undur *soum*
Byambadorj, Chairman	Buffer zone Council
Erdene Ochir, Herder	
Erdenebaatar, Ranger	
Samdan, Herder	
Nina, Member	
Dashzeveg, Member	
E. Tsendmaa, Leader	Bayan Undur *soum*, Junior Environment Protection “Mazaalai” club
20 school students	Members of “Mazaalai” club
Gobi Altai *aimag*	
S. Battur, Governor and Mayor	Gobi Altai *aimag*, Tsogt *soum*, Bayantooroi *bag*,
Dorjgotov, Senior Manager	Gobi Altai *aimag*, Tsogt *soum*, Bayantooroi *bagh*, Great Gobi Protected Area Administration
M. Bayanmunkh, Information Manager	
L. Ankhbayar, Admininistrativa Assistant	
B. Ganzorig, Ranger	
Ts. Khenmedehev , Ranger	
B. Dorjsuren, Technician	Gobi Altai *aimag*, Tsogt *soum*, Bayantooroi *bagh*, Tree Nursery
J. Darjaa, Assistant	

Sustainable Grassland Management	
Bayankhongor *aimag*	
S. Unenbuyan, Vice - Governor	Bayankhongor *aimag* Government
S. Mandal, Chairman	Bayankhongor *aimag*, Environmental Protection Agency
Enkhbayar, Officer	
Tsetsegjargal, Officer	
Tserendorj, Chairman	Jinst *soum* Citizens Khural Representatives
“Devshil” Herders group	
“Shar khad” Herders group	
Selenge *aimag*	
B. Enkhbat, Chairman	Selenge *aimag*, Bayangol *soum*, Citizens Khural Representative
B. Bolor Erdene, Head	Selenge *aimag*, Bayangol *soum* Government, Administration Department

D. Tsendjav, Business Development Officer	Selenge *aimag*, Bayangol *soum*, Sustainable Grassland Management Local Office
T. Batjargal, Head	Selenge *aimag*, Bayangol *soum*, "Derst Hond" Herders Cooperative
L. Ochir, Herder and Member	Selenge *aimag*, Bayangol *soum*, "Derst Hond" Herders Cooperative, Co-Management Committee
U. Dagvasuren, Herder	Selenge *aimag*, Bayangol *soum*, "Derst Hond" Herders Cooperative
D. Batnyam, Herder	
O. Dolgorsuren, Herder	
N. Lkhagva, Herder	
N. Enkh Amgalan, Herder	
Ch. Baasanjav, Head	Selenge *aimag*, Bayangol *soum*, "Bayantsogt" Herders Cooperative
L. Battulga, Herder	
D. Chuluunbaatar, Herder	
S. Byambajav, Herder	
V. Sukhbaatar, Herder	
D. Batsukh, Herder	
A. Bat Ulzii, Herder	
D. Davaatseren, Herder	
M. Darkhanbaatar, Herder	

Biodiversity Conservation and Sustainable Livelihood options in the Grasslands of Eastern Mongolia	
Dornod *aimag*	
Ts. Janlav, Governor	Dornod *aimag*
Kh. Dashdorj, Head	Eastern Mongolia Protected Area Administration
Z. Tserenbaltav, Officer	
B. Batdorj, Officer	
B. Delgermaa, Officer	
J. Ulziitumur, Ranger	
Ts. Lhamsuren, Accountant	
D. Damdinbazar, Head	Land Agency
L. Lhundev, Senior Officer	
Sh. Ganbat, Head	Nature and Environment Agency
D. Khuyagbaatar, Officer	
N. Khishigjargal, Head	Meteorological Research Center
Sh. Ulziiduuren, Head	Matad *soum*, Buffer Zone Council
E. Purevdorj, Member	
E. Tumurbaatar, Teacher	Matad *soum*, Young Rangers' Community
Kh. Nyambuu, Head	Matad *soum*, Bayanburd Herders' Group
Ch. Batjargal, Herder	
T. Dolgormaa, Trainer	
J. Yondonjamts, Governor	Dashbalbar *soum*
D. Jambaldorj, Head	Dashbalbar *soum*, Soum Citizens Khural Representatives
D. Gankhuyag, Secretary	
Ch. Chinbat, NCV	Dashbalbar *soum*
D. Delgermaa, Member	Buffer zone council
G. Tserenbat, Inspector	Marmot Protection Project
S. Dulamkhand, Member	Herders' Community "Undral"
Ch. Gereltsetseg, Teacher	"Swan" Children Club
M. Dolgor, Member	Buffer zone council
Ch. Urjinkhand, Head	"Chukh" Herders community
D. Andrei, Herder	
B. Byambajav, Herder	
B. Byambadorj, Herder	
D. Gulgun, Herder	
J. Jamyan, Herder	
B. Batbayar, Herder	
M. Jargal, Herder	

B. Boroldoi, Herder	
E. Tsendsuren, Herder	
J. Tsendmaa, Herder	
Ch. Tsogzolmaa, Herder	
L. Sergelen, Chairperson	Gurvanzagal *soum*, Citizens Khural Representatives
S. Byambaa, Head	Marmot protection “Zagal” group
U. Dorjsukhbaatar, Member	
D. Dagvasuren, PM	Project Office in Choibalsan
T. Ankhbayar, GIS Officer	
B. Gankhuyag, CCF Manager	
O. Chuluunbaatar, Driver	
T. Chinzorig, Head	Development support fund, NGO
Khentii aimag	
M. Bulgan, NCV	Khentii *aimag*
J. Tsagaachin. NCV	Khentii *aimag*, Bayan Ovoo *soum*
Kh. Purevdorj, Head	Bayan Ovoo *soum*, “Esun Erdene” Herders Group
Ts. Shinechimeg, Officer	Khentii *aimag*, Land Agency
N. Oyunmandal, Officer	Khentii *aimag*, Environment Protection Agency
Sukhbaatar aimag	
R. Erdenetsogt, Governor	Sukhbaatar *aimag*
S. Borgil, Head	Sukhbaatar *aimag*, Environment protection Agency
Kh. Enkhbayar, Head	Sukhbaatar *aimag*, Meteorological Agency
N. Munkhbaatar, Officer	
D. Batkhurel, Senior Officer	Sukhbaatar *aimag* Government, Strategic Planning Department
U. Tsetsegdelger, Officer	Sukhbaatar *aimag* Government, Land Agency
B. Enkhtuya, Officer	Sukhbaatar *aimag* Government, State Specialized Inspection Agency
M. Delkhiitsetseg, NCV	Sukhbaatar *aimag*
U. Maral, Member	Sukhbaatar *aimag*, Junior Environmental Club
D. Dugarsuren, Head	Sukhbaatar *aimag*, Dariganga *soum*, National Park
T. Bayarmagnai, Technician	
D. Gantulga, Officer	
T. Sukhbaatar, Accountant	
U. Batsaikhan, Governor	Sukhbaatar *aimag*, Erdenetsagaan *soum*
O. Enkhtuya, Chairperson	Sukhbaatar *aimag*, Erdenetsagaan *soum*, Citizens Khural Representatives
Z. Zembe, Vice Governor	Sukhbaatar *aimag*, Erdenetsagaan *soum*
G. Bat Erdene, NCV, Head	Sukhbaatar *aimag*, Erdenetsagaan *soum*, Buffer Zone Council
S. Tserennamjil, Member	
L. Saikhantuya, Member	
D. Munguntsetseg, Head	Sukhbaatar *aimag*, Erdenetsagaan *soum*, Gazelle Protection Team, Buffer Zone Council
Sh. Narangerel, Member	Sukhbaatar aimag, Erdenetsagaan *soum*, Gazelle Protection Team
D. Munkhuu, Member	Sukhbaatar aimag, Erdenetsagaan *soum*, Berry Bush Community
Ts. Enkhtsetseg, Head	Sukhbaatar *aimag*, Erdenetsagaan *soum*, “Zegstei” Herders Community
V. Buyanjargal, State Inspector	Darkhan Uul *aimag*, State Specialized Inspection Agency
Ch. Batbulgan, Construction and Road Inspector	
D. Munduu, Veteran	Darkhan City Citizen
Sh. Munkhdarkhan, Server	
D. Dashnyam, Unemployed	
B. Odgerel, Officer	Erdenet City Governor’s Office
N. Narangerel, Head	Erdenet City, Energy Conservation Center
G. Dugree, Chairman	Erdenet Branch of Mongolian Association of Construction Engineers
M. Tsendkhuu, Veteran	Erdenet City Citizen
S. Bazarragchaa, Veteran	
Ch. Undarmaa, Unemployed	

Annex 4. List of documents reviewed

ADB. 2002. Mongolia's Environment Implications for ADB's Operations.

Dalai Van – Audit Co., Ltd, Certified Accounting and Auditing, April 1999. Auditor's Report: "Biodiversity Conservation and Sustainable Livelihood Options in the Grassland of Eastern Mongolia" project.

Davaa G. 2005. Changes in hydrological systems of Mongolia. Third Environmental Conference on Environmental Change in Central Asia. J. MOLARE Res. Center. Vol. 3: 20-28.

GEF. 2002. Guidelines for Implementing Agencies to Conduct Terminal Evaluations.

GEF. Tracking Tool For GEF Biodiversity Focal Area Strategic Priority One: "Catalyzing Sustainability of Protected Areas"

Government of Mongolia – Donors, 2002. Rural Development Conference. Conclusion Document.

Government of Mongolia, 2002. The Government of Mongolia Good Governance for Human Security Programme. Policy Document.

Government of Mongolia. 2002. Discussion Papers: Medium-term Growth Policies for Poverty Reduction. Mongolia Consultative Group Meeting.

Government of Mongolia. 2002. The Public Investment Program and Development Project Proposals 2002 – 2005. Mongolia Consultative Group Meeting.

Metzner, K. A. 2004. Final Consultancy Report. Community Development for Biodiversity Conservation for Biodiversity Conservation and Sustainable Livelihood Options in the Grassland of Eastern Mongolia - MON/97/G32.

Ministry of Nature and Environment. 1998. Biological Diversity in Mongolia. First National Report. Harry

Ministry of Nature and Environment. 1996. Biodiversity Conservation Action Plan for Mongolia.

Ministry of Nature and Environment and UNDP. 2005. "Conservation of the Great Gobi and Its Umbrella Species" Project. A Summary of the Report: "Ecotourism Feasibility Study in Great Gobi Strictly Protected Area Section A"

Ministry of Nature and Environment – UNDP. 2004. Access to Water and Sanitation Services in Mongolia.

Ministry of Nature and Environment, UNDP/GEF. 2004. "Conservation of the Great Gobi and Its Umbrella Species" Project, and the Wildlife Conservation Society,. International Gobi Bear Conservation and Management Workshop Recommendations.

Ministry of Nature and Environment and UNDP/GEF. 2002. Nomrog Strictly Protected Area Management Plan 2001 – 2005.

Mongolian Environmental Laws, 1996.

Mongolian National Audit Office, 2005. Audit Report: Commercialization of Super-Insulated Buildings in Mongolia Project MON/99/G35.

Mongolian National Audit Office. 2005. Audit Report: Sustainable Grassland Management.

Mongolian National Audit Office, 2004. Audit Report: Commercialization of Super-Insulated Buildings in Mongolia Project MON/99/G35.

Official Translations of Mongolian Environmental Law, April 1996.

State Financial Auditing Department. 2000. Auditor's Report: "Biodiversity Conservation and Sustainable Livelihood Options in the Grassland of Eastern Mongolia" project.

State Ikh Khural (Parliament) of Mongolia, 2004. Action Programme of the Government of Mongolia 2004 – 2008

State Ikh Khural (Parliament) of Mongolia, 2000. Action Programme of the Government of Mongolia 2000 – 2004

State Ikh Khural (Parliament) of Mongolia. 1996. Action Programme of the Government of Mongolia 1996 – 2000

The Legal Information System. 2002. Selected Commercial Laws of Mongolia.

TPR Recommendations, 2004. Status of Recommendations from 24 April 2003 ESBP Tripartite Review

UNDP. 2005. Commercialization of Super-Insulated Buildings in Mongolia Project MON/99/G35. Annual Project Report and UNDP/GEF Project Implementation Report,

UNDP. 2005. Semi-Annual Progress Report January – June, 2005: Sustainable Grassland Management Project.

UNDP. 2005. Semi-Annual Progress Report July– December, 2005: Sustainable Grassland Management Project.

UNDP. 2005. Evaluation of Work Done up to December 2005 by the Sustainable Grassland Management Project, Mongolia (MON/02/301, 2002-2007) in the Fields of Policy, Strategy and Coordination.

UNDP. 2005. Economic and Ecological Vulnerabilities and Human Security in Mongolia.

UNDP. 2005. Annual Report on Progress in the Fields of Policy, Strategy and Coordination for Sustainable Grassland Project.

UNDP. 2005. Measuring and Demonstrating Impact UNDP/GEF Resource Kit (No. 2)

UNDP. 2005. A National Workshop "Presentation of Eastern Steppe Biodiversity Project Activities Implemented in Three Eastern Aimags"

UNDP. 2004. Biodiversity Conservation for Biodiversity Conservation and Sustainable Livelihood Options in the Grassland of Eastern Mongolia MON/97/G32. Annual Project Report and UNDP/GEF Project Implementation Report

UNDP. 2004. Semi-Annual Progress Report January – June, 2004: Sustainable Grassland Management Project.

UNDP. 2003. Commercialization of Super-Insulated Buildings in Mongolia Project MON/99/G35. Annual Project Report.

UNDP. 2003. Strategic Results Framework (SRF).

UNDP. 2003. Multi-year Funding Framework 2004 – 2007.

UNDP. 2002. Biodiversity Conservation for Biodiversity Conservation and Sustainable Livelihood Options in the Grassland of Eastern Mongolia MON/97/G32. Annual Project Report and UNDP/GEF Project Implementation Report.

UNDP. 2002. Result Oriented Annual Report (ROAR).

UNDP. 2001. Result Oriented Annual Report (ROAR)

UNDP. 2001. Report of the Independent Mid-Term Evaluation Mission for Biodiversity Conservation and Sustainable Livelihood Options in the Grassland of Eastern Mongolia MON/97/G32.

UNDP. 2000. Issues Paper. Provided for the Tri-partite Review of the Biodiversity Conservation and Sustainable Livelihood Options in the Grasslands of Eastern Mongolia Project.

UNDP. 1999. Mongolian Action MAP-21 Programme for the 21st Century, 1999.

UNDP Evaluation Office, 2002. Guidelines for Outcome Evaluators: Monitoring and Evaluation Companion, Series, #1

UNDP and Government of Mongolia. 2002. Project Document: Commercialization of Super-Insulated Buildings in Mongolia 2001 – 2004.

UNDP/GEF and Government of Mongolia. 1998. Project Document: Biodiversity Conservation for Biodiversity Conservation and Sustainable Livelihood Options in the Grassland of Eastern Mongolia MON/97/G32.

World Bank. 2004. Mongolia Mining Sector: Managing the Future.

World Bank, Mongolia Environment Monitor. 2004. Environmental Challenges of Urban Development.

World Bank. 2005. Going, Going, Gone: The illegal Trade in Wildlife in East and Southeast Asia. Environmental and Social Development Unit. East Asia and Pacific Region.

Annex 5. Guiding document for interviews based on project outcomes

Outcomes	Intended beneficiaries	Relevant X-cutting issues	Indicators	Source of information	Method for data collection	Data location
Biodiversity Conservation and Sustainable Livelihood Options in the Grasslands of Eastern Mongolia						
1. Protected areas in the Eastern steppe are strengthened to be able to effectively protect critical biodiversity (equivalent to effective enforcement of legal and regulatory measures related to PAs management)	Global and national interest Local people	- Advocate and foster an enabling policy environment - Develop national capacities	- No mining nor other development project activity that may have potential negative impacts on environment is taking place in the existing Protected Areas and their buffer zones	- PA Administration - EPA - Specialized State Agency - Aimag and Soum Governors - Local herders - Project staff	interviews	- PA Administration - Aimag and Soum Governments
	Global and national interest	- Advocate and foster an enabling policy environment - Develop national capacities	- Illegal commercial hunting of mammals is reduced in the existing Protected Areas and their buffer zones	- PA Administration - Specialized State Agency - Local herders - Official records	- Interviews - Documents	- Eastern Mongolia PA Administration - Soum and Bag Governments - Buffer zones
	- Global and national interest - Herder communities living in the PA buffer zone	- Advocate and foster an enabling policy environment - Develop national capacities	- Wildfires are reduced in the existing Protected Areas and their buffer zones	- PA Administration - Local herders	- Interviews	- PA Administration - Soum and Bag Governments
	- PA Administration - Global and national interest	- Develop national capacities - Advocate and foster an enabling policy environment	- Appropriate information on biodiversity from research results are integrated in the PA management plans	- Eastern Mongolia PA Administration	- Interviews - Documents	- PA Administration -Project Central Unit
2. Sustainable alternative livelihoods and biodiversity conservation in the	Local populations Global and national interest	Forge partnership for results	- Illegal commercial hunting of mammals is reduced in the existing Protected Areas and their buffer zones	- PA Administration Specialized State Agency - Local herders - Official records	- Interviews - Documents	- PA Administration - Soum and Bag Governments

Outcomes	Intended beneficiaries	Relevant X-cutting issues	Indicators	Source of information	Method for data collection	Data location
PA buffer zones are supported	Local populations Global and national interest	- Develop national capacities - Forge partnership for results	- Illegal collection of rare and endangered medicinal plants for commercial purposes is reduced	- EM PAA (what species and locations) - Soum Authorities	Interview documents	EMPAA
	- BZ Management committees	- Develop national capacities - Forge partnership for results	- Buffer zone management plans integrating biodiversity conservation, fire management and afforestation are prepared by buffer zone management committees following a participatory approach	- BZC (4-5) - EMPAA - NCVs - Project staff - Management plans Soum authorities	Interview documents	Soum Governments EMPAA in Choibalsan Project Office in Choibalsan
	- Local herders -	Develop national capacities (institutional)	- Research activities have provided relevant information on biodiversity that could be integrated in the protected areas and buffer zone management plans	- BZC - EMPAA - Project staff - NCVs	Interview documents	BZC EMPAA Project office Soum Governments
	- Buffer zone population	Enhance national ownership	- Raised public awareness on biodiversity conservation in buffer zones	- Local people in BZ -Soum and Bag Governors - NCVs	Interviews Site visits	Soum and Bag Governments Project Sites
	Local populations	- Develop national capacities - Forge partnership for results	- Alternative livelihood options are included in the buffer zone management plans	- BZC (4-5) EMPAA NCVs Project staff Management plans Soum authorities	- Interview - Documents - Site visits	Soum Governments EMPAA in Choibalsan Project Office in Choibalsan Community groups in buffer zones

Outcomes	Intended beneficiaries	Relevant X-cutting issues	Indicators	Source of information	Method for data collection	Data location
3. Components of biodiversity are incorporated into Aimag and Soum development plans	Aimag and Soum authorities and populations	- Develop national capacities - Enhance national ownership - Forge partnership for results	- Aimag and soum government professional staff capacities and awareness for incorporating biodiversity issues in land use and development planning are increased	Aimag and soum authorities Aimag Land Agencies	Interviews documents	Aimag and Soum Governments
	Aimag and Soum populations	- Enhance national ownership - Forge partnership for results	- Local people awareness on biodiversity issues is increased (TV – radio – School programs)	Local people in rural and urban areas	Interviews	Aimags and soums
	Global and national interests	Develop national capacities (institutional)	- Appropriate information on biodiversity from research results are integrated in the Aimag and Soum development plans	Aimag and Soum Authorities Aimag and Soum Development Plans	Interviews documents	Aimag and Soum Governments
	Global and National Interest	Advocate and foster an enabling policy environment	- No mining nor other development project activities that may have potential negative impacts on environment is taking place in the three aimags of the Eastern Region	Aimag and Soum Authorities Aimag Land Agencies SSAs EPAs	Interviews Documents (Official records)	Aimag and Soum Governments EPAs
	MNE	- Enabling environment; - Develop national capacities; - Enhance national ownership	- Trust fund established, capitalized and operational	MNE UNDP Trust Fund Management Rules	Interviews documents	MNE UNDP Trust Fund Management Committee

Outcomes	Intended beneficiaries	Relevant X-cutting issues	Indicators	Source of information	Method for data collection	Data location
	Grantees Government of Mongolia (?)	- Promote gender equality - Develop national capacities	- At least two grantees obtained their Master's degrees and four grantees completed a one-year training programme and reinstated in a relevant position	Project team Project M&E documents	Interviews documents	Project Office
	Global and regional interests	- Forge partnership for results	- The international meeting with China and Russia allowed the identification of practical solutions to the transboundary illegal hunting	EMPAA Aimag governments EPA	Interviews documents	EMPAA Aimag governments EPA
	Government of Mongolia	Advocate and foster an enabling policy environment	- Environmental laws have been updated based on project's results to support biodiversity conservation in the Eastern Steppe.	MNE EMPAA Project staff	Interviews documents	MNE EMPAA

Outcomes	Intended beneficiaries	Specific X-cutting issues	Indicators	Source of information	Method for data collection	Data location
Conservation of the Great Gobi and its Umbrella Species						
1. Management of the Great Gobi SPA is strengthened	- Global - PA Administration - PA Management Authorities (UB and Gobi)	Development of national capacities	- Great Gobi SPA management plan formulated and implemented to international standards	- PA administration (UB and Gobi) - PA Director (Gobi) - Rangers (Gobi) - PA Specialists - Border patrols	- assessment with GEF "tracking tool" - interviews - site visits - documents: PA management plans, Monthly reports from rangers	- evaluation team - PA administration - PA administration
	- Global - PA Administration - Mongolian and Chinese authorities in charge of biodiversity conservation	- Forge partnership for results	- Transboundary coordination established with China	- MoU between China and Mongolia	- document	- PA administration
	- PA Administration - PA Management Authorities - Scientific institutions	Develop national capacities	- GIS information database established	- PA administration (UB and Gobi)	- interview with person in charge of database	- PA administration
	- Global - PA Administration - PA Management Authorities (UB and Gobi) - Scientific institutions	- Develop national capacities - enabling policy environment	- Causal factors behind keystone species declines are known and management decisions based on them.	- Research reports - PA management plan	- documents	- PA administration (UB and Gobi) - Project (?)

Outcomes	Intended beneficiaries	Specific X-cutting issues	Indicators	Source of information	Method for data collection	Data location
	- PA Administration	- Develop national capacities	- Strengthened PA Administration technical and human capacity via targeted training.	- PA administration (UB and Gobi)	- interviews on capacity building	
		- Develop national capacities - Forge partnership for results	- Framework for monitoring relationship(s) between keystone species and the ecosystems built. (monitoring network) - GG biodiversity information available online	- PA administration (UB and Gobi) - Web site	- interview - internet search	
	national	- Advocate and foster an enabling policy environment - Develop national capacities (institutional)	- Current policy and institutional framework reviewed and necessary regulatory/ institutional changes promoted.		- documents - interviews	- PA administration (UB and Gobi)
2. Stewardship of the buffer zone areas is improved	- Aimag (Bayankhongor and Gobi Altai) and Soum (5) Governments Officials - Herders - Buffer Zone Councils (1/soum) - Herders communities	- Enhance national ownership - Forge partnership for results	- Improved awareness and commitment from all relevant players towards conservation and sustainable use of buffer zone resources.	- Aimag (Bayankhongor and Gobi Altai) and Soum (5) Governments Officials - Herders - Soum Buffer Zone Councils - Herders communities	- interviews	- PA Administration - BZC - Soum Government - Local people

Outcomes	Intended beneficiaries	Specific X-cutting issues	Indicators	Source of information	Method for data collection	Data location
	- Bag councils - Herders communities	- Forge partnership for results - Promote gender equality - Develop national capacities (institutional) - Enhance national ownership	Formal buffer zone councils including representatives from all major stakeholders including bag councils and members of herders communities are functional (frequency of meetings : official 1/3 months – autonomous operations)	- Buffer zone councils	- Interviews - Documents	Head of buffer zone council Protected area administration
	Soum BZCs	- Forge partnership for results - Develop national capacities	Buffer zone council members have the capacity to elaborate sustainable management plans for the BZ and exchange information between soum BZC	- Buffer zone councils	- Interviews	Head of buffer zone council
	- Soum governments - Local people	- Forge partnership for results - Enhance national ownership	Soum government and local people are committed to conduct conservation and sustainable use activities in the buffer zone on a voluntary basis	- Soum governments - Local people	- Interviews	- Soum governments - Local people
		- Develop national capacities - Forge partnership for results	Potential to develop ecotourism as an alternative income generating source is known to operators	- PAA - BZC	- Interviews - Documents	- PAA - BZC
		Develop national capacities	Potential to increase profits from agriculture and livestock market-oriented activities is known to herder communities	- Herders - Soum and bag governments - BZC	- Interviews - Documents	- Herders - Soum and bag governments - BZC

Outcomes	Intended beneficiaries	Specific X-cutting issues	Indicators	Source of information	Method for data collection	Data location
		- Promote gender equality - Forge partnership for results (incentive)	The implementation of pilot projects is funded with microcredit from the soum revolving funds	- BZC - Soum and bag governments	- Interviews	- Soum and bag governments - BZC
3. Targeted response for the cross-cutting issues of overgrazing and range deterioration, overcollection of Saxaul bushes and downy poplars, declining water resources are developed and implemented.	Herder communities	- Forge partnership for results - Develop national capacities - Promote gender equality	- Community-based livestock management in place			
		- partnership for results - gender equality	- Community-based fuel resource management is implemented			
		- Develop national capacities - gender equality	- Comprehensive water use and management plan is implemented			
	Herder communities	- partnership for results - Develop national capacities	- Herders participate in, and endorse sustainable grazing plans	- herders - documents in Soum and Bag governments	- interview - documents (sustainable grazing plans)	Soum and Bag governments
		- partnership for results - gender equality - Develop national capacities	- Consensus-based grazing plans integrating biodiversity conservation issues are implemented	- Soum and Bag authorities	- interview	
		- Promote gender equality - Develop national capacities	- Suitable alternatives to fuel wood explored and developed	-Soum and Bag governments - Local herders	- Site visits - Interviews	- Public showers
		Develop national capacities	- Dynamics of water resources fully understood (watershed approach)	- Aimag and Soum governments	- Interviews	

Outcomes	Intended beneficiaries	Specific cross-cutting issues	Indicators	Source of information	Method for data collection	Data location
Sustainable Grassland Management						
1. Herders apply tested models of cooperative resource management specifically developed for their ecological zone, based on customary forms of cooperation.	- Herder communities - Bag and soum authorities	- Forge partnership for results - Enhance national ownership	Existing neighbourhood groupings are registered as formal herder institutions with the support of bag and soum authorities (target: 30 by PY3)	- Bag and soum authorities - Herder institutions	- Interviews - Documents (registered institutions)	- Bag and soum governments
	Herder communities	- Develop national capacities - Forge partnership for results -Gender equality	Herders have the capacity to plan pasture use, assess resources and adjust over-winter grazing pressure, and invest in improving resources	- Bag and soum authorities - Herder institutions	- Interviews - Documents (pasture maps)	- Bag and soum governments - Local herder institutions
	Herder communities	- Enhance national ownership - Develop national capacities	Grasslands are protected and managed according to reinstated customary techniques (seasonal patterns of pasture use)	- Bag and soum authorities - Herder institutions	- Interviews - Documents (pasture maps)	- Bag and soum governments - Local herder institutions
	Herder communities	Develop national capacities	Local herders, local and national governments understand and see the opportunity to control Brandt's voles with an ecological approach (South region)	- Bag and soum authorities - Herder institutions	- Interviews - Documents (reports on pilot tests – maps of previous pesticide uses)	- Bag and soum governments - Local herder institutions
2. The rights of herders and their investments in improving resources are secured through formalized grazing rights	Herders	Develop national capacities	Boundaries and key resources of customary seasonal grazing areas are mapped	- Bag and soum authorities	- Documents (maps)	- Bag and soum governments

Outcomes	Intended beneficiaries	Specific cross-cutting issues	Indicators	Source of information	Method for data collection	Data location
	Herders	- enabling policy environment - Promote gender equality - Forge partnership for results	Possession certificates for pastoral resources (shelters, pastures, hayfields and hand wells) are issued to members of herder communities (target: 30 by PY3)	- Herder communities	-Documents (see actual possession issue)	- Herder communities
	Herders	- Develop national capacities - Promote gender equality	Herders understand tenure rules about reciprocal access between groups with primary responsibilities and occasional users, as well as tenure systems for resources with multiple users	- Herders - Bag and Soum authorities	- Interviews	- Herder communities - Bag and Soum governments
	Herder communities	- Forge partnership for results - Develop national capacities	The establishment of emergency fodder reserves or other essential husbandry inputs approved by herder communities is funded by a revolving fund with community counterpart contribution	- Herders	- Site visit (?) - Interviews - See how fund is managed, by whom…	- Herder communities - Bag and Soum governments
3. Herder community associations have the capacity to identify economic opportunities for the members and to negotiate service contract with outside providers	Herder community associations	- Forge partnership for results - Develop national capacities	Herder community associations - understand micro-credit and micro-insurance opportunities and requirements, - negotiate service contracts with private and government specialists, - identify market, transport and processing opportunities - negotiate contracts with processors and exporters.	Herder community associations	interviews	Herder community associations

Outcomes	Intended beneficiaries	Specific cross-cutting issues	Indicators	Source of information	Method for data collection	Data location
4. Local best practices are disseminated on a significant scale through herder-to-herder and community-to-community learning and emulation	Herder communities	Develop national capacities	- Local best practice guidelines - Increased number of demands from herder communities to benefit from project support	Local and central project unit	- document - interview	Local project unit
5. Effective co-management leading to better land use planning and coordination achieved through co-management structures involving Bag and Soum governments and herders	- Herder associations - Bag and Soum government	-Forge partnership for results - Enhance national ownership	- Soum land use plans take into account herders interests	- Soum governments - Herder communities	- Documents - interviews	- Soum governments - Local herders
	- Herder associations - Bag governments	- Forge partnership for results - Enhance national ownership	- Bag executive co-management committees comprising household association representatives and chaired by the Bag governor allow to coordinate the implementation of land use plans and resolve disputes	- Bag governments - Local herders	- interviews - documents on the committees composition	- Bag governments - Local herders
	- Herder associations - Soum governments	- Forge partnership for results - Enhance national ownership	Soum co-management committees comprising Soum technical staff and herder association representatives and chaired by the Soum governor allow to coordinate the implementation of land use plans at bag level, and resolve disputes that have not been resolved at lower levels	Soum governments	- Interviews - Documents on the committees composition	Soum governments

Outcomes	Intended beneficiaries	Specific cross-cutting issues	Indicators	Source of information	Method for data collection	Data location
6. Improved capacity to commission, carry out and use policy research to draft new policies and legislation in the livestock and grassland management sector	- Food and Agriculture ministry - Nature and Environment ministry - Relevant Members of Parliament	- Develop national capacities - Advocate and foster an enabling policy environment	New policies in the following areas: land tenure, risk management, conflict resolution, grazing fees, and grazing management are tested, discussed and agreed on through consensus decision-making	- Food and Agriculture ministry - Nature and Environment ministry - Relevant Members of Parliament - Aimag and Soum governments (on the testing of policies)	- Documents - Interviews with relevant actors	- Food and Agriculture ministry - Nature and Environment ministry - Central project unit - Aimag and Soum governments (on the testing of policies) - Parliament
	- Food and Agriculture ministry - Nature and Environment ministry - Collaborating research institutions	- Develop national capacities - Advocate and foster an enabling policy environment	Subjects of policy research include new approaches to community associations, new approaches for livestock insurance, saving products appropriate for herders, alternatives to existing livestock head tax, and improved livestock product marketing.	-Aimag Government Authorities - Food and Agriculture ministry - Nature and Environment ministry - Collaborating researchers	- interviews - documents	-Aimag Government - Food and Agriculture ministry - Nature and Environment ministry - Collaborating research institutions

Outcomes	Intended beneficiaries	Specific cross-cutting issues	Indicators	Source of information	Method for data collection	Data location
Commercialization of super-Insulated Buildings in Mongolia						
1. Increased awareness and confidence in straw bale buildings	Households		- More SB insulated houses built - Increased demand for straw-bale houses	Monitoring by project	Project documents	- Project office - Energy Conservation Center
2. A strong and growing cadre of engineers, professionals, businesses, household representatives qualified in designing and constructing super insulated houses	engineers, professionals, businesses, household representatives involved in straw-bale projects	Develop national capacities	- Certified trainees capable of designing, building, promoting straw bale houses - Number of students registered in the relevant trainings for the current university year -Training center activities and sustainability (self-financed) - Straw bale technology is included in university engineering curriculum	Monitoring by project, training center (Energy Conservation Center), and training institutions	- Documents - Interviews	- Project office - Energy Conservation Center - University of Science and Technology (UB and Darkham)
3. Improved quality and safety of straw bale houses	Households	Develop national capacities	- National building codes and standardization for straw bale buildings are established	Official documents	- Documents	National Center for Standardization and Measurement Aimag and Capital City Governor's Office
			- All the straw bale houses meet quality standards and are built according to safety guidelines (nb of houses that have been approved by certified inspectors vs total number of SB houses built)	(clarify with project staff)		(clarify with project staff)
			- improved awareness			

Outcomes	Intended beneficiaries	Specific cross-cutting issues	Indicators	Source of information	Method for data collection	Data location
4. Private construction and inspection companies have developed business management skills	Private construction and inspection companies	Develop national capacities	- Commercial operation of private construction and inspection companies are profitable	- private construction and inspection companies (to identify with project staff)	interviews	- private construction and inspection companies (to identify with project staff)
5. Improved information on energy efficiency heating options for straw bale buildings	Households	Enhance national ownership	- Coal consumption for heating reduced	Statistics from monitoring done by project	documents	- Project office - Energy Conservation Center
6. More private and public financing channelled into constructing super insulated houses	Households Business companies involved in SB construction	- Forge partnership for results - Enhance national ownership	- More insulated houses built - More investment in building straw bale houses from the private and public finance - Credit lines available for customers	To be clarified with project staff		- Energy Conservation Center - Project staff
7. Private households can afford to purchase or build straw bale houses	Households		- Credit lines available for customers			
8. Increased awareness on the importance of energy efficiency (reducing energy consumption)	Households	Enhance national ownership	- National policies and aimag and soum development plans promoting energy efficiency	Ministry of Construction and Urban Development MNE Ministry of Fuel and Energy Aimag and soum Governments	Documents interviews	Ministry of Construction and Urban Development Ministry of Nature and Environment Ministry of Fuel and Energy Aimag and soum Governments

Annex 6. Environment-related legal and policy framework

Environment-related laws

Adopted until 1999 (Baseline):

The following laws related to environment were adopted between 1994 and 1999, partly with the assistance of UNDP during the GEF funded pilot phase of the ESBP project. During the implementation of the full project, UNDP contributed to draft amendments for these laws.

1. Petroleum (1991)
2. Underground Resources (1994)
3. Special protected areas (1994)
4. Land (1995)
5. Environmental protection (1995)
6. Forests (1995)
7. Water (1995)
8. Fees for Harvest of Forest Timber and Fuelwood (1995)
9. Natural Plants (1995)
10. Natural Plant Use Fees (1995)
11. Hunting (1995)
12. Hunting Resource Use Payments, and on Hunting and Trapping Authorization Fees (1995)
13. Water and Mineral Water Use Fees (1995)
14. Air (1995)
15. Protection from Toxic Chemicals (1995)
16. Prevention of Forest and Steppe Fires (1996)
17. Plant Protection (1996)
18. Mineral Resources (1997)
19. Buffer Zones (1997)
20. Geodesy and Map Making (1997)
21. Land Use Fees (1997)
22. Hydrometeorology and Environmental Monitoring (1997)
23. Environmental assessment (1998)
24. Cadaster (land registry) and Land Cadasters (1999)

New laws adopted and amendments to existing laws after 1999:

1. Fauna (2000)
2. Reinvestment of natural Resource Use Fees for Conservation and Restoration of Natural Resources (2000)
3. Import, Export, and Transportation of Harmful Wastes (2000)
4. Tourism (2000)
5. Fees for Harvest of Forest Timber and Fuelwood (amended 2000)
6. Forests (amended 2000)
7. Hunting (amended 2000)
8. Export and Trade of Endangered Species, and their Raw Materials (2002)
9. Land Ownership for Mongolian Citizen (2002)
10. Land (amended 2002)
11. Household and Industrial Waste (2003)
12. Water (amended 2004)
13. Environmental protection (amended 2005)

National environment-related policy documents

Adopted until 1999 (Baseline):

1. Environmental Action Plan "Towards Mongolia's Environmentally Sound Sustainable Development (1995)
2. Biodiversity Conservation Action Programme (1996)
3. National Program to Combat Desertification (1996)
4. Basic Guidelines on Rural Policy (1996)
5. Ecological Policy of the Government of Mongolia (Parliament Resolution 106, 1997)
6. National Program on Forests (1998)
7. Mongolian Action Programme for the 21st Century – MAP-21 (1998)
8. National Program on Special Protected Areas (1998)
9. National Program on Water (1999)
10. National Program to combat Natural Disaster (1999)

Adopted after 1999:

1. Climate Change National Programme (2000)
2. National Action Programme on Protection of Argali wild sheep (2002)
3. Action Programme on Protection and Rational Use of Rare Plants of Mongolia (2002)
4. Programme to develop hydrologic and meteorological sector (2002)
5. National Programme to support the quality and management of environmental sector (2002)

Environment-related international conventions

Accessed or ratified until 1999 (Baseline):

1. Convention on Biological Diversity (ratified on 30.09.93)
2. United Nations Framework Convention on Climate Change (ratified on 30.09.1993)
3. Convention on International Trade of Endangered Species of Wild Fauna and Flora – CITES (accessed on 05.01.1996)
4. Vienna Convention for the Protection of the Ozone Layer (accessed on 07.03.1996)
5. Montreal Protocol on Substances the Deplete the Ozone Layer (accessed on 07.03.1996)
6. United Nations Convention on Law of the Sea (ratified on 13.08.1996)
7. United Nations Convention to Combat Drought and Desertification (ratified on 07.11.1996)
8. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (accessed on 15.04.97)
9. Ramsar Convention on Wetlands of International Importance (ratified on 08.04.98)
10. Kyoto Protocol to the Framework Convention on Climate Change (accessed on 15.12.1999)

Accessed or ratified after 1999:

- Cartagena Protocol on Biosafety (party since 20.10.2003)
- Stockholm Convention on Persistent Organic Pollutants (ratified on 30.04.2004)

Annex 7. Graphs and maps used to assess the change for some indicators of the outcome 2 in the whole country and in the soums that were involved in UNDP projects.

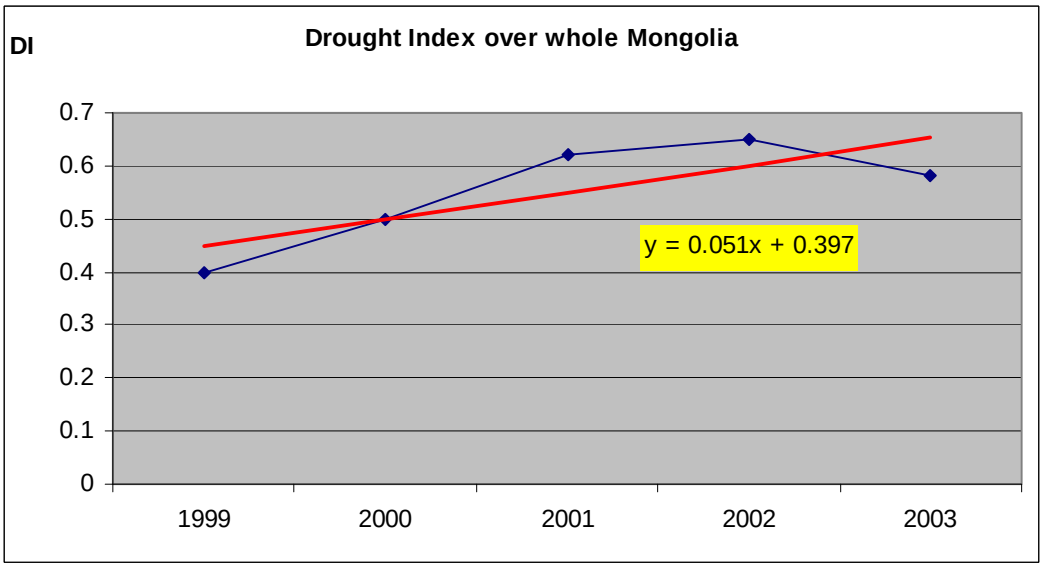

Figure 1. Average yearly Drought Index for the years 1999 to 2003 for the whole country (data for 2004 and 2005 not available)

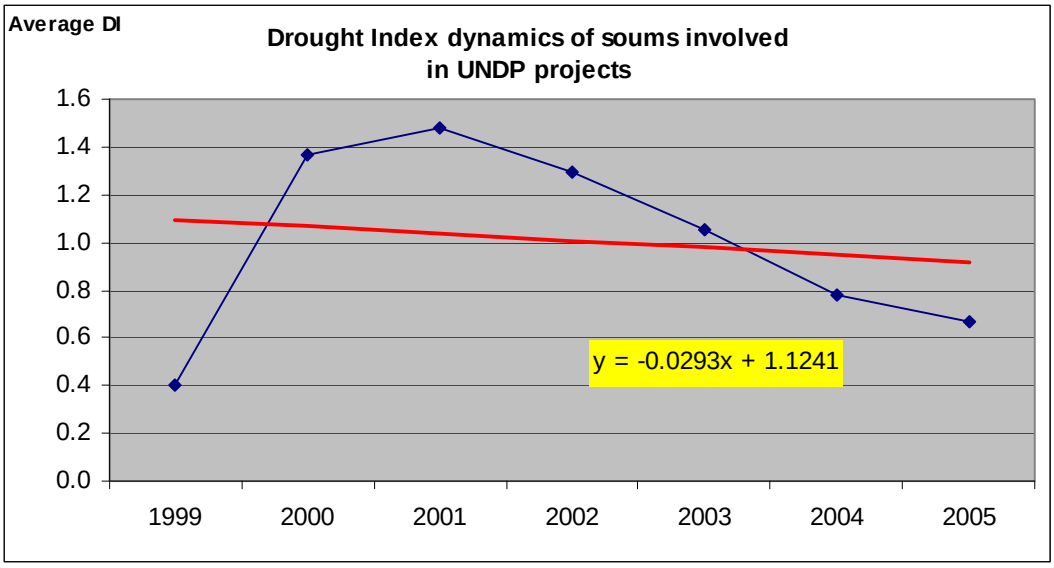

Figure 2. Average yearly Drought Index for the years 1999 to 2005 for the for the soums involved with UNDP projects (ESBP, GG, SGMP)

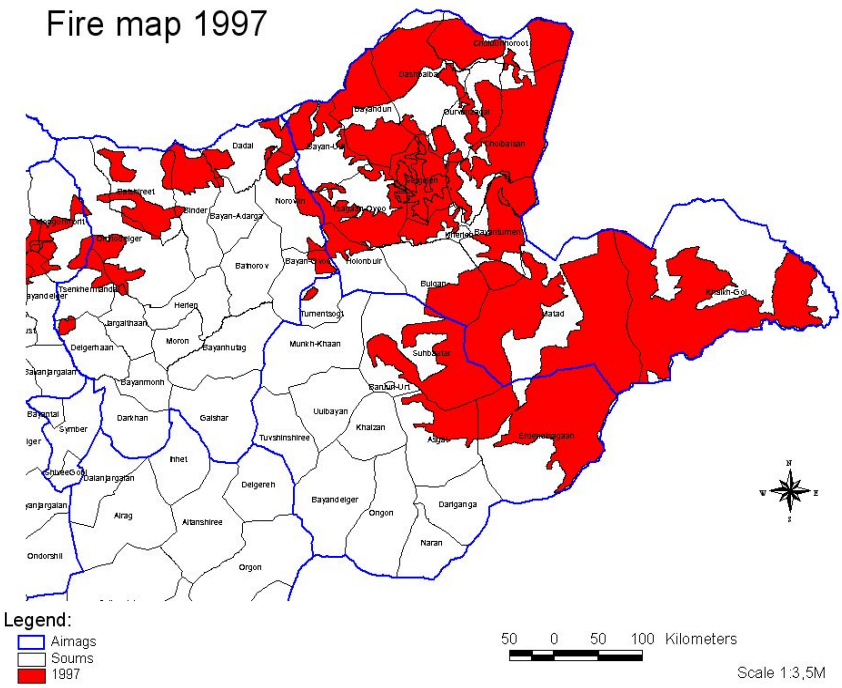

Figure 3. Figure showing the extent of the fires that occurred in 1997 in the eastern *aimags*

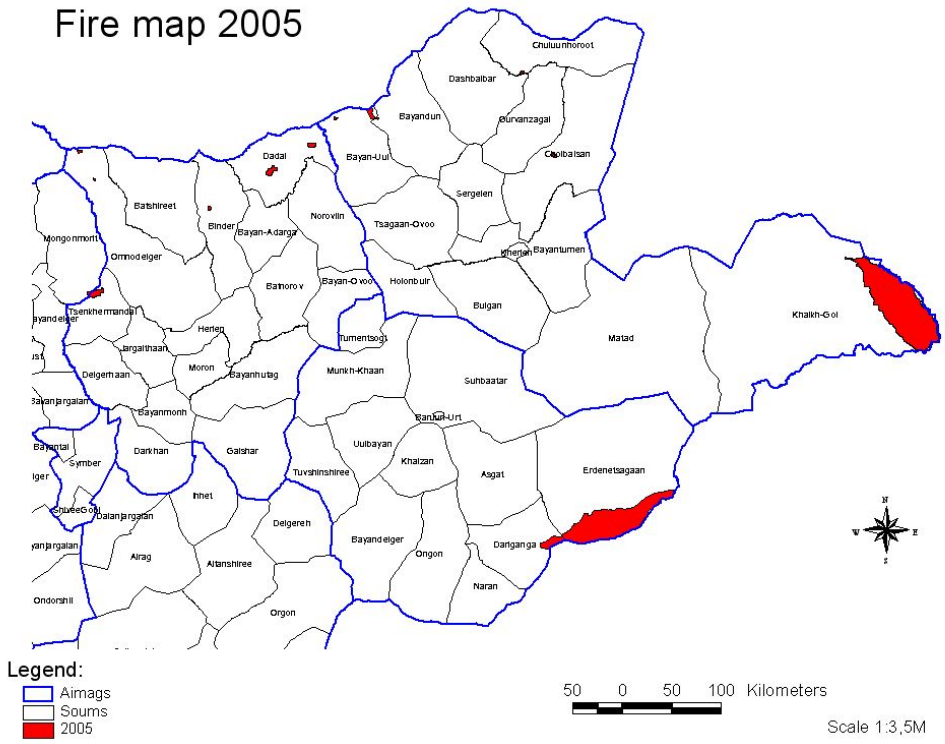

Figure 4. Figure showing the extent of the fires that occurred in 2005 in the eastern *aimags*

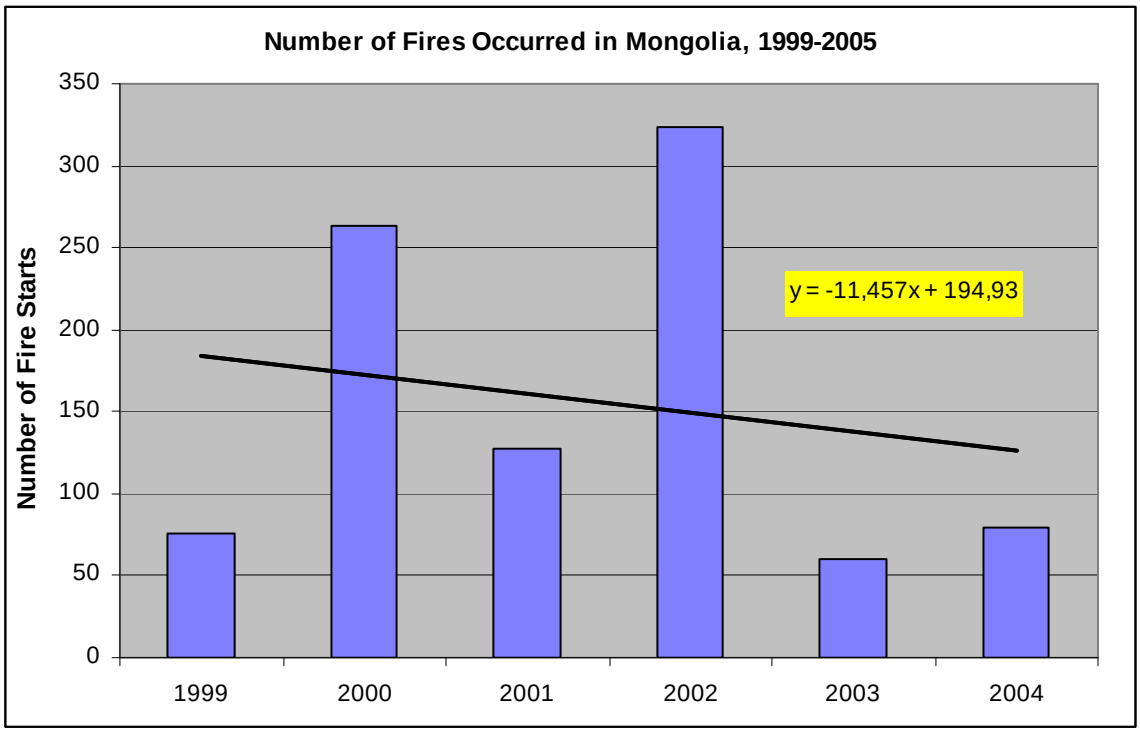

Figure 5. Total number of human-induced fires that occurred yearly from 1999 to 2004 in the whole country

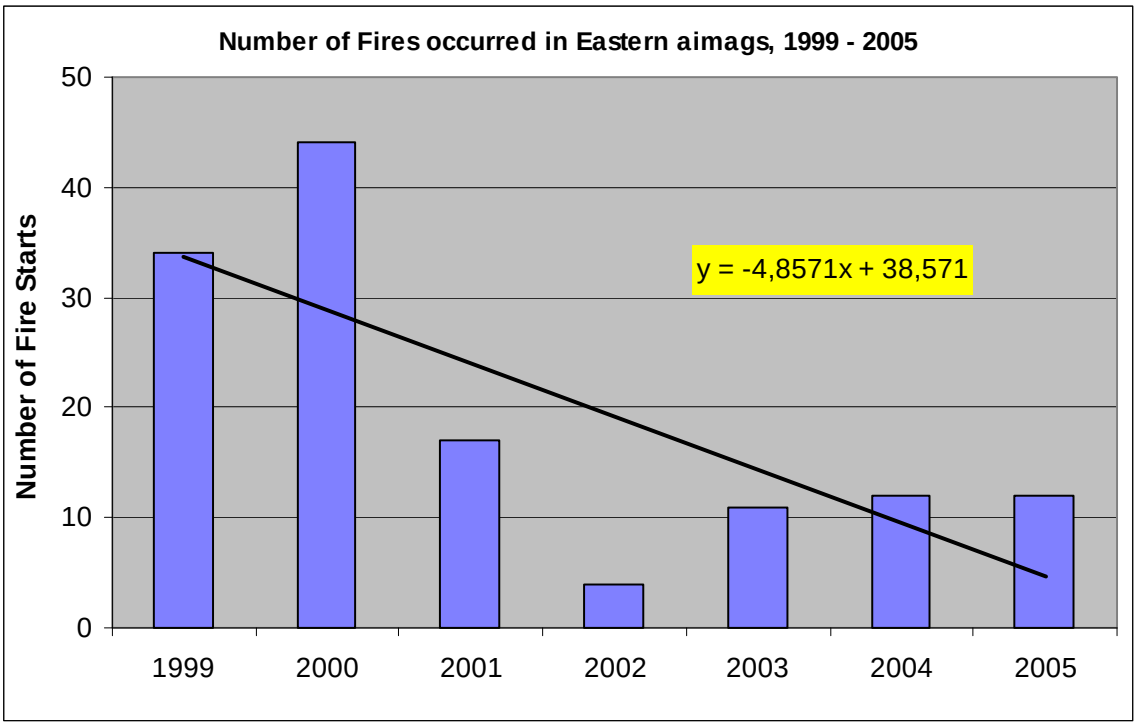

Figure 6. Total number of human-induced fires that occurred yearly from 1999 to 2005 in the eastern *aimags* that were involved in ESBP activities (Dornod, Sukhbaatar, Khentii)

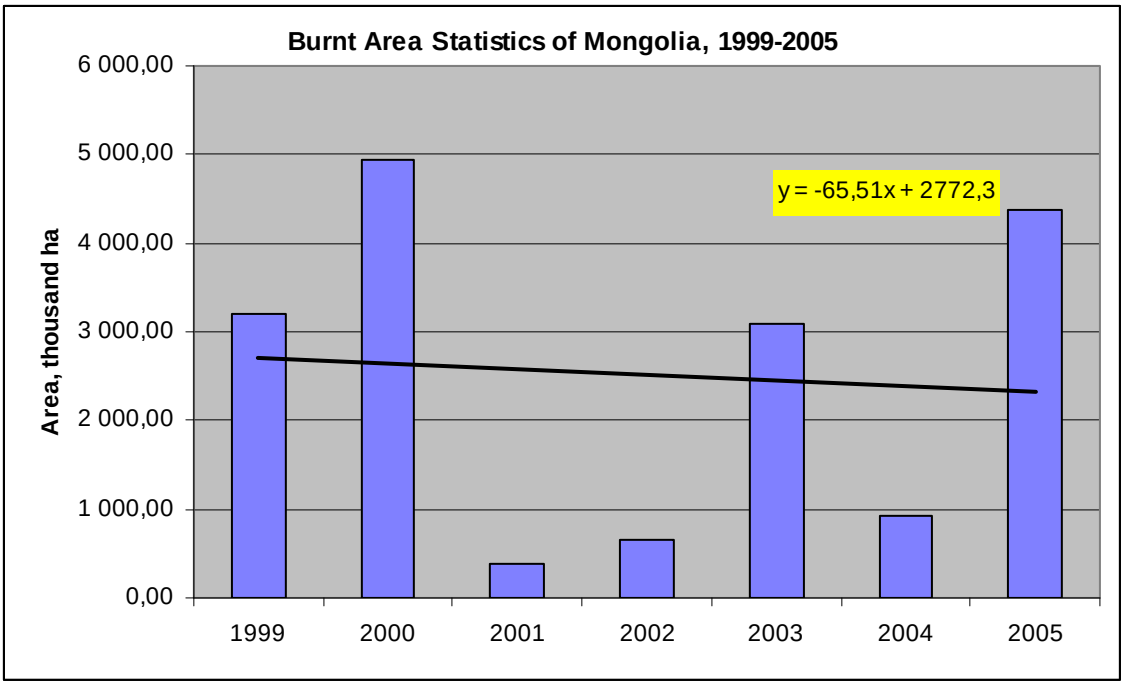

Figure 7. Total yearly burnt area from 1999 to 2005 in thousands of hectares for the whole country

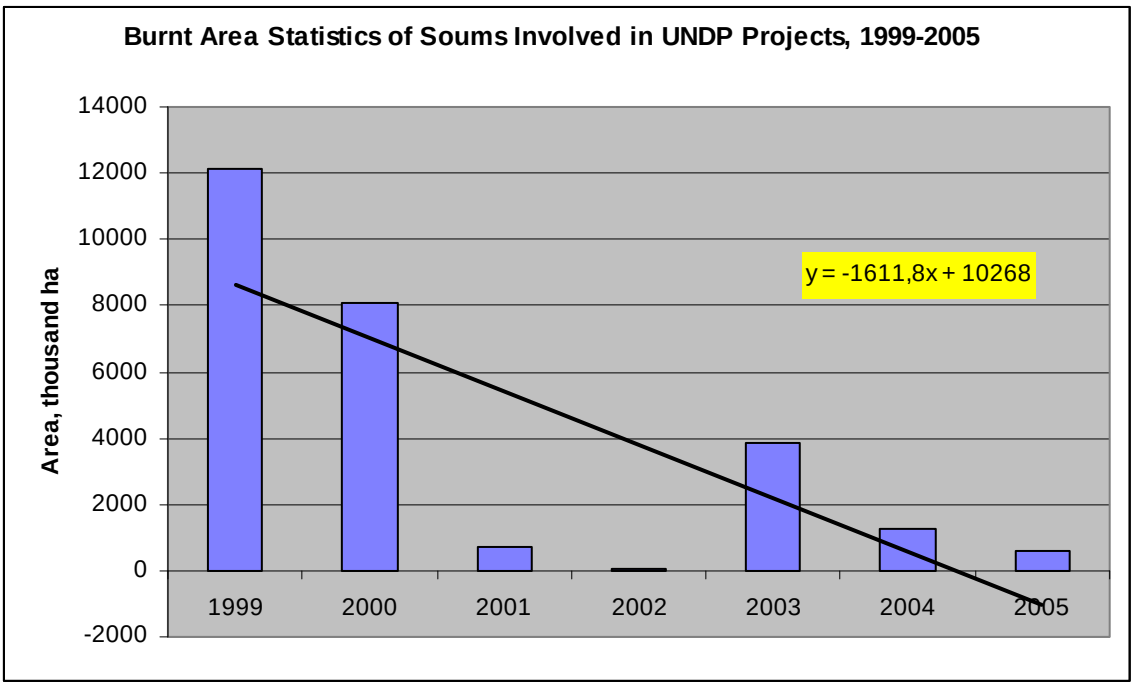

Figure 8. Total yearly burnt area from 1999 to 2005 in hectares for the soums involved with UNDP projects (ESBP, GG, SGMP)