Terminal Evaluation of the GEF Project

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Preparation of a Strategic Action Programme and Transboundary Diagnostic Analysis for the Tumen River Area, its coastal regions and related Northeast Asian Environs" "The TumenNet Project"

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Executive Summary

This report is based on a review carried out between March and May 2002. Although officially a "Terminal Evaluation", the project was still very much active and had only just started preparing the SAP. As a result some of the comments in this report may no longer be relevant and some of the recommendations have already been adopted by the project.

The full title of the project is "Preparation of a SAP and TDA for the Tumen River Area, its coastal regions and related Northeast Asian Environs" (Strategic Action Programme and Transboundary Diagnostic Analysis). The project, now generally referred to as TumenNET, involves China, Russia, the Republic of Korea, Mongolia, and to a limited extent the Democratic Peoples Republic of Korea.

The project developed from a move by the five countries in the early 1990s to promote economic development in the newly demilitarised and opened up border zones between the countries. The Tumen River Area Development Programme was created to promote this. In 1995 the five countries signed three key documents, the "Agreement on the Establishment of the Consultative Commission for the Development of the Tumen River Economic Development Area and Northeast Asia", the "Agreement on the Establishment of the Coordinating Committee for the Development of the TREDA", and the "Memorandum of Understanding on Environmental Principles Governing the Tumen River Economic Development Area and Northeast Asia".

In 1997, a GEF/UNDP mission prepared a project brief primarily focused on international waters (IW), particularly the pollution affecting the Tumen River and Peter the Great Bay. There was a secondary focus on biodiversity, or rather the protection of key species, the Amur Leopard, the Siberian Tiger and the Mongolian Gazelle.

The design of this project is poor. The justification for GEF funding is weak, especially on global biodiversity values. The definition of the project area is extremely poor. The objectives and outputs are concerned mainly with the production of documents with little reference to content. Two of the major objectives and outputs are only weakly linked to the core outputs of the project. The risk analysis is unrealistically optimistic. Important recommendations from the STAP Review are largely ignored.

Preparing the TDA

Project execution began in June 2000, with an inception tour of the countries by the Chief Technical Adviser. It was during this mission that weaknesses in the project design became apparent. The project area for interventions is not defined. The project interventions are loosely described as being the "Tumen River Area" extended with the inclusion of the Mongolian Gazelle to the eastern steppes of Mongolia. Two other key points were picked up in the inception report: DPRK had still not signed and the idea that data would be freely exchanged between countries was clearly optimistic. Both risks had been identified in the ProDoc, but had been assigned unrealistically low probabilities.

A key change made to the project following the Inception Report was the restructuring of the project into five components: the TDA, the SAP, Environmental Information Systems, Awareness Raising and Small Grants Programme. Each component was assigned to a Lead Agency in one of the participating countries to ensure full national ownership of the TDA/SAP process. Meanwhile, with the exception of EIS which was covered by a Chinese Expert recruited for practical reasons as a national consultant, the short term international consultancies were reduced to effectively just one aspect. This was the support of the process of developing the TDA through two regional workshops, the TOP workshop in November 2000 and the TDA workshop in August 2001. The TOP workshop was preceded by national training workshops to introduce the participants to the TDA and SAP concepts. Resources were then channelled to consultants from the region to support national capacity building and ensure greater national participation.

Following this first TOP workshop, the TDA Lead Agencies and the Partner Institutions were given contracts and subcontracts to prepare national and sectoral reports. Meanwhile, following the Inaugural Council Meeting, and a proposal by the PCU, the project area was formally expanded to include two

transborder steppe zones in Mongolia – one overlapping with RF and one with PRC. This has resulted in the creation of three geographically specific planning Zones, the Tumen River Zone is geographically isolated from the Daurian Steppe Zone and the Mongolian Plateau Zone. A Supra-Regional Zone deals with aspects such as migratory birds and the wetlands they depend on.

As a result of this expansion, the project shifted from an initial focus on international waters to a predominant focus on biodiversity. The primary interest in the two steppe zones was strongly on biodiversity, and even in the Tumen River Zone, much of the attention evolved towards biodiversity rather than international waters. Unfortunately this shift has not been reflected in project inputs. None of the long-term or short-term technical advisors to the project have had expertise in the development of biodiversity conservation strategies, although some individuals have worked on the protection of flagship species. Furthermore, the national and sectoral reports prepared, with one exception, did not cover the Russian and Chinese portions of the new steppe zones.

The TDA workshop also did not reflect this change in focus from IW to biodiversity. The planning tools promoted were adapted from IW waters projects. Applied to biodiversity, they over-emphasised the transboundary nature of biodiversity interventions, although biodiversity issues are not inherently transboundary the way IW issues are. The TDA following the species focus in the ProDoc, almost completely missed the sustainable use aspects of biodiversity conservation and did not identify open access to grassland ecosystems of the steppe zones as the root cause of biodiversity loss and rangeland degradation on the steppes. The proposed biodiversity interventions of the TDA have focused on protected areas, despite the fact that this is the one component that several other on-going and developing biodiversity projects are addressing in the same zones.

Following the workshop, task forces were established to prepare the Zonal TDAs. Based on these, a final draft TDA was prepared by the Russian Lead Agency in February 2002. The national and sectoral reports and the diagnostic portion of the TDA are fundamentally sound documents. The TDA still identifies pollution in the Tumen River as being the biggest issue to be addressed by the SAP

This TDA workshop also made the first formal move to bring political decision makers into the evaluation process, which up to then had been led by scientific research institutions, although of course there was already political representation on the Council – the project Steering Committee. The Governors of the provinces in the three direct intervention zones were invited to the TDA, and those from Russia and Mongolia signed a Memorandum of Understanding on the Environment. Since then China has also signed on to this Governors initiative. This involvement has been a good strategic move by the project.

With the completion of the TDA, the process of developing the SAP has now started. The Lead Agency is in ROK. The PCU sees the SAP as being politically driven, involving multi-lateral and bi-lateral negotiations to establish priority actions. However, the Evaluation Team strongly recommend the continued involvement of technicians and planners responsible for drawing up the TDA

Recommendations for Finalising the SAP

This is the most critical stage of the project. The SAP is the only document that needs to be formally signed by the member countries – all other reports are working documents. The signing of the SAP is the one key political act that commits the member governments to undertake the specific actions identified in the SAP. Once signed, SAP implementation once again becomes a primarily technical exercise.

The project has now achieved a major breakthrough with the agreement of DPRK to participate in the development of national components for the SAP and in the final signing ceremony.

The logic of the TDA/SAP process is that the TDA identifies the priority environmental problems that need to be resolved and indicates the priority areas for intervention, while the SAP then takes these regional priorities as the basis for developing a programme of specific actions. In the event the TDA did not formally rank the environmental problems, but is still very clear in the text as to what the

priority environmental issues are. The TDA Lead and Partner Agencies, with the support of the PCU, should review the TDA and provide guidance on the priorities that need to be addressed in the SAP.

The SAP, with the guidance of the National policy agencies, must then identify specific direct actions to address major international waters and biodiversity issues identified in the TDA, or give a good reason for not doing so. These actions should be regionally prioritised, primarily national, site specific, costed and with defined responsibilities for implementation. Given the emphasis that on water pollution that underlies the whole project and is reiterated in the TDA and the national area reports, it is critical that the SAP includes concrete actions to address specific pollution sources in the Tument River.

The PCU, with the support of the Lead Agency and the national partners should review all ongoing and planned projects that cover international waters and biodiversity conservation in the project zones. It is critical that the SAP actions do not duplicate what is already covered, but rather refer to these projects and propose actions in other priority areas.

So far the project emphasis on biodiversity conservation is primarily species based and focused on protected area. The project needs to carry out a gap analysis on the adequacy of ecosystem coverage of the existing system of protected areas, and also focus on the sustainable use of biodiversity, and adjust the emphasis in the SAP accordingly. The project should note that under GEF guidelines "transboundary" is not a criteria for biodiversity interventions. The project should also be aware of the resettlement implications of interventions in both existing and new PAs.

The biggest potential for sustainable use strategies is the grassland steppes, most of the biodiversity is found outside the PAs and yet all former management systems have broken down. The degradation of the grasslands is the key factor leading to the regional problem of the "Yellow Dust". The SAP can use this issue as a major catalyst for regional cooperation and support to interventions in the steppes.

It is recommended that the TumenNET countries consider combining the Daurian Steppe and the Mongolian Plateau Zones into one single Steppe Zones.

Awareness and Environmental Information Systems

As in the project design, these two components were basically developed as tools to support the future implementation of the SAP. The AWARE component has been successful both in general public awareness campaigns, using the mass media, and in more directed campaigns using the small grants programme. It has also been effective in raising the awareness among project partners.

The EIS is now seen as a general project awareness tool to be continued after the present project period, with the following objectives:

- Environmental status understanding;
- Environmental awareness education;
- Help investment decision making;
- Help environment exploitation

This complements the PCU website and will ultimately replace some of it's functions. However, more work is required before the country and regional systems are fully functional. One aspect that needs clarifying is what information will need to be shared to support implementation of the SAP. This can only be established once the actions have been decided.

Project Ownership and Stakeholder Involvement

The PCU has emphasised strong stakeholder involvement in the preparation of the TDA and the SAP, and as a result there is a real feeling of ownership of the project. However, full public participation in the planning process that was called for in the ProDoc was never really an option at this planning level or in a two year project period but has been achieved to the extent possible.

1 Introduction

This project has developed out of a dramatic and rapidly evolving political and economic environment in the Northeast Asia Region. With the break-up of the USSR and the creation of the Russian Federation (RF) in the late 1980s and early 90s, tension eased between Russia, the Democratic Republic of Korea (DPRK) and the Peoples Republic of China (PRC).

The Tumen River Area, the geographic centre of this political rapprochement, with the easing of border restrictions, was seen as a major focus for international cooperation and economic development, a free trade zone and major urban centre. It was speculated that the area could perhaps even develop into the equivalent of a new Hong Kong. There were discussions of \$30 billion in investments.

It was against this background that the Tumen River Area Development Programme (TRADP) was initiated in 1991. Supported by UNDP, TRADP also brought in the Republic of Korea and Mongolia as partners in economic development.

In December 1995 the five countries signed three key documents establishing a framework for formal cooperation on economic and environmental issues:

- Agreement on the Establishment of the Consultative Commission for the Development of the Tumen River Economic Development Area and Northeast Asia
- Agreement on the Establishment of the Coordinating Committee for the Development of the TREDA
- Memorandum of Understanding on Environmental Principles Governing the Tumen River Economic Development Area and Northeast Asia

TRADP requested support from GEF in addressing the environmental problems of for the Tumen River Area. In 1997 a GEF Fact Finding Mission prepared a preliminary Transboundary Diagnostic Analysis (TDA) and, following two regional workshops, a Project Brief.

Following approval of GEF funding, UNDP then prepared a Project Document (ProDoc). With the exception of DPRK, this was signed in 1999. The project was primarily focused on international waters problems, especially the pollution of the Tumen River and Peter the Great Bay. Biodiversity was a secondary focus in the design, concentrating on the protection of key species, especially the Siberian Tiger, the Amur Leopard and the Mongolian Gazelle.

Project execution began in 2000. By this time TRADP was into its third funding phase. Investment in the region had been much less dramatic than expected, at around \$1.5 billion. It had become clear that economic development would be slower than expected and national political focus had shifted away to other areas. However, the problems of the pollution of a shared river and the threats to tigers and leopards that had originally triggered the development of the SAP project, remained.

1.1 Evaluation Principles

This evaluation is referred to as the Terminal Evaluation Mission. However, the project has brought forward the timing of the mission so that the mission also has the potential to feed recommendations into the final development of the Strategic Action Plan (the SAP). The TOR for this evaluation are presented in Annex 1.

The Evaluation Team have used the ProDoc as the main document against which to review the project, as this was the document signed by the participating countries (with, to date, the exception of DPRK).

1.2 Key Concepts

When designed, the project fell principally under the GEF International Waters Focal Area, and secondarily under the Biodiversity Focal Area. The International Waters focal area specifically addresses the "degradation of the quality of transboundary water resources, caused mainly by pollution from land-based activities...". By the time of the evaluation, the emphasis has shifted to focus more strongly on biodiversity.

The project is classified under GEF's Integrated Land and Water Multiple Focal Area Operational Programme. These projects focus on integrated approaches to the use of better land and water resource management practices on an area-wide basis. However "Global benefits" are often produced in other GEF focal areas, in this case under Biodiversity.

1.2.1 International Waters

Based on GEF guidance for IW and biodiversity projects, and based on the collective experience of the Evaluation Team members in these areas, the following key points were developed for use in evaluating this review:

The Transboundary Diagnostic Analysis (TDA) for IW

- We would expect an evaluation of the water quality status of the international water bodies, this should include all point sources and non-point sources of pollution.
- The evaluation should include the impacts of land degradation.
- The evaluation should include the impacts of water extraction and water storage on stream flow.
- The impacts of pollution and flow change on biodiversity and human health should be established.
- A critical factor is that the TDA should rank the significance of these existing threats.
- In line with the ProDoc and the GEF Operational Programme, the TDA should include an evaluation of threats from ongoing and planned economic investment and related social changes.

The SAP

- We would expect the SAP to identify specific actions to address the threats identified in the TDA. These actions should be prioritised in line with the ranking of the threats in the TDA.
- In the majority of cases, as the sources of these threats are country specific pollution sources, the prioritised actions should be national ones.
- We would expect the SAP to include a proposal for a management structure to coordinate the proposed activities and act as a communication channel between participating countries as necessary.
- The SAP should also include proposals for reviewing the impact of national and regional interventions and environmental changes, and for reviewing the TDA and modifying the SAP.

The Process

The GEF emphasises the participatory nature of developing the TDA and the SAP, and that the formulation of the SAP is the responsibility of the collaborating governments and national/regional stakeholders.

- We would expect key stakeholders to have been identified through a stakeholder analysis, or social assessment, as well as the levels at which their involvement will be critical and the means to ensure their effective participation.
- Stakeholder groups to include some or all of the following community representatives, NGOs, private business, resource users and managers, scientists, local government and political representation.
- The stakeholders should be actively involved in the analysis of the problems and in the identification of priority actions to resolve identified issues.
- We would expect there to be demonstrated continuity between the stakeholder involvement in the preparation of the TDA and the SAP.

1.2.2 Biodiversity

The other GEF focal area for this project is biodiversity. While recognising the constraints placed on project implementation by the ProDoc, in terms of the focus of the Biodiversity components on flagship species and their habitats, this review, in line with the STAP comments on the proposal have looked at the wider aspects of biodiversity conservation.

Key points used for evaluating the biodiversity portions of this project are as follows:

- The emphasis should be on *in situ* conservation of ecosystems rather than on species. This is supported by the CBD, the GEF Operational Strategy and the UNDP/GEF Guidelines for the Development of National Biodiversity Strategies. We would expect analysis of biodiversity to be done largely on an ecosystem basis.
- For the Tumen Project area, we would hope to find a spatial analysis of the location and areal extent of the natural ecosystems over the project area, employing a commonly agreed system of classification of ecosystems/habitat types.
- We would hope to find a definition of biodiversity conservation priorities, both regional and national, by ecosystem/habitat types.
- We would hope to find an identification of threats and an analysis of the direct and indirect causes of the threats.
- In situ biodiversity conservation can be achieved through protected areas or through sustainable use systems or combinations of the two. In the Tumen Project, we would look for a balanced analysis of the adequacy of the existing protected area networks and the adequacy and sustainability of existing use systems.
- We would hope to find this analysis in the form of a gap analysis comparing the areal extent/location of ecosystems with the adequacy of coverage of protected areas/gazetted areas/management areas for each ecosystem
- We would hope to find an analysis of the institutional/human resource/sustainable financing capacities for protected areas and for sustainable use systems.

2 Project Evaluation

The ProDoc was signed by PRC in June 1999 and faxed agreements were received from Mongolia later in June, from ROK in July and from the RF in September, and countersigned by UNDP and UNOPS in October. DPRK did not sign up to the document.

However, there were then further delays in the recruitment of the CTA and the project eventually became operational with the arrival of the CTA in June 2000.

2.1 Project Design

The design of this project was poorly done. The justification for GEF funding is weak, especially on global biodiversity values. The definition of the project area is extremely poor. The objectives and outputs are concerned mainly with the production of documents with little reference to content. Two of the major objectives and outputs are only weakly linked to the core outputs of the project. The risk analysis is unrealistically optimistic. Important recommendations from the STAP Review are largely ignored.

The badly polluted Tumen River provides a clear justification for the international waters focus of the project. The justification for biodiversity is very weakly made and contains errors. Although CBD and GEF guidance stresses the need to focus on conservation of ecosystems, the design focus is on species.

The definition of the limits of the project area in the ProDoc is hopelessly confused, contradictory and imprecise. The area covered by the different descriptions varies by a factor of about 20 to 1. The project design applies tools that were developed for IW projects (TDA and SAP), to biodiversity conservation. This has given the false impression that biodiversity must be dealt with as a transboundary issue.

The design stresses process over content The key outputs of the project are the TDA and the SAP, but the design does not define what the content of these outputs should be. Of the four Immediate Objectives of the project, two are directly related to these core outputs. The objectives involving awareness raising and environmental information systems are primarily independent activities not strategically linked to the core outputs of the project.

The assessment of risks was unrealistically optimistic. GEF Scientific and Technical Advisory Panel review recommended increasing the emphasis on the conservation on ecosystems and on sustainable use of biodiversity, but these comments were not incorporated into project design.

A much more thorough analysis of the project design is presented in Annex 6, "Evaluation of Project Design

2.2 Project Recruitment

The ProDoc proposes a project management structure with a regional coordination unit, currently referred to as the Project Coordination Unit (PCU), staffed by an internationally recruited Chief Technical Adviser (CTA) and regionally recruited Programme Officer (PO) and Communication Specialist.

The project was also expected to recruit a range of short-term international consultants to give technical inputs to the national and regional working groups, act as resource persons, and give methodological guidance in organising consultation meetings and planning workshops.

The TORs for the CTA emphasise the need for considerable experience in international work in environmental policy and natural resources and an understanding of the related practical and political issues. "Advanced degree in Environmental Studies or other relevant fields. Demonstrated practical understanding of development processes. At least fifteen years of broad experience in international work involving environmental policy and natural resources management. Substantial experience in developing strategies in biodiversity conservation and international waters protection. Demonstrated understanding of the practical and political issues related to natural resources management. Experience in the five participating countries desirable. Proven ability of good coordination and negotiation skills to deal with a multi-cultural working environment of five government counterparts and various international/ national consultants."

The CTA is responsible for the overall execution of the project under the supervision of the UNDP Beijing Office. His duties are however, primarily managerial.

The TORs for the PO require experience in project implementation and management in the field of natural resources management. The duties of the PO are even more specifically managerial, "…mainly be responsible for organising and coordinating workshops and study tour(s)".

The TORs of the Communication Specialist relate to the management of the Environmental Awareness-raising Programme and the supervision of the Small Grants Programme

The ProDoc identifies the need for International Consultants in the following fields:

- Environmental Database/ Training Programme
- Awareness-raising Programme
- Area-based Studies to provide methodological and technical assistance in planning.
- Sector Studies and Workshops to provide technical guidance to prepare Sector Studies and help organise Sector Workshops.
- Target Oriented Planning (TOP) and SAP (Logical Framework)
- Environmental Information System and EIA

None of the profiles of the short-term consultants listed above call for a technical background that specifically relates to the content of biodiversity or international waters strategies. Following the Inception Report, a decision was made to shift the structure of TA inputs. With the exception of the EIS component where the decision was made that the most appropriate regional consultant was a Chinese national, then recruited as a national consultant, the project decided to recruit short-term international expertise for only two components, the TOP workshop and secondly the TDA planning workshop. These workshops focused on the process of developing the TDA and the SAP and defined the scope of the background studies.

UNOPS recruited a CTA with considerable experience of policy development and a wide knowledge of the political realities of working in the region. The CTA is clearly an exceptional project manager and has kept the project moving despite the complexities of dealing with five governments and institutional systems with very different socio-cultural and political environments.

However, it is apparent that while the CTA has provided guidance on strategies promoting the institutional process of developing the TDA and the SAP, there has been so far little guidance on developing strategies for resolving threats to biodiversity or international waters. Nor has this been provided by the PO or by any of the short-term international consultants actually recruited. This is perhaps, an issue that can now be addressed in the final development of the SAP.

2.3 Inception Report

The project establishment phase commenced with the arrival of the CTA on 19 June 2000 and the arrival of the program officer on 26 June 2000. A project inception mission to the five countries was conducted from 24 July to 18 August and an inception workshop was held on 22 / 23 August. The Inception Report is dated September 2000.

The Inception Report notes that DPRK had still not signed up to the ProDoc and that this refusal introduces a considerable risk factor. "Approximately 30% of the Tumen River Basin lies in DPRK territory, as well as half of the coastal marine areas, and their exclusion will raise the question of the technical authority and the long-term regional impact of the SAP".

The second major issue is that it was already apparent that the release and sharing of geographic and water pollution data would pose a special problem. The report states that "Many data are therefore still subject to restrictions and while national governments have agreed to make relevant data available, the litmus test will come when provincial and local government authorities will have to implement that ruling and actually release data".

Two of the risks identified in the ProDoc as medium to low and low were already causing concern.

2.3.1 Changes in Project Structure

Following consultation with the partner countries, the PCU took a strategic decision to shift from the use of international consultants to the selection of Lead Agencies from within the Region. Each Lead Agency would provide technical expertise to the National Partner Institutions working on the TDA and SAP and the Awareness Programme and EIS.

The justification for this is that since the original project design in 1997, "...the situation has changed and that a high level of technical expertise is now available in the region".

The PCU identified five project components and lead agencies, with one lead agency in each country.

Lead Agency
Far Eastern Branch of the Russian Academy of Sciences, Vladivostok
Global Environment Office, Ministry of Environment, Seoul
Jilin Provincial Institute for Environmental Protection, Changchun
Mongolian Nature & Environment Consortium, Ulaanbaatar
National Coordination Committee on Environment, Pyongyang

This change did not affect the project budget or fundamentally change the project outputs. Budgets for the international consultants who were no longer considered to be required, were switched to Lead Agencies. A few additional subheadings were added to the ProDoc Outputs and this became the structure for the workplan.

The National Partner Institutions were also identified, responsible for their national inputs to the lead agencies. This was a strategy to promote regional cooperation and trust and build capacity in institutions which were assumed to be responsible for implementing the SAP.

However, it was recognised that there was a risk that the identified institutions might not have the technical capacity to fully participate in the process, and the PCU proposed to monitor their performance and provide additional national, regional or international consultants if required.

The Evaluation Team finds that this focus on the use of local institutions was a successful strategy to make the most of local expertise, to foster networks between agencies and to enhance "ownership of the project". The five components allowed each country to take a key responsibility in the implementation of the project.

2.3.2 The Project Area and the Three Zones

As previously noted the geographical definition of the project area in the ProDoc was exceedingly vague. The first clear indication that the PCU was considering an the option to expand the project to eastern Mongolia and the adjacent areas of RF and PRC is found in the Inception Report. The Inception Report notes the isolation of Mongolia from the Tumen River area and hence the isolation from the rest of the project

The Inception Report provides the basis for the later expansion of the project activities into what subsequently became two additional zones geographically remote from the Tumen River – the Mongolian Steppe Zone (linking Mongolia with China) and the Daurian Steppe Zone (linking Mongolia with Russia). The Inception Report also sets the scene for the focus on Protected Areas.

2.3.3 Component Linkages

The Inception Report does not explore the linkages between, or content of, the supporting project components, but highlights the general concern on the post project funding of the regional Environmental Information System. The post project costs would include data collection, evaluation and translation into a common language (English).

The Inception Report introduces a new actor into the project, the business sector. This move is justified through their future role in investment in the region along side multilateral and bilateral donors. The report brings in the concept of "green investment", but does not define what is meant by the term.

However, at present business interest is minimal, as there is little incentive to invest in the region, or for existing factories to invest in cleaner technology. During the project lifetime, the project interaction with business is likely to be limited primarily to awareness raising.

2.4 The TDA and the SAP

2.4.1 Target Oriented Planning Workshop

The ProDoc identifies the need for a Target Oriented Planning Workshop (Immediate Objective 3), dealing with the development of the TDA and the SAP. The project recruited two international consultants from Woods Hole Group, Marine Environmental Solutions to provide training in the process of developing the TDA and the SAP. Their specific terms of reference were to "Prepare and hold a Target Oriented Planning Workshop". The objective of this training/planning exercise was:

- Agree on environmental and economic sectors to be covered during preparation of country and regional sector reports.
- Determine the lead agents for preparation of national and regional sector reports.
- Define a common methodology to prepare country and regional sector reports, and the subsequent TDA and SAP.
- Achieve national consensus and agree on a workplan, institutional arrangements and identification of required expertise for preparing national and regional reports, TDA and SAP.

The TOP workshop was preceded by national TOP training workshops held in China, Russia, Mongolia and ROK, but not DPRK. These national workshops were primarily training exercises to introduce the concepts of the TDA and the SAP, as well as discuss outline structures for the National Reports and Sector Reports.

The national meetings were attended by a wide range of interested parties. Although largely restricted to academic research and government departments, they did include participants with agricultural, industrial and mining interests as well as those already identified as participants of the SAP/TDA, Awareness and EIS components.

The TOP regional workshop was held in Beijing at the end of November 2000. The TOP workshop was divided into three sections. The first was a general introduction to the TDA/SAP concepts and case study materials were presented to the participants. The second session went into the details of the proposed TDA/SAP process and presented a timeframe and outline structure for the TDA and contributory reports. It also prioritised the regional issues to be studied and agreed on a total of eight sector studies for which tables of content were determined as follows:

- Coastal priority environmental issues
- Opportunities and impacts of ecological tourism
- Large predators, ungulates and their environment
- Loss of natural habitats and important ecosystems
- Migratory birds and their habitats
- Transport corridors and environmental degradation
- Tumen river priority environmental issues
- Urbanisation and its environmental effects

The third session was a "networking" session for the partner institutions dealing with EIS, AWARE and the other project components.

However, despite the apparent focus on biodiversity indicated by the selection of sectoral studies, the case studies and other materials provided focused entirely on international waters and included:

- Black Sea Strategic Action Programme
- Danube River TDA
- South China Sea TDA and SAP
- GIWA (Global International Waters Assessment) Methodologies

The workshop SAP/TDA examples are GEF international waters projects. However they are not particularly strong documents in terms of proposing direct actions, as most of the "actions" described are either long-term environmental policy targets or have no direct effect on reducing pollution or on conserving biodiversity¹.

¹ As an example the South China Sea SAP lists as direct actions: *Review national EIA regulations to promote greater public participation; Develop guidelines on preparation of national plans for protection of marine and coastal environments; A regional GIS database and a mathematical model on pollution and its impact on ecosystems; Collect information on trade in "minor" and endangered marine products.* None of these in themselves will reduce pollution or conserve biodiversity.

The UNEP-led and GEF-funded Global International Waters Assessment, GIWA Programme, was carried out as an exercise to produce a comprehensive and integrated global assessment of international waters – *at a global level*². While the IW technical advisers in the GEF heavily promoted the use of the GIWA methodology, it was recognised by the PCU that as it stood it was not necessarily the most appropriate tool to use for project. The Tumen River is essentially a local watershed planning exercise, with additional geographically isolated zones where water is not the key focus.

The consultants proposed a methodology for the TDA which closely followed the international waters approach promoted by GEF, but was simplified to fit more closely with local conditions. There appears to have been no guidance at this TOPS workshop on the development of strategies for biodiversity conservation. One result is that the list of sector reports did not include an analysis of the adequacy of the coverage of ecosystems by the existing PAs and sustainably managed areas.

It was at this workshop that the content of the national area reports and the topics and content for the sector studies was finalised. The table of contents of the National Reports and the Sector Reports imply that biodiversity must be treated as a transboundary issue. Part two of the table of contents is "Threats to Transboundary Biodiversity and International Waters". No definition is given as to what is meant by "Transboundary Biodiversity", but it was discussed extensively at the workshop and the preceding national training workshops.

The Lead TDA Agency FEBRAS in RF was responsible for the overall supervision of the National Area Reports, the Sector Studies and supervision and preparation of the final TDA. The first of the networks were now being established, and the project developed the logo "TumenNET" to reflect the network arrangements being promoted.

During the TOPS Workshop, the question of the poorly defined limits of the project area was not resolved. The possibility, that had been raised in the Inception Report, of creating new zones in the steppe area, was not debated. Significant portions of the two steppe zones that were later created, were not included in the areas to be covered by the National and Sector Reports.

2.4.2 National Area Based Reports

The four participating countries promptly produced National Area Based Reports, generally following the structure agreed at the TOP workshop.

The "Area" described in the National Reports for PRC is limited to the Tumen River Area (basically the Yanbian Korean Nationality Autonomous Prefecture). The Russian report describes the environment in South West Promorye Region and includes the marine environment. The ROK report focuses on ROK, and refers to the Tumen River Area. The Mongolian report reviews the environmental issues in the three eastern provinces (Aimags) of Khenti, Sukhbaatar and Dornod.

The original timetable set for the reports was for completion by the end of April 2001. The reports were completed promptly by the partner institutions and the project held a "Workshop on National Reports", in Vladivostok on 4-5 April 2001, hosted by the lead TDA Agency and attended by representatives of the partner institutions.

The National Reports were completed according to schedule, are very comprehensive, and clearly were a major achievement of the participating institutions.

The Project has sought formal government endorsement of the National Reports – China's central government has still not approved their National Report.

² The GIWA ProDoC states that the key output is "Strategic information for GEF use at a programmatic level through the provision of a framework for: the identification of regional and global priority areas for the consideration of the GEF and its partners in the focal area of international waters...". One of the outputs is "An agreed methodology for making transboundary diagnostic analyses at regional scales". The GIWA evaluation divides the world into 9 Megaregions with 66 Subregions.

2.4.3 Sector Studies

The following topics for the sector studies had been agreed at the TOPS workshop, as well as the lead and partner institutions.

- Large predator species Lead Institute: Institute of Biology and Soil, FEBRAS RF
- Migratory birds Lead Institute: Wildlife Division, National Institute of Environmental Research, RPOK
- Transboundary transport corridors Lead Institute: Jilin Monitoring Center of Environmental Protection PRC
- Tumen River priority environmental issues Lead Institute: Jilin Monitoring Center of Environmental Protection PRC
- Coastal and marine priority environmental issues (including Peter the Great Bay) Lead Institute: Far Eastern Regional Hydrometeorological Research Institute, RF
- Urbanisation and environmental effects Lead Institute: Jilin Monitoring Centre of Environmental Protection PRC
- Opportunities and impacts of ecological tourism Lead Institute: Ministry of Nature and Environment in cooperation with Tourism Development Board of Mongolia
- Loss of Habitats and Important Ecosystems as a result of human activities Lead Institute: Pacific Institute of Geography, FEBRAS RF

The timetable for this was for a draft to be prepared by June 30 and a final version by July 20, 2001. Between January and April 2001, a draft Table of Contents for each report was prepared.

Following the National Area Workshop at the beginning of April, the PCU along with the lead TDA partner in Russia, held a series of workshops for the lead and partner institutions for each sector study.

This involved setting up eight workshops in four different countries hosted by the lead institution, each workshop attended by typically three representatives of the TDA Lead Agency, and two from each participating national institution and by one person from the PCU. Flying ten people from three different starting countries to attend a meeting in a fourth country, and doing this eight times in the space of one month is an amazing effort and both the PCU and the TDA Lead Agency should be commended for this. To make the management even more difficult, this coincided with the Inaugural TumenNET Council Meeting, which took place on 28/29 May 2001.

The lead institutions then started the real task of writing the sector reports. The underlying concept was that these would be based on compiling and analysing existing data. Again a considerable effort was made to stick to the timetable, and incredibly all the reports were in their final form within a couple of weeks of their deadline and were available for the TDA Workshop that was subsequently held in Vladivostok at the end of August 2001.

While the technical quality of the reports is variable, and there have been complaints among the scientists that the data quality is poor and inadequate, the information presented in almost all cases provides a very sound basis for taking management decisions. The purpose of the TDA is to evaluate the root causes of key issues and these key issues are brought out in the sectoral reports.

2.4.4 Musan Iron Ore Mine

In addition to the sectoral studies, TumenNET commissioned a study of the Musan Iron Ore Mine in DPRK. The Musan Mine Complex is the major iron ore mine in DPRK and supplies concentrate to the Kim Chaek Iron and Steel complex, the largest producer of iron and steel in the DPRK. The Mine has long been recognised as a major source of pollution on the Tumen River.

The main environmental impact is the result of the discharge of fine tailings, into the Songchonsu River shortly before it joins the Tumen River. The tailings are not toxic, but cause severe damage to the river environment and degrade the quality of the water.

A number of factors lead to this discharge, including design and operation issues. However, there are only limited funds available within DPRK to invest in the improvement of the mine, and it is not clear that it would attract commercial investment unless associated with some other investment enterprise.

The study is recognised as a major accomplishment, as the first significant involvement of DPRK in the project. It is also perhaps, a sign of an opening up of DPRK, which has recently included renewed political dialogue between DPRK and ROK.

2.4.5 The TDA Workshop

The TDA Workshop was held in Vladivostok from 20 to 30 August 2001. The objective of the workshop was to introduce the participants to the preparation of the actual TDA. It launched the main TDA phase and built on the previous discussions held at the TOP workshop. It also aimed at reinforcing the concepts of the TDA and the SAP, as well as carrying out specific tasks including cluster analysis to establish priorities and a preliminary stakeholder identification.

The workshop participants were formally introduced to the newly defined zones, which are now referred to as the Tumen River Basin Zone, the Daurian Steppe Zone, the Mongolian Plateau Zone and the Supra-Regional Zone. The Steppe Zones include part of the RF province of Chitinskaya Oblast in Siberia and part of the PRC territory, the Inner Mongolia Autonomous Region.

The workshop specifically included the governors of the provinces directly linked to the proposed zones. This was a continuation of the move to bring a political understanding into what had previously been primarily a technical/scientific driven process. The workshop included a Meeting of the TumenNET Governors which resulted in the signing of a Memorandum of Understanding by the Governors of Dornod, Khentii and Sukhbaatar Aimags in Mongolia, and the Vice Governors of Chitinskaya Oblast and Primorski Krai in the Russian Federation.

The Vice Governor of Jilin Province and the Vice-Chairman of the Inner Mongolia Autonomous Region were also present with other members of their staff, but did not have central government authority to sign the document. However DPRK was still not present.

More recently the Governor of Gangwon Province, ROK, has signed this document, and efforts continue to seek the outstanding Chinese signatures.

Although the project, with the addition of the two new steppe zones, was now shifting to a predominant focus on biodiversity, the international consultants hired for this workshop were still largely from an international waters background. The workshop was facilitated by the same consultant from Woods Hole Group, Marine Environmental Solutions, with additional support from a consultant then working for the International Commission for the Protection of the Danube River³, and two consultants from Jaako Poyry Infra, Soil and Water, a professional engineering consulting group.

The workshop presented the executive summaries of the National Area Reports and Sectoral Reports. The sectoral report for Loss of Habitat had been updated by the Russian Team to include Chitinskaya Oblast. However, none of the other sectoral reports dealt specifically with the steppe areas in the newly defined zones. The workshop was organised into four groups, each one dealing with a specific zone.

The working group reports indicate some of the problems faced by the facilitators and participants. These include "...cause and effect are mixed and important issues are missing..." and "...Due to language constraints only 5 to 7 *(of around 25)* participants could actively follow the workshop...". There was a general feeling that the time allowed was inadequate. In one case the participants did not have time to prioritise the "causes".

Different groups used different approaches to prioritising. One approach asked participants to allocate an imagined budget of 6, 5, 4, 3, 2, and 1 million dollars to six clusters in priority order.

³ Joachim Bendow Executive Secretary ICPDR – had been the CTA on the GEF PDF B mission that carried out the preliminary TDA in 1997.

The implicit assumption was that the national area reports and the sectoral studies provided all the information necessary for preparing the zonal TDAs. The cluster analysis would identify and prioritise specific areas for intervention and thus actions that would be recommended in the TDA and logically then in the SAP.

While not perfect, the cluster analysis did successfully highlight the perceived main issues in zones. The first priority in the Tumen River Zone was mining and industrial pollution. The cluster analysis lists hot spots and some general actions that could be developed into specific actions in the subsequent preparation of the TDA and SAP. It is worth noting that for the Tumen River Zone, *Unsustainable Management of Protected Areas* has a very low priority, the seventh of eight clusters.

The assumption of adequate data clearly was not valid for major portions of the two new zones that had only recently been included in the project. There was little data for the RF and the PRC portions of the Daurian Steppe and the Mongolian Plateau Zones, they had not been covered by the national and the sector reports. The project management strategy was to seek these data at the TDA stage to the extent possible and feasible within the given time frame

2.4.6 The TDA

The preparation of the zonal TDAs was assigned to a task manager (China for the Tumen River Zone and Mongolia for the two steppe zones), supported by national co-authors and a team from the Russian TDA Lead Agency who acted as advisers and ensured internal consistency. EIS, Awareness and Education were included under Supra-Regional Issues.

Zone	PRC	RF	Mongolia	ROK
Tumen River	Task Manager	Key Author + Support		
Daurian Steppe		Key Author + Support	Task Manager	
Mongolian Steppe	Key Author	Support	Task Manager	
Supra-Regional	Support	Key Author + Support	Key Author	Task Manager

Arrangements for the TDA Task Force

While the three main zones were now somewhat more clearly geographically defined, the Supra-Regional Zone remains undefined. Immediately following the TDA workshop, a one-day technical TDA meeting was held in Vladivostok. The objective was to reinforce the understanding of cluster analysis, gap analysis, and prioritisation of issues and interventions, constraints and stakeholder analysis.

The process of preparing the zonal TDAs then went back to national level, with the responsibility for preparing national TDA contributions, including national stakeholder analyses. The national authors were then given five weeks to prepare their national contributions. By October 9, final national contributions were to be with the Task Manager, who then had four weeks to draw these into a zonal TDA and submit these to the TDA Lead Agency by November 6. The Lead Agency was then given two weeks to compile a final single TDA report.

In the event, the timetable proved to be overly optimistic. The first draft of the Zonal TDAs were presented at local Stakeholder Workshops held between October 30 and November 21. These took place in Primorsky Kry and Yanbian Prefecture for the Tumen River Zone, in Chita and Baruun Urt, Sukhbaatar Aimag for the Mongolian Steppes and ROK for the Supra-Regional Zone.

The Mongolian team are to be commended for their proactive inclusion of input from Inner Mongolia, despite Inner Mongolia not being at that time a formal party to the project.

The Second TumenNET Council Meeting was held in Sokcho in ROK on 29/30 November 2001. The Lead Agency presented an outline of findings and conclusions of the Zonal TDAs, which were approved by the council. The summary notes that "The 2 months delay in the TDA preparation, caused

primarily by the need to involve Chitinskaya Oblast and Inner Mongolia Autonomous Region, has the potential to translate into a commensurate delay in the completion of the SAP."

The four zonal TDA reports were understandably of varying quality, and again there was criticism from the Russian Lead Agency scientists of lack of real data. The effort required to bring the documents together into a single document was considerable, and the Lead Agency is to be commended for achieving this. The final draft TDA was distributed in the middle of March 2002. It is expected to be translated into local languages by June 2002.

The final TDA workshop was held in Vladivostok on 3 April 2002. The workshop approved the TDA and agreed that it would be the basis for developing the SAP. The team were still waiting for National comments. These comments would be included in the final TDA.

The workshop also recommended that the delayed water quality survey of the Tumen River basin be implemented as soon as possible.

2.4.7 The Final TDA Conclusions

The preparation of the TDA has been led by scientists and research institutions. At the first TDA workshop, the consultation process was expanded to include political leaders. However, there appears to have been little attention paid to the involvement of resource managers. To some extent this is a reflection on the state of the natural resource management systems. There is no real concept of sustainable management of forest systems, rangelands or other natural systems in any of the countries.

The TDA is fundamentally a strong and sound diagnostic document. The major issues may lack detailed scientific analysis, but for management decisions, the issues are all highlighted. However, the prioritisation that was carried out as part of the cluster analysis exercise during the TDA Workshop has largely been lost. The major issues in each zone have not been formally ranked. Threats, impacts and causes are still not clearly distinguished.

International Waters

Water pollution is still highlighted as the key issue. The TDA states "The most serious affected area is the Tumen River Basin where all kinds of pollutants from industry, agriculture and human settlements accumulate and flow into the marine waters of the DPRK and Russia at Peter the Great Bay." The main body of the text lists specific point sources of pollution in PRC, DPRK and RF.

The root causes are identified as "outdated technologies, insufficient funding, insufficient public safety, inadequate enforcement of existing regulatory tools...", and many other institutional issues.

Biodiversity

The major transboundary threats affecting biodiversity – apart from those resulting from pollution, include "…inappropriate management of water and land resources, unsustainable forest exploitation, forest fires… unsustainable management of protected areas and species, and, impact from tourism. All of these result in loss and modification of marine, inland and wetlands ecosystems".

The root causes for loss and modification of ecosystems and loss of biodiversity, are dealt with separately in the text. However together they include many legislative and regulatory issues, such as lack of supervision of existing regulations, lack of awareness, overemphasis on development and "…insufficient management of water and land use".

The draft TDA has largely failed to identify open access as the key root cause of loss of biodiversity and degradation of the grassland ecosystems of the steppe zones. The TDA has not linked the loss of biodiversity resulting from the unsustainable use of the rangelands with another truly regional environmental issue, the "Yellow Dust". The draft is now subject to national comments.

The draft TDA does not include an analysis of the existing protected networks in the zones. The Preliminary TDA in 1997 indicated there was very low capacity amongst the TRADP countries to

manage and to fund existing PAs. It is critical to analyse existing capacities before recommending the creation or extension of new PA.

2.4.8 The Final TDA Recommendations

The draft TDA includes a summary of recommendations for Regional and National Actions. The regional recommendations include the following four sections:

- Transboundary transfer of pollutants; the recommendations focus on general statements on implementing existing agreements and taking measures to treat effluents and on monitoring. It also generally refers to agriculture, forestry and soil erosion.
- Conservation and recovery of biodiversity; focused on protected areas networks.
- Public Awareness; general statements on awareness of the need for protection of plants and animals, and "environmental" protection.
- Ecotourism; listing a number of national and international specific opportunities and then general issues of policy, legislation and plans and capacity building.

There are no corresponding recommendations for the "Supra-Regional" issue of wetlands and migratory birds, highlighted in the first section of the TDA. This deficiency has now been recognised by countries and will be dealt with in the SAP phase where a special policy/technical workshop has been organised.

National Recommendations

These are divided by country and zone, although not always consistently.

The major issue is the lack of prioritisation that comes through in the recommendations, the major focus is on biodiversity and national parks. There is almost no emphasis on international waters or on specific interventions to reduce pollution, and yet this is the most important issue highlighted in the executive summary of the TDA. However, the project strategy is now to deal with this prioritisation as part of the SAP development.

Tumen River Area

Of the seven recommendations from PRC for the Tumen River area, six deal with biodiversity. These six are largely focused on PAs. It is worth noting that one proposal is to create a new nature reserve in Hunchun District along the Russian Chinese Border. A nature reserve in Hunchun, bordering on Russia was formally opened on 12 December 2001. The creation of this PA has been an international effort, including support from the Russian branch of RFE WWF, WCS and Wetlands International.

The Russian proposals for this area are also limited to fire protection and PAs. The Russian DPRK proposals⁴, focus on forest management and PAs.

Daurian Steppe

The joint RF and Mongolian proposals include general recommendations on land management, while avoiding the issue of overgrazing of the grassland ecosystem. Specific recommendations are limited to PAs, and include the general supporting programme of awareness raising and ecotourism.

Mongolian Plateau

The joint Mongolia and Inner Mongolia proposals do not deal with rangeland degradation and again focus almost exclusively on PAs, It does however, note the need to strengthen the management of biodiversity outside protected areas, rather imprecisely through "…a national multiple nature conservation system".

2.4.9 The SAP

The process of moving from the general, preliminary recommendations in the TDA to a set of prioritised actions in the SAP has only just started. The Lead Agency responsible for developing the SAP is the Ministry of Environment ROK. The countries also have established National SAP Task

⁴ It is not clear whether these were developed through any consultative process with DPRK.

Forces that will play a major role in driving the policy process. National SAP Task Forces include political decision makers at national and provincial levels (environment, foreign affairs, finance, and economic development portfolios) technical experts from the TDA phase, NGO and business representatives. They also include the National TRADP Coordinators to ensure mainstreaming of SAP recommendations with parallel TRADP driven efforts.

The first SAP Planning Workshop was held in Seoul on February 19/20 2002. The objective of this workshop was to agree on a final table of contents for the SAP and on a timetable and programme to complete the process. Prior to the workshop each country prepared a list of priority actions areas based on the initial draft TDA recommendations. They are summarised as follows:

- China: New PAs, PAs management and anti-poaching in the Tumen River and the Mongolian Plateau Zone, Awareness Raising, Ecotourism; these have not been broken down by zone;
- Russia: New PAs and PA management, fire control, land rehabilitation and wetlands protection, water quality monitoring;
- Mongolia: Pollutants and international waters (in Mongolia), biodiversity conservation, Awareness, Ecotourism, fire fighting and poaching.

The proposed process for developing the national SAP actions includes National SAP Task Force meetings, national intergovernmental meetings and finally bi-lateral and multi-lateral negotiation meetings. These negotiations were seen as largely a political process, and there appears to have been no guidance on prioritising actions and focusing them on priority problem areas. The implicit assumption is that the TDA set priorities, which it did in terms of issues but failed in terms of proposing actions to counteract those issues.

The Lead Agency proposes to attend and support the national intergovernmental meetings and the bi and multi-lateral meetings.

Following discussions between the Evaluation Team and the PCU, and separately with ROK, the SAP outline has been modified to include actions to address the TDA issues of the supra-regional zone. Further meetings will have to be scheduled by the PCU.

The major breakthrough is that now DPRK has agreed to participate in the formulation of the SAP and wishes to be involved in the process and final signing ceremony. This a major breakthrough for the project, but the project may now have to direct additional resources to support DPRK in developing proposals for actions.

2.5 AWARE and SGP

The ProDoc includes an objective described as "An Awareness-raising Programme on transboundary environmental issues will also be designed and partly carried out to raise environmental awareness among public". In the outputs and objectives it is described as "...at all levels". The ProDoc lays considerable emphasis on this and included a full time regionally recruited Communications expert.

The PCU has followed the guidance of the ProDoc and laid similar emphasis on the awareness component. The Lead Agency is the Mongolian Nature and Environment Consortium, a relatively small but very active and high profile local NGO.

The partner agency in RF is WWF Russian Far East Branch and in ROK the Environment and Culture Institute. In PRC it was the Jilin Provincial Publicity and Education Centre of Environmental Protection, a parastatal organisation.

Based on an EIC concept paper prepared by the PCU which proposed three components – Awareness Raising, Small Grants Programme (SGP), Awards for Excellence. In February 2001, the Lead Agency then prepared a Regional Education, Information, Communication Strategy. This was a very sound document, detailing six steps for developing a project specific awareness

programme. National partner institutions them prepared national EIC strategies that reflected indigenous approaches to technology access and cultural differences

- PRC focuses on the wonders of nature and "campaigns".
- RF the wonders of the environment and threats (tigers, leopards... fires, poaching)
- Mongolia the physical and cultural environment and threats (grassland, gazelles... Genghis Khan... fires, poaching)
- ROK the cultural link with the Tumen River and in particular with Paekdu Mountain/Changbai, a spiritual centre and the "Heart of the Korean People". A message of beauty and threat.

SGP is an integral component of AWARE. In February 2001, the PCU drew up guidelines for the selection of projects for funding under the SGP. The defined objectives of the SGP can be summarised as raising awareness of environmental issues, promoting alternative livelihoods, promoting TumenNET and supporting conservation activities.

The first set of 29 SGP projects were approved and funds released in late 2001. The projects were as diverse as the countries different awareness campaigns. All projects were strong on awareness of environmental issues and awareness of TumenNET. But less than half can really be said to have addressed the other objectives of alternative livelihoods and/or conservation. The second set of proposals is currently under appraisal.

One advantage of this two stage approach is that it has allowed DPRK to observe the implementation of the first set of SGP activities, and on the basis of this to agree to implement SGP activities under the second tranche of funding.

The public awareness component the EIC has been successful, specifically targeting schools and, through mass media, the general public⁵. Innovative approaches were supported under the SGP, such as the Tumen River Green Pilgrimage which brought together NGOs and communities in different countries. However, there is little evidence that AWARE targeted or reached the decision makers at political or administrative levels through their campaigns, and these are the people whose support will be required to approve and move the SAP on to implementation.

Awareness raising among people directly involved in the project has been through participation in project workshops and meetings. This includes the Council Meetings, which could perhaps be considered as high-level awareness creation exercises rather than functioning as a steering committee.

2.6 EIS and EIA

The ProDoc calls for the development of a Regional "Environmental Research and Information System", using the Internet as a tool for dissemination. The objective is to strengthen Capacity to Implement the SAP at the National and Regional Level. However, this logic is far from clear. Although researchers may be needed to support the management of interventions in the SAP, it is not researchers who are going to be responsible for implementing the SAP.

Research data on water quality might be used to evaluate compliance with water quality standards, or to monitor improvements in water quality resulting from SAP interventions. However the type of applied research needed to manage PAs or to develop sustainable use systems is generally different from the type of research data needed to prepare a TDA or a SAP. Species lists are of little use for implementing sustainable management systems or PA interventions.

The Lead Agency for the EIS component is the Jilin Provincial Institute for Environmental Protection. One of the first steps was to prepare a review of existing environmental information systems

⁵ This is a subjective assessment of the Evaluation Team. The PCU has tried to judge success through indicators such as number of media reports discussing the project areas or the project itself, but it is virtually impossible to judge whether this has been a result of the project or a result of all the parallel activities undertaken by other environmental pressure groups.

throughout the region and a report was completed in January 2001. A regional meeting was then held in China on March1/2 2001. At this meeting the concept of the EIS shifted. The underlying theme is stated as "Work for people not scholar, minimise work scope, avoid new digitising, utilise existing data, harmonise with sector reports". In other words the EIS would present the information gathered for the sectoral reports, but through the media of the internet.

In addition, it was recognised that following the present project period the project management/PCU web site would no longer function. It was decided that it would be appropriate to expand the objectives of the EIS web site to cover awareness aspects and also act as an information conduit for investors and donors. These country web sites would continue to function after the end of the project, using TumenNET as a "corporate logo" to promote the further development and implementation of the SAP.

The EIS now has the following expanded objectives:

- Environmental status understanding;
- Environmental awareness education;
- Help investment decision making;
- Help environment exploitation

At the time of the evaluation, the four active countries have gone some way to completing their national EIS web sites. The regional site is not yet functional. The content and quality of the sites is highly variable and not surprisingly, given the broad objectives, each very different from the other.

The countries all lay emphasis on different aspects of the site, but all agree that it is worth further development and should remain functional after the end of the project. There is some concern about the cost of maintaining the sites, especially the costs of updating data and information and translation to the common language – English. However, Mongolia and ROK both felt that they could access non-project resources and maintain the sites in the future.

The scientists responsible for the sites still feel that it is a useful tool for the exchange of data, and supports the regional institutional networks established by the project. However, while still expecting to post data on the site, it is now even less clear what data is appropriate, or how it will be used.

At present the EIS web sites are not effectively serving any of the newly set objectives. If the stakeholders are interested in supporting all the above objectives, then it is probably better to create four separate sites, or else clearly separated zones on each web site, each one serving a specific purpose.

GIS

Geographical Information Systems are seen by many of the research institutions as an integral component of scientific and management EIS. The majority of research and planning institutions have, or have access to, GIS. Throughout the region the common software is ArcInfo/ArcView, however as the PCU noted, many of these systems are effectively non-functional and data is rarely exchanged between institutions. This is partly a result of the choice of this non-user friendly system promoted by international partner institutions with dedicated GIS support. When international support and the specific project ends, the local incentive for maintaining the system stops.

Despite there being many non-functional systems, there is clearly still the capacity in the region to produce dedicated thematic maps, which can be reformatted for web sites. However, the PCU felt that the quality of the locally produced maps was not adequate for presentation purposes and has contracted an Australian company to prepare project maps to support the TDA and SAP. While clearly maps are extremely important in presenting information crucial to the TDA and SAP, the project may have missed an opportunity to build local capacity, even if it would have resulted in a slightly lower quality product.

2.6.1 EIA

A second ProDoc output "Harmonised technical and legal conditions for Environmental Impact Assessment" was also seen in the project design as a way of strengthening national and regional capacity to implement the SAP. EIA is a methodology for evaluating potential impacts and recommending alternatives, not a tool for managing or controlling impacts. However, the enforcement of EIA outcomes is a management tool.

There is neither the need nor the capacity to change national EIA regulations, which would require major legislative changes. Although there may be a specific requirement for sharing EIA reports particularly where proposed interventions have regional or transboundary implications.

The project held a one-day EIA Policy Workshop in October 2001, with countries presenting descriptions of their EIA approaches. This has been followed by two brief workshops on EIA, one focused on strategic environmental assessment (case studies for the oil and gas pipeline sectors) and one on EIA for mining. The workshops are not intended to provide training in EIA techniques, but an awareness of the scope of EIA required and introduced the new planning tool of strategic assessment. The workshops have been run with the help of consultants provided by the Australian Government through Environment Australia and the NSW Department of Mineral Resources.

2.7 SURVEY

The ProDoc obliquely referred to the need for a survey of water pollution and biodiversity (Outputs 1.2.4 and 1.2.5). This output was explored further during the inception phase and a specific Survey component proposed. However, the PCU suggested "waiting with the survey until the nature of possible pollutants from within the Tumen River watershed area (China and DPRK) is better understood, that is after the production of relevant country reports".

In April 2001, the PCU prepared a draft strategy for the Survey, based on the fact that the Chinese and Russian National Area Reports indicated high levels of contaminants in the Tumen River. DPRK was identified as providing the Lead Agency for this component.

China refused to give its go-ahead for such a survey until such time that the DPRK would agree to it However, with the continued non-signing of DPRK this component could therefore not be implemented.

There is now a proposal from the RF co-authors of the report on Tumen River Priority Environmental Issues and Coastal Priority Environmental Issues, to carry out an immediate survey of bottom sediments and ecological issues in the lower reaches and estuary area. This is where sediments and contaminants can be expected to accumulate. This would of course allow for the evaluation of the combined impacts of sediments and contaminants from China and Korea. However, much of this information has already been collected by the Russian authorities and is available to the project.

3 Additional Implementation Issues

3.1 Expansion of the Project Area to the Daurian Steppe and Mongolian Plateau Zones

The ProDoc was extremely imprecise in the definition of the project area (See Annexe 6), but the initial focus of the project was clearly the Tumen River Area.

The Inception Report states that "Both Mongolia and the Republic of Korea sit somewhat uncomfortably with a Tumen River SAP Project. Neither country shares a border with the Tumen River Basin, nevertheless there are valid reasons for their inclusion...".

The report goes on to say that "The Mongolian Gazelle, migratory water fowls and the rare Manchurian flora are among the key threatened species⁶ that are well protected in Mongolia but to a lesser extent in bordering China and Russia". The PCU proposes establishing closer links with the GEF Eastern Steppes Biodiversity Project and suggests "there is potential to complement the national efforts of the Eastern Steppe Project by encouraging Russia and China to establish protected areas at the border to Mongolia to complement Mongolia's biodiversity management plans".

This had major implications for the structure and focus of the project, bringing biodiversity into the forefront in two of the three major zones where direct actions would be proposed in the SAP.

However, following the Inception Report there is no move to mainstream this change into the planning process and the proposal is not addressed in the TOPs workshop, where the focus is still firmly on IW and the immediate Tumen River area and on Eastern Mongolia. As a result the National Area Reports and the Sectoral Reports do not include the RF or PRC components of the steppes.

The first formal introduction of new zones, was at the Inaugural TumenNET Council Meeting held in May 2001. The PCU proposed the expansion of the project to new steppe zones in China and Russia. The minutes of the meeting note "Council endorsed the idea of explore the concept of dedicated transboundary zones... The Tumen River Basin Zone... the Daurian Steppe Zone... the Manchurian Steppe Zone...".

However, it is clear that this change in focus of the project was not understood by many of the participants. Initially PRC and Russia were not happy with this proposal. Following the Council Meeting, there was considerable effort (and shuttle diplomacy) made by the PCU over the period June, July and August to convince cooperating agencies of the value of expanding the project area.

On August 13 the CTA sent a letter addressed to "TumenNET Councillors and Friends of TumenNET" informing them of the imminent TDA Workshop. This letter states "The present TumenNET zones are...", the Mongolian Plateau Zone, the Daurian Zone, and the Tumen Basin Zone.

The TDA workshop held at the end of August 2001 (over a year after project start-up), was the first occasion that the new zones were brought into the TDA/SAP planning process.

The reasons for this shift in focus are considered by the Evaluation Team to be as follows:

- Recognition of the continuing problems in addressing IW and pollution in the Tumen River Area;
- Concern that this might jeopardise the project;
- Recognition that the design focus on the Tumen River Area left Mongolia marginally involved in the core project;
- The expansion of the steppe zone to PRC and RF, brings a transboundary element to the steppes;
- The emphasis on the key IW problems of the Tumen River Zone were then largely lost.

The impact of the introduction of new zones was significant. The emphasis of the project was shifted towards biodiversity. The TDA workshop was still largely focused on applying IW transboundary concepts and tools to global biodiversity issues. However, the PCU and UNDP/GEF technical advisors should have recognised the significance of these changes and brought in appropriate expertise in biodiversity conservation strategy development.

The Evaluation Team recognises this as a tactical decision by the project to reduce the risk of a serious hiatus in project implementation. The decision to create the new zones is not one that can, or should, now be changed.

⁶. The Mongolian or White Tailed Gazelle (Procapra Gutterosa) is not yet listed as a threatened or endangered species (IUCN Red List 2000), nor is it listed in the Mongolian Red Book. The present best estimate is of a population of around 2,000,000 in Mongolia. There is however a proposal to include the species in the Convention on The Conservation of Migratory Species in the "Lower Risk/near threatened" category, the same IUCN Red List category as the Goitered or Sand Gazelle - Gazella subgutturosa. (http://www.wcmc.org.uk/cms/cop7/species_proposals/word/II_14_Procapra_gutturosa_MNG.doc)

3.2 Project Management

The project is "implemented" by UNDP on behalf of GEF. The role of UNDP is to ensure that the project design and execution conform to GEF criteria and guidelines. The project is supervised by the UNDP Beijing office and supported by the other UNDP country offices. The technical supervision and backstopping support comes from the UNDP GEF IW and Biodiversity personnel based in New York and Kuala Lumpur, both geographically distant from the project.

UNOPS was subcontracted by UNDP to "execute" the projected. The role of UNOPS is predominantly administrative including sourcing long term staff, organising contracts, managing accounts and review missions.

At the top level the ProDoc proposed a Project Steering Committee comprising the TRADP Regional Environmental Working Group extended with representatives from UNDP, UNOPS, the Tumen Secretariat, NGOs and the CTA.

The project would be managed by the PCU, led by an internationally recruited CTA, and supported by a Programme Officer and Communications Specialist, both regionally recruited.

At national level the TRADP National Teams with the addition of the national GEF Focal Point would take overall responsibility for in-country activities. The ad hoc National Environmental Working Groups would provide technical support and National SAP Planning Units would be established.

This is very much the structure outlined in the Management Framework prepared by the CTA in September 2000, following his inception mission round the region. However, it did note the need to "…re-activate the national Environment Working Groups to become formal/informal advisers to the TRADP National Teams and/or the GEF Focal Points and the national SAP Planning Units". Effectively the TRADP environmental initiatives had been suspended following an Environmental Working Group Meeting in September 1998, while they waited for the proposed SAP project to become effective.

When the project eventually became operational, there was no effective environmental management structure, the environmental working groups existed only on paper and had no national mandate. The project GEF Focal Points were appointed by the TRADP National Coordinators and were members of the TRADP National Teams. The key problem was that TRADP was traditionally preoccupied with investment promotion and trade and did not have a history of environmental expertise in its committees.

As a result, TumenNET moved away from TRADP, establishing a separate set of networks, and parallel sets of institutions. This has led to some confusion in the participating countries over the different roles and responsibilities of TumenNET and TRADP.

In the meantime, TRADP has initiated on their own a number of environmental projects in the Tumen River Area, including projects to address the three main sources of pollution in the PRC portion of the watershed. These should be included in the review of ongoing and planned projects that , and it is recommended in 4.2.2., in order to avoid including actions in the SAP that are already covered by others. that the project review these as components of the SAP.

The TumenNET Council

In March 2001, the PCU drew up the TORs for the TumenNET Council – to serve as the Steering Committee for the project. However, the membership was expanded beyond that suggested in the ProDoc to include the Commercial Sector, Lead Agencies, Research and Academic Institutions and representatives of the Donor Community.

The duties of the council were similarly expanded to look to the future implementation of the SAP.

Beyond the normal steering committee roles of dealing with project progress, and external reviews, the TORs for the TumenNET Council were extended to promoting "green" investment, promoting regional

partnerships between the community, government and the business sector and to ensure compatibility with national policy and advise on legislative and institutional issues.

The first TumenNET Council was held in Beijing on the 28th and 29th May 2001. This meeting was attended by around 40 people: government departments, NGOs, the UN, business and investment sectors, and academic and research institutions and the diplomatic community.

The proceedings started with presentations from the Lead Agencies on project achievements and challenges and "...quickly turned to post-project issues like SAP implementation, funding and enabling measures". The meeting was clearly a major awareness raising success and raised keen interested in the issues of implementing post-project interventions. However, it is likely that well over half the participants were not fully conversant with the project, and were not in a position to give guidance on the first of the TORs, "To monitor progress, workplans and outputs, and participate in external reviews".

The meeting was attended by one representative from UNOPS and the meeting report notes that "UNOPS... will propose to delete the mid-term review..."UNOPS also suggested **merging** the Tri-Partite Review (TPR) meeting with the next Council meeting scheduled for November in ROK.

The next council meeting took place in Korea and was attended by over 50 senior executives. According to the UNDP Office Beijing and the PCU the TPR was considered unnecessary, and was in any case no longer a UNDP requirement.

It is the view of the Evaluation Team that a council meeting of this size and composition is not a substitute for a technical project review. The loss of the mid-term review and the TPR is unfortunate, as it may have highlighted the changes in project emphasis and advised accordingly.

Regional Coordination beyond TumenNET

All parties have expressed concern over the maintenance of a regional coordination function after the present project has ended. The present phase of TRADP runs to the end of 2003. The future of TRADP is presently under consideration. While the SAP must include a recommendation for a regional coordination mechanism, this could be considered as a part of the TRADP function, at least in the interim period until there is a formal program to implement the SAP.

3.3 Stakeholder Involvement

The ProDoc states "the project will also give special consideration in having broad coverage of people participating in the Consultation Meetings and Planning Workshops. In particular, the project encourages Private Sector, NGOs, and women participation. Efforts will be made to assure that at least 30% of all participants in the Consultation Meetings, Planning Workshops and training are women".

In terms of women participating in the project at the anticipated levels, the project has been successful. The Evaluation Team met a representative set of the project partners and in many cases women were strong participants.

The NGO community was also well represented, particularly in AWARE and SGP, although the PRC concept of NGOs would probably more accurately be classified as parastatals.

The ProDoc "Expected End of Project Situation" suggests that "...the SAP will have been prepared using a Participatory Approach and by mobilising grass root participation". The project has certainly facilitated a participatory approach, and with the AWARE component raised public awareness. However, the implied grass roots participation in the planning process is totally unrealistic, and was not addressed by the project⁷. While public participation can be brought into the TDA and SAP process,

⁷ The stakeholder meetings held to discuss the draft zonal TDA were informative, but can hardly be considered as public participation.

there is no set process or guidelines on how to do this, and it is probably totally impractical to attempt this in a two-year project.

3.3.1 Ownership

The PCU has consistently followed a policy of reliance on local expertise. The switch from international consultants to Lead Agencies, the identification of partner institutions and the creation of networks has all been a deliberate strategy to encourage ownership of the project, and of the TDA and the SAP. The TDA and the SAP are truly local products⁸. This has generally been an excellent policy. The Evaluation Team does feel that local expertise should have been supported more strongly by external expertise in those few areas where it was needed – particularly to advise on the development of overall strategies for biodiversity conservation.

The involvement of politicians at an early stage and the creation of the Governors Network and the Governors MOU have also been strong moves by the PCU to develop early political support for the SAP.

There is no doubt that there is a strong sense of ownership and a commitment to the future of the TDA and SAP among those directly involved in the project.

However, the key challenges still lie ahead. Local support for the SAP must now be translated into national support. The project areas in RF and in PRC are remote from the capitals. Investment in these areas has not been understood to be a national priority. The development of the SAP has just begun. The first challenge is to develop a SAP that has real content – that identifies concrete actions to address the causes of the priority problems identified in the TDA. The second challenge is to achieve endorsement of the SAP by the member countries. The final challenge will be to mobilise the resources necessary to implement the SAP.

4 Recommendations

The preparation of a SAP is a delicate balance between what is needed and what is politically acceptable or doable. A strong SAP that develops concrete actions to address the priority environmental issues, but that is not subsequently endorsed by governments, represents failure. A SAP that is so watered down that it is devoid of any real content in order to ensure political endorsement, also represents failure. Relatively few SAPs have been developed to date that have real content.

Developing a strong SAP that will be signed by the governments is the key remaining challenge for this project and the TumenNET countries.

4.1 General SAP Structure and Content

The key output

The Strategic Action Programme is the one key output of this project. The SAP is the only document that needs to be formally signed by the member countries. All the other reports prepared up until now are working documents that have been produced in a logical sequence as preliminary steps leading to the development of the SAP. If governments formally sign them, so much the better. If governments do not sign the SAP, the project will have failed in its principal task.

Balance between the political and the technical

The preparation of the TDA has been primarily a technical exercise with a limited, but strategically important, level of participation from government authorities and decision makers. The SAP must now be prepared by a balanced team of technicians, government authorities and other policy makers. Technical specialists who worked on the TDA are needed to ensure continuity with the TDA. The

⁸ However, this approach need not preclude the provision of additional guidance and support to those institutions during the process of developing the TDA and SAP,

policy makers and government authorities must play the lead role in building government commitment to the document development and to maximise the chances of formal government endorsement.

The signing of the SAP is the one key political act that commits the member governments to undertake the specific actions identified in the SAP. Once signed, SAP implementation once again becomes a primarily technical exercise, although mechanisms for ensuring continued political commitment and for regional coordination need to be included.

Prioritising Issues

The logic of the TDA and the SAP is that it is the TDA that identifies the priority environmental problems that need resolving and that these priorities are agreed as the regional framework that will then guide national priority actions. The TDA failed to formally rank different environmental problems, although this was to some extent done at the TDA workshop.

The TDA Lead and Partner Agencies, with the support of the PCU, should review the TDA and provide guidance on the priorities that need to be addressed in the SAP.

SAP Support

The SAP is now under preparation. The PCU needs to support this final process during the last six months of the project, to ensure that the content of the SAP retains credibility and is acceptable to the participating countries. It is strongly advised that the PCU ensure that there is outside guidance provided at national and bi-lateral and multi-lateral meetings. The key point to make is that actions must address priority problems. Problems need not be the same in two or more countries, and each country needs to address their own problems but under the framework of the regional environmental priorities set alluded to in the TDA.

At present ROK as the Lead Agency, has the responsibility for supervising the preparation of the SAP

- 1. The PCU should meet with the Lead Agency as soon as possible, to discuss the SAP-related recommendations in this evaluation report. If possible, UNDP/GEF technical backstoppers in International Waters and Biodiversity should also attend this meeting.
- 2. As each national SAP Task Force begins their work, it is critical that the PCU and the Lead Agency do everything possible to ensure that concrete actions are identified to address each of the priority problems.
- 3. The Lead Agency should send facilitators to each of the key national workshops. One of the key tasks of the facilitators should be to ensure that point number 2 is addressed.
- 4. Doing this will be a test of the Lead Agency concept. Defining actions will probably be a more sensitive topic than previous TDA related tasks or EIS and AWARE components have been.

If there are concerns of possible conflicts of interest or lack of neutrality, then it may be necessary for the PCU to bring in an international consultant to assist countries in preparing national actions and in bi-lateral and multi-lateral negotiations.

SAP content

The Strategic Action Programme should include:

- A general policy statement on objectives this is largely covered by the existing 1995 MOU
- Specific political commitments to undertake the direct and indirect actions of the SAP
- Direct actions that are:
 - Regionally prioritised
 - Primarily national
 - Site specific
 - Costed, and with
 - Defined responsibility for implementation distinguishing between those
 - Which will be done with local resources and those
 - Requiring donor assistance

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- Indirect actions that may include
 - SAP coordination
 - Policy and legislative changes
 - Institutional strengthening & capacity building
 - Monitoring, evaluation and data exchange...

Essential content

The SAP must identify specific actions to address all the major international waters and biodiversity issues identified in the TDA, or give a good reason for not doing so.

4.2 Specific Recommendations

4.2.1 Pollution Sources on Tumen River

It is critical that the SAP includes concrete actions to address specific pollution sources on the Tumen River. This project was conceived and developed as an international waters project first and a biodiversity project second. The principal international waters environmental issue that this project was developed to address was water pollution in the Tumen River. Even though the project has since expanded to include two steppe zones that focus on biodiversity, the TDA has confirmed that water pollution in the Tumen River remains the single most important environmental problem in the entire expanded project area. Yet the preliminary activities proposed in the TDA do not include any actions that address specific sources of pollution in the Tumen River

The credibility of the entire SAP is at stake. If TumenNET member countries wish to seek donor funding to assist in implementation of SAP actions, they must take steps to ensure the overall credibility of the SAP. If donors realise that the SAP has failed to deal effectively with the one core issue it was intended to address, they are likely to be reluctant to consider funding for other actions, however well they may be conceived.

To better mobilise political support for these actions, it may be of particular importance to stress the human health benefits of water pollution clean-up.

4.2.2 Review of all relevant ongoing and planned projects

An exceptionally high proportion of the activities proposed in the TDA are already covered, in whole or in part, by ongoing or planned projects. It is critical to complete and update a review of ongoing and planned projects that cover international waters and biodiversity conservation in the project zones. It is critical that the SAP actions do not duplicate what is already covered. Rather, the SAP planners should seek to develop linkages with ongoing projects, should seek to influence the content of project under development to better address SAP priorities. SAP planners should only develop new activities as needed to fill in key gaps for environmental priorities not already covered.

The Evaluation Team made no attempt at an exhaustive inventory of ongoing and planned IW and biodiversity projects in the TumenNET Area. However, sometimes by direct questions, sometimes by chance, a number were identified that seem to directly address key issues identified in the TDA.

Examples of existing or proposed Tumen River Area projects

- 1. TRADP has prepared two Finnish-funded, pre-feasibility studies for reducing pollution from the Kaishantun & Shixian pulp and paper mills on the Chinese side of the Tumen River.
- 2. TRADP has developed a project to build a municipal sewage treatment plant for the city of Yanji on the Chinese side of the Tumen River. A NORAD appraisal mission was scheduled for mid-April. (Yanji and the two pulp mills are responsible for over 50% of the Tumen River pollution of Chinese origin.)
- 3. UNDP/ROK have developed a project document for the preparation of a Tumen River Watershed Master Plan. An inception mission is planned for June. Measures to address industrial and urban-based pollution on the Tumen River will be included in the Master Plan.
- 4. UNDP/ROK have developed a project document for Water Quality Training for the Tumen River countries.

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5. UNDP/UNESCO/ROK have developed a project document for the creation of a new Man and the Biosphere Reserve for the Khasan Wetlands.

Examples of existing or proposed Daurian Steppes and Mongolian Plateau projects

- 6. The UNDP/GEF Biodiversity Conservation and Sustainable Livelihoods Options in the Grasslands of Eastern Mongolia Project focuses on biodiversity conservation in seven PAs and their buffer zones in the three eastern provinces. This covers all of the Mongolia portions of the Daurian Steppes and of the Mongolian Plateau.
- 7. UNDP/RF has prepared a GEF Medium-Sized Project Brief entitled "Conservation of the Wetlands-Steppe Complex in the Daurian Steppe Eco-Region" for the RF portion of the Daurian Plateau. It will focus on strengthening protected areas management, creating new PAs, increased awareness raising and on buffer zones
- 8. In Inner Mongolia, the Chinese are developing a biodiversity conservation project with the assistance of Canadian CIDA. It will target several PAs including those in the Inner Mongolian portion of the TumenNET Mongolian Plateau Zone.

The SAP planners should seek to develop links with ongoing projects and to influence or redirect, as possible, the content of projects under development, in line with evolving SAP strategies and actions.

4.2.3 Protected Areas and Resettlement

At the time of the evaluation, many of the proposed biodiversity linked activities focused on management of existing or new PAs. Some of these areas have people living there, some are actively farmed, some provide seasonal grazing, others timber and non-timber resources. In PAs in Mongolia there is commonly seasonal grazing and medicinal plant collection, PRC has designated wetland PAs which are actively farmed, as well as having settlement within many of their PAs.

The project should be aware of the increasingly tight international guidelines on involuntary resettlement. These regulations apply to all land users, including those with formal land rights, usufructuary rights and squatters. As an example, the current World Bank Guidelines would require consideration of resettlement issues if it is part of any project in which resettlement is a component, even if it is the host government that is financing and implementing that component.

All proposals which have any elements associated with resettlement or changes in land use or land access rights should follow current guidelines and may well need to incorporate a resettlement plan.

4.2.4 Supra-regional issues

The TDA identifies significant threats to wetlands and migratory birds and problems of marine pollution as significant "supra-regional" environmental issues. The early outline for the SAP did not include actions to address these issues – this oversight has apparently now been addressed. ROK, with their concern for their regionally important wetlands and migratory birds have now been given the lead developing direct actions for SAP implementation.

4.2.5 Strengthening the biodiversity components of the SAP

Increase emphasis on conservation of ecosystems

Most of the analysis of biodiversity and threats to biodiversity focused more on the species level than on the ecosystem. To improve biodiversity conservation strategies and actions for the SAP, the Project should attempt to complete the work already done under the TDA with an analysis of the adequacy of coverage of ecosystems by the existing networks of PAs and management areas within the three zones.

Existing classification systems should be reviewed to see which most closely correspond to characteristic differences in levels of endemism and in levels of species diversity.

Ecosystems should be analysed for the biodiversity conservation value, giving higher priority to:

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- Ecosystems of special importance as habitat for endangered species of high conservation value (i.e., tigers and leopards)
- Ecosystems whose original geographic area has been severely reduced;
- Ecosystems with the highest level of endemism;
- Ecosystems with the highest level of species diversity;
- Ecosystems of other unique or special features;

The SAP should seek to ensure that representative areas of the full range of ecosystems of the three zones are covered by an appropriate mix of PA and sustainable use areas.

Critical need to review management capacities for PA

Biodiversity conservation in the project zones to date has focussed almost exclusively on PA and most of the preliminary identification of activities for biodiversity conservation in the TDA focus on PA. The Preliminary TDA (1997) found that there was very little capacity in most of the member countries for PA management or for sustainable financing of PAs. The current TDA did not analyse these national capacities for PA management or financing. It is therefore critical that this analysis be done immediately and that SAP emphasis on PAs be adjusted accordingly.

Strongly increase emphasis on sustainable use strategies

Biodiversity can be conserved through protection or through sustainable use. SAP planners should assess the potential for conservation through the development and/or extension of sustainable use systems for each of the ecosystems in the three zones. Where appropriate, these should be translated into sitespecific actions in the SAP.

The biggest potential for sustainable use strategies is on the steppes. Most of the biodiversity of the steppe grasslands is found outside the PAs yet all former systems of management have almost totally broken down. Nomadic grasslands use systems were replaced by government ownership of land and livestock. Livestock were privatised between 10 and 20 years ago in the three countries. Open access now prevails and owners can now put unlimited numbers of livestock wherever and whenever they please. Grasslands degradation is becoming critical in many areas. Biodiversity is being lost, the economic base of the livestock industry is being diminished and the resulting "Yellow Dust" has shocked everyone across the region.

As previously discussed, there are already protected areas projects in both of the steppe zones that are ongoing or under development. It would seem that the critical need is for the development of sustainable use systems for the grasslands outside PAs. This is not simple – the development of range management systems is one of the most difficult NR management challenges. But there are community-based management approaches that are working very well in similar dryland areas where land is owned by government and livestock are privately owned. An outline of such an approach is presented in annex 10. It is strongly recommended that SAP planners consider the inclusion of similar pilot range management activities in the SAP.

As another example, the Preliminary TDA states that Siberian tiger habitat that is managed using selective logging harvest systems generally retains most of its value as tiger habitat. Forests that are clearcut do not. Therefore, a network of PAs of prime tiger habitat that are linked together with other suitable habitat areas managed through selective harvest systems, may be developed together as more effective conservation strategy for the Siberian tiger than PAs surrounded by forests managed through clear cuts.

Drop "transboundary" as a criteria for BD site selection

SAP planners should not use a transboundary location as a criterion for the selection of sites for biodiversity conservation actions. Good sites may happen to be located in a border area – indeed this may be fairly common in parts of the project zones. Some border order areas have relatively pristine, undegraded ecosystems because people were kept out as a result of past border conflicts/tensions. In this case, the criterion of relatively pristine, undegraded areas may lead one to chose a border site for a PA or for the development of a sustainable use system.

4.2.6 Use "Yellow Dust" as Catalyst for SAP support

The problem of "yellow dust" is a truly regional environmental issue. It is caused by wind erosion on the bare, degraded soils of the steppe grasslands. The Deputy Secretary General of FKI said that the economic costs to Korea alone are "massive". Yellow dust is also believed to have negative impacts on human health. Some of the most severe incidents of yellow dust in decades occurred during the evaluation – the subject currently enjoys a very high level of awareness amongst government decision-makers, heads of industry and the public in general. The Evaluation Team believes that the high level of awareness could be harnessed to mobilise needed support for the endorsement and the implementation of the SAP.

The logic is as follows:

- Open access and overgrazing of the steppes results in the loss of biodiversity. 90% or more of the steppe ecosystem is found outside PAs;
- Open access and overgrazing of the steppes leads to wind erosion from bare soils resulting in "yellow dust";
- The source of yellow dust are the degraded steppes of Inner Mongolia, Mongolia and beyond;
- The two problems (loss of grasslands diversity and yellow dust) have a common solution the development of sustainable use systems that maintain the productivity and grass cover of the steppes;
- One should be able to mobilise the high level awareness of the problem of yellow dust as a catalyst to gain political and donor support for rangeland management pilot interventions that are necessary for biodiversity conservation.

4.2.7 Combine the two steppe zones into one

The Tumen River Zone is very different ecologically, economically and in terms of land use, from the two steppe zones. The two steppe zones are much more similar in terms of ecosystems, land use and environmental problems. It is recommended that the TumenNET countries analyse the opportunity for combining the Daurian Steppe and the Mongolian Plateau Zones into one single Steppe Zone.

ANNEX 1 Terms of Reference – Terminal Evaluation Mission

RAS/98/G31

Preparation a of Strategic Action Programme (SAP) and Transboundary Diagnostic Analysis (TDA) for the Tumen River Area, its coastal regions and related Northeast Asian Environs.

1. Introduction

The Tumen River Economic Development Area (TREDA) and its Northeast Asian environs (hereinafter referred to as "the Region") includes parts of the People's Republic of China, Democratic People's of Korea (DPRK), Mongolia, Russian Federation, and the Republic of Korea (ROK). The Region is abundant with natural resources and has a great human resource potential. Together with the political will of all parties concerned, and the fact that it lies close to some of the world's fastest growing and biggest economies, this area is very likely to become one of the largest international development centers in the region. As a result, there is a long-term potential to attract billions of dollars in investments for infrastructure, natural resource development, industry, mining, oil exploration, and urban development. However, the industrial and economic development will also bring new dangers, and unless mitigation strategies are immediately implemented, growth in the Region will threaten the regional environmental resources.

Although many of the countries in the Region have received significant international assistance, very few of them have a regional focus.

One exception is the Tumen River Area Development Programme (TRADP) supported by UNDP which begun in 1992 with the participation of China, DPRK, Mongolia, ROK, and Russia. The participating countries requested assistance to elaborate an economically and environmentally sound approach to development of the Tumen River Economic Development Area (TREDA), its related coastal areas, and its Northeast Asian environs (RAS/92/430 and RAS/97/430).

TRADP is the only regional forum in the Region. As such, it receives strong support by the member states and has greatly enhanced economic collaboration in the Region. In particular, is has contributed significantly toward the signing of the *Memorandum of Understanding on Environmental Principles* (MOU) in December 1995. This historic agreement can be considered as the starting point for raising environmental concerns and government commitment to concerted actions for environmental protection and rational management of natural resources.

Most of the current <u>environmental</u> initiatives are implemented at the national level, and there are only very few initiatives which cover the region, such as: UNEP's Northwest Pacific Action Plan, ESCAP's Northeast Asia Region Environment Programme, and the IOC's Northeast Asia Regional Global Ocean Observation System.

Under the preparatory assistance phase (RAS/96/G41) of the present project, two regional workshops and one identification and formulation mission were organized. The first workshop, held in Vladivostok in May 1997, introduced the project concept to the participating countries and determined in a participatory manner the general goals and approach to the project. The mission conducted data collection and prepared a preliminary TDA and draft Project Brief. The second workshop, held in Beijing in October 1997, defined the details of the Project and built consensus.

The current project is designed to strengthen capacity to manage regionally and globally important environmental resources in the Tumen Region. The project will build regional capacity to prepare and implement collaborative, targeted and effective efforts. Specifically, the project will prepare a Transboundary Diagnostic Analysis (TDA) and a Strategic Action Programme (SAP), and the capacity to implement the SAP. This SAP will provide the common framework for the identification and formulation of strategies, programmes, and projects responding primarily to transboundary issues of environmental management.

The development objective of this project is to promote environmental sustainable development in the Tumen Region. The project intends to provide regional environmental benefits by protecting international waters and biodiversity in the Region.

Related immediate objectives are defined as:

- Capacity to prepare Environmental Strategic Action Plan (SAP) for protection of international waters and biodiversity is reinforced.
- Awareness on transboundary environmental Issues raised at all levels.
- Transboundary Diagnostic Analysis (TDA) and Environmental Strategic Action Plan (SAP) are Developed.
- Capacity to implement SAP strengthened at the National and Regional levels.

The immediate management of the project is carried out by the GEF-SAP Coordination Unit, comprising the Chief Technical Advisor, Mr Gunther Mau; a Programme Officer, Mr Alexander Tkalin, Manager for the Environmental Information Component, Ms Ying Zhou-Tala; an Administration and finance officer Mr Katja Jalava and part time Web-Master Mr Darryl Penrice. The mandate of the GEF-SAP Coordination Unit is to organize and coordinate the TDA-SAP planning process and to ensure that the project is implemented accordingly. The GEF-SAP Coordination Unit was to work closely with the Tumen Secretariat. Implementation was due to start March 1999 but was delayed until the hiring of CTA Mr. Gunther Mau in June of 2000, although some administrative preparation was underway from March 2000. It is currently expected that the project will end on September 30, 2002 at which time it is anticipated that of the project budget of \$4,671,800, approximately \$350,000 will remain unspent.

2. Objectives and Issues to be Addressed

- Assess the results, which have been achieved by the project.. In particular it should:
 - List the achievements of the project and assess their effectiveness in solving the perceived problems and limitations.

• Assess whether the project has produced its outputs effectively and efficiently and identify the major factors, which have facilitated or impeded the progress of the project in achieving its desired results.

• Determine the effect of the project on target groups: The quality, usefulness and sustainability of the project's achievements and outputs in terms of commitment to sustainable management of the environmental resources of the Tumen Region and improving the capacity to prepare and implement collaborative, targeted and effective efforts. Specifically, the capacity to implement the SAP.

• Examine the role the project took in terms of supporting women and civil societies/NGOs, particularly through the Small Grants Programme as well as collaboration with the private sector.

• Assess whether the inputs of the various Government agencies were sufficient and met with their stated obligations and commitments and the overall level of government "buy-in" to the SAP process.

 Review and assess the efficiency and adequacy of implementation arrangements and management of the project

• In particular, the evaluation should review the quality and timeliness of inputs and activities by the main implementing sub-contractors of the project – Lead Agents and Partner Institutions.

• It should assess the effectiveness of direction, implementation and contribution to regional and national ownership of the project of the various coordination and management bodies including the Steering Committee (Council), the TRADP National Teams, National SAP Planning Units and Task Forces and the overall TumenNet "network".

• It should assess the effectiveness of the PCU with regard to its composition, operational modality and delegation of responsibilities.

• The effectiveness of UNOPS execution and the contribution of the UNDP Country Offices should also be reviewed.

- □ Identify the lessons learned during implementation, identify the major impediments encountered and make specific recommendations to address these findings.
 - In this regard the evaluators should make recommendations regarding the most effective use that remaining project funds may be put to further enhance the achievements of the project.

3. Products Expected from the Evaluation

The evaluation mission will complete the Project Evaluation Information Sheet (PEIS) according to the existing format and produce a report according to the structure outlined in the UNDP Guideline for Evaluators. In addition, the final report should contain the following annexes:

- Terms of Reference for final evaluation
- Itinerary (actual)
- List of meetings attended
- List of persons interviewed
- List of documents reviewed
- Any other relevant material

4. Methodology and Implementation Arrangements

The mission will consist of two independent international consultants. The team will be assisted by project staff and by interpreters as necessary.

The team leader shall be responsible for the overall review of the project and with specific technical issues related to International Waters components of the project. The consultant should have a solid background in natural resource management and planning, participatory approaches to capacity building and familiarity with GEF, TDA & SAP concepts and processes, have a minimum of 10 years of relevant experience including evaluating, formulating and managing natural resource projects. S/he should be fluent in English.

The second member of the team will support the team leader in the overall evaluation of the project and pay particular attention to the Biodiversity components of the project. The consultant should have a strong background in biodiversity conservation and management related issues and familiarity with GEF, TDA & SAP concepts and processes, have a minimum of 10 years of relevant experience including evaluating, formulating and managing natural resource projects. He/she should be fluent in English.

The team members shall familiarize themselves with the project through a review of relevant documents prior to their travel. These documents include inter alia:

- GEF Project Brief and Project document
- Inception report
- CTA progress reports
- Council meeting reports
- Preliminary TDA and supporting documents
- GEF annual progress reports

The above-referenced documents shall be sent by courier or email to the evaluators in advance of the mission.

Further information may be accessed on the 10 project websites at:

-	1 5
Regional site	http://www.tumennet.org
Chinese site	http://tumennet.yeah.net
Mongolian site	http://montumennet.freyellow.com/english.htm
Korean site (ROK)	http://tumennet.me.go.kr
Russian site	http://www.tumennet.febras.ru
Regional information	http://www.tumen.org.cn
Chinese site	http://tumen.com.cn/index2.htm
Korean site (ROK)	http://neaspec.go.kr/tumen/e/index.htm
Mongolian site	http://www.tumennet.mn
Russian site	http://www.tigis.dyo.ru/TumenProject/Start.htm

The team will visit all major project centres and to the extent possible, the mission should allow for consultation with the project staff and affiliated agencies, the UNDP Country Office representatives, GEF/UNDP, UNOPS, stakeholders and beneficiaries.

5. Mission Schedule

Suggested date of start for the evaluation mission – mid March 2002.

Annex	2	Actual	Itinerary
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Week (One			
Sun	17	Beijing	Arrive	
Mon	18	Beijing	PCU China GEF Focal Point (MOFTEC-CICETE) UNDP China Country Office	
Tue	19	Beijing - Changchun	air travel	
Wed	20	Changchun	AWARE partner institution Nat SAP Planning Unit (EPA)	
Thu	21	Changchun	EIS Lead Agent TDA partner institution	
Fri	22	Changchun - Beijing	air travel	
Sat	23	Beijing - Ulaanbaatar	air travel	
Week	Гwo			
Sun	24	Ulaanbaatar- Ondorkhan SGP project site visit		
			Environment Agency Small Grants Programme Governor	
Mon	25	Ondorkhan	SGP	
Tue	26	Ulaanbaatar	AWARE Lead Agent (Badarch) TDA partner institution EIS partner institution GEF Focal Point UNDP Mongolia Country Office	
Wed	27	Ulaanbaatar - Seoul	air travel via Beijing	
Thu	28	Seoul	FKI Korea GEF Focal Point (MoFA)	
Fri	29	Seoul	UNDP Seoul Office AWARE partner institution (Mdm Park) EIS partner institution (NIER)	
Sat	30	Seoul - Vladivostok	air travel	

Week	Three		
Sun	31	Vladivostok	report writing
Mon	April 1	Vladivostok	Nat SAP Planning Unit (FEBRAS) AWARE partner institution (WWF)
Tue	2	Vladivostok	TDA Lead Agent (Pacific Geographic Institute) Local Administration
Wed	3	Vladivostok - Moscow	air travel
Thu	4	Moscow	GEF Focal Point (Peshkov) UNDP
Fri	5	Moscow	Ministry of Natural Resources
Sat	6	Moscow	Report writing
Week	Four		
Sun	7	Moscow	Delayed flight
Mon	8	Chitinskaya Oblast	Delayed flight
Tue	9	Chita - Moscow	Delayed flight
Wed	10	Moscow - Beijing	air travel
Thu	11	Beijing	report writing
Fri	12	Beijing	report writing
Sat	13	Beijing	report writing
Week	Five		
Sun	14	Beijing - Hohot	air travel
Mon	15	Beijing	Inner Mongolia EPA (National SAP contact) and DOFTEC . Field Visit PCU
Tue	16	Beijing	TRADP
Wed	17	Beijing	report writing
Thu	18	Beijing	UNDP Beijing
Fri	19	Beijing	report writing
Sat	20	Beijing	report writing
4.3	Sun	21 Beijing - Homeba	se air travel

Annex 3 List of Meetings and People Interviewed

China

Beijing

PCU Dr Alexander Tkalin Programme Officer Ying Zhou-Tala EIC Manager Gunther Mau Chief Technical Adviser

UNDP China Country Office Kirstin Leitner

Ministry of Foreign Trade and Economic Cooperation, China International Centre for Economic and Technical Exchange – MOFTEC CICETE (GEF Focal Point) Wang Zhen Deputy Director Zhao Yong Li Division Chief

Changchun

Jilin Provincial Publicity and Education Centre of Environmental Protection (AWARE Partner Institute) Li Li Project Coordinator Shu Hua Yang Deputy Director Wang Di Project Assistant

Institute of Environmental Protection of Jilin Province (EIS Regional Lead Institute) Yin Tianyou Senior Engineer Fan Weimin Deputy Director Liang Dongmai Engineer

Environmental Monitoring Central Station of Jilin (TDA Partner Institute) Li Zhongshan Deputy Director Xu De Zhi Senior Engineer Jin Yan Engineer

Environmental Protection Agency of Jilin Province (SAP Planning Unit) Wang Guo Cai Deputy Director Shen Guisheng Vice Director Lou Jia Project Officer

Mongolia

Ondorkhan

Hentii School of Inventor Youth (Green School) Gantig Baatarsukh Director

Secondary School (Green School)

M Zolzaya Director

Khentii Aimag Government Choijin Erdenbaatar Governor

Small Grants Programme Healthy Environment Traditional Medical Centre Rencendor Baigalmaa Director of Kentii Aimag Health Department ?? Director of Hospital

Environment Protection Agency Khentii Province Ms Dolgorsuren Director ?? ?? ??

Ulaaanbaatar

Mongolian Nature and Environment Consortium (AWARE lead institution and lead SAP Planning Team) Dr Badarch Bill Shaw

Institute of Geoecology, Mongolian Academy of Sciences (TDA Partner Institute) D Dash Scientific Secretary

Central for Environmental Monitoring (EIS Partner Institute) Badarch Lkhagvasuren Director

Ministry of Nature and Environment (SAP Task Force Leader) P Baigalmaa International Cooperation Department Officer

UNDP Office Natsuki Hiratsuka Deputy Resident Representative and Programme Director Gordon Johnson Senior Adviser Environment and Natural Resources Management Team

Korea

Seoul

Federation of Korean Industries Tae-Seung Chung Deputy Secretary General Hoon-Jeong Sohn Assistant Manager Environmental Department Soon-Bum Kwon Assistant Manager for North East Asian Economic Relations Jaeyong Choi Chief Planner UNDP/GEF Project Unit Ministry of Environment

Ministry of Environment Jae-Young Ko Director General for International Cooperation Jaeyong Choi Chief Planner UNDP/GEF Project Unit Hee-Kyung Noh Deputy Director UNDP/GEF Project Unit Hyejung Yang Project Assistant Stephen John Danyo Policy Analyst UNDP Seoul Office Anne-Isabelle Degryse-Blateau Representative Sewoo Kim Programme Manager

Environment and Culture Institute Eun-Kyung Park Director

National Institute of Evironmental Research Deok-Gil Rhee Director Air Quality Kim Myungjin International Cooperation Chief Dong-Il Jung Chief Water Chemistry Doug-Hee Rhew Water Quality Research Hyun-Saing Mun Research Planning Division Jin-Han Kim Senior Researcher Wildlife Division

Russia

Vladivostok

National SAP Planning Unit and TDA Lead Agent Alexander Cherednichenko Coordinator Oleg L. Scheka Coordinator

WWF AWARE Partner Institution Vladimir P. Karakin WWF Sustainable Development Programmes Coordinator Olga Kabalik WWF AWARE Coordinator Yuliy Fomenko SGP Coordinator WWF Elena Starostina Press Club Salim Shakizovich Danton Society for the Promotion of the Sustainable Development of Russian Far East (SGP Partner) Irina Milenina Phoenix Fund Chief Consultant (SGP Partner) Sergei L Bereznuk Phoenix Fund Chief Director (SGP Partner) Victor V. Ivin Institute of Marine Biology (SGP Partner) Sergey Maslennikov Institute of Marine Biology (SGP Partner) Alexander Cherednichenko SAP Planning Unit Coordinator Mikhail Bibikov State Committee on Natural Resources Svetlana Veronenko ISAR-RFE (SGP Partner) Olga Likacheva ISAR-RFE (SGP Partner)

Pacific Geographic Institute (EIS Partner and TDA Inputs) Petr Baklanov Cirector PGI FEBRAS Sergey S. Ganzei Deputy Director Anatoly N. Kachur Director for Landscapes and Environment Studies Yuri Bersenev WWF Protected Areas Coordinator Viktor V. Yermoshin Head of Information and Cartography Centre Alexei Lankin Deputy Director International Projects Elena Chernobrovkina RINPRO Moscow

Local Administration State Committee on Natural Resources Mikhail Bibikov Environmental Protection Alexander Cherednichenko SAP Planning Unit Coordinator Vladimir P. Ponomarev Vice Chairman Leonid N. Alexeiko and Dr Chem All Russian Scientific Institute of Nature Protection (Far Eastern Branch, Ministry of Natural Resources of the Russian Federation)

TDA Workshop Vladimir Sergienko Chairman FEBRAS Petr Baklanov Director PGI FEBRAS Anatoly Kachur TDA Adviser Supraregional Zone Sergey S. Ganzei TDA Adviser Mongolian Plateau Zone Boris Lebedev TDA Adviser Daurian Steppe Zone Dmitry Pitruk TDA Adviser Tumen River Zone Elena Chernobrovkina RINPRO Moscow Alexander Chernousov Primorsky Krai Administration Alexander Cherednichenko SAP Planning Unit Coordinator Oleg Shcheka FEBRAS Eugeny Vishniakov Chita Oblast Administration J Tsogtbaatar Director Institute of Geoecology Mongolia Dr Badarch MNEC Mongolia Li Zhongshan TDA Partner China Rhee Deok-Gil Task Manager for Supraregional Zone TDA Choi Jaeyong Chief Planner SAP Planning Unit

Moscow

All-Russian Research Institute for Nature Protection RINPRO Andrey Peshkov Director Nikolai Pomoshnikov First Secretary Ministry of Foreign Affairs International Organisations Department Anna V Belousova

Ministry of Economic Development and Trade Sergey A Patrikeev

UNDP

Peter Newton Head of Environment Unit and GEF Programme Coordinator Elena Armand Programme Officer

China

Inner Mongolia

Environmental Protection Bureau Yun Er Zhu Director Yong Hong Deputy Director Zhao Fuquan EPB Wang Dongpu EPB Li Jian Gang Director DOFTEC Wei Hong Deputy Division Chief DOFTEC Liu Min Project Officer DOFTEC

Beijing

TRADP G Tsogtsaikhan Deputy Director

Annex 4 Documents and Website Materials

Agreement on the Establishment of the Consultative Commission for the Development of the Tumen River Economic Development Area and Northeast Asia (Signed New York 1995)

Black Sea Strategic Action Programme (Web Materials, SAP and TDA) Country EIS Websites Danube Strategic Action Programme (Web Materials, SAP and TDA)

Draft Project Brief for the Preparation of a Strategic Action Programme for the Tumen River Area, it's Coastal Regions and its North East Asian Environs; GEF/UNDP August 1997

GIWA Documentation - ProDoc and background and publicity materials 1999/2000

Guidebook UNDP-GEF (Electronic Version)

Memorandum of Understanding on Environmental Principles Governing the Tumen River Economic Development Area and Northeast Asia (Signed New York 1995)

Operational Program Number 9 Integrated Land And Water Multiple Focal Area Operational Program (Revised)

Operational Programmes GEF 1996 Operational Strategy GEF 1996

Pollution Abatement of the Tumen River: An Interdisciplinary Approach to the Challenge; Yu Fei, UNDP/TRADP October1999

Preliminary Transboundary Analysis of Environmental Issues in the Tumen River Area, it's related Coastal Regions and its North East Asian Hinterlands; UNOPS/GEF-SAP Fact Finding Mission June 1997

Preparation of TumenNet Transboundary Diagnostic Analysis (TDA); TumenNet October 2001

Project Document Preparation of Strategic Action Programme (SAP) and Transboundary Diagnostic Analysis (TDA) for the Tumen River Area, it's coastal Regions and related Northeast Asian Environs; UNDP 1999

Project Implementation Review Of The Global Environment Facility GEF 1998

Project Management and Country Websites

Strategic Action Programme for the South China Sea (Web Materials, ProDoc, TDA and SAP)

Study of GEF's Overall Performance GEF 1997

Summary Report Of The Study Of GEF Project Lessons GEF 1998 TRADP Website

Transboundary Diagnostic Analysis (TDA) (Draft); TumenNet/FEBRAS February 2002

Tumen River Area Priority Environmental Issues Regional Sector Report Jilin Provincial Monitoring Center Station of Environmental Protection 31 July 2001

Annex 5 TDA and SAP Concepts

The project is classified as an International Waters Focal Area project, with the secondary Focal Area as Biodiversity.

The GEF Operational Strategy defines "international waters" as oceans, large marine ecosystems, enclosed or semi-enclosed seas and estuaries as well as rivers, lakes, groundwater systems, and wetlands with transboundary drainage basins or common borders.

The GEF Strategy states that "An initial GEF-funded activity to formulate a Strategic Action Program (SAP) is usually an appropriate first step to help countries define priority problems, establish country and Implementing Agency commitments to specific actions, and agree on additional interventions for their priority transboundary concerns".

Transboundary Environmental Issues:

The GEF Operational Strategy only refers to "transboundary" with reference to international waters. Unfortunately the GEF documents, including the GEF Country Dialogues Glossary of Terms, do not precisely define the term, however it is defined in the Helsinki Declaration⁹:

"Transboundary waters" means any surface or ground waters which mark, cross or are located on boundaries between two or more States. Transboundary impact refers any significant adverse effect on transboundary waters caused by a human activity, the physical origin of which is situated wholly or in part in one or more of the riparian states

While "transboundary" is specifically defined for international waters, it is also loosely used to describe some biodiversity issues. However the focus of the GEF biodiversity programme is not transboundary, it is global value. Technically *transboundary* biodiversity issues should be limited to the case where human activities in one country have impacts on *transboundary waters* and the biodiversity supported by those waters.

Despite this many projects, including this one have tried to fit the concept of transboundary to biodiversity. If used, this should be limited to the following scenario: human activities in one or more countries threaten biodiversity in adjacent or in the case of migratory species, distant countries.

The GEF guidelines do not refer to resolving transboundary problems as a condition for biodiversity interventions. This project should not try to force proposed biodiversity interventions into a transboundary framework, although management interventions may require cooperation between two or more countries.

The SAP Concept

A Strategic Action Programme provides a regional framework for a prioritised set of national and regional actions to achieve the objective agreed by the participating countries, stated in the Project Document *as* "... to promote environmental sustainable development in the Tumen Region... protecting international waters and biodiversity in the Region".

In 1996 the GEF published their Operational Strategy which describes the purpose of the SAP as follows:

"The SAP should establish clear priorities that are endorsed at the highest levels of government and widely disseminated. Priority transboundary concerns should be identified, as well as sectoral interventions (policy changes, programme development, regulatory reform, capacity-building investments, and so on) needed to resolve the transboundary problems as well as regional and national institutional mechanisms for implementing elements of the SAP."

⁹ Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1997)

Fundamental to this is the recognition that management plans have to be revised in response to changing circumstances. The SAP therefore should establish an agreed planning and management process and prioritise an initial programme of interventions based on present needs and knowledge.

The GEF recommends that participating countries adopt a process that includes a formal assessment of problems and priorities, described as a Transboundary Diagnostic Analysis – TDA.

"The centrepiece of the GEF strategy... is the concept of "strategic joint fact finding" as a means of arriving at a consensus on what actions are needed to address threats... collaborating states establish technical teams that work to establish a common baseline of facts and analysis of the problem in the form of a transboundary diagnostic analysis (TDA), which is then used to set priorities for actions to address threats to international waters in the form of the SAP."

The responsibility for formulating the SAP is also clear. "Formulation of SAPs is the responsibilities of the collaborating governments and national/regional stakeholders....It is through SAP formulation that baseline and additional priority actions are identified."

The GEF sees this also as a capacity building exercise and a demonstration of their ability to implement a SAP. This is also embedded in the Project Document in the fourth immediate objective, "*Capacity to implement SAP strengthened at the National and Regional levels*".

However, there is a fundamental flaw in the logic. The SAP must include specific national and regional actions that the countries are prepared to implement. The preparation of a TDA and the formulation and signing of a SAP demonstrates research and planning capacity and political will. It does not demonstrate capacity to implement actions described in the SAP.

Annex 6 Evaluation of the Project Design

1 General

The design of this project was poor. The justification for GEF funding is weak, especially on global biodiversity values. The definition of the project area is wide open to interpretation. The objectives and outputs are concerned mainly with the production of documents with little reference to content. Two of the major objectives and outputs are only weakly linked to the core outputs of the project. The risk analysis is unrealistically optimistic. Important recommendations from the STAP Review are ignored.

Unfortunately, there are two project designs. The first is the original design (the GEF Project Brief) that was approved by GEF. Second, there is the UNDP ProDoc that is signed by UNDP, UNOPS and four of the five countries (DPRK have still not signed). The ProDoc was rewritten from the Brief – they are similar, but far from identical. One of the key differences is in the highest level objectives – see Section 2.5 below.

2 Justification of GEF Involvement

The project focuses on the GEF focal areas of international waters and of biodiversity. The badly polluted Tumen River, although it is a small river, provides a clear justification for the international waters focal area. The Tumen is shared by DPRK, China and the Russian Federation. The ProDoc also targets marine pollution problems in the Sea of Japan along the coasts of RF and the DPRK, although the limits of this area are not defined.

The justification for biodiversity is very weakly made and contains errors. For GEF funding, one needs to show that there is biodiversity of global significance and that is threatened. GEF emphasises the conservation of ecosystems rather than species. In the Tumen design, the emphasis is on species – primarily the Siberian tiger, the Amur leopard and the Mongolian gazelle. One these three, the Mongolian gazelle, is not threatened (recent populations are put at about 1 million or more) and should not have been used to justify GEF funding. This gazelle is also falsely reported to migrate from the Mongolian steppes to the Tumen River Area (over a thousand kilometres away across totally unsuitable habitat). Biomes and ecospheres are mentioned, but no indication is put forward that they are threatened. The design justifies the project in terms of barriers that need to be overcome (lack of consensus, limited cooperative mechanisms, etc.)

The ProDoc states that the most of the threats to biodiversity are transboundary in nature, without providing any evidence that this true (and has not been shown to be true since). It goes on to say that collaborative region-wide activities are needed. This is curious, because most activities will need to be implemented locally.

3 The Project Area

The definition of the limits of the project area in the ProDoc is hopelessly confused, contradictory and imprecise. The GEF Brief and ProDoc are sometimes precise, sometimes imprecise for the geographic locations of the IW component and hopelessly vague for the biodiversity component.

Origins

TumenNet grew out of TRADP. As its name indicates, TRADP was created with a focus on the Tumen River. This project grew largely out of concerns over the water pollution in the Tumen River. To the extent that project area is defined in the ProDoc, this is based on the area covered by the TRADP – an agency for promoting regional economic development. Its limits are therefore based more on regional economic development criteria than on the IW and biodiversity criteria. Ultimately, the working definition of the project area was largely left up to those implementing the project.

Conflicting descriptions in design documents

The full project name is "Preparation of a SAP and TDA for the Tumen River Area, its coastal regions and related Northeast Asian Environs. On the cover pages of both the Brief and the ProDoc, the project area is defined simply as as the Tumen River Development Area (TREDA). The ProDoc does not define what the geographic limits of TREDA are.

TREDA does have a very specific geographic definition. It remains unchanged today since it was defined under two MOUs signed by the five TRADP five member countries in 1995. TREDA is composed only of Yanbian Korean Autonomous Prefecture in eastern Jilin Province of China, the small Rajin-Sonbong Free Economic and Trade Zone in DPRK and, in RF, it includes Vladivostok and the Free Economic Zone of Nadhodka, including Vostochny, and the Primorsky Krai town and ports south of those cities.

The problem of pollution in the Tumen River has always been the key environmental issue to be addressed by this project. However, if one uses TREDA as the definition of the project area, then only a small portion of the DPRK portion of the Tumen River Basin is included in the project area.

In the body of the two design documents, however, the project area is often referred to as TREDA and its Northeast Asia environs or as "The Region". The Brief states that the Region "...includes parts of the People's Republic of China, Russian Federation, Mongolia, DPRK and ROK". Which parts of these countries are not specified. The word "environs" is nebulous at best. All of these imprecise references to an expanded project area potentially open up a geographic area roughly 20 times larger than TREDA for inclusion in the project area.

International Waters

A relatively precise definition of the geographic location of the international waters component is given in the Introduction, "The international waters component is the Tumen River and all of its tributaries, Peter the Great Bay and rivers to the north and south of the Tumen River". However, there are no significant international rivers south of the Tumen and what rivers to the north of the Tumen is totally undefined. There is no indication that ROK or Mongolia are involved in the IW component.

Biodiversity

There is no corresponding statement describing the area to be covered by the biodiversity component -- it is scarcely defined at all. It indicates that raw material supply zones for the Tumen River Area will be covered as will areas affected by transport corridors linked to the TRA. The specific mention of the Mongolian gazelle clearly implies that some portion of the steppes should be included – without defining what portion.

Maps

Several maps are presented in Appendix One of the ProDoc, but none specify the limits of the project area. None of the maps make it clear which portions of the five countries are included. The Tumen River Basin is clearly shown, but these maps do not show which marine areas are covered or which rivers north and south of the Tumen are covered. There is no indication on the maps of what areas are covered by the biodiversity component.

4 TDAs and SAPs as Tools for Biodiversity Conservation

The project focuses on IW and biodiversity conservation. International waters issues, are, by their nature, transboundary. Biodiversity conservation issues are not. They may be, but they are not inherently transboundary in nature.

The GEF Operational Strategy (1996) and the IW Operational Programs 8, 9 and 10 provide explicit guidance for GEF IW projects. Guidance for all three IW OPs are based on the preparation of Transboundary Diagnostic Analysis (TDA) followed by a Strategic Action Program (SAP). These tools were developed for IW, not for biodiversity. They are, however, the only tools specified by the project for both components – IW and biodiversity.

One result is that the design implies that biodiversity must be treated as a transboundary issue – and that transboundary activities must be identified to ensure biodiversity conservation. Very often, in practice, the

opposite is true. Transboundary sites are often some of the most difficult areas in which to develop effective biodiversity conservation systems. Developing effective measures for collaboration/coordination for a transborder wetland, between countries with strained diplomatic relations, is no simple matter. The problem of controlling poaching along transborder natural areas is notoriously difficult to achieve.

The UNDP/GEF Guidelines for Country Teams for the Development of National Biodiversity Conservation Strategies and Action Plans would have been a more useful tool for this project to have used for the biodiversity components.

5 Objectives and Outputs

Two Designs with Different Objectives

The logframe of the GEF Project Brief appears in a restructured and rewritten form in the ProDoc. Most of the content and the details are similar but not identical. The Brief has four Objectives that support a Long-Term Objective. The ProDoc has four Immediate Objectives (IO) that support the Development Objective. The Long-Term Objective, "...to protect globally important resources in the Tumen River Area, its related coastal areas and its Northeast Asian environs through the preparation of a SAP for International Waters and Biodiversity Protection", is very different from the Development Objective, "...to promote (stated as an activity) environmental sustainable development in the Tumen Region. The project intends to provide regional environmental benefits by protection international waters and biodiversity".

It is most regrettable to have two different design documents. The reason for rewriting the document is not clear – it seems to have been an internal administrative requirement of UNDP. Such differences as the one above can substantially change the understanding of the focus and intent of the project design.

Four Objectives

The Project has four Immediate Objectives that are paraphrased as follows:

- IO 1: Capacity to prepare the TDA and the SAP reinforced;
- IO 2: Awareness Raised on Transboundary Issues at all Levels;
- IO 3: TDA and the SAP developed;
- IO 4: Capacity to Implement the SAP strengthened

Emphasis on process rather than content

The core output of this project is the SAP. The other objectives, outputs and activities contribute to, or are ancillary to, the production of the SAP. However, when one reads the details of the ProDoc, the design of this project is all about process – it says very little about relevance and content. It does not define what a TDA and a SAP are. The ProDoc says almost nothing about how to ensure the relevance of their contents.

GEF has invested hundreds of millions of dollars on IW, but this project design says nothing about how this project will benefit from lessons learned from this wealth of experience. GEF has not developed real guidelines for the development of TDA and SAP. There is some guidance in the GEF OPs for IW, but the ProDoc does not specify that these should be used. As discussed in Section 3.1 on Staffing, the ProDoc TOR for the CTA and Program Officer do not specify that they will play any role to ensure relevant content of the TDA and the SAP. The suggested international consultants are not given this task, neitheh is it specified that UNDP/GEF or UNOPS will fill this role. To manage a TDA and a SAP properly is not an intuitive process. It is as though the project staff will be left alone to decide what the content of the TDA and the SAP should be – to reinvent the wheel. A TDA and the SAP, by themselves, are just paper documents. They are the key outputs, and too important to be left undefined.

The ProDoc also says little about measures to ensure the SAP will get approved and implemented.

6 Project Component Linkages

The main output of the project is the SAP. The linkages and relevance of two of the IOs with the production of the SAP are weakly developed, at best. This is true for awareness raising (IO 3),

environmental information systems and harmonised EIA (both in IO 4). The linkage between Capacity to prepare the TDA and the SAP reinforced (IO 1), and the actual production of the SAP, is clear and obvious.

Awareness Raising and Small Grants

Most of the design treats awareness raising as a separate component that is run in parallel with the production of the SAP, but that is not really linked to the SAP. The one exception is under the "End of Project Situation" discussion of the awareness raising component where it is stated, "...the SAP will have been prepared using a Participatory Approach and by mobilizing grass root participation". This presents a clear linkage with the SAP, but this linkage is not developed in the Outputs and Activities of IO 2. Most of the design treats awareness raising as an inherently "Good Thing", without presenting strong justification, focus or linkage with the SAP.

The Small Grants activity is part of the same IO. The only justification for small grants is as support toawareness raising and participation.

One must question the inclusion of awareness raising and small grants in a short, two-year project for the following reasons:

- Awareness raising on environmental issues is much more effective when it is tied with clear messages to the target audience about what they can do about it. The whole purpose of the SAP is to strategically identify concrete actions that can be taken to address priority environmental problems. But these clear messages on what can be done only come near the end of the two-year project.
- The project was under an incredibly tight schedule to complete the TDA and SAP in the two-year period. Developing a true "grass roots" level involvement in TDA and SAP preparation, in the original sense of the term, would have been highly desirable, but very unrealistic in the two-year time frame.
- The inclusion of a small grants component is also questionable, both as a tool for effective awareness raising, and as an administratively complex task to undertake in such a short period. A limited number of grants could have been used strategically as a tool to test new, innovative ways of addressing certain problems, but this is not the justification developed in the design.

Environmental Information System

The weakest linkage is for IO 4 and its two outputs. Output 4.1. is stated as "Environmental research and information system for the Region developed". The ProDoc does not explain why this is it needed, how it will be used or what type of information is needed. It does state that, "This will help strengthen cooperative mechanisms…" and "data… will be made accessible to all concerned and interested parties". But these statements are so vague as to be of little use.

In particular, the EIS is not linked in the design to the TDA and SAP. A regional EIS would clearly be of use for developing the TDA and the SAP. However, the EIS is under Immediate Objective 4, "Capacity to implement SAP strengthened and the National and Regional Levels." The type of data needed to implement the SAP is quite distinct from that needed to do national and regional analyses.

An EIS for the sharing of water pollution monitoring data for an international water body (the Tumen River) is one component of an overall EIS, and probably a minor one in terms of actual management requirements.

It is less clear what is required in terms of an EIS supporting the sustainable use or conservation of biodiversity.

For example, the SAP would typically identify specific activities for biodiversity conservation such as creation and management of new protected areas or the pilot development, testing and extension of sustainable use systems for biodiversity resources. The information needs for these activities will be very specific.

The information systems should be developed accordingly, but they cannot be developed during the project, because the identification of the SAP activities is the last thing the project will do. More importantly, an EIS is only one small part of the capacities needed for SAP implementation.

"Harmonised" EIA

The second output under IO 4 is "Harmonised technical and legal conditions of Environmental Impact Assessment (EIA) developed across the region. The implied logic is that harmonised EIA conditions and the establishment of EISs will provide the capacity to implement the SAP. Again, the logic is flawed. Harmonising EIS conditions is not only impractical (one would have to change all the relevant legislation in each of the countries), but it has little to do with the capacities to control water pollution, to manage a park or to develop sustainable use systems.

7 Risk Assumptions

The analysis of risks was highly unrealistic. More importantly, the risk analysis did not evaluate alternative courses of action that could be taken if key assumption did not prove to be valid. The analyses of two of the three risks identified in the ProDoc are especially problematic:

Slow Commitment to Regional Cooperation The estimated likelihood is ranked at medium-low. "It is unlikely that participating countries commitment is slow enough to hinder the progress of the whole project." The differences in political ideologies and economic systems of the five countries are some of the greatest on the planet. This ranking can only seen as naïve.

Failure of Timely Delivery of Counterpart Funding and information The estimated likelihood is ranked as low. Data sharing was already identified in Section 4.7 of the Preliminary TDA (1997), "The concept of freely-shared data is not widely accepted in all countries in the region, and many organisations and individuals are unwilling to reveal data to others within their own country, let alone to foreigners. Thus exchange of information to facilitate more competent treatment of issues that extend beyond national boundaries has been rare." The Preliminary TDA correctly identified a key constraint that is rooted in cultural differences – and not easy to overcome. The low ranking of this risk was unrealistic.

8 STAP Review

As a Full Project, the GEF Project Brief underwent a STAP review as part of the design process. Some of the recommendations of the STAP were highly pertinent, but were not incorporated into the design.

Ecosystems and Sustainable Use

The Preliminary TDA recognised that nature/biodiversity conservation in the five countries has always been species-based. Protected areas have not been created with the objective of conserving representative samples of the full range of ecosystems, but have been centred on key species. The GEF Brief, however, talks almost exclusively about species, not ecosystems. The STAP comments "The project description emphasises biodiversity <u>conservation</u> but according to the GEF Operational Strategy and the CBD, <u>sustainable</u> use is as important. It is important that the SAP include options for the sustainable use of the biodiversity, not the least to convince local people that this would imply protecting ecosystems including their endangered species, while serving human interests."

Cross-Sectoral Approach

The STAP review recommends that more emphasis needed to be given to a cross-sectoral approach that fully analyses and address root causes of the problems identified.

Length of Project

"The time frame for the project seems to be too short, in particular as a stepwise approach including capacity building is presented."

Response to the STAP Review

The last page of the GEF Project Brief states, "The STAP reviewer's comments are fully incorporated into this project brief.." This section does directly respond to the STAP comments on the need for a cross-sectoral approach and on the length of project. However, no evidence can be found that the STAP review comments on the need to increase the emphasis on the conservation of ecosystems rather than species, and on the need to emphasise sustainable use strategies for biodiversity conservation.

This is most regrettable, because the project, during, implementation, has since shifted its primary focus away from international waters to concentrate more and more strongly on biodiversity.

Annex 7 Suggested Additional Project Activities

1. Sustainable use of grassland ecosystem biodiversity outside of protected areas

In support of proposed actions detailed in 2 steppe zones TDA recommendations International consultancy on options and potential sites for rangeland management to include: Workshop attended by specialists and livestock herders from 3 countries

2. Gap Analysis

Contract to Russian Academy of Sciences to refine analysis of the adequacy of coverage of ecosystems for three zones by different forms of protected and managed areas.

3. Tumen River Study Tour for SAP Task Forces from:

China, Russia, ROK, Mongolia and DPRK (if willing)

4. TumenNet Environmental Challenges Video

Target audience: Policy makers involved in developing and approving the SAP Purpose: Awareness raising providing an overview the project area, challenges and opportunities addressed by the SAP. Target audience: Donors Purpose: Awareness raising providing an overview the project area, challenges and opportunities and attracting support to implement the SAP. Target audience: also widely applicable at all levels from school to public broadcast.

TUMENNET ENVIRONMENTAL CHALLENGES VIDEO

Overview of Area
Diversity of peoples and cultures
Nature as it should be should be and the resources it provides
Introduce the problems
Dead fish floating
Tiger skins in the market
Dust blowing off the steppes
Wetlands drained for ROK factory site
Tumen River
Start with interview of old fishermen – how the river used to be – former salmon runs – present
day fish with ulcers & deformities
Factory discharge – interview factory managers about problems and solutions
Municipal discharge – interview city managers
Mine discharge – mine managers
Watershed – reforestation to stop erosion – shots of Changbai Mtn.
Tigers and Leopards and Forests
Start with shots of them in the wild – stress this is the only place they are found in the world
Loss of habitat/fragmentation – Shots of clearcuts – interview Russian
Poaching – interview a ranger – show confiscated weapons
Steppes
Starts with best shots of the steppes with lush grasslands, herds of gazelles and fat cows
Nature of the problem – interview herder about changes and causes of degradation
Land and livestock both owned by government until 10 (former Soviet Union) to 20 (PRC) years ago

Land still government owned – livestock privatized. Open access. Each livestock can put as many animals wherever and whenever he pleases

Shots of barren land, skinny dead animals, huge Yellow Dust clouds, people in Beijing with handkerchiefs over face, interview head of FKI about economic costs to microchip industry, shipyards etc.

Wetlands and Waterfowl

Start with shots of wetlands with large flocks of waterfowl – cranes Local changes – regional impacts. Maps of area showing flyways and critical wetlands

Interview representatives of industry

Interview with an "artists" on cultural importance of cranes and their loss

Marine

Start with shots of the wonders and abundance of sea life

Problems of pollutants from river mouths, direct discharge from factories, municipalities and ports,

Dangers of invasive species from bilge waters

Interview with fishermen who can no longer fish, with citizens who can no longer swim in the waters

TumenNet and the SAP

Interview on overview of the SAP process

Priority problems must be addressed by concrete actions

Interview with lead agency on the TDA

Overview of actions for key problems

What you can do to help?

Educators

NGOs/Civil Society

Investors

Sources of information

Annex 8 Recommendations for GEF IW and Biodiversity Projects

1 Project areas need to be clearly defined

Far too often, the geographic limits of GEF projects very poorly defined. Hopefully, the TumenNet Project is an extreme example, where different project area descriptions within the same design document vary by a factor of 20 to 1. International waters and biodiversity are physical resources with geographic locations. GEF projects for IW and biodiversity need to have clearly defined geographic limits so that all parties involved in project execution know which resources they are working with.

2 Need for realism in risk analysis

The high risks of failure of a project requiring the collaboration of five countries of ideologies as diverse as those of the TumenNet project should be obvious to anyone. These risks, however, were largely ignored in the Project design. The evaluation team does not criticize GEF for approving and funding projects like TumenNet. If the However, the unrealistic optimism in risk assessment does not serve anyone's interest. If the global environmental values at stake are high enough, one should accept the risks. However, risks should be realistically assessed, risk avoidance strategies developed and alternative courses of actions developed for situations where the risks are realized. Ultimately, one should be willing to abort or suspend projects if essential conditions are not met.

3 Ensure that expertise corresponds to GEF focal areas

GEF needs to ensure that long-term and short-term technical advisors recruited for IW and biodivesity projects have solid credentials in IW and biodiversity. The focus of the TumenNet project shifted during implementation from IW to biodiversity, yet no one with solid experience in developing biodiversity conservation strategies, either long-term or short-term, was ever brought into this project.

4 Provide senior level GEF technical backstopping with specialists of appropriate expertise

The focus of the TumenNet project shifted during implementation from IW to biodiversity, yet the evaluation team found no evidence of technical/strategic inputs from UNDP/GEF. From project design through the beginning of the preparation of the SAP, the project has maintained a narrow focus on species and protected areas. UNDP/GEF needs to ensure that technical advisors of appropriate background support their projects and that these advisors are of high calibre.

5 Allow adequate time for grass roots participation

The GEF Project Brief for TumenNet states that, "the SAP will have been prepared using a Participatory Approach and by mobilizing grass roots participation". The evaluation team believes that the term "grass roots participation" implies that the whole planning process should be driven by civil society from the bottom up. This is clearly unrealistic. At a minimum, it would mean that there is broad involvement of communities and user groups throughout multi-country region – not just a token sample of a few individuals chosen to represent certain interest groups. This again is totally unrealistic for a two-year project working across five countries.

"Grass roots participation" may be an appealing "feel-good" phrase to include in a project brief. However, if GEF seriously wants to promote such an approach on their projects, then they need to devote the time and resources necessary. And they need to develop appropriate methodologies for ensuring grass roots participation across multiple countries.

In a regional planning process, it is relatively easy to involve structured groups that are represented by established organizations – one invites the organization to send a representative to planning workshops and other events. One of the greatest challenges in any planning process is how to involve groups that are not organized – such as livestock owners on the Mongolian steppes. For biodiversity conservation, such unstructured groups are often the most important stakeholders.

One approach for ensuring participation of such groups is to carefully select a "representative" sample and to engage them using specially modified PRA techniques. This may involve engaging a PRA specialist to develop a special PRA methodology modified to meet the needs of the regional planning exercise. PRA teams then need to be trained before they are sent out to conduct the modified PRA with the carefully selected "representative" groups. Ideally, this should be done in a two step process. The PRA team does a first diagnostic exercise with the community or user group. The results must be checked against interviews with local technicians, authorities, NGOs, etc. The team then should go back to the community to first present and validate the results from the first exercise and, secondly, to facilitate and guide brainstorming sessions to develop strategic options to address key problems. Through this process, spokesmen can be selected to represent these otherwise unstructured groups at planning workshops.

None of this is simple nor intuitive. GEF needs to be much more realistic as to what they mean by stakeholder participation on a regional project.

6 Avoid forcing BD into the IW Transboundary Framework

Guidance for all three IW OPs are based on the preparation of Transboundary Diagnostic Analysis (TDA) followed by a Strategic Action Program (SAP). These are technical planning tools that were developed for International Waters Projects, not for biodiversity projects. Many GEF projects start out as IW projects and then get biodiversity "grafted on". This is especially true for freshwater IW. However, the projects remain structured around the IW planning tools of the TDA and the SAP. International waters issues are inherently transboundary in nature. Biodiversity conservation issues are not.

Grafting biodiversity onto an IW project implies that biodiversity must be treated as a transboundary issue – and that transboundary sites/activities must be identified to ensure biodiversity conservation. Very often, in practice, the opposite is true. Indeed, transboundary sites tend to be amongst the difficult areas in which to address threats to biodiversity. Transboundary threats are often much more difficult to resolve that threats that are contained within a single country. Transboundary collaboration between park managers may be severely inhibited by political differences. The problem of controlling poaching along transborder natural areas is notoriously difficult to achieve.

7 Avoid peripheral activities not strategically linked to SAP

An IW project with a strategic action program as its core output should remain focused on that core output. GEF has a tendency to graft on peripheral activities that are not strategically linked to the production of the SAP, such as research, EIS, awareness raising, small grants, etc., that are not strategically necessary. These peripheral activities tend consume a great deal of management time and effort and to diminish the focus on the essential.

8 Focus on Process and Product

During the preparation of many of the early SAPs, the emphasis was on the science. The TDA was a scientifically based evaluation of threats. The SAP was prepared by project teams, with an awareness of political issues. The result was a technically sound document, but which in many cases avoided concrete actions that were felt might not be politically acceptable.

More recently the emphasis has changed to the process of developing the SAP and less on the science feeding into it. This is partly in recognition of the limited scientific data available for developing the TDA, and emphasises the precautionary principle – lack of scientific knowledge is not justification for not taking

action. However, there still has to be a clear fact based scientific evaluation in the TDA, if the SAP is to be a coherent document. The process is important, but then so is the product.

9 Need for solid guidelines for IW projects

GEF has now committed over \$250 million to IW projects. Over the next five years, GEF will double its financial support to water and related land resources activities to one-half billion dollars. Yet GEF has still not produced solid guidelines for the projects. GEF has not adequately defined what the content of a TDA and a SAP should be. Most SAPs produced to date are full of policy actions but contain relatively few concrete actions to address specific environmental threats.

Futhermore, GEF has not yet distilled the lessons learned from all their projects on what the most effective methodologies are for developing TDA and SAP. Guidance should include a definition of what the key IW issues are.

Finally, GEF project briefs for IW should specify what guidelines should be used for project execution. GEF should not assume that the long and short term technical advisors hired to execute IW projects, are familiar with GEF policy or approaches, particularly when so little on process is described in reports.

10 Be flexible with the use of GIWA for IW projects

The Global International Waters Assessment – a four year UNEP/GEF initiative, was as a response to the perceived need to prioritise issues in different international waters in a systematic and comparable manner. The output was expected to be a list that would guide GEF funding towards resolving issues in priority water bodies. The evaluation was global, splitting the world into 9 mega regions and 66 sub-regions. The evaluation relies on "five major concerns and 22 key issues" The study is led by Kalmar University and the "partners" are also predominantly other academic/research departments.

The GIWA evaluation was standardised to allow comparison between water bodies, it is not a rigid tool for evaluating priorities within one IW area, nor is necessarily the most appropriate tool. GEF projects should be free to use and modify planning tools as defined by project needs.

11 Focus IW Learn on project support not academic/science support

IW:LEARN is a GEF IW capacity-building project. "IW:LEARN's objective is to build a Web-based "global knowledge community" to protect and restore the world's lakes, river basins, coasts and oceans". The project has prepared materials dealing with three aspects, International Waters, Information and Communication and GEF Procedures.

Again much of the emphasis is on the science of international waters rather than management. The methodology is on delivering information over the web. While designed to support linkages between projects, the main problem is that the outputs from projects does not provide guidance on how these outputs were achieved.

If IW:LEARN is to support projects then it needs to present tools and methodologies for developing TDAs and SAPs, not guidance on measuring water pollution or web design.

Annex 9 Development of Range Management on the Steppes

Situational Analysis

Use of the steppe grasslands by livestock owners within the TumenNet project area is presently characterised by open access. There is no management whatsoever of the range resource. Livestock owners are free to put as many livestock as they wish anywhere and at anytime. The rangelands are owned by the three governments but the livestock are privately owned. Indeed, the economics of the present situation provides incentives for each livestock owner to put as many head of animals as possible onto the rangelands. It is a "worse case" scenario that is leading to very rapid land degradation on the steppes. This degradation is the major source of "Yellow Dust" that has repeatedly afflicted all of Northeast Asia in recent years. There is no possibility of reversing this trend without putting an end to the open access that presently characterising the present system.

The steppes were originally inhabited by nomadic herders. Herds were moved with the seasons between higher altitude summer grazing and lower altitude winter grazing. They were moved during drought years to areas where it had rained and to where the grass was the richest. Such mobility of livestock is a highly desirable characteristic of dryland grazing systems. When rains fail or grasses become overgrazed, the herders move their animals and overgrazing is minimised. The productivity of the resource is conserved. This was all aided by relatively low populations of people and livestock.

When the steppes first fell under communist systems, both land and livestock people the property of national governments. The range wasn't really managed, but livestock numbers were kept in some type of balance with the potential of the grasslands, and serious degradation was avoided. However, this was all to change again. Roughly 20 years ago in PRC, and roughly 10 years ago in Mongolia and RF, livestock were privatised but land remained the property of the government. The present system is characterised by open access and overgrazing with localised areas of very severe overgrazing and land degradation – especially around larger settlements.

As the grasslands are degraded, the diversity of plants and animals is lost. First to go amongst the plantlife are the preferred forage species. They are the most intensively grazed and rarely get a chance to flower and fruit. The economically most valuable species are the first to be lost. In grasslands like this, the most nutritious, have vale forage grasses are usually perennial species. Deep-rooted perennial grasses are also the most drought resistant. Perennial grasses grow taller than annuals – during snow disasters or "zud", more of the perennials reach above the snow and are available to livestock – reducing the severity of the zud and the loss of livestock.

Options for improved range management systems

One is confronted with three basic options for developing grasslands, or "range", management systems for the steppes:

- Government could manage the rangelands controlling who can graze what number of livestock when and where. Management by government rarely works well anywhere in the world.
- One could completely privatise the rangelands in the breaking up the steppes into privately owned tracts in the hands of individual herders or formal "businesses". Each new landowner would be responsible for managing his own tract of grasslands. Individual tracts would generally be relatively small. Mobility of livestock is reduced to a bare minimum.
- The government could contractually transfer management rights to legally constituted community groups. The transfer of management rights to such herders' association is generally done through contracts that stipulate the conditions of use. Management units can be very large, allowing seasonal movement of livestock. Arrangements for movement between management units during times of drought can be negotiated, with or without an exchange of fees. Within the herders association, livestock are still privately owned. But the herders' association manages the rangeland

as a common good for the benefit of its members. The herders' association is responsible for the sustainable management of the rangelands applying traditional management systems or modern systems that are developed with in a participatory fashion by the herders association with the assistance of donor projects and or government services. Proper use of the grasslands is a contractual condition of the transfer of management rights from the government.

Key elements of community-based range management

Such community-based range management systems generally have the following characteristics:

- 1. The transfer of management rights from government to herders' association is done through a written contract.
- 2. Such a contract must be signed by a legal entity. The herders group together into a legally constituted organisation such as an association a legal entity that can enter into a contract with another party. The association should have a representative structure and should have an agreed upon plan or rules for equitably sharing costs and benefits amongst its members.
- 3. The limits of the rangelands to be transferred to the community group have well defined geographic limits. These limits are usually negotiated by the herders association itself negotiated with neighbouring herders or associations.
- 4. The herders association receives exclusive rights to the rangelands that they will manage. This does not mean that they will exclude non-members, but it does mean that anyone wishing to graze their animals on the association's rangelands can only do so with the permission of the herders association. Everyone, member or non-member, must abide by the conditions of use imposed by the herders association.
- 5. The herders association manages the rangelands as a business. The individual members of the association own their own livestock and manage their livestock as a business.
- 6. A range or grazing management system is developed. It is the responsibility of the herders' association to implement the management system. The grazing system ensures that the preferred forage species are able to reproduce and multiply. The management system must be based on the biology of the preferred forage grasses the grazing system must allow these species periodically to go through there full life cycle allowing them to develop, to flower and fruit and to produce viable seeds.
- 7. The herders' association may chose to regulate the number of livestock by charging their members and non-members grazing fees for the use of the rangelands. Fees can be varied to increase or decrease the number of livestock. Fees can be used to cover management costs and to make investments for the public/community's benefit.
- 8. The system is dependent upon the development of systems of good governance, especially concerning the use of funds. Systems must be equitable and transparent. Decision making should be done in a representative fashion.