Conservation of Biodiversity at Mt Myohyang in the DPR Korea

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Report of the Terminal Evaluation

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Acronyms and Terms

APR	Annual Project Report
BSAP	Biodiversity Strategy and Action Plan
CTA	Chief Technical Adviser
DLEP	Department of Land and Environment Protection, (County level)
DNPD	Deputy National Project Director
DPR Korea	Democratic People's Republic of Korea
EDC	Environment and Development Centre, MLEP
GEF	Global Environment Facility
GIS	Geographical Information System
HPO	Hyangsan Project Office
IUCN	The World Conservation Union
KNCU	Korea Nature Conservation Union
MLEP	Ministry of Land and Environment Protection, DPR Korea
MPMU	Medicinal Plants Management Unit
MTE	Mid-term evaluation
NCCE	National Coordinating Committee for Environment, DPR Korea
NGO	Non-Governmental Organisation
NPO	National Project Office
PA	Protected Area
PAA	Protected Area Adviser (Duckworth)
PAPA	Protected Area Planning Adviser (Meredith)
PPA	Project Planning Adviser
PPO	Pyongyang Project Office
PIR	Project Implementation Review
Prodoc	Project Document
PSC	Project Steering Committee
SSMU	Scenic Sites Management Unit
TNA	Training Needs Analysis
TOR	Terms of Reference
TPR	Tripartite Review
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services
WCS	Wildlife Conservation Society

Terminal Evaluation of the Project:
Conservation of Biodiversity at Mount Myohyang in the Democratic People's Republic of Korea

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Executive Summary

The Project was designed to protect biodiversity in Mount Myohyang, identified as having global significance because of its altitudinal variation in forest-types, a diversity of plants and animals, and a degree of endemism and rarity. Mount Myohyang has top priority in DPR Korea's national conservation ambitions, with a high profile in the National Biodiversity Strategy and Action Plan (BSAP).

Threats to Mount Myohyang's biodiversity were identified as lack of information and of dissemination of information, a need for institutional strengthening, and a need for better management. The Project Development Objective and Immediate Objectives were, and are still, relevant. It was envisaged that the Mount Myohyang PA management plan would be used as a model for other biodiversity conservation areas, and for this and other outcomes of the Project to guide the formulation of national biodiversity conservation policy.

This terminal evaluation was conducted over the period 28th February to 20th March 2004, by a team of one national consultant and one international consultant. A 'resource person' supported them in their work.

The Project was the first externally funded biodiversity conservation intervention in the country. It was founded on the highly ambitious expectation that its modest level of technical support would suffice to overcome fundamental institutional, management and information constraints in the short space of three years. Good progress has been made but it is no surprise to the evaluators that not all targets have been met. A longer duration Project was needed.

The Wildlife Conservation Society has very effectively carried out an important support role for the Project. The Society's provision of a long-term position of Protected Areas Adviser has been crucial to the success that has been achieved.

The National Coordinating Committee for Environment (NCCE) role was to facilitate cooperation among the agencies with roles in the Project, and to monitor MLEP progress with the Project. NCCE established a Project Steering Committee (PSC) consisting of representatives from Government departments, research institutions, and UNDP. The record of only one PSC meeting has been sighted. This Project needed strong steering, particularly where it faced difficulties in achieving inter-agency coordination and cooperation

There seems to have been a good relationship between the UNDP Country Office and UNOPS-Beijing, from where the Project was executed. A weakness in this arrangement seems to have been lack of a UNOPS capacity for technical backup. UNDP-GEF in Kuala Lumpur took a close interest in the GEF element of the Project, as evidenced by participation in TPRs and feedback on draft PIRs. The UNOPS role was made less effective by staffing changes. By the time of the TE there was nobody in UNOPS-Beijing who had participated in the execution of this project.

The Prodoc claimed that, by addressing the rational management of the forest resource needs of communities living in the vicinity of the Mount Myohyang area a combination of sustainable development and biodiversity conservation suited to the DPR Korea would be demonstrated. However, this was not spelled out in terms relevant to local circumstances, the project design did not make proper provision for this and since no action had been taken at the time of the mid-term evaluation the evaluators recommended that the single Project Activity devoted to this element should be dropped.

All of the capacity building measures provided for in the Prodoc, and found to be implementable,[1] were attempted. Three Project years was too short a period to reach the capacity level needed to conduct competent surveys of plants and animals, analyse and interpret data and translate this into management prescriptions. The MTE had made the point that a Project of this type should be of five years duration to be effective, and the TE team confirms this. As the Prodoc stated: "*Knowledge can be imparted relatively swiftly, but conceptual growth needs time*." (our underlining, for emphasis)

The Prodoc envisaged that training and capacity building at national and local levels would be led by the Academy of Sciences and the EDC under the direction of the MLEP, following appropriate 'training of trainers' by WCS-selected technical specialists. When it became apparent that the Academy of Sciences would not be taking on this role WCS was then faced with the need to 'fill the gap'. Since the timing and duration of their inputs had been calculated in expectation of a major Academy role, these international inputs were then no longer adequate to the training task faced. The input of short-term advisers was further limited by the short permitted duration of their visits and by the changing membership of some training sessions. The greatest success with these international training inputs seems to have been with the management planning group.

The Project's **Development Objective** required, first, a basic protective regime for Myohyang biodiversity and, second, an IUCN category II level of protection. The first element of this Objective has been achieved. The evaluators judge that the second element could not have been achieved in three years. They also note a DPR Korea commitment to continue to work towards IUCN category II status.

A largely satisfactory result has been achieved in the effort to meet **Immediate Objective 1** (information systems and outreach). Awareness raising activities have led to a promising series of actions to introduce biodiversity awareness material into the wider school system. Less information on rational use of biological resources by local communities was collected than was needed for management planning. Changes in membership of the awareness working group slowed progress.

Good progress was made towards achieving **Immediate Objective 2** (a strengthened institutional and policy base) in terms of policy. Achievements of note are Cabinet-agreed biodiversity reoriented MLEP and DLEP roles in PA management and a reclassification of all DPR Korea PAs. More progress is needed regarding a key institutional improvement objective – effective multi-agency cooperation to ensure effective joint management at the PA level.

With regard to **Immediate Objective 3** (strengthened management, including a management plan) the TE team is able to report a satisfactory result. More experience, coupled with further training, is needed to consolidate PA management's capacity to apply what has been learned and to confidently initiate and sustain a management planning process.

Given another two years, and progress towards a multi-agency PA administration for Mt Myohyang, the original Project objectives might yet be achieved.

Regarding **sustainability**, Project gains would be more likely to be sustained if other relevant agencies had been more closely engaged in the Project. The Academy of Sciences is one of those and the cooperative link between the MLEP and the national level of Scenic Sites Management is yet to be firmed up so that the SSMU at Mt Myohyang can play its role as a full partner in biodiversity conservation. Other matters that would have improved

[1] No GIS or GPS training was permitted.

sustainability are a higher proportion of Project time and resources devoted to the PA staff, and links with economic stakeholders such as the tourist hotel within the Myohyang PA.

The evaluators find that a necessary 'next step' in presenting biodiversity in its full national context is for the economic development values of Mt Myohyang and other PAs to be assessed. In this way the full biodiversity value of PAs at both local and national levels will be known, and understood. This is needed for the contribution of PAs to national development to be truly appreciated and properly placed within the planning and budgeting process.

Several **lessons learned for Project design and implementation in the DPR Korea** have been identified.

For reasons of national security, international specialists are not able to enter all parts of the area encompassed by a Project. Different strategies for achieving the results expected need careful consideration in project design.

Experience with this Project shows a need to provide for an inception phase to assess any changed circumstances at the start of implementation.

Undertake a simple 'indicative' assessment at the outset, or even as part of project design, to identify training needs in general, by group. Detailed training needs assessment should be deferred until staff are sufficiently aware of Project objectives and of their roles, to be able to participate effectively in the assessment.

Adequate time must be allowed for training to move beyond knowledge acquisition, to grow into conceptual understanding and to mature into confident application in biodiversity management. This means a DPRK project should be of the order of five years duration, and designed to provide for a more measured rate of implementation.

There is a firm determination in the DPR Korea to reach international standards in biodiversity management. This Project has shown that this is an achievable objective, but that further international support will be needed, including technical specialists.

Since Korean Project staff have few opportunities to learn directly from the experience of other countries then it follows that a long-term international adviser presence is needed to impart some of that experience. The role of Protected Areas Adviser was a key element in the success achieved in this Project Even so, the PAA under-achieved because of difficulties communicating with Korean technical specialists. The only long-term and sustainable solution is for technical staff to be given opportunities to become proficient in English.

Real and active inter-agency cooperation must be a feature of future projects. This means sharing biodiversity information and sharing of Project resources in the national interest. The Project goal (which is a national goal) must override any agency ambition to further its own interests. Project steering committees must be strong and effective and Project managers must respond to the recommendations of these committees.

One of the **lessons learned from the Myohyang Project for biodiversity projects in all countries** is that well-planned study tours can be very effective. They need to be meticulously planned and executed and serious debriefing needs to be conducted after returning home so that colleagues who did not travel are able to derive some benefit from the experience.

Another is that more guidance is needed regarding Project equipment. Project equipment lists need to be tested in terms of relevance to the production of one or more of the Project Outputs; cost effectiveness; the circumstances in which it is to be used; prospects for its

continued use after Project completion; and preferably locally made or, if not, spares can readily be obtained.

A third lesson, for project designers, is that biodiversity corridors and patches should be a feature of all Projects. Where a specific PA is targeted for support to maintain its biodiversity do not neglect to consider how the surrounding landscape may contribute to that PA's biodiversity values.

The first of two **recommendations** is that Project success should be consolidated. After an uncertain start, sufficient progress has now been made towards achieving Project objectives that a follow-up phase to build on progress would be effective.

The **first option** put forward is that provision be made in the proposed 'West Sea Project' for Mt. Myohyang PA staff to be given further training opportunities through this project; and international advisers attached to the 'West Sea Project' to be made available to provide further support inputs to Mt. Myohyang PA.

The **second option** (the preferred option) is a 'phase II' project that is designed to build on phase I, with a focus on capacity building needs at the PA level, and an extension of the Project experience to other PAs. Further international inputs will be needed, and more attention to the 'training of trainers' approach that was not possible in phase I. Equipment needs should be minimal. A functioning multi-agency approach will be needed, with MLEP, Scenic Sites Management Department, and the Academy of Sciences among the key partners.

The second recommendation is that **biodiversity values of the Myohyang-Rangrim forest corridor should be secured**.

The forested link between Mt. Myohyang and Mt. Rangrim is the key to ensuring that the Mt. Myohyang PA maintains global biodiversity significance. Alone, Mt. Myohyang PA is not of sufficient size to maintain global significance as there is a real prospect that some of its globally significant species will gradually be lost.

Approach and Methodology

The terminal evaluation was conducted over the period 28th February to 20th March 2004, by a team made up of one national consultant (An Chol Ho, of the Academy of Forest Sciences) and one international consultant (Graham Baines, who had been team leader for the mid-term evaluation of the Project). The evaluation team was supported in its work by a resource person, Will Duckworth, who had been long-term adviser to the Project.

While the evaluation team worked to comprehensive terms of reference (Annex I) its members were mindful of the recommendations of the MTE and the outcome of the Tripartite Review Meeting (TPR) that considered the MTE report. A key feature of the MTE report, sanctioned by the TPR, was that the management planning process should become the focus of effort from that point. The TPR also agreed to a four-month implementation phase to be commenced at the point when the Project was originally envisaged to end (June 2003).

The MTE report had recommended that the terminal evaluation team should particularly look for:

- A satisfactory basic PA management plan, with staff and budgetary allocations geared to its implementation.
- The results of an extension of the awareness programme into the area of "threats reduction".
- Evidence of effective participation by the Academy of Sciences.
- A functioning Hyangsan Project Office.
- Evidence of progress in Project staff comprehension and use of implementation schedules and work plans.
- An explicit management body for Mount Myohyang, replacing the dispersed multi-agency coalition that has served as an interim arrangement, with clear indications of where the responsibility for implementation of the management plan would lie.

The terms of reference for the evaluation team also encouraged it:

- “to bring any other issues pertinent to this project and sector to the attention of the DPR Korea Government and the donors involved;” and to

- “record any significant lessons that can be drawn from the experience of the present project and its results, especially anything that worked well so that it can be applied to the West Sea and other projects, as well as anything that has worked badly and should be avoided in the future.”

Interviews and discussions were held with as wide a range of stakeholders as was possible. In total, 13 full days were spent in and around the Project site, while based in Hyangsan town (two hours’ drive from Pyongyang). Project management staff were kept informed of interim findings by the evaluators as these emerged and, a week before completion of the mission the UNDP Environment Liaison Officer became available for consultation and was briefed on emerging outcomes and provided with a hard copy of interim findings for comment.

A presentation of findings was made to key Hyangsan County stakeholders on the 17th March and, having taken note of their comments, a presentation was then prepared for Pyongyang agency stakeholders. This was done on the 18th March. On the 19th March the evaluation team met again with UNDP officers (Abu Selim and Kim Yun Hum) and took on board final comments before completing the core text of the evaluation report (from Project

Implementation' through to and including 'Lessons Learned') so that this would be available for study by stakeholders in advance of the final Tripartite Review meeting on the 24th March. The introductory sections and the report annexes were subsequently added to complete the report and this was e-mailed to UNOPS-Beijing and to other key stakeholders on the 23rd March 2004.

Project Concept and Design

The project was designed to protect biodiversity in Mount Myohyang, identified as having global significance because of its altitudinal variation in forest-types, a diversity of plants and animals, and a degree of endemism and rarity. Because biodiversity information was considered inadequate for protected area (PA) management planning the first of three Immediate Objectives was directed at addressing this inadequacy.

Mount Myohyang has top priority in DPR Korea's national conservation ambitions, with a high profile in the National Biodiversity Strategy and Action Plan (BSAP). The Government views it as the ideal location from which to begin upgrading the country's PAs.

The Project Document (Prodoc) referred to "threats" to Mount Myohyang's biodiversity as being lack of information, a need for institutional strengthening, and a need for better management. There was a low awareness of the nature and value of biodiversity, a lack of information and monitoring systems, and such information as did exist was not being disseminated to those who needed it. Institutional arrangements, were not suited to biodiversity management, while management was held back by inadequate resources allocated to biodiversity conservation, including human resources. The Project was designed to address these weaknesses.

The Prodoc contained an excellent, well informed and explained threats analysis that has stood the test of time and should now be regarded as 'required reading' for anyone seeking to understand the situation at Mount Myohyang – though it should be noted that some additional threats were identified and defined during implementation.

It was envisaged that the Mount Myohyang PA management plan would be used as a model for other biodiversity conservation areas, and for this and other outcomes of the Project to guide the formulation of national biodiversity conservation policy.

The Prodoc also claimed that, by addressing the rational management of the forest resource needs of communities living in the vicinity of the Mount Myohyang area a combination of sustainable development and biodiversity conservation suited to the DPR Korea would be demonstrated. However, this biodiversity - surrounding communities - development linkage, though implied in the Prodoc was not spelled out in terms relevant to local circumstances. In any case the project design did not embrace it. It was not presented as a distinct Objective. It was not even an Output! Instead, this important matter was addressed in a single Activity; 3.3.5 – the very last – giving the impression that this Activity "*Undertake pilot activities in the buffer-zone and forest corridor to identify and implement sustainable alternative livelihoods*" was added as an afterthought. It is not altogether surprising, then, that it slipped out of view during implementation.[2]

A strong feature of the Project as designed was the participation of a DPR Korea institution, the Academy of Sciences, in a key role providing technical support and training, in association with the Environment and Development Centre (EDC) of the Ministry of Land and Environment Protection.

[2] The MTE recommended that as it seemed unlikely to happen, and there was at that time a pressing need to focus resources on management plan preparation, it should be de-listed

The Project was the first externally-funded biodiversity conservation intervention in the country. It was founded on the highly ambitious expectation that its modest level of funding and technical support would suffice to overcome fundamental institutional and management capacity weaknesses, and a low level of information and of exchange of that information, in the short space of three years. By the end of only three years it was expected that staff with no prior experience of comprehensive PA management, and limited understanding of biodiversity would be able to complete a PA management plan, have it endorsed, and then implement it. The specified target of meeting all the requirements needed to advance Mount Myohyang PA to IUCN category II (National Park) status amplified this highly ambitious expectation.

A more appropriate approach to this target would have been a Project designed as two phases, with a first phase of three years leading to the first management plan and, subject to this plan being credible, and both Project and PA staff capacity adequately developed, then followed by two years of implementation, with a review of the management plan towards the end of the fifth year.

The Prodoc did not address sustainability issues and, so, did not identify specific activities and actions that would serve to promote sustainability. Shortcomings in this area are discussed, later, under **Sustainability of Project Outcomes**.

National security is an overriding concern in the DPR Korea and some of the protective measures applied in the name of security – such as limits on where both Korean and international staff can go, and when, and for what duration – pose unusual difficulties for project implementation. The impact of these restrictions appears not to have been fully understood by those who designed the Project, and of those who approved it. This could be attributed to inexperience on both sides. The international personnel involved had never before worked in DPR Korea; the MLEP had never undertaken an on-site internationally collaborative project; and the UNDP Country Office had not been involved in a biodiversity conservation project.

Project implementation

Participating agencies

The Mount Myohyang PA extends over three provinces but is entirely administered from Hyangsan County of North Pyongan Province.

The Project was executed by the United Nations Office for Project Services (UNOPS), which was responsible for contracts, sub-contracts and procurement of equipment for the Project.

With financial support from the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP), the Ministry of Land and Environmental Protection (MLEP) of the DPR Korea implemented the Project in association with the Wildlife Conservation Society (WCS) and various national stakeholders. WCS also contributed funding and international specialist advisers (except the Project Planning Adviser). The PA management body is under the MLEP, as is the Environment and Development Centre, and as are the County and Provincial Departments of Land Management.

Participating agencies outside the Ministry included the Korean Nature Conservation Union (KNCU), and the Koryo Medicinal Plant Resources Office of the Ministry of Public Health. An important agency in terms of PA management is the Tour Guide Unit, Scenic Spot Management Office, which is under the Ministry-level Cultural Property Conservation

Administration. There was an expectation written into the Prodoc that the Academy of Sciences would assume a role as a key participant but this did not eventuate.

The **Ministry of Lands and Environment Protection** had the key role in direction and implementation of the Project. The **County DLEP** played an important role as the local authority with control of land administration and resource use. The **Environment and Development Centre** (EDC) of MLEP had the main technical role in the Project. **Hyangsan County Forest Management Office** oversees management of the PA and is in the process of shifting from timber-centred management of forests to sustainable forest management including biodiversity conservation. However, the **Forest Management Unit** at Mount Myohyang PA had always had a biodiversity conservation role, though this was largely unrealised prior to the Project.

The **Mount Myohyang Scenic Spot Management Office** has an important role as one of the main users of the PA. Its role is expected to be harmonising tourism with biodiversity conservation, and interpreting and disseminating biodiversity conservation information.

The **Koryo Medicinal Plant Resources Office,** an agency of the **Ministry of Public Health,** has a role as a user of biodiversity and in establishing cultivation of medicinal plants outside the PA so as to ease pressure on the PA through harvesting of medicinal plants. The **Academy of Sciences** in the past has had the main role in biodiversity inventories and in recommending practical measures for biodiversity protection, but its responsibilities in this area now are directed to sea and shore bird studies. The **Korean Nature Conservation Union** is a grouping of individuals, including government officers, that has a role in promoting biodiversity awareness and, in this case, of disseminating Mount Myohyang PA biodiversity information throughout the country.

Training and capacity building at national and local levels were to be led by the Academy of Sciences and the EDC under the direction of the MLEP, following appropriate "training of trainers" by WCS. This was an excellent idea, building on existing national organisations while enhancing their experience and status and, in doing this, in establishing an important base for sustainability. Yet apart from a minor role in leading two mammal surveys the Academy did not engage. A call for the Academy to engage in the Project had been made by the PSC in October 2001. The MTE report expressed concern about this and the matter was raised again during the TE. It has not been possible for the TE team to determine exactly why there was no participation. Part of the reason may be that because of the country's economic difficulties, the Academy's role has switched to a focus on species that have direct relevance to life and economic development in the DPR Korea. Even so, Project management did attempt to engage Academy Scientists in the Project. Three of them were taken to the Project site to investigate the opportunity to participate, but only one chose to contribute[3]. Whether consciously or not, the MLEP then was set on a course towards trying to establish an in-house capability in biodiversity research, with training provided by WCS specialists.

In the course of the development of biodiversity conservation awareness materials through the Project a new and enthusiastic Project partner emerged - the TV Broadcasting Administration of the Korean Central Broadcasting Committee.

National level arrangements

A national centre for the Project (Pyongyang Project Office; PPO) was established under a full-time Deputy National Project Director, Mr Ri Song Il who carried overall responsibility

[3] Two mammal surveys with Project staff.

for Project management, ably assisted by Ms Kim Jong Ok in the role of Assistant Project Manager. A Project Planning Adviser (PPA) assisted Project inception by preparing an updated implementation schedule for the entire project, a detailed work plan for the first 12 months of implementation, and a schedule of indicators for each of the Project's years. Though these tasks were carried out as specified, since they were based on the unrealistically over-ambitious Prodoc they were not useful and were not subsequently used.

Five positions of National Facilitator were created, and filled by English-speaking Koreans (they facilitated interaction between foreign technical experts and Project staff and, also, communication between working groups). Facilitators were "contact points" for five working groups (WG1: Wildlife Survey and Monitoring; WG2: Land Use Planning; WG3: Protected Area Management and Planning; WG4: Training and Awareness; and WG5: Local Community Involvement) and were responsible for the coordination and management of inputs from each group. In addition, three National Training Consultants were appointed to act as counterparts to international trainers. In practice, with the exception of the well-focused management planning group, these working groups were not distinct.

A position intended for a National GIS and Database Expert was not filled once Project management became aware that official approval for the use of GIS technology could not be obtained.

The National Coordinating Committee for Environment (NCCE) is responsible for GEF projects in DPR Korea. Its role was to facilitate cooperation among the agencies with roles in the Project, and to monitor MLEP progress with the Project. NCCE established a Project Steering Committee (PSC) consisting of representatives from Government departments, research institutions, and UNDP. The record of only one PSC meeting has been sighted. There seems to have been a lapse. This Project needed strong steering, particularly where it faced difficulties in achieving inter-agency coordination and cooperation

International support

The Wildlife Conservation Society role in the Project was to provide technical backstopping services. These included the provision of experts and training, support for the development and implementation of a public awareness and outreach programme at Mount Myohyang, fielding specialist trainers, and procurement of field equipment. WCS also fielded a long-term Protected Area Advisor (PAA) to the Project. His in-country time totaled almost 29 months over the Project's 3.3 years (three years plus a four month extension to trial implementation of the PA Management Plan). Among a range of other activities the PAA's role included capacity building in biodiversity survey work. After an MTE recommendation to this effect, he focused on support for the management planning process. This has been a difficult task for the WCS but the PAA has represented them well and Korean stakeholders noted his substantial contribution on several occasions during the Terminal Evaluation.

Project management

The fact that this is a pioneering project has meant that Project management has not been easy. For the Project "manager" (the DNPD) this challenge has been intensified in that though there is an official Project staffing structure, it has been difficult to translate this into efficient practice. At least during the first part of the Project, staff were only working part-time, still spending time in the offices from which they had been seconded. Working Groups based on key Project themes were established but most of their members worked across all themes depending on their work priorities.

There was a heavy burden on the Project "manager". As well as managing staff from a range of agencies and finding it not easy to form them into a team, he was responsible for time-consuming processing of visas for internationals, and approvals for Project staff and for internationals to travel to and from the field site. The staffing structure and the Project management arrangements were uncertain at the start, though they improved with time. The Project manager's capacity and skills would have been improved, to the benefit of the Project, had an MTE recommendation that he gain further experience through attachment to an overseas GEF biodiversity project been followed up.

There has been limited scope for adaptation. Even so, as management experience was gained and as stakeholders became more comfortable with the nature of the Project and with the role of international specialists there was discernible progress in easing some of the limits on the Protected Area Adviser's working arrangements and movements. This is evidence of successful adaptation. Also, the entry of new stakeholders such as the Central Broadcasting Committee and the Koryo Medicinal Plants Resource Office of the Ministry of Public Health is of note. DPRK Government acceptance of an additional four months, including an additional three months of international adviser time, was further evidence of a capacity to adapt to circumstances.

However, management has not been guided by a logframe or indicators of Project success. The Project design did not provide these, though a set of indicators was developed when, at the start of the Project, the PPA prepared a work plan. This was not used. In the MTE report it was noted that work plans and targets had not become an integral part of Project practice. The TE is now able to report more evidence of the use of this management tool, both in the PPO and at the Hyangsan Project Office (HPO). How effectively they are being used remains unclear.

Role of the UN agencies

Time did not permit a close examination of the roles of UNDP and UNOPS. There seems to have been a good relationship between the UNDP Country Office and UNOPS-Beijing, from where the Project was executed. Obviously it was not a particularly efficient arrangement to have execution effected from another country but this may have been the only option at the time. A particular weakness in this arrangement seems to have been lack of a UNOPS capacity for technical backup. Or was it assumed that UNDP-GEF in Kuala Lumpur would fill this role? The staff of that unit did, fortunately, take a close interest in the GEF element of the Project, as evidenced by participation in TPRs and feedback on draft PIRs. However it could not be expected to give the backup that normally would be expected of an Executing Agency. Staffing changes further reduced the effectiveness of the UNOPS role and by the time of the TE there was nobody in UNOPS-Beijing who had participated in the execution of this project.

Project Reporting and Monitoring

Under the chairmanship of the NCCE the PSC was expected to meet quarterly to review Project implementation and coordination of activities, drawing on information emerging from informal meetings of the PPO team and from joint meetings of the PPO and HPO teams. However, as noted above, the PSC met in full only once during the life of the Project.

Quarterly Project progress reports were submitted through the National Project Director to UNDP-Pyongyang and UNOPS. Annual Project reviews were also prepared and it is understood that these were shared with all Project stakeholders.

UNDP-GEF was also required to monitor project performance, particularly in line with the indicators included in the MSP Brief, and to participate in annual Tripartite Reviews (TPR). UNDP-GEF were represented from the regional office in Kuala Lumpur at one of the two TPRs.[4] The PAA in collaboration with the National Project Director assisted with preparation of Project Implementation Reports required by GEF. Extensive comments on drafts of these were fed back by UNDP-GEF (Kuala Lumpur) and Project management found these useful.

The monitoring targets for Project implementation were 'refined' by the Project Planning Adviser and included in an updated implementation schedule that was attached to the Project Document. However these lost their relevance as the realities of implementation dawned, some Activities had to be 'redirected'[5] and the over-ambitious targets of the original design came to be recognised.

The Annual Project Reviews (APRs) and Project Implementation Reviews (PIRs), though they did list some difficulties encountered, did not note any issues appearing to require urgent attention or redirection. One major issue that this mode of reporting failed to report was the slow progress with the management planning process. This was picked up by the MTE team, which made a major recommendation for a Project shift of focus on the management plan. At the time of that evaluation the Project was floundering and the chances of completing a plan in the 15 months of Project life remaining did not look good.

The Prodoc provided for a project terminal report to be prepared by the UNOPS for consideration at the TPR. The MTE team has not had an opportunity to examine this report.

The terms of reference for international technical specialists contracted by the WCS specified that a report was to be submitted at the end of each mission. The TE team was able to examine creditable reports on training needs, environmental education, PA management planning, plant surveys and animal surveys.

Project Results

Output 1.1 Information Systems

Targeted surveys of selected animal species (birds and mammals), areas and habitats vulnerable to human activities were conducted under the guidance of the PAA and with training by him over the period September 2000 to June 2003. Limitations on the movement of international specialists meant that all surveys done under their guidance were located in the Nature Park – the tourist section of the PA. This represents less than 25% of its total area. Only three surveys were conducted outside this area, two of which produced good results (one being a mammal survey supervised by an Academy of Sciences expert). The data were used to refine the PA threats analysis of the Prodoc and to recommend specific management actions.

A survey of traditional medicinal plants was undertaken under the guidance of a WCS specialist and this was coupled with two intensive training sessions, each of two and a half weeks, in August 2001 and September 2002. With the participation of local stakeholders, Project staff compiled a list of about 520 medicinal plants harvested within the PA. From a subset of 97 readily harvested species, the likely impact of existing harvests on 38 species was then assessed. The management planning team decided to allow 11 species to be harvested under the PA Management Plan - according to strict annual quotas, and under a permit

[4] A problem regarding time to process a visa application prevented attendance at the second.
[5] As, for instance, in the case of a recommendation of the MTE.

system. More detail on the use of datasheets for each species was provided in the MTE report. The survey results have been incorporated into the Management Plan.[6]

The Prodoc specified a geographical information system (GIS) being operational by the eighteenth month. It was not possible to obtain government approval for this action and this was explained in the MTE report. However, the team produced a series of base maps to guide the management planning process. These were prepared in association with the Forest Design Institute and the Project's own Land Use Planning Working Group (Ministry of Land and Environmental Protection, Land Use Planning Department, Land Use Planning Institute, and County Forest Management Unit). Project maps are scaled 1:25,000, based on Russian topographic maps of scale 1:50,000. These include Infrastructure, Human uses, and an 'experimental' map of key harvested plant populations. An existing map of dominant tree cover was also used.

Biological and resource-use data were collected for use in determining an appropriate internal zoning arrangement for the PA and for defining monitoring programmes. Personnel and other resources available were not enough to determine the status of invertebrates, or of lower plants, as had initially been envisaged. Animal groups considered to be of immediate management significance were birds, mammals and fish. No fish specialist was available, so this group was not studied. Bird surveys were conducted, and camera-trapping surveys to determine the distribution and abundance of larger animals. Through ground surveys of animal signs, opportunistic records, and camera-trapping, the team was able to determine, in general terms, species areas and habitat distributions for a number of mammal and for most of the bird species present. Among plants, the group selected as having management significance was medicinal plants.

About a dozen "indicator species" were identified, some indicative of fragile habitats, others of human pressures. Survey results were used to define PA 'sectors' that were management priorities because of their wildlife or habitat, and as a basis for drafting PA regulations. In liaison with local counterparts, particularly PA rangers, the Project team identified some of the key PA habitats vulnerable to human activities, and converted this information into map form. A full analysis of vulnerable habitats did not eventuate.

Socio-economic surveys were not conducted, but some socio-economic data for the Project area is said to have been obtained from local sources. Such information is 'limited access' for Koreans and cannot be viewed by international specialists or evaluators. Some data on resource usage by local communities was made available by the County Medicinal Plants Department (on the local collection of medicinal plants), the Local Industry Department (on the collection and processing of fruit and wood), and the County Forest Management Unit (on poaching of wildlife and timber). Information on agriculture is said to have been collected from the County Cooperative Farm Management Committee. This information informed the management planning process and prescriptions in a general way.

At the time of the MTE there was no indication that a proposed survey of the forest corridor extending northeast from Mount Myohyang would be carried out. So as to focus attention on the management plan the MTE recommended that this Activity be dropped. However, this forest corridor is important for maintaining the global biodiversity significance of Mount Myohyang PA and this point is taken up under **Recommendations**, below.

Output 1.2. Outreach

[6] As have wildlife and habitat survey data.

Project staff, working closely with the PAA, and in liaison with co-operating institutions, have produced:

- "Identification Guide for Birds of Mount Myohyang" (with details on 165 bird species found in, or likely to be found in the PA.
- Bird sounds CD and tape.
- "Identification Guide for Plants of Mount Myohyang" (with details on 360 typical, special and/or easily observed species found in the PA region.
- "Biodiversity Conservation of Mount Myohyang Protected Area."
- "Survey report on wildlife of Mount Myohyang Protected Area." (completed, but yet to be printed)

In addition, the Korean Central Broadcasting Committee produced with Project support:

- A video documentary of Mount Myohyang Protected Area, in all seasons; produced for national TV, and to be used for visitor education at the PA.

Five hundred copies of each of the first two books have been printed, with distribution to tour guides and rangers at Mount Myohyang PA, and to schools in the area that participated in Project awareness activities. Two thousand copies of the biodiversity book have been printed. Though this has been distributed to some Bio-Club students its level of complexity is such that it is best used as a source book for teachers. At the end of 2003 the Hyangsan County Education Office (the area in which the Mount Myohyang PA headquarters is located) received 1100 copies and these were distributed as follows: each of four 'core' schools, including the school that piloted Project awareness activities, received 100 copies. The 14 other secondary schools in the County each received 50 copies. Enthusiastic about the book, the Hyangsan County Education Officer asked the evaluation team if more copies could be provided! A number of copies was distributed to the education authorities in the other three Counties that border on the Mount Myohyang PA. This is a very promising indication of uptake that could extend this Project benefit throughout the 'Mount Myohyang' Counties and even beyond.

A "Student Package on Environmental Education" was produced early in the Project, with more than one hundred pages of information on issues, methods, and materials for use by local schoolchildren. Only 20 photocopies of this were said to be distributed as attention subsequently shifted to the more relevant biodiversity book.

Educational visits to the PA for local teachers and children were arranged and supported by the Project. A pilot group from the nearby Hyangan Ri Secondary School participated closely in Project awareness activities and this experience is being transferred to other secondary schools in the County, the Hyangan Ri participant teacher introducing the material to other teachers. The County Education Officer reported that from 1st April 2004 material from the Project-supplied biodiversity book would be included in the biology and geography curricula of all secondary schools in the County.

Another educational group that has benefited and that continues to include Mt Myohyang biodiversity awareness activities in its programme, is the Mt Myohyang Children's Camping House operated by the Kim Il Sung Socialist Youth League. Over 13,000 13-14 year olds attend courses there each year.[7] Two of the six days of each course are spent on Mt Myohyang trails.

The WCS awareness specialist guided Project staff in the design and conduct of questionnaire surveys as a basis for collecting information on the perceptions of people living in the vicinity

[7] There are nineteen of these schools in DPRK so through these there is big potential for disseminating biodiversity conservation awareness.

of the PA – the group with greatest impact on the PA. A limited initial survey was conducted but there was no follow up to this. It is important that this information gap be filled.

Twenty-two signboard designs were prepared, attractively illustrated and with interpretive messages about biodiversity. All but one of these has been erected and has been in use for some time as a basis for tour guide presentations. A total of almost thirty boards will have been provided through the Project by the time the last few are erected (expected to be before the end of March 2004). A study of signboard impact on visitors has been carried out and, as a result, some signboards should be relocated and re-texted. An information video about the PA and its natural features has been developed with the Korean Central Broadcasting Committee carrying out filming and editing functions and this has been broadcast nationally (twice) in four parts totaling a little over an hour of screening time. It is reported that, from the opening of the new season on 1st April the documentary video is to be screened regularly to visitors to the Mt Myohyang PA.

A pilot programme to cultivate medicinal plants has been initiated. Several hectares of about ten medicinal plant species are reported to be under cultivation outside the PA at a site about 8km from Hyangsan, while it is said that as much as 100ha of enrichment planting in forest areas not part of the PA is planned or underway.[8] This action is aimed at reducing harvesting pressures on wild medicinal plants within the PA. In a complementary action the PA Management Plan includes a list of medicinal plants for which collecting is permitted. In addition, in collaboration with the Hyangsan County Forestry Management Unit, fuelwood lots have been established near villages, so as to reduce pressure on the PA through firewood collection[9].

Output 2.1 Strengthened Measures to Protect Biodiversity

As specified in the Prodoc, policy recommendations for the PA (including harvesting quotas) based on data collected and on stakeholder input were compiled and used in the development of the Mount Myohyang PA Management Plan. Areas of the PA in which certain specified activities are permitted and others are to be disallowed (zoning) was completed. There was some engagement (by PA rangers) of communities neighbouring the PA in discussion of their need for forest resources and of means of addressing these needs while ensuring protection of the biodiversity of the Mount Myohyang PA. However there was no close community involvement.

Biological monitoring programmes were developed as an integral part of the management planning process. Three monitoring 'subjects' were selected: some readily identifiable species of harvested plant; breeding success of Mandarin Ducks in a section of the Hyangamchon River; and distribution of goral defecation piles. Training was provided for first two but there was insufficient time for training for the third.

Output 2.2 Institutional and Policy Base Strengthened

Collaboration with policy-makers in appropriate Ministries and Departments was conducted to establish the status of the PA and the institutional framework for decision-making. The key agencies, the Forest Management Unit that is under the County Forestry Department (and, so, under MLEP) and the Scenic Sites Management Unit, whose parent body is quite separate

[8] The MTE and TE teams did not visit these areas, and nor did the PAA or the Medicinal Plants Specialist.

[9] The impact can be greater than firewood removal alone. Firewood collection activities are accompanied by foraging for other resources that may be encountered, such as edible fungi. The MTE and TE teams did not visit these fuelwood plantations, and nor did the PAA or the Medicinal Plants Specialist.

from the MLEP, need to work closely together to give effect to the management plan. At a local level they do work well together. Yet the evaluators could not find evidence of an effective linkage between the parent agencies at a national level. This sort of institutional challenge is common to any country, and in many it has taken time to bring about the full cooperation and level of sharing needed to produce joint or unified management at the PA level.

Though the roles of provincial authorities, MLEP, the PA administration and other stakeholders were reviewed so as to fit them for a new integrated approach to PA management it seems a clarification of interagency arrangements for PA management is still awaited.

The MTE report listed at its Annex VI the DPR Korea legislation that makes provision for biodiversity conservation. DPR Korea regulations at Project start stressed conservation of biological resources, with less attention to management of biodiversity and, so, were less than are needed for a PA to become a National Park to international standards. Improved regulations for the Mount Myohyang PA have since been developed as part of the Management Plan prepared through the Project, and been approved by Cabinet.

Discussions on the reclassification of PAs throughout the country were held between representatives of the Cultural Property Conservation Administration (parent body of the SSMU at Mount Myohyang PA), Ministry of Fisheries, Ministry of Forestry, Ministry of Agriculture, and the Academy of Sciences, chaired by the MLEP. Cabinet approved the proposals submitted and, further, agreed to some PA extensions, including a 37% increase to the area of Mount Myohyang PA.

Through Project intervention the roles of the County DLEP and the PA rangers have been reviewed and proposals for changes submitted to, and agreed by, the MLEP. The uptake at County level is, however, slow. Similar proposed changes to tour guide roles, to bring them into line with the biodiversity conservation theme of the PA, have been approved by the Scenic Sites Management Department in Pyongyang.

The TE terms of reference specified that policies be examined in the light of any conflicts between conservation and development at Mount Myohyang. No new conflicts have become apparent since the Project was designed. There is no indication that any economic or physical development will threaten the long established sanctity of the PA.

Output 3.1 Building Management Capacity

PA management arrangements have been reviewed and improvements have been made to make biodiversity conservation measures more effective, as specified in the Prodoc. All activities have been characterized by a refocussing of the mission of the PA Forest Management Unit in relation to identified threats to biodiversity. Its PA partner, the SSMU, is yet to wholeheartedly adopt its role in biodiversity conservation.

The TE team was able to sight PA Forest Management Unit work plans linked to budgets. However it has not been possible to determine how effective this new management tool is. A 2004 work plan was not yet available at the time of the TE. There was evidence that Rangers were using the notebook formats developed for them as part of the Project and there was an unexpected bonus. PA administrators found these notebooks to be a useful staff management tool as the record of ranger activities gave them a better understanding of what rangers were doing, where they were going and how much time was involved.

The Project has been responsible for introducing conservation themes into PA sign-posting and for marking boundaries around 'Controlled Use Zones'.

Technical facilities for Project implementation and PA management have been upgraded as required, including computer equipment, a small library, and relevant field equipment.

At the time of the MTE the Project had provided a range of office and field equipment[10] that included:

- Office equipment included desktop computers and printers, desks, chairs and storage cabinets, meeting tables, and generators.
- Transportation equipment made available to Project staff included one minibus, one 4XD Land Cruiser (two similar vehicles have been purchased for use by MLEP), five motorbikes (used by the tour guide unit, the DLEP, and PA rangers), and 15 bicycles (used by rangers, tour guides, and medicinal plant unit staff).
- Library materials consisting of books, reports and papers on birds, plants, mammals and insects, sample PA management plans and other documents pertaining to PA planning and management.
- Field equipment including binoculars (35), telescopes (10) compasses (35), altimeters (5), camping and equipment sets (tents, sleeping bags, backpacks). The Project has also provided some field equipment for ranger use. This includes 35mm camera with telephoto lens, and patrolling gear (winter trousers and coat, raincoats, boots). Thirty camera traps were provided for animal survey work.

This equipment was held by the EDC and the Forest Design and Technical Institute of MLEP, the Academy of Sciences and the Forest Management Unit of the Mount Myohyang PA. Since the MTE more equipment has been purchased. The list provided to the evaluators is largely office equipment, with an emphasis on computer spares, but also included megaphones for Mount Myohyang PA tour guides.

Output 3.2 Improved Human Resources

An assessment of Project and PA staff training needs was conducted at the start of the Project but for a number of reasons, including changes in Project personnel the results were no longer relevant once the time came to use them. In any case, it has been suggested it could not have been an effective assessment because many of the 'potential trainees' at that time were unsure about Project aims and what their roles would be and, so, were not in a position to participate effectively in such an assessment. This point is taken up under **Lessons Learned**.

Mt Myohyang PA managers received training in the planning and implementation of a management plan. However, the shortage of Project time limited scope for raising their ability to the level considered appropriate to carry plan implementation through to subsequent plan review and preparation.

As stipulated in the Prodoc, on-the-job training in biodiversity - targeting biological data management, biodiversity conservation planning and monitoring, and public outreach methods - based on training needs agreed by DPR Korea, has been conducted.

In line with the Project design, in-country training activities for decision-makers and PA administration staff in protected area management planning and co-ordination, the aims and

[10] Project training addressed the use of field equipment. Initial lectures were given in Pyongyang, followed by a second lecture and field practice at the field site. On-hands-training in the use of field equipment was repeated.

practice of biodiversity conservation, public awareness raising aims and techniques, patrolling strategies, and monitoring and evaluation of biodiversity conservation activities have been conducted. Also, a series of three meticulously planned and executed study-tours to Bulgaria, India and Cambodia was organized and conducted by WCS to enable key Project staff to view and learn from relevant other protected area conservation programmes.

On-site practical education and skills development for rangers and other PA staff has been conducted to enhance their capacity to manage, patrol and document the biodiversity of the PA, in patrolling, basic ecology, aims and practices of biodiversity conservation, and basic species survey techniques and field identification of selected species.

Output 3.3 PA Management Plan

As required by the Prodoc, in a collaborative manner Project and PA staff were trained in the formulation of a PA Management Plan and policy and decision-making levels of Government were kept informed of the management planning process.

A short-term management planning specialist made a first visit to the Project site in March 2001. However, subsequent progress was slow. There was a change of facilitator, and the group convened for management planning dispersed. However, during the summer of 2002, things began to move. The replacement facilitator began to understand his role, and a study tour to Indian PAs had stimulated thinking and provided ideas. Also, by then the PAA was better placed to give advice on management planning issues because he had become familiar with the 25% of the PA in which he had permission to work. In October 2002 the Mid-Term Evaluation report recommended "*a project revision to focus on the management planning process*" and urged that the work of the PAA be re-focused onto support for the management planning process. This focus on the management planning process was firmed up by the appointment to the Project management planning team (as a National Consultant) of the individual who had served as national evaluator on the Mid-Term Evaluation team.[11]

The MTE noted that the successful production of a management plan was of vital importance for two reasons: *1) The Mount Myohyang management plan was intended to become a model for the nation's PA system and, so, must be a sound example; and 2) it was a matter of national pride and determination for the DPR Korea to gain international status for its efforts in biodiversity conservation by meeting GEF criteria – for which a sound management foundation is necessary - and by eventual recognition through meeting IUCN Category II (National Park) criteria.*

There is still much to be done to achieve Category II status. A discussion of the issues to be addressed is at Annex IV of this report.

The TE team can now report that a management plan has been produced, Cabinet has approved this for implementation,[12] and implementation has begun. Some of the evidence for this lies in the firm action being taken to deal with two alien tree species introduced into the PA, one of which is particularly aggressive. This action is highly significance as it reflects a remarkable shift in understanding and perception. These trees formerly were viewed as an acceptable part of the PA landscape.

Another area where prompt implementation action was expected was in bringing together the operators of the twenty-odd weirs that obstruct the flow of the Hyangamachon River and have

[11] Kim Gwang Ju had trained with UNESCO in Biosphere Reserve concepts and had been the initiator of the DPR Korea's Mt Paekdu Biosphere Reserve nomination.

[12] On 27th October 2003.

drastically altered its natural flow and condition. The initial step was to have been to effect some coordination of weir management and, in particular, to coordinate the opening and closing of sluices. This has yet to be achieved.

As a 'first', this management plan it is quite satisfactory. As experience is gained it will be a suitable basis for a review and a new plan. It is standard practice in PA management to review plans every few years so as to be able to take account of new policy or management developments. In this way they improve over time. Local community stakeholders did not directly participate in the management planning process and the Plan formulators had to rely on PA ranger assessments of community needs and perceptions derived from their extension work with communities. The next plan can be improved by bringing communities into the management planning process.

Capacity building

This statement from the Prodoc needs to be kept in mind: "*long-term project success involves developing the ability of PA staff to notice, observe, document and think over potentially problematical situations, develop ideas together with other stakeholders, implement these ideas, evaluate the results, and perhaps modify future actions. Knowledge can be imparted relatively swiftly, but conceptual growth needs time.*"

So much had to be learned, beginning with 'what is biodiversity?' and leading through to 'what is conservation?' and 'what does a protected area for biodiversity really mean? Working within a project framework, too, was a new way that had to be understood and learned – matters such as 'Objectives, Outputs and Activities', 'capacity building' and – the really difficult one – the distinction between 'output' and 'outcome'. Further down the track, inevitable anxieties about project evaluation were to arise. 'What is its purpose?' 'How is it done?' and 'What do we do with the results?'

All of the capacity building measures provided for in the Prodoc, and found to be implementable,[13] were attempted. These were designed and conducted to transfer a wide range of skills, knowledge and understanding. The capacity to implement these skills and apply the knowledge and understanding is learned on the job, through experience. Three Project years was too short a period to reach the capacity level needed to conduct competent surveys of plants and animals, analyse and interpret data and translate this into management prescriptions. The MTE had made the point that a Project of this type should be of five years duration to be effective, and the TE team confirms this. As the Prodoc stated: "*Knowledge can be imparted relatively swiftly, but conceptual growth needs time.*" (our underlining, for emphasis)

The Prodoc envisaged that training and capacity building at national and local levels would be led by the Academy of Sciences and the EDC under the direction of the MLEP, following appropriate 'training of trainers' by WCS-selected technical specialists. When it became apparent that the Academy of Sciences could not take on this role WCS was then faced with the need to 'fill the gap'. The responsibility for all animal and plant species survey training then fell to WCS specialists. Since the timing and duration of their inputs had been calculated in expectation of a major Academy role, these international inputs were then no longer adequate to the training task faced.

In terms of capacity building the management planning process was the most successful element of the Project. The group involved should now be able to apply skills and

[13] No GIS or GPS training was permitted.

understanding developed through the Project, and engage in a management planning process in another protected area. The same cannot be said for the wildlife survey and public awareness elements.

An adviser's effectiveness depends on the time he or she spends at a Project site. The advice and training given must directly relate to the situation 'on the ground'. Also, time spent among trainees, in the place where they do their work, is important for building understanding between the adviser and those with whom he or she works. It is judged that the approach used by the PAA was effective, but that it could have been more effective. If he had been able to reside in DPRK for the duration of the Project, so as to be able to provide the sustained support that this Project so obviously needed, then more advanced outcomes would have been possible.

Prior to each short-term advisory input the PAA tried to ensure that core team members were selected and available, schedules agreed, and the topic coverage discussed. After each visit, the PAA facilitated continued participation by core team staff by discussing the adviser's report, and following up to try to ensure (not always with success) that the reports were translated into Korean and distributed to all Project staff.

Nevertheless, the input of short-term advisers was weakened by the short permitted duration of their visits. Another matter that made advisers' inputs less effective was the uncertain membership of training sessions. This was particularly a problem at the start of the project. The situation improved later, particularly in the case of the second training session of the Traditional Medicinal Plants Adviser, where the training was held at a remote temple from where it was not convenient for participants to wander off to something else!

The greatest success with these international training inputs seems to have been with the management planning group, where it is reported members actively engaged in debate.

Project management delegated by the National Project Director to the Deputy National Project Director. This, too, was an area for capacity building. There was an expectation that the Project's PAA, in the course of other duties, would provide a form of 'management backup.' "*The day to day management of the project will be the responsibility of the NPD. The PAA is however expected to play a significant role in assisting the NPD and his staff to develop project implementation plans, undertake reviews and build local capacity to meet the reporting requirements necessary during a UNDP / UNOPS project implementation*."[14] It was presumptuous to expect that an individual who was to be selected primarily on technical criteria could or should also take on an advisory role in management. Not surprisingly he feels his contribution in this area was limited. In any case, where a decision has been taken to nationally manage a Project it must be assumed that the capacity exists to manage. Fiddling with a technical specialist's terms of reference to make these fit some unrelated need is bad Project design.

The MTE report pointed out that the technical background of some of the individuals selected for training had not been consistent with the subject areas in which they trained. All trainees appeared to have been interested and willing to learn. However, while it was good for a wide range of individuals to have exposure to training it was an inefficient use of training opportunities to mix those who had qualifications and a background in the training subject, with those who did not. A more systematic approach to selection of trainees was recommended by the MTE, based on trainees' capacity to absorb training. Since this recommendation was made it appears that trainees have been better matched to the training.

[14] From the TOR for the PAA.

Overseas training, and the involvement of international trainers was part of the UNOPS sub-contract with the WCS. The PAA had direct input to in-country training and was specifically responsible for liaison between WCS and the PSC regarding overseas training and international inputs. The WCS carried out its responsibilities in this area very well. The overseas study tours seem to have been very effective in providing the comparative experience and PA management ideas that trainees needed. Their success can be attributed to the careful planning and guidance, and the post-tour debriefings held so that trainees could convey their experience to Project and PA staff that did not participate in the tours.

The non-participation of the Academy of Sciences[15] weakened the capacity building process. Though some scientific skills and understanding were transferred to a number of trainees the international inputs, which had been designed to complement Academy inputs, on their own were not sufficient to bring trainees to the level of 'trainers'. As a consequence, this outcome of the Project cannot be said to be sustainable.

The fact that most of the technically trained individuals in the Project team were not able to communicate in English reduced their capacity to benefit from international expertise offered through the Project. The strategy adopted to deal with this problem was to appoint 'facilitators' who are competent speakers of English. However, none had a technical background. It has not been easy for them to interpret and to translate technical terms and concepts. To their considerable credit, these facilitators displayed a keen interest in learning and applying technical knowledge and made a big contribution to Project success. Even so, the full potential of the technical specialists has been under-utilised and their capacity has not been built as much as was envisaged. The lesson to be learned is that DPR Korea's efforts in biodiversity conservation will be strengthened if English language training is provided for technical specialists.

The extent to which Objectives have been achieved

Normal practice in an evaluation is to assess a project against the original project design. The time allocated to this Project was judged by the MTE to be too short. This means the original design is an unsatisfactory basis for judgment. This assessment of progress in meeting Objectives takes this into account.

A largely satisfactory result has been achieved in the effort to meet **Immediate Objective 1** (information systems and outreach).

Most progress has been through awareness raising activities, leading to a promising series of actions to introduce biodiversity awareness material into the wider school system. Also, a basic system for compiling and managing information has been developed; a simple system rather than the unwarranted high-tech system that seems to have been envisaged initially, and one that is better suited to local needs.

Less information on rational use of biological resources by local communities was collected than was needed for management planning. Because of changes in membership of the awareness working group progress was slower than expected. Further capacity building is needed to enable group members to achieve the level of skills needed to independently prepare an awareness programme for another PA.

Good progress was made towards achieving **Immediate Objective 2** (a strengthened institutional and policy base) in terms of policy. Achievements of note are Cabinet-agreed

[15] It is noted that one of the Academy's scientists did make a good contribution to the Project by conducting two mammal surveys with Project staff.

biodiversity reoriented MLEP and DLEP roles in PA management and a reclassification of all DPR Korea PAs[16].

More progress is needed regarding a key institutional improvement objective – effective multi-agency cooperation to ensure effective joint management at the PA level.

With regard to **Immediate Objective 3** (strengthened management, including a management plan) the MTE had found that there was a prospect of meeting this Objective if the PA management planning process could be progressed at a much faster rate and if the understanding of PA management staff about the rationale for biodiversity conservation could be advanced and their skills for this firmly established. The report pointed out that "*this would be a notable achievement even though it is likely to be that communities of the area surrounding the PA will not be engaged as closely as is necessary for sustained long-term management of the PA's biodiversity*." The TE team is able to report a satisfactory result.

Though this Objective has been largely achieved more experience, coupled with further training, is needed to consolidate PA management's capacity to apply what has been learned and to confidently initiate and sustain a management planning process.

Project relevance and performance

Adherence to the Convention for Biological Diversity (CBD) in 1994 established an important platform for commitments and efforts towards biodiversity conservation. Statements from the leadership exhorting the public to appreciate and respect plant and animal biodiversity and placing stress on environmental rehabilitation to reduce the impact of flood and drought have reinforced this official commitment.

There is no question that the Project's objectives remain relevant to needs and priorities at a national level, and the Project is assessed to have maintained its relevance in a global context. The Project design was deficient in some respects but of overriding importance is the fact that the Project duration was unrealistically short. It is inevitable that this has resulted in a lower level of performance than would have been possible had the PA staff, and scientists of the MLEP been given the time needed to gain experience and upgrade their skills with continued guidance from specialists. Another reason why achievements fell short was the absence of the planned Academy of Sciences input to the Project.

From indications of progress seen during the terminal evaluation it is judged that, given another two years, and with progress towards a multi-agency PA administration for Mt Myohyang, the original Project objectives might be met in full. This view is explained under **Recommendations**, below.

The MTE report presented Project staff with a challenge. In relation to shortcomings identified at that time, it said: "*The test of improved performance will be a Terminal Project Evaluation that reports the existence of a sound PA management plan, County level staff confident and capable of implementing it, a growing body of information on the PA's biodiversity and signs that this information is being used to guide management practice*."

A basically competent and practical management plan has been produced and implementation, though slow and unsure, has commenced. County level staff are enthusiastic and confident, though unaware of how much more capacity building they need to be able to

[16] Cabinet decision of 11 April 2003: 'Establishment of a protected area management system and rearrangement of protected areas throughout the country' – endorsed by Cabinet again on 17 June 2003.

implement the management plan well, and to review it and produce a new plan at a later date. In light of the precarious position of the Project at the time of the MTE this is a good result.[17]

The achievements of the Project and its effectiveness in solving the perceived problems can be summed up in Project analysis terminology as:

- The project has produced some of its Outputs effectively, though not often efficiently;
- The quality of the Outputs and the manner in which they are being utilized is discussed in the text and under 'Project impact', as is the effect of the Project on target groups and institutions;
- There were no unforeseen effects on non-target groups and no unintended effects caused by the Project;
- Project self-monitoring was not as effective as it could have been, but this was one of many aspects of project management that was being learned;
- The results are of high significance for the country and this is explained in the text; and
- The Project Objectives and goals are already part of national development policy but the extent to which they are incorporated into the development programme is not known.

With respect to country ownership/driven-ness the project fits national development and environmental agendas, and national commitments to international agreements, and notably the Convention on Biological Diversity. Also:

- The Project concept has its origin within the DPR Korea National Biodiversity Strategy and Action Plan;
- Outcomes from the Project have been used as a basis for national actions regarding PA classification and PA management planning;
- Relevant country representatives have been actively involved in Project implementation;
- The recipient government has maintained financial commitment to the project; and
- The government has approved policies and modified regulatory frameworks in line with the Project's Objectives and Outcomes.

Findings

Project impact

Impact on Mt Myohyang biodiversity

As indicated under **Results**, above, a satisfactory management plan has been produced. Provided it is properly implemented this will have a major beneficial impact on Mt Myohyang biodiversity. Factors contributing to this success included: stability in the composition of the management planning working group, a strong sense of national ownership of the process and of the Plan that emerged from it, the experience gained by the working group's leader on

[17] The reaction in some countries to constructive criticism emerging from a Project evaluation is to become defensive. Time is spent in questioning the credibility of the evaluation (and in some cases pressuring UNDP-GEF for changes) rather than working to re-direct action towards achieving Project Objectives. It is very much to the credit of Mt Myohyang Project management and the Government of DPR Korea that the MTE recommendations were accepted and promptly acted on.

overseas study tours, strategically spaced short-term adviser visits, a boost from the MTE recommendation that the management plan be made the focus of effort and the adviser's input be extended, and successful involvement of some 'outside' stakeholders such the Hyangsan County Medicinal Plants Management Unit.

There are two matters that could reduce this beneficial impact. Though some implementation actions have been taken there has not been sufficient time to produce decisive evidence of success. Further, success requires that more attention be paid to 'ownership' of the Plan at the local, PA level. The MLEP sense of ownership of process and Plan is good, but at the County and PA level it remains weak. An administrative arrangement to bring together all the involved County-level agencies, coupled with active interaction and cooperation between the Forest Management Unit and the Scenic Spots Management Unit on-site at the PA would help to develop the local ownership that is needed for sustainability.

Government satisfaction with Project results that demonstrate the biodiversity significance of the Mt Myohyang PA has led to a Cabinet decision to add 90km^2 of adjacent forest land. This represents a 37.5% increase in its area and this is another beneficial impact arising directly from the Project.[18]

Project actions were expected to impact positively on Mt Myohyang biodiversity through threat reduction, and to some extent they have. Fuelwood plantations should begin to have positive impact as they mature. It will take time to determine how much the threat of medicinal plant collection is reduced by cultivating these outside the PA. In the MTE report it was pointed out that is unclear whether the choice of medicinal plants for cultivation was based on a careful ecological analysis of their growing requirements. It is likely that many of the more threatened species require growing conditions that are very specific to the areas where they are found and that it would be very difficult, and in some cases impossible, to recreate these conditions under cultivation. Some evidence in support of this point has emerged. The TE has learned that the quality of the cultivated medicinal plants is inferior to that of wild-grown plants. The plant collection threat to the PA has been reduced, but not as decisively as was hoped.

The MTE report noted that relief from harvesting pressure was needed also for certain non-medicinal plants. Discussions with local government counterparts had led to the idea of prohibiting the sale of products made from highly threatened species such as *Gastrodia elata* and *Taxus cuspidata* (the latter is used for wood carving). The main sales outlet for souvenirs made of *Taxus* wood in the past were in the PA itself, in stalls around the bus station, at the base of tourist trails, and in the souvenir shop in the PA 'tourist sector'.

Impact on global biodiversity

Annex V of the Prodoc outlined a basis for judging Project performance using indicators listed in that Annex. The TE team has used these indicators as a basis for assessing the end-of-Project situation. This is presented as Annex V: Project Performance Against GEF Project Brief Indicators, of this terminal evaluation report. This provides a general statement of Project impact in global terms.

Few new species of vertebrate animals of major global conservation concern were found in the Mt Myohyang PA during the Project. This is an indication that there had been good coverage for mammals under previous surveys. Also, few Korean land-birds are of international conservation significance. The continued presence of a probably viable

[18] This includes areas formerly managed as production forest on a 30-year cutting cycle. It is 28 years since the last harvest.

population of Asian Black Bear *Ursus thibetanus* was reconfirmed, and Long-tailed Goral *Naemorhedus caudatus* still occurs. Both are in decline, the numbers of the Goral dropping quickly. There has been a beneficial Project impact as a result of the 37% increase in the area of the PA, and through Project success in focusing the attention of the agencies involved in PA management more towards biodiversity conservation. These successes have probably slowed the declines in these globally important species.

What is now critical for long-term persistence of these species is protection of the forest connection to the northeast. The Project has had positive impact in this respect through raised awareness within MLEP and other agencies as to why this is an important issue. Protection of the forest link with Mt Rangrim PA is taken up under **Recommendations**, below.

Little plant survey work was undertaken through the Project, and no survey of fish. There is insufficient information to comment on whether there may be 'special' fish species of global significance, but there would seem to be a possibility of this.

The most significant single-species 'find' during the project was the discovery of large numbers of Scaly-sided Mergansers *Mergus squamatus* using the adjacent Chongchon River. Probably over 1% of the global population of this endangered duck pass through in the non-breeding season. This species is sensitive to water quality and research might show that the pure water flowing into the Chongchon from the various catchments of Mt Myohyang has a significant effect on Chongchon water quality.

Possibly the global significance of Mt Myohyang lies mainly in the little disturbed altitudinal transition of natural habitats from its lowest foothills (at an altitude of around 100m) to summits ranging from 1,000m to 1,900m and extending over several hundred square kilometres. The lower areas are probably the habitats of greatest global significance. Though they are well protected from clearance at their margins, they are under great threat from an aggressive invasive tree species. At the start of the project this was not widely recognised as a threat to biodiversity. PA management is now active in removing this tree, and this is a very positive sign of a change of attitude as understanding of biodiversity has improved through the Project. However since it suckers readily, the removal of this weed tree from the PA is a very daunting task.

The project developed a focused management programme for medicinal plants, outlawing collection of most species within the PA. Conservation of large populations of these is particularly important so that a wide range of genetic resources can be maintained in the PA. Bearing in mind the widespread international interest in medicinal plants this, too, can be seen to be an aspect of biodiversity conservation that has global significance.

Impact on Project beneficiaries

The intended target beneficiaries include, at a national level, the MLEP, the Academy of Sciences (which has undertaken many biodiversity surveys in DPR Korea) and the Korean Nature Conservation Union (a member of IUCN-the World Conservation Union, with responsibility for preparation and dissemination of conservation and environment-related material in DPR Korea). The MLEP has benefited greatly in terms of staff development, institutional strengthening and policy improvement. Since the Academy of Sciences did not participate significantly it has not been subject to Project impact. The KNCU was to have a role in the dissemination of information. This, it is understood to have done and, from information it has received through the Project the KNCU's role and status can be said to have been strengthened.

The primary local beneficiaries are the staff of the Forest Management Unit and the Scenic Sites Management Office at Mt Myohyang PA - through training, experience and the

provision of equipment through the Project. Other local stakeholders to benefit directly are secondary schools that participated in Project awareness activities and received awareness material produced by the Project. The County Education Office has benefited from Project-produced biodiversity conservation material that is about to be introduced into biology and geography curricula. Also, The Mt Myohyang Children's Camping House and the thirteen thousand children who pass though it each year are benefiting from Project produced awareness material during their excursions into the PA.

The project was designed specifically for one particular protected area. However, since it was chosen as a 'demonstration site' the Project had a strong national theme. Application of Project results to other PAs was the intention. Accordingly the Project was implemented as a national project. It is not easy in such circumstances to allocate resources and attention equitably to both national and local partners. Most decisions about project activities and scheduling were made in Pyongyang, though County and PA officials were consulted. It was mostly Pyongyang people who went on overseas study tours and Pyongyang-based staff prepared reports, which is what is standard procedure for national staff.

Though PA staff clearly benefited from the Project and their interest and enthusiasm was evident to the TE team. Their sense of 'ownership' may not be as strong as that of MLEP staff. The lesson to be learned is that, in such a partnership special attention must be paid to encouraging and supporting the engagement of County staff in a genuine partnership in which they feel truly empowered.

PA-neighbour communities were not listed in the Prodoc as Project beneficiaries, even though the last Activity listed was intended to address community needs. The communities of people living in the vicinity of the PA's boundaries and who impact on, and are impacted by, the PA, were not engaged as Project stakeholders. Despite some efforts by PA rangers to promote understanding of the PA's biodiversity values among local residents, the PA may still be seen by these communities as an interference with their livelihoods. Experience in many countries has shown that community engagement and support is a vitally important element of PA management. Without this, the Mt Myohyang experience offers only a partial model for a national approach towards biodiversity conservation through protected areas.

Impact on DPR Korea capacity for biodiversity conservation

In respect of building capacity for biodiversity conservation at a national level the Project has had success. A good beginning in biodiversity understanding has been achieved. This has begun, simply, with a focus on species, then leading to the more complex concept of animal and plant habitat. From this point it is necessary to extend learning into study of ecosystems and ecological processes. There has not been time to do so. Project impact in this area has been limited by the time constraint.

Some skills and knowledge in biodiversity conservation and management have been gained, and the confidence of the MLEP Project staff and the Mt Myohyang PA staff has increased. What is now needed is the practical application of skills and knowledge that makes for experience. It will be through that experience that staff will begin to realise how much more there is to understand and learn.

The experience with the management planning process has had a major beneficial impact. Awareness is not confined to the working group through which the management plan was prepared. Decision makers, too, seem to have benefited. The real test of impact now comes – successful implementation.

The quickest and most promising start of any component of the project was 'awareness'. Yet, in the end the impact, though good, could have been better. The reasons for the good start

included the fact that PA staff already were engaged in awareness activities, staff themselves had identified this as a component for the Project and, so had 'ownership', and the short-term awareness adviser was permitted significantly longer time in the DPR Korea than other advisers - two trips, each of two months (other short term advisers, only 2-3 weeks). What held back progress were changes in key Project awareness personnel, inadequate time at the project site, decreasing local ownership of the awareness component as the enthusiasm of the PA SSMU declined, and the short duration of the project.

A creditable set of biodiversity guides has been published, and a schools-based awareness programme that is characterised by strong teacher and student responsiveness are excellent outcomes. Reports that the Hyangan Ri Secondary School experience as a Project participant is being extended through teacher meetings and through the County Education Office are very encouraging indications that a process of replication is underway.

The level of understanding and skill needed to initiate new forms of biodiversity conservation awareness or new programmes for different PAs has not been achieved. Further international specialist support would advance this effort in promoting biodiversity conservation awareness.

The entry of the Korean Central Broadcasting Committee as a national promoter of awareness information arising through the Project was an unexpected bonus that extended the beneficial impact of the awareness programme nationwide.

Sustainability of Project outcomes

Basic ranger equipment was relevant, was greatly appreciated and served to boost ranger interest, enthusiasm and status – all primary determinants of their effectiveness. Office equipment for Pyongyang and Hyangsan Project Offices was appropriate.

It is well understood that there are acute financial limits to what the Government of the DPR Korea can support. In the interest of sustainability of Project outcomes it is important to choose equipment that is appropriate to the circumstances, that will continue to be useful and can be easily repaired or replaced. The data management system envisaged for this Project would have failed this test severely. Fortunately, WCS recognised that a sophisticated computer database was not warranted because there was so much that PA staff needed to understand and learn before they could make effective use of such a system. This was a wise decision.

In summary, equipment choice needs to be tempered by consideration of circumstances in which it is to be used, and local capacity to sustain it after Project completion.

A GEF biodiversity programme study a couple of years ago produced these findings and recommendations on sustainability:

1. Much more needs to be done to secure sustainability of project gains and activities
2. Funding patterns during the project must be compatible with the economic realities of the host institution/country.
3. For most governments to have the political will to conserve biodiversity, its conservation must be seen as contributing to economic growth and economic security.
4. Only activities that have a realistic chance of tackling immediate and proximate underlying causes should be considered.
5. Conservation initiatives should be linked to commercial interests

Some of these can be interpreted in terms of the Mt Myohyang Project experience.

With respect to the **first point**, above, Project gains would be more likely to be sustained if other relevant agencies had been more closely engaged in the Project. The Academy of Sciences is one of those, though WCS inputs did partly compensate for its non-participation. Of greater significance is the fact that the cooperative link between the MLEP and the Scenic Sites Management Department is yet to be firmed up so that the SSMU at Mt Myohyang can play its role as a full partner in biodiversity conservation. A higher proportion of time and resources devoted to the PA staff would also have improved sustainability.

The **third point** is relevant in that it indicates a necessary 'next step' in the DPR Korea for the economic development values of Mt Myohyang and other PAs to be assessed so that the full biodiversity value of PAs at both local and national levels is known, understood, and promoted.[19] This is required to place biodiversity conservation firmly within the development planning process and for its contribution to national development to be truly appreciated.

The Project was reasonably well focused in relation to the **fourth point**.

The **fifth point** was not accommodated by the Project design. There may, however, have been an opportunity to develop a link with the tourist hotel within the PA. In future projects of this type consideration should be given to the idea, if it is practicable, of linking biodiversity conservation initiatives with forest economic enterprises.

Lessons Learned

For project design and implementation in the DPR Korea

Though the nature of international personnel inputs to projects in DPR Korea is the same as in biodiversity conservation projects in other countries, the overriding priority of national security means that international specialists are not able to enter all parts of the area encompassed by a Project. This restricts their ability to gain an overall understanding of the area where they are required to give the support that Koreans are requesting in their admirable quest to lift capacity to international standards. Different strategies for achieving the results expected of international specialists are needed, but are not easy to develop. This needs careful consideration in project design, and in some cases could even lead to a conclusion that a good Project idea is, for the present, unworkable.

The Mt Myohyang Project experience provides lessons that, if recognized and learned, can lead to improved project design and implementation. Certain points emerge clearly:

Provide for an inception phase. It is inevitable that some key Project factors will have changed by the time implementation commences. Provide for the submission of an inception report at (3 months) that presents any necessary recommendations for shifts in the nature and scheduling of Activities, together with the first year's work plan.

Detailed training needs assessment should be deferred until some months into a Project, at a time when staff are sufficiently aware of Project objectives and of their roles, to be able to participate effectively in the assessment. There is, however, a case for undertaking a simple 'indicative' sort of assessment at the outset, or even as part of project design, to identify training needs in general by group.

[19] Some useful guidance on this can be obtained from reports prepared during a recently completed study: Protected Areas and Development in the Lower Mekong Region (Vietnam, Laos, Cambodia and Thailand).

However, an interim assessment of training needs of different trainee groups should be done before a Project design is finalized to determine, in general, the level of training inputs needed. In the case of the Mt Myohyang Project it was discovered only after implementation commenced that the basic knowledge and understanding of trainees was less than anticipated. This, coupled with the absence of a key Project 'player', the Academy of Sciences, and the lack of English language skills among technical staff, meant that the designed training inputs were less than the situation demanded.

Adequate time must be allowed for training to move beyond knowledge acquisition, to grow into conceptual understanding and mature into confident application in biodiversity management. This means a DPRK project should be of the order of five years duration, and designed to provide for a more measured rate of implementation.

There is a firm determination in the DPR Korea to reach international standards in biodiversity management. This Project has shown that this is an achievable objective, but that more skills transfer and, particularly, more experience is needed. Until such skills and experience have been firmly established further international support will be needed, including technical specialists.

The role of Protected Areas Adviser was a key element in the success achieved in this Project Even so, the PAA under-achieved. There was a slow start to understanding the situation at the Project site because so little time at the site was permitted. There was also a communication difficulty, even with English-speaking Facilitators. This difficulty did ease as the Facilitators learned more about biodiversity, but the only long-term and sustainable solution is for technical staff to be given opportunities to become proficient in English.

In making the point that a long-term international adviser is an important feature of a project this must not be misinterpreted as questioning the considerable skills and knowledge of Korean specialists. However, since Korean Project staff have few opportunities to learn directly from the experience of other countries then it follows that a long-term international adviser presence is needed to impart some of that experience. Project staff on many occasions mentioned to the TE team that a great deal had been learned from the international experience and ideas introduced by the PAA, the short-term advisers, and even from the MTE and TE team members who took the time to sit and explain aspects of the global experience in biodiversity conservation.

Care needs to be taken that a long-term international adviser is, as was the case with the Mt Myohyang Project, not only technically able but also culturally sensitive, and patient.

Real and active inter-agency cooperation must be a feature of future projects. This means sharing biodiversity information and sharing of Project resources in the national interest. The Project goal (which is a national goal) must override any agency ambition to further its own interests. Project steering committees must be strong and effective and Project managers must respond to the recommendations of these committees.

For biodiversity projects in all countries

Well-planned study tours can be very effective

Overseas study tours conducted as part of some projects have produced mixed results. The tourist and shopping experience can become a distraction and reduce focus on the essential purpose of the visit. The three overseas study tours conducted as part of the Mt Myohyang Project appear to have been extremely effective. The fact that for the DPRK study tour participants this was a unique opportunity, that they were hungry for ideas and information,

and that they were well disciplined, obviously contributed to making these visits as successful as they became. Yet it took more than that to make these tours successful.

The lesson to be learned by others is that each tour must be meticulously planned, that it is best for the tour leader or adviser to become familiar with the target area in advance, that care is taken to brief the staff in the host PAs as to what information or observations will be most useful to the visitors, that the visitors themselves are thoroughly briefed before they leave home and also while on the tour, and that serious debriefing is conducted after returning home, so that colleagues who did not travel are able to derive some benefit from the experience.

Guidance is needed regarding Project equipment

Project equipment lists need to be tested against these principles:

- the equipment is relevant to the production of one or more of the Project Outputs;
- it is cost effective;
- it is appropriate to the circumstances in which it is to be used and is something that the recipient can reasonably be expected to continue to use effectively after Project completion; and
- it is locally made or, if not, spares can readily be obtained – and preferably from local suppliers.

Consider making provision in a project design for the replacement of certain key equipment during the final year so as to boost prospects for sustainability …

Biodiversity corridors and patches should be a feature of all Projects

The Mt Myohyang Project is yet another that demonstrates how important is the biodiversity in the landscape adjacent to a target PA. The capacity of the 330km^2 of this PA to sustain viable populations of some species, and particularly those of global significance, is limited. What adds to the value of Mt Myohyang is the forest extension to the northeast. Some other GEF-funded projects have featured extensions and corridors. For instance, the design of the Chitwan project in southern Nepal is based on the role of an extension to an existing PA and the idea of this forming a dispersal corridor for tiger and rhino into forested country to the north. In some others, the role of adjacent areas has not been considered, but has later been found to be critical for maintaining global significance. An example of this is Yok Don PA in central Vietnam. Here, the project was designed on the basis only of the biodiversity values of the Vietnamese PA itself. Yet this PA shares a long boundary with neighbouring Cambodia, and large mammals move seasonally between the two areas. At the time of mid-term project evaluation Yok Don PA was found to be at risk of losing its global biodiversity significance because of a plan to construct a highway along the international border that would cut this important biodiversity link. When the importance of the biodiversity link was pointed out a decision was taken construct the highway in another area where it would not interfere with animal migration.

There is a lesson here for project designers. Where a specific PA is targeted for support to maintain its biodiversity do not neglect to consider how the surrounding landscape may contribute to that PA's biodiversity values. Make provision for assessment of the biodiversity of the surrounding landscape, whether it is in the form of extensions, corridors (even narrow, stream-side vegetation strips) or patches such as woodlots or forest on rocky knolls in the midst of farmland – and consider including actions that would support maintenance of these.

Recommendations

Project success should be consolidated.

As explained earlier in this report the decision to limit the duration of this Project to three years was unwise. After an uncertain start, sufficient progress has now been made towards achieving Project objectives that a follow-up phase to build on that progress would be effective. This is strongly recommended.

Even if the Government of DPR Korea is able to continue financing the current level of PA management activities and to make staff trained through the Project available to continue support for the Mt Myohyang PA staff it would not be in a position to provide the international expertise needed. TE team offers two options for consideration:

The **first option** put forward is that p**rovision be made in the proposed 'West Sea Project'** for:

- Mt. Myohyang PA staff to be given further training opportunities through this project; and
- International advisers attached to the 'West Sea Project' to be made available to provide further support inputs to Mt. Myohyang PA.

The **second option** (the preferred option) is a 'phase II' project that is designed to build on phase I, with a focus on capacity building needs at the PA level, and an extension of the Project experience to other PAs. Further international inputs will be needed, and more attention to the 'training of trainers' approach that was not possible in phase I because the Academy of Sciences was not there to fill this role in association with the EDC. Equipment needs should be minimal. In this respect a phase II should be treated as a continuation of an existing Project – not as a new one. A functioning multi-agency approach will be needed, with MLEP, Scenic Sites Management Department, and the Academy of Sciences among the key partners, in addition to others such as the Ministry of Public Health (for its role with medicinal plants).

Such a phase II project should provide for:

- extension and reinforcement of the plant and animal survey skills of MLEP and DLEP scientists and PA managers and an extension of skills to include fish surveys;
- description and assessment of the forest and stream ecosystems of the Mt. Myohyang PA and of the ecological processes that operate in the area and their relevance for the local landscape including the downstream productive landscape of farms, towns and villages;
- the upgrading of skills to develop and implement biodiversity awareness activities;
- analysis of the Mt. Myohyang PA experience, leading to definition and documentation of a management planning approach and process suited to PA management in DPR Korea;
- opportunities (through workshops, training courses, manuals/booklets) for PA managers from other areas of the DPR Korea to gain exposure to management planning concepts and methodology developed at Mt. Myohyang PA; and
- review of the management plan.

The effectiveness of a phase II project would be strengthened by:

- closer interaction between agencies involved in the management of the Mt. Myohyang PA, with steps taken towards an integrated administration for the area; and

- further promotion of biodiversity awareness activities among communities that live in the vicinity of the Mt. Myohyang PA and more consideration of community circumstances and biological resource needs;

Biodiversity values of the Myohyang-Rangrim forest corridor should be secured.

The evaluators emphasise that the forested link between Mt. Myohyang and Mt. Rangrim is the key to ensuring that the area maintains global biodiversity significance. Alone, Mt. Myohyang is not of sufficient size to maintain global significance as there is a real prospect that some of its globally significant species will gradually be lost. To ensure that Mt Myohyang maintains global biodiversity significance, action is needed to ensure biodiversity protection in the Myohyang-Rangrim forest corridor.

In the Prodoc this forest corridor was described as being of high significance in terms of both national and global biodiversity. In the case of the bear, for instance, it is estimated (from the density derived data in similar habitat in China) that an area of up to 15 square kilometres is needed to supports an individual of this species. So, the Mt Myohyang PA might support 10-15 bears at full capacity. This is not a large enough population to be of long-term conservation priority and in any case it may not be a viable population. Bear conservation interest in Myohyang is dependent on maintaining a forest link to the northeast of the PA so that the Myohyang bears are a component of a significantly larger functional population. The same argument holds for other big carnivores in the area, although there is little evidence that Myohyang retains important numbers of any other species.

The corridor is legally protected as a production forest under the Forestry Law of 1992. It seems to hold few villages, although at least one road crosses the mountain range. Currently, there are no site-specific hunting and harvesting regulations within it. Selective felling (on a 30-year cycle) followed by replanting (not always with native species) is occurring. It has potential value for wildlife conservation if various management practices can be introduced – such as enforcement of hunting and harvesting regulations and maintenance and/or rehabilitation of some areas of natural forest.

Outright deforestation of the corridor does not seem a threat, but fragmentation/bottlenecking (at least one road crosses it), over-hunting within it, and over-conversion to exotics might be. Even without complete knowledge of the forest it is responsible to assume that it is an essential long term 'lifeline' for Mt Myohyang wildlife.

It was expected that the project would address the area's legal designation as long-term forest, by undertaking a survey to define a long-term habitat link to the Mount Rangrim Nature Reserve and establish the corridor as an extension for Mt Myohyang's wildlife. The aim was not to gazette the area as a strictly protected area – it was to ensure biodiversity considerations were taken into account when determining future uses of the forest.

No Project activities were carried out in this area and, again, a major reason was a lack of Project time to extend into this area. Action now must be regarded as high priority if the DPR Korea is to achieve its ambition of meeting GEF criteria and gaining international standing for Mt Myohyang PA.

Annex I. Terms of reference for the Terminal Evaluation

Terms of Reference

TERMINAL EVALUATION OF "CONSERVATION OF BIODIVERSITY AT MOUNT MYOHYANG IN THE DPR KOREA", DRK/00/G35/A/1G/31

1. Project Summary

Project Title	"Conservation of Biodiversity at Mount Myohyang in the DPR Korea"
Project Short Title:	Mt. Myohyang
Project Number:	DRK/00/G35/A/1G/31
Executing Agency:	UN Office of Project Services (UNOPS)
Implementing Agents:	Ministry of Land and Environment Protection (MLEP)
Co-operating Agents:	Wildlife Conservation Society (WCS)
Project Duration:	3 years
Project Site:	Mount Myohyang Protected area, administrated from Hyangsan County, North Pyongan Province, with sectors in South Pyongan and Jagang Provinces, DPR Korea
Beneficiary Country:	Democratic People's Republic of Korea
Project Start Date:	July 2000
Project End Date:	March 2004

Project Financing

UNDP, TRAC (1 & 2)	US$ 100,000
GEF	US$ 750,000
Government of DPRK	US$ 650,083
WCS	US$ 150,000

2. General Introduction to the UNDP/GEF Terminal Evaluation Process.

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives: i) to monitor and evaluate results and impacts, ii) to provide a basis for decision

making on necessary amendments and improvement; iii) to promote accountability for resource use; and iv) to document, provide feedback on, and disseminate lessons learned. A mix of tools is used to ensure effective project M&E. These might be applied continuously throughout the lifetime of the project – e.g. periodic monitoring of indicators -, or as specific time-bound exercises such as mid-term reviews, audit reports and independent evaluations.

In accordance with the UNDP/GEF M&E policies and procedures, all projects with long-term implementation periods (e.g. over 5 or 6 years) must undergo terminal evaluation at the end of the project. In addition to providing an in-depth assessment of the results and impacts, this type of evaluation is responsive to GEF Council decisions on transparency and better access of information during implementation.

Terminal Evaluations (TE) are intended to measure outcomes, demonstrate the effectiveness and relevance of interventions and strategies, document lessons learned (including lessons that might improve design and implementation of other UNDP/GEF projects), indicate early signs of impact and recommend what interventions to promote and abandon.

3. Introduction to the Myohyang

With financial support from the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP), Ministry of Land and Environmental Protection (MLEP) of the Government of Democratic People's Republic of Korea has been executing a 3-year project to conserve biodiversity in Mt. Myohyang since June 2000. The project is being implemented in association with the Wildlife Conservation Society (WCS) and various national stakeholders.

The project was designed to protect biodiversity in Mt. Myohyang identified as globally significant based on the rich altitudinal variation in forest-types and the high species richness of plants and animals. The project focus on developing information systems for protected area management, strengthening institutional and management capacity and involving stakeholders through the development of strategic outreach plans. The project is expected to result in Mount Myohyang PA meeting IUCN category II (National Park) status, increasing habitat range, reducing pressure on biodiversity resources and raising awareness of biodiversity conservation measures.

Development Objective

The objective of the project is to protect biodiversity in Mt. Myohyang in central DPRK identified as globally significant based on the rich altitudinal variation in forest-types and high species richness of plants and animals including many threatened and/or endemic species. This will be achieved by initiating a protected area management scheme that focuses on biodiversity conservation, demonstrating a model of protected area management for the rest of the country. The result will enable the Myohyang PA to meet the IUCN Protected Area Management classification scheme, with the current nature park being classified as a "National Park" (IUCN Category II).

Immediate Objectives

In order to meet the development objective of the project, three immediate objectives have been identified, mainly focused on:

a) developing information systems and outreach strategic plans that will assist in determining clear objectives for PA management and provide data for ongoing monitoring, and ensure relevant information disseminated;
b) strengthening institutional and policy base capacity and especially for the Myohyang PA which will build the capacity of the PA staff, management and Ministry officials to carry out biodiversity conservation measures; and

c) strengthening management, which will include development of a Management Plan and the improvement of human resources.

Outputs

Output 1.1:	Developing Information Systems
Output 1.2:	Developing Outreach Strategic Plans
Output 2.1:	Strengthening Measures to Protect Biodiversity
Output 2.2:	Institutional and Policy Base Strengthened
Output3.1:	Building Management Capacity
Output 3.2:	Improving Human Resources
Output 3.3:	Preparing and Implementing a PA Management Plan

4. Scope and Purpose of the Evaluation

The purpose of the evaluation is to:

1. Assess the appropriateness of the project's concept and design and the project's effectiveness in realizing its immediate objectives and the extent to which they have contributed towards strengthening the institutional, organizational and technical capability of the Government in achieving its long-term development objectives.

In particular, the mission should assess whether;

- The problem was identified correctly;
- The project approach was sound, the beneficiaries and users of the project results were identified;
- The underlying assumptions were accurate and the objectives were the correct ones for solving the perceived problem;
- The objectives and outputs were stated precisely and in verifiable terms; the objectives were achievable;
- The relationship between the different project elements (outputs, activities etc.) were logical and commensurate with the time and resources available;
- A work plan was prepared and followed.

2. Review the efficiency and adequacy in implementation and management of the project.

In particular, the mission should review the quality and timeliness of inputs, activities, responsiveness of project management of changes in the project environment; monitoring to changes in the project environment; monitoring/backstopping of the project by all concerned parties. Evaluate whether project design allowed for flexibility in responding to changes in the project environment.

3. Review the UNOPS execution modality of the project.

The mission should specifically evaluate the UNOPS execution modality with a view to assess its effectiveness and impacts and determine what is necessary to achieve effective project execution.

4. To review the results of the project

In particular, the mission should:

- Review the achievements of the project and assess their effectiveness in solving the perceived problems;
- Assess whether the project has produced its outputs effectively and efficiently;
- Assess the quality of the outputs and how they are being utilized (i.e. assess project impact);
- Assess whether the project has achieved or impeded the progress of the project in achieving its desired results;
- Determine the effect of the project on target groups or institutions;
- Assess any unforeseen effects on non-target groups and any unintended effects caused by the project;
- Assess the adequacy of the project self-monitoring;
- Assess the significance of the results achieved for the country or region;
- Determine the degree of support given by the Government in integrating the project objectives and goals into the national development programme and other related projects, and vice versa how well the project fit into the national development policy.

5) Describe the main lessons that have emerged in terms of:

- strengthening country ownership/drivenness;
- strengthening stakeholder participation;
- application of adaptive management strategies;
- efforts to secure sustainability;
- knowledge transfer; and
- role of M&E in project implementation and its effectiveness.

In describing all lessons learned, an explicit distinction needs to be made between those lessons applicable only to this project, and lessons that may be of value more broadly, including to other, similar projects in the UNDP/GEF pipeline and portfolio.

In its reporting of the project's results, the evaluation mission should highlight the following aspects:

a) the extent to which national project personnel have been or are being trained, and whether there is enough capacity and human resource to fully take over all technical and professional responsibilities from expatriate project personnel.

b) The adequacy of institutional arrangements in attaining the long-term objective of the project. Also the infrastructural, logistical, and financial implication of sustaining the project objectives beyond the project duration/after completion of UNDP/GEF funding.

c) Assess whether the Logical Framework Approach (LFA) and performance indicators have been used as project management tools.

d) Impact of the project upon beneficiaries/users, particularly with respect to setting protected area management on a sound footing with the support of the local communities.

e) Effectiveness of the project's linkages, liaison, coordination and impact upon related activities in environment and nature conservation being undertaken in the country.

f) The project's assistance, relationship, relevance to and coordination with the pre-existing PA management system and staff.

5. Project Status

To be sent to the consultants two weeks before arrival (PIR report 2003, Mid-term evaluation report).

6. Finding and Recommendation of the Evaluation

Based on all the above points, the TE should identify needs and provide specific recommendations for future park management and support needs.
The up-coming UNDP-GEF MSP 'Conservation of biodiversity in the West Sea of DPR Korea' shares many features with the present project. Thus, the mission should particularly record any significant lessons that can be drawn from the experience of the present project and its results, especially anything that worked well and that can be applied to the West Sea other projects, as well as anything that has worked badly and should be avoided in the future.

7. Composition of the Mission

The evaluation team will consist of 1 international evaluator and 1 national evaluator (who will participate for the entire duration of the evaluation while in Korea). The international evaluator will be designated as team leader and will carry overall responsibility for organizing and achieving the evaluation and delivery of a final report. In addition, 1 international resource person (the returning Protected Area Advisor, who worked with the project July 2000-November 2003), and 1 national project staff will accompany the mission. The former will provide context and continuity between the project and internationally standard monitoring procedures (see Footnote 1 of the projects Mid-Term Evaluation report), and will assist, where directed by the team leader, in undertaking activities with project staff. The latter will gather basic data, set up meetings, identify key individuals, assist with planning and logistics, and generally ensure the smooth progress of the evaluation.

8. Duration, Timetable and Itinerary of the Evaluation

The evaluation will spend 21 days in DPRK (all are working days) and should commence in time to leave the country by 20 March 2004. A broad outline of time structure (subject to revision depending on progress) reflecting the proposed methodology is:

	Activity	Days
a	In Pyongyang to study the project files, meet government representatives, staff of all Pyongyang-based organisations involved in the project, and carry out detailed planning of the evaluation	2
b	Field evaluation including visits to project sites and meetings with representatives of all project site stakeholders and beneficiaries	13
c	Preparation of draft evaluation report	3
d	Present draft evaluation report to stakeholders (at Hyangsan, and including Pyongyang stakeholders)	1
e	Incorporate comments and circulate updated draft evaluation report to major stakeholders	2
Total		21

For the international evaluator, an estimated three more days will be required outside Korea for activities related to the evaluation, notably meeting with UNOPS in Beijing and the finalisation of the report.

The international resource person should arrive in DPRK 3-4 days before the evaluator to (1) review project progress since November 2003 and (2) advise in final preparations for the evaluation.

Dates of international personnel's arrival and departure from Korea are proposed as follows:
24 February 2004: arrival of international resource person
28 February 2004: arrival of international evaluator
20 March 2004: departure of both

9. Methodology for the Evaluation.

The evaluation will be conducted in a participatory manner working on the basis that the primary purpose of the evaluation is to assess the results (outcomes), impacts, performance (on the basis of the indicators identified in the logframe matrix) and sustainability of the project. For this to happen, the mission will start with a review of the key project documents, notably PIRs, reports of Tripartite Review meetings, and the Mid-Term Evaluation Report, but also any other reports and correspondence that seem relevant. It will include visits to the Pyongyang project support office, person-to-person meetings with key individuals within the project, within government, and with independent observers of the project and its activities, as well as implementing and executing agency personnel. The majority of the in-country time will be spent in and around the project's focal protected area (Mt Myohyang), to view activities first-hand and to meet with local stakeholders and government officials who are responsible for ensuring the sustainability of the project. Participatory techniques and other approaches will be used for gathering and analysis of data and opinion. The mission will maintain close liaison with the UNDP GEF focal point in DPR Korea, the concerned Agencies of the Government, and permanent counterpart staff assigned to the project. To the extent possible, the mission should consult any organizations of the civil society.

The team should be familiar with, and use, the results based monitoring approach of UNDP. For the report to be of value to the beneficiaries, stakeholders must fully understand and identify with the evaluation process and report, even if they might disagree with some of the latter's contents. The team should bear in mind the novelty of the evaluation process in DPR Korea (as flagged in the project's Mid-Term Evaluation report) and schedule contact sessions appropriately.

In order to optimise use of the time available for the evaluation, the international team members may operate separately for a significant proportion of the visit, but it is essential that all parties take note that only one international and one national are engaged to evaluate the project. Therefore, these individuals need first-hand experience of all significant aspects and activities.

The mission undertaking the evaluation is encouraged to bring any other issues pertinent to this project and sector to the attention of the DPR Korea Government and the donors involved. Although the mission should feel free to discuss with the concerned authorities anything relevant to its assignment, it is not authorized to make any commitments on behalf of the government or UNDP.

10. Report of the Mission

The mission shall first prepare a draft report, and the main findings and recommendations of this draft report shall be discussed with representatives from Government of DPR Korea, Wildlife Conservation Society, UNDP, and UNOPS. Their comments to the draft shall be considered for incorporation in the final report, to be presented by the mission to a meeting of

major project stakeholders. The mission is then required to finalise and submit the evaluation report within one month of departure from DPR Korea. The evaluation report and the summary of the evaluation report shall follow the Guidelines for the Preparation of Evaluation Report attached to these Terms of Reference as Annex 2.

The mission report shall give a detailed account of the itinerary and persons interviewed, summary of field visits, lists of documents reviewed, methodology and questionnaire used and summary of results and any other relevant materials. The report shall be submitted in hard copy and electronic form, using Word 7, or later version.

11. Implementation Arrangements

- Government of DPR Korea and UNDP will draft the TOR, finalise agenda of the mission, and recruit international and national consultants for the mission.
- The project (NPD) is responsible for arranging visas for international consultants, booking hotels, arranging domestic travel, picking them up at the airport, arranging meetings with concerned parties in Mt. Myohyang and in Pyongyang, and other logistic support.
- The mission should finish by late March 2004.

12. Terms of Payment

To follow the standard payment schedule in the UNOPS Service Contract

Annex 1 Key questions

In line with the Terms of Reference above, the final report of the assessment mission should address the following issues:

I. Policy Environment

A. Review both national and local policies with regard to conservation and development prevailing at the time the project was formulated, especially with regard to the Mount Myohyang Protected Area. How were apparent conflicts between conservation and development in the Mount Myohyang Protected Area resolved within those polices, if at all?

B. Review the same policies prevailing at the present time. How have these policies changed since the project was formulated? Have there been any significant new initiatives with regard to development in the area that might have a negative impact on the project?

C. Considering the above, make recommendations on appropriate adjustments the protected area might need to make while implementing the management plan in light of the potentially changing policy environment.

D. Does the project document clearly define the linkages among its main objectives that focus on protected area management and local human activities including development plans? What is the overarching aim of the project? How do these objectives and their related activities gel together? How do these objectives intend to influence the overall policy environment in Mount Myohyang?

E. How could the project become part of the national system and program for conservation and development? Who are the concerned stakeholders, national and local entities and other development projects, and how can the project collaborate in the coordination process? What would be the steps leading to such a situation and what are the mechanisms for the project to be guided in this process?

II. Implementation Arrangements

A. Project Design

1. What are the discrepancies, if any, between the project design parameters and the actual existing conditions? Comment with respect to available human resources, institutional capacities, clarity of policies of the government and institutions, national inputs and budgets, level of national commitment, logistical and administrative ease, etc.

2. How appropriate are the execution and implementation arrangements? Review especially the project management and staffing structure in terms of its effectiveness, efficiency and suitability in achieving the project goals.

3. Does the project document clearly define the budget in relation to the proposed activities? Are all activities adequately funded? If not, what activities would have benefited from additional funding and in what amounts? Was funding channeled towards superfluous items and/or activities? Given the difficulties of predicting in advance what money is needed for what activities, how could future projects use a system better able to target money at necessary project activities?

4. Was the risk analysis (a) meaningful and (b) helpful in encouraging the project to focus on achievable outcomes? Were there other assumptions implicit in the project document that should have been highlighted under risks? Were other assumptions identified during implementation that with hindsight were risks?

B. Project Management

1. In principle, are the project inputs adequate in terms of quantity and quality to produce the target outputs? Comment specifically in terms of national and international personnel, sub-contracts, training and equipment. In particular, assess existing human resource capacity in Pyongyang and Mt. Myohyang vis-à-vis those envisioned in the project document. Assess as well ongoing efforts to build up those capacities

2. In practice, are the project inputs being used efficiently to produce the target outputs? What inefficiencies in implementation have been identified by the project management, and how are these being dealt with?

3. How well is the project being managed? Comment specifically on the strengths and possible areas for improvement of the Management of Mount Myohyang. Comment as well on the guidance provided by the last Steering Committee, Tri-Partite Review group, and Mid-Term Evaluation report such as:

    - A new work plan to reflect a more realistic design of the project;
    - Improvement on the provision of national staff to the project needs;
    - Improvement of the contributions from agencies outside MLEP, such as the Academy of Sciences;
    - Fully functioning project offices;
    - Linkages with technical agencies and improved data collection in terms of methodology.
    - Full use made of PA Advisor services – time in field, provision of transport etc

C. Project Support

1. How adequate is the support provided by the Government to the project, and how tangible is Government participation? Comment specifically on the respective roles of the National Coordinating Committee for Environment (NCCE), in conjunction with MLEP, the Forest Protection Sub-department of MLEP, and the Myohyang Protected Area Administration. The government Academy of Sciences and Korean Nature Conservation Union were also predicted to be significant particpants. Did they provide adequate input? Comment on the support from any other bodies that emerged with a significant role during project implementation.

2. How adequate is the support provided by the United Nations? Has the UNDP Country Office taken adequate measures to monitor and support project implementation? How effective is support provided by UNOPS? UNDP/GEF inputs timely and relevant? Comment on any areas of needed improvement, or possible alternative arrangements.

3. How adequate is the support provided by WCS? Has WCS taken adequate measures to monitor and support project implementation? Comment on any areas of needed improvement, or possible alternative arrangements.

Annex 2 Evaluation Products

The Terminal Evaluation Report (no more than 30 pages, excluding Executive Summary and Annexes) structured as follows:

Acronyms and Terms

Executive summary
- Brief description of project
- Context and purpose of the evaluation
- Main conclusions, recommendations and lessons learned

Introduction
- Purpose of the evaluation
- Key issues addressed
- Methodology of the evaluation
- Structure of the evaluation

The project(s) and its development context
- Project start and its duration
- Problems that the project seek to address
- Immediate and development objectives of the project
- Main stakeholders
- Results expected

Findings and Conclusions

- Project formulation
- Implementation approach
- Country ownership/Driven-ness
- Stakeholder participation
- Replication approach
- Cost-effectiveness
- UNDP comparative advantage
- Linkages between project and other interventions within the sector
- Indicators [*Note that the original logframe and indicators have been abandoned as unhelpful to project implementation. Therefore, the TE team may themselves need to develop, post-hoc, appropriate indicators*]
- Management arrangements

  - Implementation
    - Financial Planning
    - Monitoring and evaluation
    - Execution and implementation modalities
    - Management by the UNDP country office
    - Coordination and operational issues

  - Results
- Attainment of objectives
- Sustainability
- Contribution to upgrading skills of the national staff

Recommendations

[*Here, the evaluators should be as specific as possible. To whom are the recommendations addressed and what exactly should that party do? Recommendations might include sets of options and alternatives*]

- Corrective actions for the design, implementation, monitoring and evaluation of future projects in the sector
- Actions to follow up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives

Lessons learned

- Best and worst practices in addressing issues relating to relevance, performance and success

Annexes

- TOR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Questionnaire used and summary of results

Annex 3 Explanation on Terminology

Implementation Approach includes an analysis of the project's logical framework, adaptation to changing conditions (adaptive management), partnerships in implementation arrangements, changes in project design, and overall project management.

Some elements of an effective implementation approach may include:

- The logical framework used during implementation as a management and M&E tool
- Effective partnerships arrangements established for implementation of the project with relevant stakeholders involved in the country/region
- Lessons from other relevant projects (e.g., same focal area) incorporated into project implementation
- Feedback from M&E activities used for adaptive management.

Country Ownership/Driven-ness is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements where applicable.

Some elements of effective country ownership/driven-ness may include:

- Project Concept has its origin within the national sectoral and development plans
- Outcomes (or potential outcomes) from the project have been incorporated into the national sectoral and development plans
- Relevant country representatives (e.g., governmental official, civil society, etc.) are actively involved in project identification, planning and/or implementation
- The recipient government has maintained financial commitment to the project
- The government has approved policies and/or modified regulatory frameworks in line with the project's objectives

For projects whose main focus and actors are in the private-sector rather than public-sector (e.g., IFC projects), elements of effective country ownership/driven-ness that demonstrate the interest and commitment of the local private sector to the project may include:

- The number of companies that participated in the project by: receiving technical assistance, applying for financing, attending dissemination events, adopting environmental standards promoted by the project, etc.
- Amount contributed by participating companies to achieve the environmental benefits promoted by the project, including: equity invested, guarantees provided, co-funding of project activities, in-kind contributions, etc.
- Project's collaboration with industry associations

Stakeholder Participation/Public Involvement consist of three related, and often overlapping processes: information dissemination, consultation, and "stakeholder" participation. Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the GEF-financed project. The term also applies to those potentially adversely affected by a project.

Examples of effective public involvement include:

Information dissemination

- Implementation of appropriate outreach/public awareness campaigns

Consultation and stakeholder participation

- Consulting and making use of the skills, experiences and knowledge of NGOs, community and local groups, the private and public sectors, and academic institutions in the design, implementation, and evaluation of project activities

Stakeholder participation

- Project institutional networks well placed within the overall national or community organizational structures, for example, by building on the local decision making structures, incorporating local knowledge, and devolving project

management responsibilities to the local organizations or communities as the project approaches closure
- Building partnerships among different project stakeholders
- Fulfillment of commitments to local stakeholders and stakeholders considered to be adequately involved.

Sustainability measures the extent to which benefits continue, within or outside the project domain, from a particular project or program after GEF assistance/external assistance has come to an end. Relevant factors to improve the sustainability of project outcomes include:

- Development and implementation of a sustainability strategy
- Establishment of the financial and economic instruments and mechanisms to ensure the ongoing flow of benefits once the GEF assistance ends (from the public and private sectors, income generating activities, and market transformations to promote the project's objectives).
- Development of suitable organizational arrangements by public and/or private sector
- Development of policy and regulatory frameworks that further the project objectives
- Incorporation of environmental and ecological factors affecting future flow of benefits.
- Development of appropriate institutional capacity (systems, structures, staff, expertise, etc.)
- Identification and involvement of champions (i.e. individuals in government and civil society who can promote sustainability of project outcomes)
- Achieving social sustainability, for example, by mainstreaming project activities into the economy or community production activities
- Achieving stakeholders consensus regarding courses of action on project activities.

Replication approach, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated or scaled up in the design and implementation of other projects. Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources). Examples of replication approaches include:

- Knowledge transfer (i.e., dissemination of lessons through project result documents, training workshops, information exchange, a national and regional forum, etc).
- Expansion of demonstration projects.
- Capacity building and training of individuals, and institutions to expand the project's achievements in the country or other regions.
- Use of project-trained individuals, institutions or companies to replicate the project's outcomes in other regions.

Financial Planning includes actual project cost by activity, financial management (including disbursement issues), and co-financing. If a financial audit has been conducted the major findings should be presented in the TE.

Effective financial plans include:

- Identification of potential sources of co-financing as well as leveraged and associated financing[20].
- Strong financial controls, including reporting, and planning that allow the project management to make informed decisions regarding the budget at any time, allows

[20] Please refer to Council documents on co-financing for definitions, such as GEF/C.20/6.

for a proper and timely flow of funds, and for the payment of satisfactory project deliverables
- Due diligence due diligence in the management of funds and financial audits.

Cost-effectiveness assesses the achievement of the environmental and developmental objectives as well as the project's outputs in relation to the inputs, costs, and implementing time. It also examines the project's compliance with the application of the incremental cost concept. Cost-effective factors include:

- Compliance with the incremental cost criteria (e.g. GEF funds are used to finance a component of a project that would not have taken place without GEF funding.) and securing co-funding and associated funding.
- The project completed the planned activities and met or exceeded the expected outcomes in terms of achievement of Global Environmental and Development Objectives according to schedule, and as cost-effective as initially planned.
- The project used either a benchmark approach or a comparison approach (did not exceed the costs levels of similar projects in similar contexts). A benchmark approach in climate change and ozone projects measures cost-effectiveness using internationally accepted threshold such as 10$/ton of carbon equivalent reduced, and thresholds for the phase out of specific ozone depleting substances measured in terms of dollars spent per kg ($/kg) of each type of ODS reduced.

Monitoring & Evaluation. Monitoring is the periodic oversight of a process, or the implementation of an activity, which seeks to establish the extent to which inputs, work schedules, other required actions and outputs are proceeding according to plan, so that timely action can be taken to correct the deficiencies detected. Evaluation is a process by which program inputs, activities and results are analyzed and judged explicitly against benchmarks or baseline conditions using performance indicators. This will allow project managers and planners to make decisions based on the evidence of information on the project implementation stage, performance indicators, level of funding still available, etc, building on the project's logical framework.

Monitoring and Evaluation includes activities to measure the project's achievements such as identification of performance indicators, measurement procedures, and determination of baseline conditions. Projects are required to implement plans for monitoring and evaluation with adequate funding and appropriate staff and include activities such as description of data sources and methods for data collection, collection of baseline data, and stakeholder participation. Given the long-term nature of many GEF projects, projects are also encouraged to include long-term monitoring plans that are sustainable after project completion.

Any issues related to the quality of backstopping and quality assurance and control of project deliverables listed in the project document should be addressed in this section.

Annex 4 Evaluation Team Requirements

International evaluator (team leader)

1. Professional background in natural resource/protected area management or related fields with experience in terrestrial biodiversity conservation and an understanding of the landscape ecology approach. A minimum of 10 years relevant working experience is required.
2. Highly familiar with conservation projects in developing countries - particularly in Asia – either through managing or evaluating large scale donor-funded projects. Substantive knowledge of participatory monitoring & evaluation processes is essential, and country experience in DPRK is a distinct advantage.
3. Experience in the evaluation of technical assistance projects, if possible with UNDP or other United Nations development agencies and major donors. A demonstrated understanding of GEF principles and expected impacts in terms of global benefits is essential.
4. Excellent English writing and communication skills (including word-processing). Demonstrated ability to assess complex situations in order to succinctly and clearly distill critical issues and draw forward looking conclusions.
5. Experience leading multi-disciplinary, multi-national teams to deliver quality products in high stress, short deadline situations.

International resource person

1. The long-term international advisor of the Myohyang project.
2. Close working knowledge of the project, the staff and the environment in which they operated developed over 2000-2003.
3. Previous work designing, advising or evaluating GEF biodiversity conservation projects.
4. Proficient English writing and communication skills (including word-processing).

National consultant

1. Academic and/or professional background in natural resource management, biodiversity conservation and related fields.
2. Some experience in evaluating conservation and/or development projects, and some substantive knowledge of participatory monitoring & evaluation are highly desirable.
3. Knowledge of national and international conservation institutions/projects. Demonstrated understanding of both conservation and development decision-making processes at the national and local level is essential.
4. Proficient English writing and communication skills (including word-processing). Ability to act as translator for international counterparts and to translate written documents between English and Korean is essential.

Annex 5

List of documents (minimum requirement) to be provided to the project TE mission:

1. Project Document
2. Inception reports
3. Quarterly and Annual reports
4. Mid-Term Evaluation report
5. Tripartite Review reports
6. Audit reports, if project was audited
7. Consultants' reports

8. Maps of the project sites (both resource maps, and project-produced maps)
9. Information on biodiversity and usage of biodiversity in project site
10. National Biodiversity Strategy and Action Plan

Annex II. Itinerary of activities of the Evaluation Mission

Day		Activities
Thursday	26th Feb	Travel Brisbane-Hong Kong-Beijing
Friday	27th Feb	UNOPS Beijing, and visa issue, DPRK Embassy
Saturday	28th Feb	Travel, Beijing– Pyongyang; initial consultations with evaluation team resource person, W.Duckworth
Sunday	29th Feb	Pyongyang - study project documentation
Monday	1st Mar	Pyongyang - discuss with Abu Selim, UNDP Country Office the approach to, and scope of evaluation, (UNDP Environment Liaison Officer, Kim Yun Hum, not yet returned from overseas). Presentations to evaluation team by key project staff on their roles in the Project.
Tuesday	2nd Mar	Pyongyang – meeting with Biodiversity Coordinator, NCCE; travel to Project site at Hyangsan.
Wednesday	3rd Mar	Hyangsan – meeting with Sin Guang Bok, County Forest Dept
Thursday	4th Mar	Hyangsan – Meeting with Jo Chun Gil, former manager (now adviser) Koryo Medicinal Plants Management Unit of the Ministry of Public Health; meeting at the Special Sites Management Unit office, with its head, Kim Un Guk and staff; meeting with Cha Myong Sik, Head of Mt Myohyang Forest Administration and staff; inspect Project signboards along .. trail.
Friday	5th Mar	Hyangsan – Meeting with Gwon Chang Ho, Director, County DLEP and Kim Guk Chol, Chief, Forest Section, DLEP; meeting with Kim Gwan Hong, Head of Administration, SSMU, Mt Myohyang PA; evening discussion with Project staff re criteria for IUCN category II status for Mt Myohyang PA.
Saturday	6th Mar	Hyangsan – 'Study day' for Korean officials; Evaluation team leader and resource person work on draft report, and study documents.
Sunday	7th Mar	Hyangsan – Meeting with Hyangan Ri Secondary School biology teacher and with students to discuss biodiversity outreach programme, use of materials produced by the Project.
Monday	8th Mar	Hyangsan – morning and afternoon team sessions to discuss evaluation methodology and identify further information needed.
Tuesday	9th Mar	Hyangsan – team discussion with Hyangsan County Education Officer; inspection and analysis of PA forest ranger notebooks prepared as part of the Project.
Wednesday	10th Mar	Hyangsan – trek along waterfall trail of Mt Myohyang PA to inspect signboards and test Tourist Guide competence in conveying biodiversity conservation messages; assessment of bird species identification skills; discussion with staff of Mt Myohyang Children's Camping House.
Thursday	11th Mar	Hyangsan – evaluation team meeting; evaluation team reports interim findings to Project staff; return to Pyongyang from Hyangsan
Friday	12th Mar	Pyongyang – meeting and update with Abu Selim, UNDP; evaluation team discussions.
Saturday	13th Mar	Pyongyang – work on draft evaluation report
Sunday	14th Mar	Pyongyang – interaction with Project manager re findings and information still needed; report writing.
Monday	15th Mar	Pyongyang - return to Project site at Hyangsan. Outline of findings presented verbally to Kim Yun Hum, UNDP, and discussed. Further elaboration of draft of core evaluation report.
Tuesday	16th Mar	Hyangsan – continued work on core report for TPR meeting of 24th March; provided a fresh draft for Project management to consider; met with national evaluator to share ideas re evaluation findings; prepared presentation for Hyangsan County stakeholders and Project team.
Wednesday	17th Mar	Hyangsan -Presentation of findings to Hyangsan County stakeholders; completion of new draft of core evaluation report and a copy of this sent to Pyongyang for Kim Yun Hum, UNDP.
Thursday	18th Mar	Hyangsan - return to Pyongyang. Presentation of findings to Pyongyang stakeholders.
Friday	19th Mar	Discussion with Kim Yun Hum, UNDP, to record his comments on core evaluation report; de-brief with Abu Selim, UNDP; core of the evaluation report completed and left with UNDP and with MLEP.

Saturday	20th Mar	Evaluation team leader travel Pyongyang-Beijing-Hong Kong-Brisbane
Sunday	21st Mar	Evaluation team leader arrived Brisbane home base at 0940
Monday	22nd Mar	Preparation of introductory text and annexes for the evaluation report.
Tuesday	23rd Mar	Finalisation of introductory text and annexes, and e-mail submission of complete evaluation report.

Annex III. Persons Interviewed by the evaluation team

Project staff and consultants

Ri Song Il	**Deputy National Project Director**
Kim Jong Ok (Ms)	**Assistant Project Manager**
Kim Chun Ok (Ms)	**Facilitator (environmental education)**
Kim Gwang Pil	**Facilitator (PA management planning)**
Jang Yong Chol	**National Consultant**
Ro Jong Sam	**National Consultant**
Kim Gwang Ju	**National Consultant**

Other stakeholders

Paek Sung Ik	**Director, External Economic Coordination Dept, MLEP**
Li Hyong Chol	**Biodiversity Coordinator, National Coordinating Committee for the Environment**
Jo Chol Hui	**Senior Officer, Biology Branch, Academy of Sciences**
Choi Gwang Hun	**External Coordination Dept, Academy of Sciences**
Ju Jong Sil	**Scientist, Academy of Sciences**
Pak Un Chol	**Senior Officer, Cultural Conservation Administration**
Representative	**Cultural Conservation Administration**

Hyangsan County

Kim In Guk	**Head, Tour Guide Unit, Scenic Spot Management Station, Mt Myohyang PA**
Kim Gwan Hong	**Administrative Officer, Scenic Sites Management Unit, Mt Myohyang**
Chan Gyong Hui	**Tour guide, Scenic Sites Management Unit, Mt Myohyang PA**
Choy Chang Min	**Tour Guide, Scenic Sites Management Unit, Mt Myohyang PA**
Kim Sung Guk	**Tour Guide, Scenic Sites Management Unit, Mt Myohyang PA**
Choi He Yong	**Tour Guide, Scenic Sites Management Unit, Mt Myohyang PA**
Chon Gyong Hui	**Tour Guide, Scenic Sites Management Unit, Mt Myohyang PA**
Gwan Chang Ho	**Director, Hyangsan County DLEP**
Kim Guk Chol	**Head, Forest Management Section, DLEP**
Sin Guang Bok	**Officer, Forest Department, DLEP**
Cha Myong Sik	**Head of Branch Station, Forest Management Administration Unit**
Paek Chang Nam	**PA Forest Ranger**
Ji Jae Nam	**PA Forest Ranger**
Kim Han Dok	**Officer of the Education Department of the People's Committee of Hyangsan County**
Kim Nam Sue	**Section Chief, Education Unit, Mt Myohyang Children's Camping House (Kim Il Sung Socialist Youth League)**
Li Song Sik	**Guide/teacher, Mt Myohyang Children's Camping House**
Jo Chun Gil	**Ex-Manager (now Adviser) Koryo Medicinal Plant Resource Management Unit, Department of Public Health**

Jon Sun Ok	**Biology Teacher, Hyangan Secondary School**
Kim Chol Jin	**Student, Hyangan Secondary School**
Ra Myong Su	**Student, Hyangan Secondary School**
Kim Ji Nam	**Student, Hyangan Secondary School**
Paek Pong Sim	**Student, Hyangan Secondary School**
Kim Jong Im	**Student, Hyangan Secondary School**
Kang Son Hui	**Student, Hyangan Secondary School**

UN agencies

Fan Xiaojie	**UNOPS Beijing**
Abu Selim	**Country Director, UNDP-DPR Korea**
Kim Yun Hum	**Environmental Liaison Officer, UNDP- DPR Korea**

Annex IV. Challenges in achieving IUCN Category II status

… a presentation by Will Duckworth of issues to be considered

It is clear the Myohyang is both a worthy site for long-term conservation, and that the current threats are largely reversible by the PA with appropriate support from the central MLEP. The closest to impossible would be the preservation of level lowland forest, which would require regeneration on land currently used for agriculture. This is unlikely to happen in the near future. Even without this, if the momentum of strengthening the biological focus of the PA generated by the project remains, Myohyang could constitute a world-class Class II protected area (national park). There is still some way to go in terms of resolving the various stakeholders' perceptions of the goal of Myohyang. A Class II protected area is the joint highest category, in terms of priority afforded to biodiversity conservation, in the world. Tourism, research, education and other non-extractive uses are encouraged insofar as they are not in significant conflict with the biodiversity conservation goal.

Almost all the world's Class II, and Class I, protected areas struggle to a greater or lesser extent against illegal collecting activity, and Myohyang is no exception. Neither is it unusual that small proportions of the PA need to allow, at least in an interim arrangement, the collection of biodiversity for local use. This is technically not catered for under definition of a Class II PA. However, provided the harvests are managed so as not to reduce viability of species populations, and are limited to a small proportion of the PA, and of the relevant habitats, then the spirit of the concept of a Class II PA is not being broken. When a PA's boundaries come right to the edge of forest habitat, as they do at Myohyang (at least in the Hyangham sector), and where local people need access to forest products, a choice needs to be made. Either the size of the PA must be reduced, so as to exclude forest areas for human use, or regulated extractive uses must be allowed over small proportions of the PA. The latter course, followed in Myohyang, has the advantage that one management body can (in principle) manage the entire area, and (should human use needs decline) the controlled-use zones can easily be reverted to no extractive use zones. This might not be the case were they to be removed from the PA.

In 1999, at the start of the international collaboration, the situation in Myohyang was one of the County DLEP recognising the genuine need of the local people for forest products, and letting them collect across the PA. This has the profound risk that, if quotas are misjudged and/or enforcement is weak, PA-wide extinction is a serious risk for collected species. In the project-generated management plan, the PA has been zoned to permit collection is in less than a quarter of it, the 'controlled use zones'. Even if quotas are mis-set for these zones, populations in the remainder of the PA should be safe, provided the zonation system is enforced. This is the chief challenge for the PA staff, notably the rangers, during the next few years.

Some other issues are still under resolution at the time of the Terminal Evaluation. There is progress in consolidating the Myohyang related activities and staff of the DLEP within a single PA-specific body within Hyangsan DLEP. This should strengthen the ability to control several ongoing activities that are at odds with Class II status. Specifically, the PA currently contains a town, a large commercial hotel, a large and culturally very significant temple complex, the International Friendship Exhibition (IFE), and the Scenic Spots Management Unit (SSMU) and their tourism-servicing activities.

The town will shortly be relocated. The hotel, while having converted former forest habitat into parkland, buildings, and vegetable gardens seems to have no wider negative effects.

Moreover it could, if appropriate negotiations are undertaken, play a significant role in financing the management of Myohyang PA. The hotel would be considerably less attractive to visitors if surrounded by desolate barren deforested slopes. That it is not amid such scenery reflects the year-after-year dedication of the county DLEP. The hotel does not currently, it seems, make any material recognition of this. The temple's activities seem to be restricted within its grounds. As a tourist attraction in itself, it may play a valuable role in increasing potential visitors' desire to come to Myohyang, thereby building a bigger pool of people who will be exposed to the PA's environmental education activities. The chief risk from the temple is probably the escape of non-native plants and it is a priority for this issue to be discussed with them. The IFE likewise, while rendering a significant area of land valueless to wildlife, acts as a magnet to bring people to the area. It might be sensible for some of these (the IFE, the Pohyon temple, and the hotel) to be declared formally as enclaves: spots that although geographically within the PA are neither managed by the PA nor intended primarily to support the aims of the PA

Of the non-PA bodies listed above, the SSMU's activities need the most active refocusing towards biodiversity goals because they are dispersed across about a quarter of the PA's land area. There is nothing intrinsically in conflict between the SSMU's tourism management and biodiversity conservation. Small shifts in behaviour are all that is needed for them to be even stronger positive partners in conserving the area. The most important of these are the replacement of planting alien species with natives (and in the mid-term a reassessment of the appropriateness of any planting in the PA); allowing natural flow in the Hyangamchon during March--June (and in the mid-term a reconsideration of the need for weirs); recognising the conservation need for the Hyangamri town site to be allowed to regenerate as natural forest (rather than any other use); cessation of burning of reeds in Hyangamchon; discouraging tourists from picnicking in the Hyangsamchon except in designated spots.

Until these issues over tourism management are resolved, it would be premature to consider Myohyang as a representative Class II protected area. This is more than a symbolic issue: one aim of the evaluated project was that events at Myohyang were supposed to serve as a guiding template for replication elsewhere in the country to build a national network of Class II PAs. While there are many features of the project that merit replication in other PAs across the country, presenting Myohyang as a model Class II PA would still be counter-productive, and this will be so until the relationship between perceived tourism needs and actual biodiversity conservation requirements is resolved, and that resolution places biodiversity conservation as the leading goal of the Myohyang. Currently, Class II remains a goal to work towards, and Myohyang more fits a Class V area, a 'Multiple Use Area' where biodiversity conservation through natural ecosystems is a significant part of the area's goal, but in certain sectors or ways, it is over-ridden by other considerations.

Annex V. Project progress assessed according to GEF Brief Indicators

Project Objectives and Outcomes	Indicators specified in the Prodoc	Status at Project completion
9. **Project rationale and objectives**: This project will protect biodiversity in Mt. Myohyang in central DPRK identified as globally significant based on the rich altitudinal variation in forest-types and high species richness of plants and animals including many threatened and/or endemic species (threats include overharvesting and pressure from tourists and local communities). This will be achieved by initiating a protected area management scheme that focuses on biodiversity conservation, demonstrating a model of protected area management for the rest of the country.	• Mount Myohyang becomes a protected area to the calibre of IUCN category II (National Park) by the end of the project. • Achievements are disseminated to all Protected Areas in DPRK by the end of project. • Species diversity and habitat range increased by end of project from the levels measured by project's baseline surveys. • Pressure on biodiversity resources reduced from baseline levels by 50% by end of project.	• Significant progress made towards achieving IUCN category II status and this is assessed as being achievable. • Dissemination not possible as capacity building at the site could not be completed in short time span of three years. • Species diversity, if measured simplistically by number, is greater as a result of new 'finds'. Evaluators unsure what is implied by 'habitat range' but can report a 37% increase in PA area as a Project result. This has increased habitat area. • Pressure on wood collection and medicinal plants has been reduced by no quantitative data to demonstrate the level of reduction.

10. **Project outcomes**:		
(1) Information system developed	• Regular data sets are being used by Myohyang staff by end of project.	• Some progress; capacity needs further development.
(2) Outreach strategic plans developed	• Plans endorsed by MLEP and incorporated into the Management Plan by end of project.	• MLEP-supported Outreach activities have been incorporated into the work of Myohyang PA rangers and tour guides and are being extended through secondary schools in the Hyangsan County. To keep the Management Plan focused and practical a decision was taken not to add an Outreach Plan.
(3) Biodiversity protection strengthened	• Increase in recorded numbers of targeted species by end of project, as compared to baseline.[21]	• See footnote, below.
(4) Institutional and policy base strengthened	• Policy recommendations endorsed by MLEP.	• Policy measures emerging from the Project have not only been endorsed by the MLEP but also approved by Cabinet.
(5) Management capacity developed	• Participation of all relevant authorities in decision-making process by end of project and decisions taken in a timely manner.	• The participation of most relevant authorities in the decision-making process has been achieved. Closer participation of the national body representing the Myohyang PA Scenic Sites Management Unit is slow to develop.
(6) Human resources developed	• Myohyang staff responsible for implementation of Management Plan by end of project.	
(7) Management Plan developed and implemented.	• Management Plan endorsed by MLEP and under implementation by staff by end of project	• Myohyang staff now responsible for, and have commenced implementation of, the Management Plan.

[21] The evaluators judge this to be an unrealistic indicator for a project of short duration. Even if all Activities had been conducted in line with the original overly-ambitious schedule there could not have been more than about 12 months between the establishment of a baseline and a follow-up measurement.