Strengthening Policy and Regulatory Framework for Mainstreaming Biodiversity into Fishery Sector of Kyrgyzstan

Mid-Term Evaluation Report

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List of Acronyms

BD-SP4	**Biodiversity – Strategic Program 4 (GEF)**
BDFMP	**Biodiversity-Friendly Management Plan**
BDFMR	**Biodiversity-Friendly Management Regime**
CAREC	**Central Asia Regional Environmental Center**
CARnet	**Central Asia Resources Network**
CO	**Country Office (UNDP)**
DEX	**Direct Execution**
EIA	**Environmental Impact Assessment**
FAG	**Fisheries Advisory Group**
FAO	**Food and Agriculture Organization**
GEF	**Global Environment Facility**
MAWRPI	**Ministry of Agriculture, Water Resources and Processing Industry**
MTE	**Mid-Term Evaluation**
NEX	**National Execution**
RRF	**Results and Resources Framework**
SAEPF	**State Agency for Environmental Protection and Forestry**
TOR	**Terms of Reference**
UNDP	**United Nations Development Agency**

Table of Contents

Executive Summary

The four-year, $ 1.38 million UNDP/GEF Medium-Sized Project "Strengthening Policy and Regulatory Framework for Mainstreaming Biodiversity into Fishery Sector" aims to conserve threatened and declining populations of endemic fish species in Lake Issyk-Kul and other mountain lakes of Kyrgyzstan by developing a biodiversity-friendly fishing management regime (BDFMR), increasing capacity for its implementation and demonstrating sustainable fishery management. The project addresses the threats of increased unregulated fishing, introduction and expansion of introduced alien fish species and failure to re-stock lakes with endemic fish species. Through the BDFMR, the project includes practical measures to boost stocks of endemic species, control alien fish populations, develop alternative livelihoods for fishing communities and boost awareness of the plight and importance of endemic species, as well as strengthen the policy and regulatory framework and build capacity.

The project Mid-Term Evaluation (MTE) was carried out from 30 August to 13 September 2010 to assess the progress of the project towards achieving its objective, identify successes and challenges facing the project and make recommendations on future actions for successful project implementation. It looked particularly at aspects of relevance, effectiveness and efficiency in terms of project design, implementation and results achieved. The two-person MTE team consulted project documents, met with key stakeholders, undertook site visits and made a presentation to solicit feedback to preliminary findings, prior to finalization of the MTE report.

This is an ambitious project that is taking on a series of interconnected and challenging policy and management issues with limited resources and a relatively short timeframe. Overall the MTE found the project highly relevant and timely, given the continuing decline of endemic species (some almost to the point of extinction) in Kyrgyzstan's lakes. The approach taken addresses the major threats and identifies new ones, principally the development of caged Rainbow Trout culture in Lake Issyk-Kul. Project implementation has been general satisfactory, though uneven. A major constraint has been the political and institutional instability following the events of April 2010, which has particularly affected the approval of biodiversity-friendly fisheries policies and regulations. Significant results have been achieved in artificial propagation and re-stocking of Lake Issyk-Kul and control of alien predator species, as well as the development of fish pond culture as an alternative livelihood activity. The project has made good use of national and international consultants in these areas and developed a partnership with Lake Balaton in Hungary through study tours and consultants. Stakeholder involvement has been good, especially efforts to involve local fishing communities in project activities and discussions. All stakeholders interviewed during the MTE were supportive of the project and appreciative of project activities and achievements. The project has established good relationships with the FAO project supporting fishery and aquaculture management in Kyrgyzstan. Progress has been slower in promoting awareness and communication, developing knowledge and information management and identifying broader alternative livelihood opportunities to reduce fishing pressure on the lakes.

The project Results Framework presents some inconsistencies in its internal logic between the objective and outcomes. The project seeks to develop sustainable fisheries in Kyrgyz lakes that incorporate conservation of endemic species, yet the objective statement of an improved policy and regulatory framework is merely one condition to achieving sustainable management of fisheries. The framework will require increased capacity for its implementation (project outcome 1). Outcome 2, "sustainable fisheries demonstrated" actually comes closest to an objective statement that reflects the project's intent. While the results indicators are fundamentally sound, these should be further analyzed and discussed in response to better information and the experience of project progress so far, both in terms of logic and target figures, as part of the management response to the MTE. This would enable the team to be more realistic about what the project may achieve, and monitor project progress better using an adaptive management approach.

The main recommendations from the MTE fall into two categories: those relating to substantive activities on the ground to achieve project objectives and those relating to improved management and coordination to achieve project success.

Project Recommendations

1. The project should focus on developing a participatory fisheries management plan that includes conservation of endemic species for Lake Issyk-Kul within the framework of the BDFMR. Consensus should be built among key stakeholders for this approach, which should be led by the Biosphere Reserve administration as a part of larger efforts to protect and conserve the ecology and environment of the lake. An overall vision for sustainable fisheries in the lake, goals and objectives, roles and responsibilities, timeframe and needed resources should be identified. Key enabling factors, such as legislative changes and increased capacity should also be identified and actions proposed. Development of a site-based management plan would proceed in tandem with promoting the policy and legislative framework at national level and increasing awareness of the role and importance of endemic species to a healthy lake environment. The management plan could then be the template, both in process and in form, for replication to other lakes in the country.

2. The project should develop a comprehensive awareness, education and communication plan, targeting different stakeholders and proposing objectives, strategies and approaches, including messages and materials, for each target group. Priority should be accorded to decision-makers that are in place following the October elections so that key policy actions can be actively promoted.

3. The project needs to pay particular attention to establishing the capacity for effective monitoring of fish populations, notably endemics. Currently, several organizations have some responsibility for monitoring, though capacities vary. The project is providing technical assistance to the Academy of Sciences at Issyk-Kul Biological Station for scientific monitoring. Local fishers can also be a valuable source of monitoring

information and could be engaged in this activity in a more formal way under the proposed management plan.

4. Development of the caged trout farming in Lake Issyk-Kul represents a new and significant threat to achieving project objectives. Project stakeholders have identified some potential actions to address this threat, notably through undertaking a comprehensive EIA of the activity. The project should strongly support this activity through the introduction of international experts and experience to provide an independent and accurate assessment. The EIA should be credible, transparent and public participation and comment should be an integral part of the process. Since there is likely to be a strong lobbying effort by trout farmers, the results of the EIA should be the basis of an informed education effort targeted at decision-makers in the new government (even targeting Presidential level).

5. The project should strengthen its Knowledge and Information Management system. The project is piloting many innovative and interesting approaches and these should be captured and disseminated for a wider audience. The project has already built a good network through its national and international experts, partnerships with Lake Balaton and the FAO project.

6. The development of alternative livelihoods to reduce pressure on fisheries has been slow to develop under the project, with the exception of improvement of fish pond culture. The project should develop a very focused and targeted set of activities that actively seek out and build on previous work and lessons learned on alternative livelihood creation. In the interests of project streamlining and efficiency, careful consideration should be given to focusing the alternative livelihoods component to activities around fish farms, including pond culture, while identifying promising alternative livelihood activities adapted to the needs of key communities currently putting pressure on the fisheries resource.

Management Recommendations

1. The mid-term status of the project provides an opportunity to review the project's Results Framework and assess progress against objectives, outcomes and outputs according to proposed indicators, as well as review risks and assumptions in the light of updated information and project achievements. The project should hold a facilitated stakeholder workshop to review and update the problem analysis and adjust the Results Framework as appropriate. While it is unlikely that the major thrusts and components of the project will significantly change, the internal logic and prioritization of actions may be improved. The workshop also provides an opportunity to build knowledge and ownership among stakeholders regarding the project and its goals.

2. Based upon the outcomes of the stakeholder workshop and a revised Results Framework, a results-based work plan for the remaining years of the project should be developed, with a tracking system for key results and indicators and continued monitoring of risks and assumptions. Specific monitoring mechanisms and

responsibilities should be included so the monitoring and evaluation system can serve as an effective adaptive management tool.

3. The project should undertake a sustainability analysis and develop a sustainability plan that identifies and addresses risks to post-project sustainability. This should form part of the monitoring and evaluation plan. The upcoming financial mechanism study will provide an important input into this, and the TORs should be adjusted to reflect overall sustainability of project activities.

4. Largely because of the conflict situation in 2010, it is feasible to propose that the project should be extended by 6-12 months. A financial analysis indicates that a no-cost extension is feasible, but the activities and budget need to be revised to reflect this, as part of the work planning process. An extension would enable the project to achieve incrementally greater results and make it more cost-effective. The political and institutional instability has meant that planned approval of policy and legislative proposals that form the basis of BDFMR have been delayed, so that a 6 – 12 month extension will enable the project to effectively build on the BDFMR when it is eventually approved.

5. The project should hold a meeting with the FAO project once the latter has "re-started" after the elections to agree on very precise modalities of cooperation, cost-sharing and joint activities, particularly around Lake Issyk-Kul, building on the intent of the MOU between the two projects. Both UNDP and FAO Country/Regional Offices should be involved to promote collaboration and cost-effectiveness.

6. As part of its revised work planning process, the project should carefully assess its internal management needs to achieve the actions, including procurement, supervision, monitoring and field-based activities needed for timely and effective project implementation. The project manager currently has an important role in building stakeholder confidence and ownership around fisheries-based activities. This requires significant time in the field at critical periods. The project should identify a credible mechanism for moving forward on those components currently delayed, including the hiring of a technical expert with significant management experience to follow up on these activities (this has already been recommended). The expert would need very clear TORs and report to the current Project Manager. The TORs would include responsibilities for awareness raising, education and communications, alternative livelihood development, NGO partnerships, knowledge and information sharing and management, overall monitoring and reporting.

2. Introduction

Kyrgyzstan has over 900 mountain lakes and in most of them the native fish species are seriously threatened by alien species and over fishing. The primary root causes to the predicted loss of endemic species and the associated threat of extinction are: (i) a massive increase in unregulated fishing over recent years; (ii) a virtual cessation of the artificial restocking of the lake with juveniles of the 4 commercially endemic species; and

(iii) the introduction of alien predatory species that are currently not subject to any control or eradication activities. The Government of Kyrgyzstan is trying to provide a long-term prospect in promoting the sustainable development of national resources, and fisheries development in particular. However, a number of barriers constrain the attention that can be paid to integrating the requirements for endemic fish conservation into the fishery management regime.

The four-year UNDP/GEF Project "Strengthening Policy and Regulatory Framework for Mainstreaming Biodiversity into the Fishery Sector in Kyrgyzstan" (PIMS 3192) was signed by UNDP and the Government of Kyrgyzstan in March 2008. GEF contributes $950,000 and UNDP $430,000. The Government of Kyrgyzstan and Kyrgyz NGOs contribute $1,000,000 and $1,690,000, mostly in-kind support through new and ongoing activities. Total project financing therefore totals $4,070,000. The implementing partner is the State Agency for Environmental Protection and Forestry.

The project strategy is to address the overall concerns relating to fisheries management in Kyrgyzstan by demonstrating a new fishery management regime within Lake Issyk Kul as it relates to: (i) the conservation of globally significant biodiversity (endemic fish species); and (ii) within the context of socio-economic concerns, especially poverty and livelihoods. One of the key elements of the project is the Biodiversity Friendly Fisheries Management Regime (BDFMR) which will be a package of national laws, by-laws and regulations developed and enforced with the objective of stabilizing the endemic fish species in the lake within the framework of a viable, sustainable and enforceable commercial fishery. Stabilization will be achieved through reduction of unsustainable and often illegal fishing practices, controlling the populations of introduced species, as well as restocking native species. The project will create the mechanism to ensure that the lessons learned in this project will be captured and replicated initially to other large lakes in Kyrgyzstan with high economic values for fisheries.

The Mid-Term Evaluation (MTE) is intended to assess overall project progress, make sure the project is on track to deliver the agreed outcomes and produce recommendations on any adjustments needed. The MTE will assess the relevance, effectiveness and efficiency of project design and implementation. It will provide an opportunity to assess early signs of project success and identify challenges to implementation and propose appropriate adjustments.

The purposes of the MTE are to:

- assess overall performance against the project objective and outcomes as set out in the Project Document, the Logical Framework and other related documents;
- assess the effectiveness and efficiency of the project;
- analyze critically the implementation and management arrangements;
- assess progress to date towards achievement of project outcomes;
- review planned strategies and plans for achieving the overall objective of the project within the timeframe;
- assess the sustainability of project interventions;

- identify and document initial lessons concerning project design, implementation and management;
- assess project relevance to national priorities; and
- provide guidance for future project activities and, if necessary, for implementation and management arrangements.

The MTE evaluation was undertaken by a two-person team, comprising an international and a national consultant, from 30 August to 13 September 2010. The methodology consisted of a review of project and related documents, meetings with stakeholders in Bishkek, field visits to project sites and related stakeholder meetings, followed by a presentation to stakeholders in Bishkek on 9 September and incorporation of comments and suggestions into a final report.

The report is structured as follows. Following a description of the project and its development context, a series of findings are detailed, addressing project formulation, implementation and results. Sections on conclusions and recommendations, and lessons learned complete the report, along with relevant annexes. The report also contains ratings, as required by the TOR, for several aspects on project design, implementation and results. For project design, the areas rated are i) project relevance and country ownership/driven-ness; ii) stakeholder involvement; iii) management arrangements; iv) project budget and duration; v) project M&E system. For project implementation, ratings are required for i) project's adaptive management and ii) stakeholder participation and partnership strategy. In addition, the sustainability of project outcomes is rated according to risk in four areas of financial, socio-political, institutional and environmental sustainability. Finally, the overall objective and outcomes of the project are rated for relevance, effectiveness and efficiency. The ratings are included in the relevant sections of the report.

3. The Project and its Development Context

The main goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes. The objective is to strengthen the policy and regulatory framework to integrate requirements for endemic fish conservation into the fishery management regime.

The project is designed to produce two outcomes:

1. Strengthened systemic and institutional capacity for biodiversity friendly fisheries management regime for Kyrgyz lakes, to be realized through the following outputs:
   - a biodiversity friendly fishery management regime (BDFMR) developed and tested at Lake Issyk-Kul
   - the capacity to deliver an implement the BDFMR is strengthened
   - a financial mechanism for the implementation of the BDFMR is in place
   - awareness and support of biodiversity friendly fishery management

2. Sustainable fisheries demonstrated that contribute to the conservation of endemic fish species and improving livelihoods, to be realized through the following outputs:

- alternative supplies to meet market demands and propagation for re-stocking of lakes with endemics
- a strategy to achieve control and reduction/eradication of introduced alien species for Issyk-Kul is developed
- alternative livelihood program that supports the transition of individuals and businesses away from activities that threaten endemics to activities in support of sustainable fisheries management
- direct assistance to support conservation of the endemic fish species of Issyk-Kul
- an information and knowledge product management system

The project is expected to result in global environmental benefits through stabilisation and long-term conservation of identified endemics within the productive landscape of the Kyrgyz lakes, notably Chebak *Leuciscus schmidti*, Chebachok *Leuciscus bergi*, Marinka *Schizothorax issyk-kuli*, Naked Osman *Diptychus dybovskii*, and 7 more endemic fish species. For these species, the project strives to demonstrate effective management of an altered ecosystem incorporating breeding and re-stocking, as well as the transfer of livelihoods away from exploitation and impact of endemics toward continuing market supply under a sustainable management regime. Replicable lessons and best practices for fisheries management reform will be gathered within the discrete, over-exploited fishery which is threatening the survival of endemic species and disseminated across the country, or similar situations particularly in other countries in transition which are attempting to embrace good governance practices and more effective management of their natural resources.

The management and regulation of fisheries on Lake Issyk-Kul and throughout the rest of the Kyrgyz Republic is highly complex and fragmented. Currently, the major government stakeholders are the Fisheries Inspection of the State Agency on Environmental Protection and Forestry (SAEPF) Office and the Fisheries Department (currently split into State Enterprise for Fisheries and a Fisheries Inspectorate) of the Ministry of Agriculture, Water Resources and Processing Industry (MAWRPI). The Fisheries Inspection within the SAEPF is responsible for policing, selling fishing permits and environmental protection and monitoring. The principal agency controlling access and activities around the Lake is the Directorate General of the Biosphere Reserve. The directorate is subordinated to the SAEF but has no government funding, but receives 40% of entrance and user fees. The Fisheries Department in MAWRPI is responsible for the artificial propagation of juvenile fish, catching, sectoral control, the economic aspects of fisheries, and issuing fisher identity cards. The Issyk-Kul Biological Station (under the Academy of Science) is responsible for monitoring of fish stocks and providing scientific advice. Due to the current political instability, there is confusion about roles and responsibilities, with the Fisheries Department of MAWRPI having presented a new proposal to Government on control and management of the fisheries sector. The situation is unlikely to be resolved until after the elections to be held in October 2010, after which a new Government will be formed. In the meantime, a Presidential decree “On measures to preserve and increase fishery stock in the Issyk-Kul, Son-Kul lakes and other water basins of the Kyrgyz Republic” was signed in January, 2008 and imposed a moratorium on fishing in order to ensure optimal conditions to preserve and increase the fish stocks in

indicated lakes. However, lack of enforcement capacity has meant that fishing effort has not significantly reduced.

4. Findings and Conclusions

4.1 Project formulation

4.1.1 Project relevance (Satisfactory)

The project remains very relevant, both in terms of conserving and sustainably utilizing the declining and threatened stocks of endemic fish species in Lake Issyk-Kul and other Kyrgyz lakes and in mainstreaming biodiversity into the fisheries sector in the country. Project monitoring indicates that endemic species remain critically endangered with some species thought to be present in such low numbers that populations may not be self-sustaining, without artificial propagation and re-stocking. Project relevance has arguably increased since project design with the identification of caged trout farming in Lake Issyk-Kul as a further major threat to conservation of endemic species. The project also responds directly to MDGs in addressing environmental concerns and poverty alleviation. Lake fishing is a subsistence activity for poor people living around the lake and forms a safety net both in terms of income generation and dietary needs.

Lake Issyk-Kul has special importance in Kyrgyzstan as a national ecological and cultural heritage area and the region is a high national development priority. This is indicated by the establishment of the area as a Biosphere Reserve in 2001. The Concept and Programme for Sustainable Development of Ecological and Economic Systems for Lake Issyk-Kul was signed as a Presidential Decree in February 2009 and includes the Project and its budget as a key action in the subsequent Strategy and Action Plan. At the end of 2009, the Project was also included in the Kyrgyzstan's Country Development Strategy 2009-2011.

Furthermore, the decline of the commercially important endemic fish species targeted by the Project is a concern for the country, both from a biodiversity viewpoint (two species have been put on Kyrgyzstan's Red List) and from a cultural perspective, and forms part of the Government's long-term strategy in the fisheries sector, which includes natural fish resources conservation. The Department of Fisheries developed, in 2007, the "Strategy for Fisheries and Aquaculture sector development and management 2008-2012, in cooperation with other stakeholders. The National Biodiversity Strategy and Action Plan states that "commercial fisheries are legally obliged to protect habitats, breeding requirements and migration routes of fish."

The project is consistent with GEF BD-SP4 Mainstreaming biodiversity into productive landscapes/seascapes and sectors: Strategic Program 4 on Strengthening the Policy and Regulatory Framework for mainstreaming Biodiversity. As a result of the project, biodiversity will be incorporated into sector policy and plans. Also in line with GEF guidance, the project will demonstrate improved livelihoods among local communities linked to more sustainable management and use of biodiversity.

4.1.2 Implementation approach

The threat analysis presented in the Project Document (see Annex 1) remains valid and relevant and the project resources framework responds to the identified threats. As mentioned earlier, an additional and significant threat has subsequently been identified with the start of caged trout farming in Lake Issyk-Kul.

While the overall thrust of the implementation approach remains sound, the details of the Project objective and outcomes, together with their respective indicators, as laid out in the Project Resources Framework, could be further clarified (without changing the major thrust of the project) to allow for a more manageable project. While the goal of the Project is to conserve the globally significant biodiversity of Kyrgyz lakes, the objective of strengthening the policy and regulatory framework to integrate requirements for endemic fish conservation into the fishery management regime would appear to be just one important prerequisite to achieve the goal. A strengthened policy and regulatory framework is certainly a necessary condition for the establishment of effective and sustainable management of fish stocks that incorporate the requirements of endemic fish conservation, but it is only the successful implementation and demonstration of the new regime that can lead to the kind of sustainable management that favors endemic species. Indeed Outcome 1 “strengthened systemic and institutional capacity for biodiversity-friendly fisheries management regime” is necessary for the regime to be effectively implemented, but the other outcomes are less well captured in the objective statement. The objective could be better considered as the establishment of policy, regulatory, capacity and technical conditions for sustainable management of fisheries resources in Kyrgyz lakes that favor conservation of endemic species. If necessary, the objective can be clarified that it will be achieved through implementation of a management plan based upon the biodiversity-friendly fisheries management regime, beginning in Lake Issyk-Kul and replicated to other lakes in the country. If the objective is tightened up, the indicators might need a reality-check and realignment.

Thus, a more encompassing and logical structure for the Project Resources Framework (Table 1) would frame the Objective as “to achieve sustainable management of fisheries resources in Kyrgyz lakes that favor conservation endemic species by establishing policy, regulatory, capacity and technical conditions”. Alternatively the management plan could be included within the BDFMR, but the key is that fisheries are being managed more sustainably to the benefit of endemic species. The original indicators of population size and productivity of endemic species and ratio of endemic to non-endemic species would reflect the improved management and conservation of endemics.

Outcome 1 is proposed to be edited to capture better the improved implementation of the management plan/BDFMR, to reflect the strengthened policy and regulatory environment that an approved BDFMR represents, as well as the increased capacity to effectively

implement it. Indicators could reflect the implementation of key elements of the BDFMR. Many of these are already included in the current Resources Framework.

Outcome 2, would need to capture the fact that the demonstrations would reduce fishing pressure due to promotion of alternative livelihoods and expanded pond culture

Table 1. Proposed Re-Alignment of Project Objective, Outcomes and Indicators

Goal: Conserve globally significant biodiversity of Kyrgyz lakes	
Objective	**Indicators**
To achieve sustainable management of fisheries resources in Kyrgyz lakes that favor conservation endemic species by establishing policy, regulatory, capacity and technical conditions	Productivity/population size of endemic fish species showing continuous trend of significant increase by the end of project
	Ratio of endemic to non-endemic species significantly reduced by end of project
Outcome 1: Design and implementation of BDFMR at Kyrgyz lakes supported by strengthened systemic and institutional capacities	Effectiveness of policies and mechanisms for biodiversity friendly fishing (BDFMR approved by government)
	Biodiversity Friendly Fisheries Management Plan adopted for Issyk-Kul lake
	Newly-established set-aside areas
	Fishery Advisory Board established and functioning
	Degree of effectiveness of breeding and re-stocking programs to sustain the viable endemic fish population
	Average license period for fishing rights for a particular plot, assigned to one user/fisherman
	The trend of changes in levels of introduced alien fish species showing significant results
Outcome 2: Sustainable fisheries demonstrated that reduce fishing pressure on endemic species due to creation of alternative livelihoods and expansion of pond culture	Reduced fishing effort directly attributable to changes of livelihoods among fishers
	The trend of employment of local people in livelihood fishing (a decreasing trend will signify a relaxation of catch loads)
	Volumes of commercial fish supply produced from artificial ponds (higher volumes will contribute to reduction in required fishing effort

4.1.3 Country ownership/drivenness (Satisfactory)

The relevant government agencies, notably the State Agency for Environmental Protection and Forestry (SAEPF) and the Fisheries Department of the Ministry of Agriculture, Water Resources and Processing Industry (MAWRPI) were properly incorporated in the design. However, the political instability resulting from the events of early 2010 has meant that institutional roles and responsibilities are currently unclear and uncertain. The former Fisheries Department of MAWRPI was abolished and replaced by two organizations, the State Enterprise for Fisheries and the Department of Inspection. During the MTE these two organizations were combined back together in a Fisheries Department. However the roles and mandates of these bodies have not been established, although they have developed and submitted to Government a proposal defining roles, responsibilities and authorities. How the proposed roles and responsibilities correspond to those of SAEPF is unclear and a certain tension has arisen between the two agencies.

4.1.4 Stakeholder participation (Satisfactory)

The project design made great efforts to involve relevant stakeholders and create ownership of the project. Institutional responsibilities in the fisheries are highly fragmented and rapidly evolving and the design closely involved the relevant government agencies and national and local level. The design also undertook a household survey and solicited input from fishermen and other local communities, including women. A stakeholder participation plan is included in the Project Document

The project consulted and made use of the skills, experience and knowledge of the appropriate national and local government entities, NGOs, community groups, including women's groups, and academic institutions in the design of project activities.

4.1.5 Replication approach

Project design explicitly incorporated a replication approach, firstly by developing a policy and legal framework through the BDFMR that would facilitate integration of biodiversity into the fisheries sector, not only at the principal site, but also elsewhere in Kyrgyzstan. The BDFMR would then be tested at Lake Issyk-Kul prior to replication at other lakes in the country. Capacity would also be strengthened to understand and implement the BDFMR at both national and local levels, also furthering the chances of successful replication.

However, lakes in Kyrgyzstan vary in their ecological situation, including the presence or absence of endemic fish species and degree of fishing pressure, so that biodiversity-friendly management plans will need to be adapted to these different situations. For example, it has been proposed to relocate certain enterprises involving alien species to other lakes to reduce pressure on Lake Issyk-Kul, the most important lake from a biodiversity perspective. So while principles and models may be generally replicable, care needs to be taken in transferring experiences between lakes.

4.1.6 Cost-effectiveness: were project budget and duration planned in a cost-effective way (Satisfactory)

Cost-effectiveness was taken into account in the design of the project. For a Medium-Sized Project with a limited budget, the design paid attention on how to obtain the greatest impact with limited resources. As a result it focused on creating and testing a cost-effective model for integrating biodiversity into the fisheries sector, initially at one, critical site, and then proposing a strategy for replication to other lakes in the country. A knowledge and information sharing component is intended to further increase cost-effectiveness, since lessons from this project could have wide application elsewhere in the world. If the project succeeds in achieving its objectives, then it will represent a very cost-effective approach to a complex ecological and socio-political situation.

4.1.7 Sustainability

The project design identified a number of issues associated with the ecological, institutional and financial sustainability of the project. Risks were highlighted for all indicators under the objective and outcomes in the Project Results Framework. The project faces strong challenges for sustainability in all these areas, notably reversing the ecological balance of fish species in the lakes after many years of decline, developing an agreed and enforceable policy and regulatory framework that addresses both institutional fragmentation and transparency and accountability, and identifying future funding from a government sector that provides relatively low investment in fisheries management. While strategies for mitigating these risks are identified and activities proposed to address them, a sustainability plan could have been developed to monitor these risks and assess the likelihood of sustainability in a continuous manner as part of a project adaptive management strategy.

4.1.8 Linkages between project and other interventions in the sector

The Project identified the work done to establish the Biosphere Reserve, with support from GTZ and has identified the Biosphere Reserve Administration as the key player in sustainable management of Lake Issyk-Kul Biosphere Reserve, including the lake fisheries and aquaculture. NGOs were also identified for potential linkages, though mostly in an indirect manner. Since the project design, the FAO-supported “Support to Fishery and Aquaculture Management in the Kyrgyz Republic,” a $2.6 million Trust Fund project financed by the Government of Finland, has become the most relevant project linking to the UNDP/GEF project, and cooperation initially was very good, although the current political instability has resulted in delays in implementation of the FAO project.

4.1.9. Management Arrangements (Satisfactory)

The State Agency on Environmental Protection and Forestry (SAEPF) was identified as the national executing agency, being represented by its Directorate General of the Issyk-

Kul Biosphere Reserve at the local level. Related agencies, such as MAWRPI and Kyrgyz Academy of Sciences have been included in project mechanisms such bas the Fisheries Advisory. Relationships with SAEPF are good and the agency has provided office space and support to the Project, as well as active involvement of Agency personnel.

The project also includes a National Project Director in SAEPF and a Project Steering Committee, responsible for approving annual work plans and reports and critical project outputs and recommendations. However, due to the political and institutional instability caused by the events of April, 2010, UNDP decided to change the modality of project implementation from National Execution (NEX) to Direct Execution (DEX) to avoid delays in project implementation processes. The Steering Committee never met. Despite this change, country ownership of the project appears to remain strong, with all relevant agencies continuing to support the projects implementation and being appreciative of project support and activities.

Despite the difficulties of locating qualified project management staff to serve in a relatively remote location outside of the capital, it is considered critical that project management be located on-site, to enable daily working relationship with the Biosphere Reserve authorities, as well as local stakeholders. UNDP can play an important facilitatory role in linking field-based project staff with government authorities based in Bishkek.

The proposed Project Management team is in line with similar UNDP medium-sized projects with a full-time national project manager, with both technical and administrative and management functions, a Project Administrative Assistant and a Project logistics clerk and driver. However, the proposed project is very ambitious, with a complex set of technical and institutional coordination components and will represent a challenge of effective and efficient implementation. The UNDP Country Office will supply support and advice in procurement and administrative matters, as well as project reporting and GEF liaison.

4.2. Project Implementation

4.2.1. Adaptive Management, including Monitoring and Evaluation (Marginally Satisfactory)

The Project Results Framework has a series of indicators at Objective and Outcome Level, together with baseline, targets, sources of verification and risks/assumptions. There is also a series of nine of outputs in the Project framework contributing to the two outcomes. Most of these are reflected in the targets of the objectively verifiable indicators under the Projects Results framework, but some such as the establishment of a financial mechanism for implementation of the BDFMR and awareness raising and support are not explicitly covered.

The Annual Work plans are developed according to the outputs and are activity based, with results being largely based on activity completion. It is thus hard to assess progress towards overall results to be achieved by the end of the project. Annual reporting follows the same format, making it difficult to assess potential impact of the project.

It is suggested to re-orient the work planning to a results-based process with indicators, targets and annual milestones. This will provide an opportunity to take stock of progress so far, review the indicators and targets and develop an overall work plan (currently for two years) for the remainder of the project against which progress towards results can be objectively measured. Use of SMART[1] indicators and targets will facilitate this process.

As indicated in the Project Design section, the current Results Framework lacks internal logic, with the Objective representing an enabling condition for the achievement of sustainable fisheries management that favors the conservation of endemic species. Impact targets for fish stocks are also over-ambitious, since the project will do well just to establish self-sustaining stocks of endemic species, let alone achieve annual catches of 40 tons/year. The Results Framework and particularly the targets for stocks of endemic fish species were discussed at the Project Inception workshop, where it was agreed that to change the Project objective at this stage would potentially have major implications, possibly involving GEF re-approval of the project and subsequent implementation delays. Although the UNDP Programme and Operations Policies and Procedures note that "the RRF (Results and Resources Framework) must be seen as a dynamic tool, which should be re-assessed and revised as the project develops and circumstances change; it should not become a confining or rigid structure," it was agreed not to revise the Results Framework. However, for work planning purposes it is clearly necessary to work with a realistic and logical set of results, indicators and targets that clearly reflects what the project is trying to achieve. So at this point, the project should use a clear, realistic and logical set of results as a basis of effective work planning. These could be, with impact indicators "retro-fitted" to the original Project Results Framework for some key GEF reporting measures. However this process should be made clear and transparent. In summary, this is not to suggest a major revision of the Results Framework but rather to use the work planning process as a basis for refining indicators, targets and milestones as a monitoring and adaptive management tool for more effective and efficient project implementation and reporting

It is also a timely opportunity to involve and update key stakeholders on the status of the project in achieving its goals and objectives, incorporate feedback to reflect the information gathered by the project so far, lessons learned over the last two years and incorporate changing priorities based on new information and changed circumstances (such as institutional changes in key partner agencies). Such a participatory work planning exercise can reinforce ownership of the project and strengthen project partnerships.

[1] Specific, Measurable, Achievable & Attributable, Relevant & Realistic, Time-Bound, Timely, Trackable and Targeted (GEF Monitoring and Evaluation Policy)

4.2.2. Identification and management of risks

The participatory work planning exercise should look critically at the risks and assumptions detailed in the Results Framework, assess to what extent the risks have been addressed through mitigating actions, whether new risks have been identified (such as the moratorium on fishing in Lake Issyk-Kul, caged trout farming) and the extent to which the assumptions remain valid. Monitoring of risks and assumptions should be a key part of the work planning process. Table 2 shows the risks identified in the project document.

Table 2: Risks identified in Project Document

Risk		**Mitigation strategy**
Political will is insufficient to adopt Fishery Management Regime (FMR) in an effective framework	L	Relevant national and local authorities responsible for FMR adoption will be actively involved in project implementation through participation in the Steering Committee and awareness raising campaigns.
Alien species are not easily removable or controllable.	M	Sound scientific basis is used for the design of measures aimed at alien species removal and control within the project. Robust ecological monitoring will enable timely response to adjustment of species control activities. Highly qualified project staff and experts (local and international) will be carefully selected.
Impossibility to target non-endemics without endemic by-catch	L	Promotion of selective breeding of endemic and non-endemic species through pond culture.
Level of cooperation with various entities (media, schools, communities, etc) is not sustained	L	The project specifically addresses maintenance of regular close links with the appropriate institutions and media and delivery of targeted awareness-raising campaigns.

The Project has already taken measures to address some risks. Additional risks and assumptions are included in the Results Framework and comments on how the project has identified and addressed these risks are included in Annex 2. Alternatively, UNDP has created an updateable risk log that could be used for monitoring risk (http://content.undp.org/go/userguide/results/project/defining/). It is not known if such a log has been created for the current project.

The Project has shown good capacity for identification of new and emerging issues and threats and responding appropriately. Caged trout culture was not identified as a threat in the Project document, but the establishment of caged trout farms in parts of the lake was quickly recognized as a major threat to achieving the goals of the project, primarily through the escape of rainbow trout into the lake. Rainbow trout are voracious predators and adapt to a variety of ecological conditions, so their establishment in the lake could be disastrous for the continued survival of endemic species, since they pose a greater immediate threat than the existing alien predator species (they have already been proven to eat endemic species in the lake). The SAEPF has proposed an EIA be carried out, with international experts, on caged trout culture and the project will support this activity.

Under the BDFMR, actions to minimize this threat have also been proposed, from removal of cages to other (pond or reservoir) sites to levying of a biodiversity fee for caged trout culture. However, a comprehensive EIA should identify and assess the costs and benefits of different mitigation options.

Similarly, at the beginning of the project, the Governor of Issyk-Kul oblast passed a moratorium on all fishing in the lake. Due to currently weak monitoring and enforcement capacities, illegal fishing continues, but for the project it meant that some proposed activities were not possible, e.g. for proposed sanitary fishing. However, the project lobbied for an exception on the basis that this was not a remunerative activity but a contribution to the improvement of overall ecology of lake, with results of the catch going to social and economic causes in the oblast (hospitals, orphanages, etc).

Finally, the Project Manager has developed good contact with fishing communities around the lake, developed incentives for their participation in alternative activities and generally started a process of including fishers (currently considered poachers in light of the moratorium) in discussion on managing the lakes resources for the benefit of endemic species. This is a new approach for the traditionally top-down style of government agencies, but it is critical for sustainable management of the lake's fisheries and should be gradually accepted by the relevant authorities.

4.2.3. Financial management

Financial management appears sound, tenders have been made and an audit has been carried out

Co-financing was planned from Government ($1,000,000) and NGOs (1,690,000). While Government co-financing has been forthcoming through office space provision and support and staff time devoted to project objectives, the planned partnership with NGOs is largely unrealized. Up to $200,000 of co-financing under CAREC activities contribute to the project, but more attention needs to be paid to other NGO contributions, since NGOs are reputedly quite active in Kyrgyzstan and may be supporting activities that contribute to project goals. Cooperation with the FAO project represents an additional source of co-financing not identified in the project document and could also be costed out.

Table 3 indicates disbursements against planned targets, as of 30 August 2010. Delivery against Output 1 was low (20%) in 2009, and although also low so far in 2010, several large procurement actions are underway and expected to be completed in 2010, so that 100% delivery is anticipated. If so, this leaves, assuming full delivery in 2011, almost $285,000 for 2012, potentially allowing an extension until at least December of that year.

Table 3: Status of objective/outcome delivery

	Planned Delivery 2008	Actual Delivery 2008	Planned Delivery 2009	Actual Delivery 2009	Planned Delivery 2010	Delivery as of 30 Aug 2010
Objective:						
Outcome 1:	$82 038	$67 941	$153 000	$ 33 183	$180 000	$23 979
Outcome 2:	$23 635	$23 521	$217 000	$211 679	$201 500	$49 690
Management costs	$45 975	$45 810	$ 35 700	$ 44 945	$ 54 807	$38 716

Budget planned for 2011 – $ 237 200 (assuming 100% delivery in 2010)
Remaining amount for 2012 – $ 284 921

4.2.4. Management and coordination

The project management team was in place with only a relatively small delay of two months, with the first project presentation in April, hiring of the Project Manager in May and the first workplan developed on June 1st. A project office was up and located in Cholpon-Ata, on the shores of Lake Issyk-Kul. The location has considerably facilitated project implementation on site and the office itself, located in the former Biosphere Reserve "Ecocenter" has facilities for workshops and conferences, which have been used for stakeholder consultations, workshops and other meetings.

The project management team has had to balance direct support to field operations with administering a relatively large number of individual procurement actions, since many activities were planned to start in the first year of the project. The project manager has played a key role in building local stakeholder confidence and ownership and assuring communication and successful undertaking of key activities in the field, particularly during the critical two month spawning ("vegetation") period. As a result of this time spent in the field, the project administrative assistant has taken on an increasing role in initiating and following up procurement actions. However, UNDP Country Office (CO) support has been very important in promoting timely actions, particularly on the administrative and procurement side, to assure smooth project implementation. As the capacity of the project management office increases, needed UNDP CO support will decline. However, in light of the delays for some activities, such as awareness-raising, knowledge and information management and alternative livelihood development, the UNDP CO has identified the need for additional project management office support in the area of management, monitoring and reporting and responsibilities in the key areas not directly relating to the technical aspects of fisheries management and species conservation. This would also allow the current project manager to continue to devote time to building stakeholder relations and overseeing technical activities in the field.

However, clear roles, relationships, responsibilities and authorities between the project manager and the new position would need to be clearly identified and agreed.

The project developed a close partnership with the FAO Project (GCP/KYR/003/FIN) "Support to Fishery and Aquaculture Management in the Kyrgyz Republic" and the two projects supported a joint workshop on Lake Issyk-Kul BDFMR and fisheries co-management in September 2009. Participants at the workshop, including SAEPF and MAWRPI "urged these projects to work efficiently and in support of the lake and its population." It was also recommended that the two projects are implemented without further delay and that they coordinate their activities to the fullest extent, with capacity building at the core of project activities. Cooperation was enhanced since the FAO International Technical Advisor also worked for the UNDP/GEF Project as International Consultant to develop the BDFMR. The FAO project has among its objectives to introduce one or two local fisheries co-management pilot schemes to include at least some of the most important fishing villages on Lake Issyk-Kul. This fits well into the proposal to develop a participatory fisheries management for the lake that favors conservation of endemic fish species. The FAO project has undergone some delays due to the uncertain political situation following the April 2010 events, but will gear up again after the October elections and a joint MOU between the two projects will be formally agreed in the near future (Raymon van Anrooy, *personal communication*, 7 Sept 2010). It is very important that the projects develop a coordinated and cooperative approach and make sure they do work at cross purposes. It should be encouraged that the projects work together and combine activities to the extent possible for Lake Issyk-Kul, and even beyond to other lakes in the country. To the extent that activities can be carried out together, potential implementation costs are reduced. Since FAO and UNDP work under the same UN "family", discussions between the two agencies should be undertaken to support joint implementation to the extent the implementation modalities allow.

Five M.Sc. candidates in fisheries and aquaculture management from Kyrgyzstan are studying in Finland (Eastern Finland University) and will return to Kyrgyzstan at the end of 2010 in order to undertake their theses. At least 3 of them will work on the Issyk-Kul Lake. This provides a good opportunity for the UNDP/GEF project to get these "almost Masters" to work as volunteers under the supervision of the project in issues such as co-management, ecological problems in fish farming, etc.

4.2.5. Contribution of Implementing and Executing agencies

UNDP, as Implementing Agency, has shown strong support to the project, although the decision to move to Direct Execution (DEX) mode has meant that the Steering Committee is no longer formally in place, and in fact has never met.

UNDP, through the Country Office and Regional Technical Advisor, has participated in:

- inception workshop;
- key stakeholder meetings to present important project outputs;
- study tour to Lake Balaton;
- reporting through APR and PIR preparation;

- providing GEF guidance, e.g. on reformulation of Results Framework, developing tracking tools;
- operational support and training in UNDP procedures, such as procurement and financial management; and
- technical input, e.g. through review of TORs for consultants.

The Executing Agency, SAEPF, has been very active in support of the project, through:

- provision of office space, equipment and in-kind staff time;
- through the Territorial Administration, based in Issyk-Kul and the Biosphere Reserve Administration, principal partners of the project on the ground;
- support to development of the BDFMR and subsequent legal follow-up, notably EIA for caged trout culture in the lake and legislation to ban cheap Chinese fishing nets;
- participation in key stakeholder meetings and inputs into key project documents and outputs.

It is important that both SAEPF and UNDP participate in workshops and meetings to develop the revised Results Framework and work plan for the remaining period of the project, which should also identify clear roles and responsibilities in implementation and monitoring, including risk monitoring. UNDP should also participate in further developing the Knowledge and Information management system, linking to other projects in the country and region. This would include identifying lessons learned and best practice, e.g. in alternative livelihood development, and strengthening cooperation with FAO regionally and nationally. In addition, UNDP should play an advocacy role in promoting key measures, such as adoption of BDFMR and related legislation, with key decision-makers.

4.2.6. Stakeholder participation, partnership strategy (Satisfactory)

The project has continued to develop and foster stakeholder participation as envisaged in the project design. In addition to building partnerships with key government agencies at national and local level, the project has also reached out to local fisher communities and identified and carried out joint activities to promote understanding and ownership of project activities. The project has also been active in working with pond owners. The project seeks to involve women to promote gender equality through identification and involvement of women in key project activities, including training and study tours. Women have a key role in processing and marketing fish, adding up to four times the value to lakeside catches, so stand to benefit from project achievements. A fish-processing company is a partner in project: it is intended to increase the proportion of locally-caught fish for processing rather than imported fish and build capacity of local populations in fish processing.

When the project develops reports and activities, stakeholder meetings are generally held to solicit feedback and input. In September 2009 there was a presentation of the BDFMR, to which local communities were invited. In November 2009 a stakeholder workshop on the licensing system in fisheries was held, which resulted in a common decision from

SAEPF and MAWRPI, based on the BDFMR for delegation of authority especially for licenses
In July 2010, the project held an inception workshop for implementing the pond farm development program and included pond farm owners, microcredit organizations as well as national and local authorities and representatives from the FAO project. The focus of stakeholder participation has been on the more technical aspects of fishery management. Direct awareness raising activities with, for example, schools and local organizations could be further strengthened.

4.3. Results

4.3.1 Attainment of outputs, outcomes and objectives

Objective: To strengthen the policy and regulatory framework to integrate requirements for endemic fish conservation into the fishery management regime

The policy and regulatory framework is intended to be the

Output 1.1 Biodiversity Friendly Fishery Management Regime (BDFMR) developed as a policy for sustainable fisheries in the country

The Project Document calls for a Biodiversity Friendly Fishery Management Regime which will be "a package of national laws, by-laws and regulations developed and enforced with the objective of stabilizing the endemic fish species in the lake within the framework of a viable, sustainable and enforceable commercial fishery". A document describing the proposed BDFMR was produced in 2009 following a series of international and national consultancies and studies, including overviews of legislative and scientific bases of endemic fish conservation in Issyk-Kul Lake. The process involved wide consultation with stakeholders and a workshop was held in September 2009 to present and discuss the proposed BDFMR

Key elements include:

- amendments of current fisheries legislation
- clarification of roles and responsibilities among key agencies
- creation of a financing mechanism (management fund)
- protection of selected endemic species in Lake Issyk-Kul
- control of selected alien fish species in Lake Issy-Kul
- Sustainable management of fishponds in Issy-Kul oblast
- Sustainable integrated fish culture extension services in Issyk-Kul oblast
- Biodiversity fee for cage culture
- Improved fishery statistics

It is not clear what this BDFMR document is, or how it can be used in a practical sense. It combines a series of observations, challenges and recommendations, of differing amplitude and ease of implementation. Currently it does not form a policy and regulatory

basis for sustainable fisheries in the country that could be adopted by Parliament in its current form. The project has supported the development of a draft law on "sustainable development of ecological and economic system of Issyk-Kul" which was jointly developed with SAEPF and describes the roles and responsibilities of the relevant organizations involved in the fisheries sector. It is currently posted on www.nature.kg for solicitation of input from the public. However, the BDFMR is not the package of national laws, by-laws and regulations envisaged in the Project Document. It follows the traditional top-down model that has resulted in depletion of current fisheries in the country and does not include involvement of local fishers and other stakeholders in managing and conserving fish stocks. The Project envisaged the creation of a Fisheries Advisory Group (FAG - a working group of national and international experts, as well as lawyers, legislators, fish breeders and representatives of the fishing communities) to act as the key provider of advice and information for managers and policy makers for fine-tuning and improving fisheries management on the Lake, to incorporate the requirements for the conservation of endemic fish species. It would also act as a conduit for reacting to the needs of decision-makers with respect to the capture of specific data necessary for evolving policy decisions. Creation of the FAG is currently in process.

The legal analysis noted that "relations in fishery and aquaculture, protection of fish resources and water invertebrates are poorly regulated because the legal basis is presented only in the law 'On Fishery', which is already out of date. Within the new law it is necessary to do the following:

- Divide better commercial and recreational fisheries;
- Indicate which authority or authorities are responsible for the controlling of fishing activities, realization and abiding the Fishery Legislation;
- Create a system, that defines clearly where the fishing is allowed and where it is not;
- Create possible and effective mechanisms for the control of fisheries
- Provide effective mechanisms for fisheries data collection, planning and adoption of solutions:
- Considering the magnitude of the Issyk-Kul Lake, it would be better to regulate all fisheries activities in that lake by a separate standard legal act."

The government has now started to revise the legal frameworks for fisheries and aquaculture and two laws have been drafted for the Cabinet approval, namely 1) On amendments & introductions to some legislative acts of the Republic of Kyrgyzstan and 2) On prohibiting of catching, transport, marketing & exporting of valuable fish species from Issyk-Kul & Son-Kul Lakes. These laws were presented to the preparatory committee of the Parliament on 27 May 2008 and passed the Parliament on 4th of August 2008.

The SAEPF is developing actions in two areas as part of BDFMR. The first is to undertake an EIA of caged trout production in Lake Issyk-Kul. Caged rainbow trout production arguably poses the greatest current threat to the lake's fisheries and the EIA is a very important initiative that should be supported by the project to make sure it is done transparently and effectively. The project could support training in EIA procedures. The

second action is to ban the use of cheap Chinese nets which are both very long and have a small mesh size. Such nets are so cheap they are often left in the lake, where they trap fish that are never removed (the ISBRA removed a total of 16 kms of such nets in one month, indicating the scale of the problem).

In order to operationalize the BDFMR, a participatory biodiversity-friendly fisheries management plan (BDFMP) for Issyk-Kul Lake should be developed that incorporates relevant parts of the BDFMR and assigns clear responsibilities and identifies actions and required resources. The Project, together with the Issyk-Kul Biosphere Reserve Administration, could play a facilitatory role in bringing together government agencies and local stakeholders, including fishers and pond owners. The management plan would be integrated into the overall Biosphere Management Plan to achieve the overall objectives of improved environmental protection of the area. This would enable the project to build on its current activities working on the ground with different stakeholders, while promoting resolution of legal and institutional constraints at the national level that may take time to resolve in the current uncertain political environment. It should be noted that one of the recommendations from the legal analysis is that "considering the magnitude of the Issyk-Kul Lake, it would be better to regulate all fisheries activities in that lake by a separate standard legal act".

Development of a BDFMP should be a flexible and iterative process, so that activities where there is agreement on how to proceed, even in an informal manner, can go ahead, while activities requiring institutional and legal definition can be pursued on another track. Some experimental activities could also be introduced and carefully monitored for desired effects. The project has already begun to involve illegal fishers in monitoring and patrolling critical spawning areas.

The concept of a BDFMP was already introduced at the September workshop and was among the recommendations made by participants.

Output 1.2: Capacities to deliver and implement the BDFMR strengthened

In a direct sense, the project has increased the capacity to implement the BDFMR, through:

- Provision of badly-needed equipment, including boats, to the Biosphere Reserve Administration and the Academy of Sciences
- Technical assistance, training and study tours
- Increased understanding of the status and importance of endemic fish species and the need for their conservation through meetings, workshops and awareness materials
- Involvement of stakeholders, such as local fishing communities in project activities

Training modules have been developed and five training sessions undertaken around Lake Issyk-Kul under a contract with PPD Associates for improved monitoring, control

and surveillance. These training modules should be continuous updated in the light of lessons learned and best practice developed under the project and a plan developed for continued training, including potentially some experimental schemes.

The project has initiated patrolling of a spawning area for chebak and chebachok during the spawning season with the Issyk-Kul branch of SAEPF.

Output 1.3: Financial Mechanism for the implementation of BDFMR

A proposal has been made in the BDFMR document to create a management fund capitalized by food fish sales fees and commercial fishing quotas. SAEPF and MAWRPI and Academy of Sciences would share equally in the fund. However, details of the precise mechanism are not developed, and should reflect the different responsibilities of these agencies, which is still unclear. Terms of Reference for an economist to develop the financial mechanism for implementation of the BDFMR in Lake Issyk-Kul have been developed and it is hoped a consultant can be hired in Sept-Oct 2010. The TOR is rather general, and the study should look at all aspects of financial sustainability of Project operations, both during the project lifetime and, very importantly, post-project. The study should clearly identify and propose specific financial mechanisms and secure commitments of financial support to the extent possible. It is not considered likely that the Government will significant increase budgetary support to the fisheries sector in the near future, especially in the light of the ongoing political and institutional uncertainty, so alternative means of financing need to be realistically developed. As an example, the Biosphere Reserve budget is predominantly funded by entrance fees to the reserve.

Output 1.4: Awareness and support raised for the BDFMR

The project has undertaken limited and indirect actions to increase awareness through regular meetings, workshops, training and study tours. It has also commissioned through contracts with individual firms, a series of awareness products, including a film and audio and video materials, which have been broadcast, as well as newspaper articles and billboards. However, planned cooperation with NGOs has not materialized and there is a need to move quickly to ramp up awareness raising activities. The identified partner NGO partner underwent a restructuring after project design and future cooperation is uncertain. The project has just signed a contract with a consultant to undertake this in the near future, and the consultant is currently developing a communications and awareness strategy. This should clearly identify and prioritize target groups, propose strategies and messages to raise awareness, indicate methods and materials and undertake baseline surveys to assess awareness, so as to be able to monitor the impact of awareness-raising activities. While obvious target groups include schools, community groups and the media, government officials and decision-makers also form an important target group, even those working in fishery administration at local and national levels. This is particularly important given the high turnover of government staff due to the political instability. After the elections in October, many new decision-makers are likely to be appointed and it will be important to emphasize the importance of Kyrgyzstan lakes, beginning with lake Issyk-Kul, the role and importance of the Biosphere Reserve and its

role and authority, the threats posed to the ecology and culture of the lake through unsustainable fishing practices and the role of the project in addressing these. For example, it may need high-level support to enforce the removal of cage trout rearing, given the vested interests involved. The project should begin to develop a strategy for addressing newly-elected leaders as an urgent priority.

Output 2.1: Alternative supplies to meet market demands and propagation for re-stocking the lake with endemics

This output deals with the potential of pond cultures around the lake to increase fish production, thus lowering fishing pressure on the lake, both through alternative livelihood provision but also increasing production so that illegal fishing becomes less profitable. It was originally envisaged that pond culture could also raise endemics for re-stocking the lake, but this may prove difficult because of the conditions needed for propagation.

The Project undertook a study of ponds in late 2008 (Rispaev and Woynarovich, 2008) which calculated that these water bodies have a total area of about 785 ha with an estimated total production potential of between 190 and 600 tonnes/year. This means that the fish farming could produce 40 – 125% of the average of the annual catches registered on the Lake between 1965 and 2003. The owners and leaseholders have been advised to complete some additional investments at their fishponds and small water reservoirs in order to ensure environment friendly fish farming. The study also proposed to support the establishment of private extension services through GEF Small Grant Facility. Quotations for different items necessary for the establishment of the fish hatchery are listed in the study report. Some activities on fish farm development have begun, including the development of business plans.

The project has also discussed the development of associations for pond farmers to increase efficiencies.

Output 2.2: A strategy to control the introduction of alien species demonstrated for Lake Issyk-Kul

The Project recruited an international expert to address this issue and he identified a strategy of strategically placing artificial nests for alien species, which would be removed once the eggs are laid, thus limiting reproduction, especially in areas near to spawning grounds for endemics. A study tour to Hungary organized by the project provided training in this technique. Ongoing “sanitary fishing” to remove alien species will be facilitated by the provision of boats and equipment by the Project. This has provided a good opportunity to build cooperation and ownership with local fishing communities.

The Project also identified the establishment of cages for raising of Rainbow Trout, an alien species highly predatory on endemic species, in the lake as a potentially significant issue, since trout have escaped and will continue to escape from these cages posing an additional threat to survival of endemic fish stocks. The BDFMR makes some recommendations to address this threat, including removal of cages and/or imposing a

biodiversity fee. The trout operations are run by well-connected people who have already invested a great deal in these cages, so may be resistant to their control. SAEPF has moved forward with a proposal to undertake an EIA of the activity. The Project will support this activity.

Output 2.3 Alternative livelihood program launched

One of the primary reasons that so much illegal and unregulated fishing pressure is exerted on the lake is that there is a high level of poverty in the surrounding areas and little or no alternative employment nor incentives for local communities to switch to an alternative. However, surveys carried out during project design indicated that a substantial proportion of current fishers, especially those recently involved in the activity would gladly give up fishing if other forms of livelihood were available. The project intended to undertake, in the first year of implementation, a technical contract to identify additional alternative livelihood opportunities and to develop guidelines for the setting-up and implementation of activities that will provide economic benefits for the local communities while reducing pressure on the lake's biodiversity. The potential activities and guidelines would be discussed at a stakeholder workshop with a view to developing criteria for promotion of alternative livelihoods. UNDP committed to support piloting some of the identified livelihood options by providing access to financial assistance through their credit program while the project will assist the local communities in preparing the application forms.

Output 2.1 has already identified pond culture as an alternative livelihood program with significant promise. Given the long-term nature and mixed results of alternative livelihood programs elsewhere, it may be more efficient to focus alternative livelihood programs around fish pond culture, such as duck raising.

Output 2.4: Direct Assistance to support conservation of endemic fish species

The project has artificially propagated both Marinka and Naked Osman in mobile incubators, releasing 6,000 of the former and 2,000 of the latter into Lake Issyk-Kul in 2010. Given that both species were thought to be extinct at one time, this is a significant achievement, and one greatly appreciated by all stakeholders. The other two species, Chebak and Chebachok are not amenable to artificial propagation and the principal approach to their conservation is through protecting spawning areas. These have been identified and discussions held with local fishers on patrolling and monitoring populations in these areas, combining with awareness-raising activities on the plight and importance of endemics in the lake. It will be important to monitor the survival of released fish in the summer of 2011 to assess the effectiveness of the release program. The project has also provided support to the Lake Issyk-Kul Biological Station under the Kyrgyzstan Academy of Sciences, both in terms of equipment and technical assistance. The national consultant on control and eradication of alien species and improving pond culture is from this institute and worked closely with the international expert to build capacity and transfer knowledge, an important part of capacity building supported by the project. The national consultant was part of the Lake Balaton study tour.

The project has undertaken a study tour for officials to Lake Balaton, Hungary, where a comparable situation in terms of lake fisheries and pond culture has long been in existence. A future study tour for fishers and pond owners is planned for late 2010. The study tour was facilitated by an international expert and represents a very good use of technical assistance combined with international best practice. Techniques for reducing populations of alien predatory fish species were learned from the study tour and improved pond culture practices can also be transferred from this experience. Future partnership and cooperation with Lake Balaton should be promoted as part of knowledge sharing and information management as well as project sustainability.

Output 2.5: A knowledge management system on conservation of endemic ichthyofauna put in place

An Information and Knowledge Product Management System to capture lessons and best practices and to ensure transfer and dissemination of lessons and best practices was planned in project design. It is considered important to capture the lessons and best practices from this Project in relation to the development and on-the-ground implementation of the BDFMR, the stock enhancement of endemic and removal of alien fish species, and alternative livelihood, particularly through improved pond culture. The Biosphere Reserve Administration was identified as the appropriate recipient of relevant knowledge products. A further vehicle for dissemination and replication then needs to be considered both nationally by the relevant national agency and by UNDP and GEF for transfer to other project sites both regionally and globally, and the CARnet information system, a digital network on Environment and Sustainable Development in Central Asia and Russia funded by UNDP, has been used by the Project as a vehicle for this. Other networks could be identified for further dissemination.

- 4.3.2. Project impact

In an immediate sense, the project has already achieved a significant impact in biodiversity terms, since two species of critically endangered endemic fish (Issyk-Kul Marinka and Naked Osman), one of which was recently thought to be extinct, have been identified in the lake, a few individuals captured and artificially propagated, thus ensuring the sufficient numbers of these species can be maintained. The challenge now is to make sure that there are self-sustaining populations in the lake. Two other endangered species (chebachok and chebak) are presumed to have benefited from increased protection and patrolling of their spawning grounds as well as the introduction of alien species control activities.

In terms of reduced fishing pressure from the development of alternative livelihoods, the project has identified the potential for pond farm culture and begun activities to support this sector, but it is too early to identify impact from these activities.

4.3.3. Prospects of sustainability

The project is ambitious in its scope and relatively limited in its timeframe. Typically, natural resources and environmental management projects take a rather long time to develop and mature, due to the nature of the resource. Fisheries management is the same. Therefore it is critical to make sure that the conditions and mechanisms are in place to increase the likelihood of post-project sustainability, including key enabling policies and laws and sufficient capacity to assure continued sustainable management. Since the project aims to mainstream biodiversity into the fisheries sector, there should be clear criteria established to assess whether such mainstreaming has been achieved. Typically, this would include specific actions, with allocated budgets and defined responsibilities, integrated into government planning. The following analysis of four dimensions of sustainability rates the prospects of sustainability by dimension (Table 4)

Table 4: Sustainability Analysis

Financial Resources	Moderately Unlikely. The project will undertake a financial analysis but current low Government investment in the sector is likely to continue and the prospects for increased funding from license and other fees remains unclear. Innovative financial mechanisms should be explored, including approaches to potential international partners
Socio-Political Situation	Moderately Likely. Understanding of the project's objectives is quite good and appreciated by stakeholders. Ownership is also quite good and the project has delivered tangible support. However, post-project sustainability is not yet clear and stronger, targeted awareness and education programs are needed
Institutional Framework and Governance	Moderately Likely. The elections in October 2010 offer an opportunity to re-define the currently fragmented responsibilities in the fisheries sector, as well as reinforce the role and status of the Biosphere Reserve, but more awareness and education efforts will be needed. Poor governance is a systemic issue that can only be partially addressed through the project.
Environmental Sustainability	Moderately Likely. Both control of alien predatory species, protection of spawning grounds and re-stocking with endemics will require post-project support. Resolution of the issue of caged Rainbow Trout will be critical to maintaining stocks of endemic species into the future.

Likely: There are no or negligible risks that affect this dimension of sustainability
Moderately Likely: There are moderate risks that affect this dimension of sustainability
Moderately Unlikely: There are significant risks that affect this dimension of sustainability
Unlikely: There are severe risks that affect this dimension of sustainability

4.3.4. Overall Project Rating

The ratings table (Table 5) follows the original project Results Framework. The project is very relevant and responds to country priorities and UNDP and GEF program strategies. Efficiency is in general also satisfactory, certainly in terms of cost-effectiveness, although some elements of the project are delayed, particularly in the areas of awareness and alternative livelihood development, and the current institutional instability will cause further delays in some areas requiring government approval, such as legislative aspects. Despite these delays, good progress towards objectives has been made, particularly relating to the fisheries aspects. The aspect of effectiveness is the most problematic, since the original objective did not capture fully the scope and intent of the project scopes, the focus in outcomes were mismatched with indicators and the impact. A re-alignment of the Results Framework after the MTE to better reflect the logic of the project approach would make assessment of effectiveness more useful.

Overall, the project is rated as marginally satisfactory in efficiency and effectiveness. To a certain extent, the project is dependent upon resolution of the political and institutional uncertainty that will hopefully come with formation of the new government after the elections. While, in a larger sense, this is beyond the control of the project, the project also needs to identify and target key actions to prioritize and address the opportunities that the new government may provide, such as preparing draft policy and legislation, targeting awareness raising and communication initiatives and strengthening partnerships. At the same time, efforts at the level of Lake Issyk-Kul, to build ownership through development of participatory management plans and strengthen capacity, will further enhance the credibility of the project and support national level efforts. Many of the shortcomings indicated by a Marginally Satisfactory rating can be overcome if the recommendations of the mid-term evaluation are taken up, including a comprehensive monitoring and evaluation plan, to be able to respond quickly and appropriately in a an uncertain and shifting political environment.

Table 5: Overall Project Ratings

	Relevance	Effectiveness	Efficiency
Objective: To strengthen the policy and regulatory framework to integrate requirements for endemic fish conservation into the fishery management regime	Satisfactory	Marginally Satisfactory	Marginally Satisfactory
Outcome 1. Strengthened systemic and institutional capacity for biodiversity friendly fisheries Management Regime	Satisfactory	Marginally Satisfactory	Marginally Satisfactory
Outcome 2. Sustainable fisheries demonstrated which contribute to the conservation of endemic fish species and to improve livelihoods	Satisfactory	Marginally Satisfactory	Marginally Satisfactory

Highly Satisfactory: The project has no shortcomings in the achievement of its objectives
Satisfactory: The project has minor shortcomings of its objectives in the achievement of its objectives
Marginally Satisfactory: The project has moderate shortcomings in the achievement
Unsatisfactory: The project has major shortcomings in the achievement of its objectives
Highly Unsatisfactory: The project has major shortcomings in the achievement of its objectives

5. Conclusions and Recommendations

5.1. Findings

5.1.1. The project design remains highly relevant and the threats analysis and broad course of proposed activities are still valid. Country ownership is strong and stakeholder involvement in developing the project will increase the chances of achieving project outcomes. The potential for cost-effectiveness is high since this is a medium-sized project with potentially significant impact and possibilities for replication. However, the project is working in a difficult political and institutional situation following the political unrest in the country which may mean delays in achieving some policy and regulatory goals.

5.1.2. The project results framework includes key indicators, baseline and targets and risks and assumptions. A series of outputs are included in the project document, but not explicitly linked to the results framework. The description of the objective and two outcomes do not reflect fully encompass the scope of the project nor are not fully consistent. The objective should focus on different conditions (including policies, regulations, increased capacity, management regimes and knowledge and technologies) to result in sustainable fisheries management that highlights the conservation of endemic species in Issyk-Kul and other lakes (or at least develop a model for replication).

5.1.3. After a short delay, the project has established a management structure and succeeded in initiating a series of activities with strong stakeholder participation, focusing on the BDFMR, capacity building, control of alien predator species and artificial reproduction and introduction of endemic species, along with improved patrolling of spawning grounds. Pond culture activities are ongoing but other alternative livelihoods have not yet been explored. Awareness, knowledge management and NGO partnership building activities have not been so fully developed. However, other emerging threats have been identified, notably caged rainbow trout production in Lake Issyk-Kul and the project has been quick to respond with proposed actions, in partnership with SAEPF. A moratorium on fishing in Lake Issyk-Kul has put some constraints on the project, but these have been partially overcome. A more systemic constraint lies in the current political and institutional instability caused after the events of April which, among other things, has delayed approval of the BDFMR and related texts. It is hoped that the October elections will clarify this situation, to the benefit of the project, but meanwhile inevitable

delays have occurred. That said, the project has done a good job in continuing with activities in the face of this uncertainty.

5.1.4. The project has good stakeholder involvement, both at national and government level, and with local communities and pond farmers, extending to specific activities with different stakeholders, including women (two female pond owners will participate in this years study tour to Hungary, the only female owners among the 50 around Lake Issyk-Kul). The project has, for the most part, made good use of international and national consultants, particularly in scientific and fisheries areas. The study tours and developing partnership with Lake Balaton, in Hungary, has been exemplary. The project has also worked closely with the FAO "Support to Fishery and Aquaculture Management" project, although the institutional instability has delayed that project. An MOU has been agreed between the two projects and should be signed within the next month, according to the FAO Regional Technical Advisor. The project has been less successful in developing partnerships with NGOs. The principal planned NGO partner has undergone a change of leadership, which has affected communications.

5.1.5. The project monitoring and evaluation system is quite weak and largely activity-based, following the outputs. Some of the targets in the project's Results Framework are quite ambitious, particularly those relating to the populations and status of endemic species and the project still lacks a comprehensive results-based monitoring system that is based upon the Results Framework and can be used as an effective tracking and adaptive management tool. This is linked to one of the project's aims, to improve monitoring of fish stocks. Without more systematic monitoring of fish stocks, it will be difficult to assess progress on achievement of the project's objectives. The project is beginning to address this issue through support to more comprehensive monitoring as part of capacity building activities.

5.1.6. The project financial management is sound and an audit has been undertaken. However, disbursement remains behind schedule, although several procurement actions recently initiated should mean that delivery rates are on track in 2010.

5.2. Corrective actions for the design, duration, implementation, monitoring and evaluation of the project

5.2.1. The mid-term status of the project provides an opportunity to review the project's Results Framework and assess progress against objectives, outcomes and outputs according to proposed indicators, as well as review risks and assumptions in the light of updated information and project achievements. The project should hold a facilitated stakeholder workshop to review and update the problem analysis and re-align the Results Framework as appropriate. While it is unlikely that the major thrusts and components of the project will significantly change, the internal logic and prioritization of actions may be improved. The workshop also provides an opportunity to build knowledge and ownership among stakeholders regarding the project and its goals.

5.2.2. Based upon the outcomes of the stakeholder workshop and a re-aligned Results Framework, a results-based work plan for the remaining years of the project should be developed, with a tracking system for key results and indicators and continued monitoring of risks and assumptions. Specific monitoring mechanisms and responsibilities should be included so the monitoring and evaluation system can serve as an effective adaptive management tool.

5.2.3. The project should undertake a sustainability analysis and develop a sustainability plan that identifies and addresses risks to post-project sustainability. This should form part of the monitoring and evaluation plan. The upcoming financial mechanism study will provide an important input into this, and the TORs should be adjusted to reflect overall sustainability of project activities.

5.2.4. A financial analysis indicates that a no-cost extension of the project for 6 – 12 months is feasible. An extension would enable the project to achieve incrementally greater results and make it more cost-effective. The political and institutional instability has meant that planned approval of policy and legislative proposals that form the basis of BDFMR have been delayed, so that a 6 – 12 month extension will enable the project to effectively build on the BDFMR when it is eventually approved.

5.2.5. The project should hold a meeting with the FAO project once the latter has "re-started" after the elections to agree on very precise modalities of cooperation, cost-sharing and joint activities, particularly around Lake Issyk-Kul, building on the intent of the MOU between the two projects. Both UNDP and FAO Country/Regional Offices should be involved to promote collaboration and cost-effectiveness.

5.2.6. As part of its revised work planning process, the project should carefully assess its internal management needs to achieve the actions, including procurement, supervision, monitoring and field-based activities needed for timely and effective project implementation. The project manager currently has an important role in building stakeholder confidence and ownership around fisheries-based activities. This requires significant time in the field at critical periods. The project should identify a credible mechanism for moving forward on those components currently delayed, including the hiring of a technical expert with significant management experience to follow up on these activities (this has already been recommended). If hired, the expert would need very clear TORs and report to the current Project Manager. The TORs would include responsibilities for awareness raising, education and communications, alternative livelihood development, NGO partnerships, knowledge and information sharing and management, overall monitoring and reporting. It should be noted that attracting a qualified person, willing to work in the field, may not be easy, and if the learning period is too long, it may actually slow down project implementation.

5.3. Recommendations for future directions underlining main objectives

5.3.1. The project should focus on developing a participatory fisheries management plan that includes conservation of endemic species for Lake Issyk-Kul within the framework

of the BDFMR. Consensus should be built among key stakeholders for this approach, which should be led by the Biosphere Reserve administration as a part of larger efforts to protect and conserve the ecology and environment of the lake. An overall vision for sustainable fisheries in the lake, goals and objectives, roles and responsibilities, timeframe and needed resources should be identified. Key enabling factors, such as legislative changes and increased capacity should also be identified and actions proposed. Development of a site-based management plan would proceed in tandem with promoting the policy and legislative framework at national level and increasing awareness of the role and importance of endemic species to a healthy lake environment. The management plan could then be the template, both in process and in form, for replication to other lakes in the country. The FAO project is planning to test co-management approaches at Lake Issyk-Kul in 2011, providing an additional opportunity to integrate into the management plan and strengthen linkages between the two projects.

5.3.2. The project should develop a comprehensive awareness, education and communication plan, targeting different stakeholders and proposing objectives, strategies and approaches, including messages and materials, for each target group. Priority should be accorded to decision-makers that are in place following the October elections so that key policy actions can be actively promoted. The project has already contracted a specialist to develop a Communications Strategy and this could be the basis for developing this activity. Existing NGOs or other organizations and projects could provide cost-effective opportunities to integrate project messages into existing activities and the Project should further identify and pursue partnerships with NGOs based on comparative advantages and potential for shared activities.

5.3.3. The project needs to pay particular attention to establishing the capacity for effective monitoring of fish populations, notably endemics. Currently, several organizations have some responsibility for monitoring, though capacities vary. The project is providing technical assistance to the Academy of Sciences at Issyk-Kul Biological Station for scientific monitoring. Local fishers can also be a valuable source of monitoring information and could be engaged in this activity in a more formal way under the proposed management plan.

5.3.4. Development of the caged trout farming in Lake Issyk-Kul represents a new and significant threat to achieving project objectives. The project has identified some potential actions to address this threat, notably through undertaking a comprehensive EIA of the activity. The project should strongly support this activity through the introduction of international experts and experience to provide an independent and accurate assessment. The EIA should look at the risks in terms of fish escapes, the impact such escapes would have on lake ecology, including conservation of endemic species, damage to lake ecology through the addition of inputs, such as fertilizers, food, hormones, etc, and impacts on scenic and cultural aspects of the lake. It should also examine alternatives to caged trout farms in the lake and propose various mitigation measures. The EIA should be credible, transparent and public participation and comment should be an integral part of the process. Since there is likely to be a strong lobbying effort by trout farmers, the results of the EIA should be the basis of an informed education effort

targeted at decision-makers in the new government (even targeting Presidential level). Lake Issyk-Kul has a special significance in Kyrgyzstan and the threats posed to this unique resource by caged trout farming need to be clearly laid out. This should be a priority under the awareness raising component of the project.

5.3.5. An opportunity exists to strengthen the Knowledge and Information management system under the project. The project is piloting many innovative and interesting approaches and these should be captured and disseminated for a wider audience. The project has already built a good network through its national and international experts, partnerships with Lake Balaton and the FAO project. Experience in Central Asia can be captured on CARNet and the international experts also have recent experience of sustainable fisheries management in Georgia and Armenia. A small consultancy should be undertaken to develop the knowledge and information system.

5.3.6. The development of alternative livelihoods to reduce pressure on fisheries has been slow to develop under the project, with the exception of improvement of fish pond culture. Yet examples exist from other projects in the region (including UNDP-supported projects). The project should develop a very focused and targeted set of activities that actively seek out and build on previous work and lessons learned. A wide-ranging program of alternative livelihoods creation risks diluting the efforts of the project and is likely to be a long-term endeavor that will require considerable effort and resources. In the interests of project streamlining and efficiency, careful consideration should be given to focusing the alternative livelihoods component to activities around fish farms, including pond culture, while identifying promising alternative livelihood activities adapted to the needs of key communities, including women and youth, currently putting pressure on the fisheries resource.

6. Good practices and lessons learned in addressing issues relating to effectiveness, efficiency and relevance

6.1. Lessons Learned

1. Information on the status, trends, distribution and ecology of fish populations tends to be limited, outdated and much dispersed. Local knowledge from resource users, such as fishers needs to be combined with scientific information on species ecology and data to have an up-to-date assessment of a very dynamic situation. In the case of the project, local knowledge has helped identify critical areas of the lake for spawning and re-introduction, as well as distribution of alien predator species. This has been very useful in efforts to control predators and favor survival of endemic species. The project has actually engaged illegal fishers in identifying and protecting endemic species in Lake Issyk-Kul.

6.2. Good Practice

1. The project is promoting the concept that management of fisheries is an environmental issue. This is facilitated by working through the Biosphere Reserve administration which

is responsible for the good environmental condition of Lake Issyk-Kul and also the strong attachment that the Kyrgyz people have for Lake Issyk-Kul as a natural and cultural heritage. Work with illegal fishers to undertake project activities like control of aliens contributes to the realization that they are doing something good for the lake. The project has also engaged with SAEPF to act on the caged trout farming in the lake in a broader environmental context. As a further example the project has discussed limiting the use of two-stroke engines due to pollution of lake waters.

2. Internationally, there is often conflict between government agencies responsible for environmental protection and those involved in fisheries, which look at fisheries as simply a productive sector. This project has worked with both SAEPF and MAWRPI to involve them in the project, share information and facilitate discussions and negotiations on roles and responsibilities as regards the BDFMR

3. Study tours on projects are often exercises to reward cooperation from important stakeholders rather than efforts directed to gain knowledge that can applied to real-life situations in the home country. The study tour to Hungary under the current project actually resulted in some practical techniques learned for control of alien predators and pond culture that have been applied in Kyrgyzstan, substantially contributing to capacity in this country

4. Responsibilities and capacities for monitoring fish stocks reside with several different organizations (in part because of overlapping and potentially conflicting mandates). These include the Academy of Sciences (through Issyk-Kul Biological Station, SAEPF, MAWRPI and the Biosphere Reserve Administration. The project is working with these agencies to combine resources for more effective and efficient monitoring of fish populations in the lake.

SECTION II: STRATEGIC RESULTS FRAMEWORK

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
Objective of the project : To strengthen the policy and regulatory framework to integrate requirements for endemic fish conservation into the fishery management regime	Productivity / population size of endemic fish species (*Leuciscus schmid,i Leuciscus bergi, Schizothorax issyk-kuli, Diptychus dybovskii)* showing continuing trend of significant increase by end of project.	Low numbers of 4 endemics -unable to quantify	At Issyk Kul: Nake Osman 40 tons per year per lake, Chebak 150 tons per year per lake, Marinka 40 tons per year per lake. These figures are now considered too optimistic and should be revised downwards. As mentioned earlier we are not able to change the indicators on the objective level. But we can reduce the figures.	Monitoring records and data analyses of fish populations and species distributions.	No other factors impacting sustainability of endemics (i.e. water quality, disease, etc). This is probably low risk, although large scale cage culture could increase pollution Monitoring is accurate. This is a higher risk and critical to assessing Project success and the Project should and will pay attention to this issue.

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
	Ratio of endemic to non-endemic species: significantly reduced number of alien species by end of project, particularly those in direct competition or predating on endemics.	Over 60 percent non-endemic species in the lake	60/40 endemic to non-endemic population size ratio by project end, 90/10 ratio 5 years after project completion Again too optimistic, especially the 90/10 ratio but we can reduce figures as above.	Catch statistics. Reports from Biological Station	Alien species are removable or controllable. Alien species may now be an important component of an altered ecosystem. The Project has identified techniques for controlling alien species through artificial nest creation and egg removal.
	Newly established set aside area (fishing moratorium)	0 ha	56,000 ha	Lake Issyk-Kul management plan	The decision for setting area aside might face opposition from fishermen, especially involved in poaching. The strategy of wider stakeholder consultations will be applied to mitigate the risk. The Project is actively undertaking stakeholder consultations on this issue, involving local fishers.
	Reduced fishing effort directly attributable to changes in livelihoods within fishers	1,500 persons fishing in lake.	1,000 persons fishing in lake (one-third reduction)	Fisheries Management statistics. Reports to Steering Committee	Fishers willing to stop fishing. May be difficult to evaluate. Project design household surveys indicated that a proportion of fishers would be willing to stop fishing if alternative livelihoods were available.

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
Outcome 1 Strengthened systemic and institutional capacity for biodiversity friendly fisheries management regime	Effectiveness of policies and mechanisms for biodiversity friendly fishing	Absence of fisheries management plans	BDFMR adopted by the Gov. and providing for sustainable management targeting endemics	A formally endorsed and government-adopted BDFMR document.	Political will to adopt BDFMR in a form that does not compromise its effectiveness Other agencies willing to relinquish responsibility (and associated budgeting) This is a critical risk since failure to adopt the BDFMR would compromise project outcomes. It is not clear in what form the BDFMR can be officially adopted. Careful consideration should be given to how the BDFMR can be made "adoptable" and implementable, in discussions with relevant government agencies. Current political instability and institutional uncertainty means the BDFMR remains on hold until new institutions and mandates are validated as part of the new government after elections in late 2010.
	Effectiveness of a management bodies (esp. Fisheries Advisory Committee) to deliver the biodiversity friendly regime in the long-term perspective.	Institutional fragmentation	FAC established and implementing effective policy	Minutes of FAC meetings. Project represented on FAC	Appropriate members selected. Assumes need for separate Committee. Role might be filled by Project Board. Project Board is temporarily not functional under FTP. TORs for FAC need to be clear and agreed.

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
	Percent of fisheries under control and monitoring	90% fishing illegal. Catches uncontrolled and unmonitored	90% of fishing legally licensed. Illegal fishing routinely prosecuted.	Database of licenses. Records of prosecutions. Reports from Fisheries Officers. Independent assessment.	Government prepared to act to eradicate corruption in ranks. Transparent enforcement procedures adopted and applied. Support from legislative arm and Courts Project will address roles and responsibilities and encourage transparency and accountability in management plans.
	Percent endemic lake fish species harvested	Endemics targeted as preferred catches	Reduced % of endemics in catches. Reduced overall fisheries catch from lake.	Catch statistics published by Management Body. Fisheries database established and accessible. Survey of markets.	Possible to target non-endemics without endemic by-catch. Can change market demand or provide alternate supply of popular endemic food fish (through pond culture) Project will monitor this.
Outcome 2 Sustainable fisheries demonstrated which contribute to the conservation of endemic fish species and to improve livelihoods	The degree of the effectiveness of the breeding and restocking programs in sustain the viable endemic fish population	Limited restocking	Re-stocking rates: Marinka *Schizothorax issyk-kuli* – 500,000/year Naked Osman *Diptychus dybovskii* – 240,000 per year	Project records. Reports from Biological Stations. Records of breeding plants	Possible to successful breed and release all spp. of endemics. Knowledge of number of individuals required. Project has successfully bred Marinka and Naked Osman.
	Average license period for fishing rights for a particular plot, assigned to one user/fishermen	Non-existing	At least 10 years	BDFMR document	Local fishermen may oppose establishment of long tenure. There is a need for a transparent bidding process behind the distribution of long-term fishing rights, and the process should incorporate assessment of the fishing experience and qualifications. These are the risk mitigation measures the project will incorporate.

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
	Volumes of commercial fish supply produced from artificial ponds (higher volumes will contribute to reduction in required fishing effort).	Little to no pond culture	10 ponds producing commercial spp. for market (>500 mt)	Project records. Site visits by Evaluators. Pond operator's records.	Suitable ponds available. Pond cultured fish are acceptable to market. Cost-effective alternative to wild- caught fish Ponds are available and there is interest in pond culture.
	The trend of changes in the levels of introduced alien fish species showing significant results.	No control or attempts to reduce alien species	Active control. Alien species number and sizes reduced	Field monitoring. Reports from Biological Station. Catch records.	Accurate information available on existing numbers and life-cycle/habitats. Control is feasible. Control appears feasible (see above) but caged rainbow trout operations pose a further threat. Project is addressing this issue with SAEPF through EIA.
	The trend of employment of local people in livelihood fishing (a dropping trend will signify a relaxation of the catch loads)	Heavy concentration on fishing for livelihood. Ltd opportunities for other employment	Increase in other forms of employment. Decrease in fishing effort.	Fishing licences. Independent survey. Local record of businesses and employment.	Other livelihoods are available and attractive alternative. Fishers willing to work in other trades Project will address this issue, there is indication that fishers would be willing to work in other trades.

ANNEX 4-RATE TABLES

Status of objective/outcome delivery as per measurable indicators

Objective	MEASURABLE INDICATORS FROM PROJECT LOGFRAME	END-OF-PROJECT TARGET	STATUS OF DELIVERY	RATING
Objective:	Productivity / population size of endemic fish species showing continuing trend of significant increase by end of project	At Issyk Kul: Naked Osman 40 tons/yr/lake, Chebak 150 tons/yr/lake, Marinka 40 tons/yr/lake		Marginally unsatisfactory
	Ratio of endemic to non-endemic species: significantly reduced number of alien species by end of project, particularly those in direct competition or predating on endemics	60/40 endemic to non-endemic population size ratio by project end, 90/10 ratio 5 years after project completion		Marginally Unsatisfactory
	Newly established set aside area	56,000 ha		Marginally unsatisfactory
	Reduced fishing effort directly attributable to changes in livelihoods within fishers	1000 (reduced by one third)		Marginally unsatisfactory
Outcomes				
Outcome 1:	Effectiveness of policies and mechanisms for biodiversity friendly fishing	BDFMR adopted by the Gov. and providing for sustainable management targeting endemics		satisfactory
	Effectiveness of a management bodies	FAC established and implementing effective policy		satisfactory
	Percent of fisheries under control and monitoring	90% of fishing legally licensed. Illegal fishing routinely prosecuted		Marginally unsatisfactory
	Percent endemic lake fish species harvested	Reduced % of endemics in catches. Reduced overall fisheries catch from lake		Marginally satisfactory
Outcome 2:	The degree of the effectiveness of the breeding and restocking programs in sustain the viable endemic fish population	Re-stocking rates: Marinka – 500,000/year Naked Osman – 240,000 per year		satisfactory

	Average license period for fishing rights for a particular plot, assigned to one user/fishermen	At least 10 years		Marginally unsatisfactory
	Volumes of commercial fish supply produced from artificial ponds	10 ponds producing commercial spp. for market (>500 mt)		Marginally satisfactory
	The trend of employment of local people in livelihood fishing	Increase in other forms of employment. Decrease in fishing effort		Marginally unsatisfactory
	The trend of changes in the levels of introduced alien fish species showing significant results	Active control. Alien species number and sizes reduced		satisfactory

Financial Planning Cofinancing

Co financing (Type/Source)	(UNDP) IA own Financing (mill US$)		Government In kind contribution (mill US$)		GEF (mill US$)		NGO In kind contribution (mill US$)		Total (mill US$)		Total Disbursement (mill US$)	
	Planned	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**
Grants	430,000	170,575			950,000	421,605			1,380,000	592,180		
Loans/Concessional (compared to market rate)												
Credits												
Equity investments												
In-kind support			1,000,000	700,000			1,690,000	300,000			2,169,000	1,000,000
Leveraged (FAO)											0	200,000
TOTALS											4,070,000	1,792,180

TERMS OF REFERENCE
Mid-Term Evaluation of UNDP-GEF project
"Strengthening policy and regulatory framework for mainstreaming biodiversity into fishery sector"

I. INTRODUCTION

This Mid Term Evaluation (MTE) is initiated by the UNDP Kyrgyzstan as the Implementation Agency for this project and it aims to provide managers (at the Project Implementation Unit, UNDP Kyrgyzstan Country Office and UNDP-GEF levels) with strategy and policy options for more effectively and efficiently achieving the project's expected results and for replicating the results. It also provides the basis for learning and accountability for managers and stakeholders.

This evaluation is to be undertaken taking into consideration the GEF Monitoring and Evaluation policy (http://thegef.org/MonitoringandEvaluation/MEPoliciesProcedures/mepoliciesprocedures.html) and the UNDP-GEF Monitoring and Evaluation Policy (http://www.undp.org/gef/05/monitoring/policies.html).

The MTE is intended to identify potential project design problems, assess progress towards the achievement of objective, identify and document lessons learned (including lessons that might improve design and implementation of other UNDP-GEF projects), and to make recommendations regarding specific actions that might be taken to improve the project. It is expected to serve as a tool of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring. The MTE provides the opportunity to assess early signs of project success or failure and prompt necessary adjustments.

The evaluation will play a critical role in the future implementation of the project by providing advice on: (i) how to strengthen the adaptive management and monitoring function of the project; (ii) how to ensure accountability for the achievement of the GEF objective[1]; (iii) how to enhance organizational and development learning; and (iv) how to enable informed decision - making.

The evaluation will have to provide to the GEF Secretariat with complete and convincing evidence to support its findings/ratings. The evaluator should prepare specific ratings on specific aspects of the project, as described in the section IV of this Terms of Reference. Particular emphasis should be put on the current project results and the possibility of achieving the objective and outcomes in the established timeframe, taking into consideration the speed, at which the project is proceeding.

II. PROJECT OVERVIEW

Strengthening policy and regulatory framework for mainstreaming biodiversity into fishery sector project was approved by GEF in February 2008 and signed by UNDP and Government in March 2008. The Inception workshop was organized in November 2008. By that time the project team was hired as well as the main consultants. The project life time is 4 years. The total budget is **4,070,000** USD (GEF contribution is 950,000 USD, Government (in-kind) – 1,000,000 USD, UNDP– 430,000 USD, NGOs (in-kind) – 1,690,000 USD).

The main goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes. The project strategy is to address the overall concerns relating to fisheries management in Kyrgyzstan by demonstrating a new fishery management regime within Lake Issyk Kul as it relates to: (i) the conservation of globally significant biodiversity (endemic fish species); and (ii) within the context of socio-economic concerns, especially poverty and livelihoods. One of the key elements of the project is the Biodiversity Friendly Fisheries Management Regime (BDFMR) which will be a package of national laws, by-laws and regulations developed and enforced with the objective of stabilizing the endemic fish species in the lake

[1] According the Guidelines on Gender Mainstreaming at the GEF, data based on analysis of the monitoring and evaluation reports from the GEF projects shows that the projects usually did not monitor or report the progress on its gender elements. Gender is one of the mandatory cross-cutting requirements in the UNDP and GEF global activity and should be incorporated into any UNDP/GEF project cycle.

within the framework of a viable, sustainable and enforceable commercial fishery. Stabilization will be achieved through limiting current fishing, controlling the size of introduced species, as well as restocking native species.

1. The project is designed to produce two **outcomes**:

1. Strengthened systemic and institutional capacity for biodiversity friendly fisheries Management Regime for Kyrgyz lakes which planned be achieved by realization following outputs:

I. A biodiversity friendly fishery management regime developed and tested at Lake Issyk Kul,
II. The capacity to deliver and implement the biodiversity – friendly fishery management regime is strengthened,
III. Financial mechanism for the implementation of the biodiversity friendly fishery management regime is in place,
IV. Awareness and support of biodiversity-friendly fishery management.

2. Sustainable fisheries demonstrated which contribute to the conservation of endemic fish species and improving livelihoods, trough realization following outputs:

I. Alternative supplies to meet market demands and propagation for re-stocking of lakes with endemics,
II. A strategy to active control and reduction/eradication of introduced alien species for Issyk Kul is developed.
III. Alternative Livelihood program which supports the transition of individuals and businesses away from activities that threaten endemics toward activities in support of sustainable fisheries management.
IV. Direct assistance to support conservation of the endemic fish species of Issyk Kul.
V. An Information and Knowledge Product Management System.

III. EVALUATION OBJECTIVES

The MTE is initiated by UNDP Country Office Kyrgyzstan in line with the UNDP-GEF M&E guidelines in order to assess the overall project progress, make sure the project is on track to deliver the agreed outcomes, and produce recommendations on any adjustments needed.

The purposes of the MTE are:

(i) To assess overall performance against the project objective and outcomes as set out in the Project Document, project's Logical Framework, and other related documents[2];
(ii) To assess the effectiveness and efficiency of the project;
(iii) To analyze critically the implementation and management arrangements of the project;
(iv) To assess the progress to date towards achievement of the outcomes;
(v) To review planned strategies and plans for achieving the overall objective of the project within the timeframe;
(vi) To assess the sustainability of the project's interventions;
(vii) To list and document initial lessons concerning project design, implementation and management[3],;
(viii) To assess project relevance to national priorities (including achieving gender equality goals);
(ix) To provide guidance for the future project activities and, if necessary, for the implementation and management arrangements;

In particular, this evaluation will assess progress in establishing the information baseline, reducing threats, and identifying any difficulties in project implementation and their causes, and recommend corrective course of action. Effective action to rectify any identified issues hindering implementation will be a requirement prior to determining whether implementation should proceed.

[2] Such as UNDP KGZ Country Gender Mainstreaming Strategy
[3] Including achieving gender equality goals, setting gender-sensitive indicators and ensuring gender balance among the project's beneficiaries and target groups

Project performance will be measured based on Project's Logical Framework Matrix (see Annex 3), which provides clear performance and impact indicators for project implementation along with their corresponding means of verification. Success and failure will be determined in part by monitoring changes in baseline conditions.

Recommendation of the evaluation should also include follow gender criteria[4]:

- Are women and men involved into project activity equally?
- Is the project maintaining a positive gender equality situation in improving national **policy and regulatory framework for mainstreaming biodiversity into fishery sector**?
- Is the project enhancing visibility and awareness of gender-related issues in conserving the biodiversity of Kyrgyz lakes?
- Will the project benefit to women and men equally?

The evaluation team is expected to work with key project stakeholders, including UNDP Country Office Kyrgyzstan, the State Agency on Environment Protection and Forestry under the government of the Kyrgyz Republic, Administration of Biosphere Reserve Issyk Kul, CSOs and women NGOs.

IV. SCOPE OF THE EVALUATION

The evaluation will focus on the range of aspects described below. In addition to a descriptive assessment, all criteria marked with (R) should be rated using the following divisions: *Highly Satisfactory, Satisfactory, Marginally Satisfactory, Marginally Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.* All ratings given should be properly substantiated:

1. Project concept/design, relevance and strategy

1.1 Project relevance, country ownership/drivenness (R): the extent to which the project is suited to local and national development priorities and organizational policies, including changes over time as well as the extent the activities contribute towards attainment of global environmental benefits:

a. Is the project concept in line with the sectoral and development priorities and plans of the country, including MDGs?
b. Are project outcomes contributing to national development priorities and plans?
c. How and why project outcomes and strategies contribute to the achievement of the expected results.
d. Examine their relevance and whether they provide the most effective way towards results.
e. Do the outcomes developed during the inception phase still represent the best project strategy for achieving the project objectives (in light of updated underlying factors)? *Consider alternatives.*
f. Were the relevant country representatives, from government and civil society, involved in the project preparation?
g. Does the recipient government maintain its financial commitment to the project? Has the government approved policies or regulatory frameworks in line with the project's objectives?

1.2 Preparation and readiness:

a. Are the project's objective and components clear, practicable and feasible within its timeframe?
b. Were the capacities of executing institution and counterparts properly considered when the project was designed?
c. Were lessons from other relevant projects properly incorporated in the project design?
d. Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval?
e. Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place at project entry?

[4] In relation to the abovementioned, it should be noted that there is increasing feminization of poverty in Kyrgyzstan (70% of poor and poorest are women according to a World Bank assessment). There is an exclusion of women's groups from management of natural recourses, decision making in environment protection, and from raising awareness on this issue. Achieving Gender Equality goals is reflected in UNDP Global Gender Equality Strategy for 2008-2011 and in a road map on making women's and men's concerns an integral dimension of all aspects and areas of UNDP's work.

1.3 Stakeholder involvement (R):

a. Did the project involve the relevant stakeholders through information-sharing, consultation and by seeking their participation in the project's design?
b. Did the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups (including women's and youth groups), private sector, local governments and academic institutions in the design of project activities?

1.4 Underlying factors/assumptions:

a. Assess the underlying factors beyond the project's immediate control that influence outcomes and results. Consider the appropriateness and effectiveness of the project's management strategies for these factors.
b. Re-test the assumptions made by the project management and identify new assumptions that should be made.
c. Assess the effect of any incorrect assumptions made by the project.

1.5 Management arrangements (R):

a. Were the project roles properly assigned during the project design?
b. Are the project roles in line with UNDP and GEF programming guidelines?
c. Can the management arrangement model suggested by the project be considered as an optimum model? If no, please come up with suggestions and recommendations.

1.6 Project budget and duration (R):

a. Assess if the project budget and duration were planned in a cost-effective way?

1.7 Design of project M&E system (R):

a. Examine whether or not the project has a sound M&E plan to monitor results and track progress towards achieving project objectives.
b. Examine whether or not the M&E plan includes a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results and adequate funding for M&E activities.
c. Examine whether or not M&E plan includes gender-sensitive and gender-disaggregated indicators for tracking progress on achieving gender equality corporative goals.
d. Examine whether or not the time frame for various M&E activities and standards for outputs are specified.

1.8 Sustainability:

a. Assess if project sustainability strategy was developed during the project design?
b. Assess the relevance of project sustainability strategy

2. Project implementation

2.1 Project's adaptive management (R):

a. Monitoring systems
    - Assess the monitoring tools currently being used:
        - Do they provide the necessary information?
        - Do they involve key partners?
        - Are they efficient?
        - Are additional tools required?
    - Assess the use of the logical framework as a management tool during implementation and any changes made to it.
    - What impact did the retro-fitting of impact indicators have on project management, if such?
    - Assess whether or not M&E system facilitates timely tracking of progress towards project's objectives by collecting information on chosen indicators continually; annual project reports are complete, accurate and with well justified ratings; the information provided by the M&E system is used to improve project performance and to adapt to changing needs.
b. Risk Management

- Validate whether the risks identified in the project document and PIRs are the most important and whether the risk ratings applied are appropriate. If not, explain why.
- Describe any additional risks identified and suggest risk ratings and possible risk management strategies to be adopted.
- Assess the project's risk identification and management systems:
  - Is the UNDP-GEF Risk Management System[5] appropriately applied?
  - How can the UNDP-GEF Risk Management System be used to strengthen the project management?

c. Work Planning
- Assess the use of routinely updated work plans.
- Assess the use of electronic information technologies to support implementation, participation and monitoring, as well as other project activities.
- Are work planning processes result-based[6]? If not, suggest ways to re-orientate work planning.

d. Financial management
- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions. (Cost-effectiveness: the extent to which results have been delivered with the least costly resources possible.). Any irregularities must be noted.
- Is there due diligence in the management of funds and financial audits?
- Did promised co-financing materialize (please fill out the co-financing form provided in Annex 1)?

e. Reporting
- Assess how adaptive management changes have been reported by the project management.
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.

f. Delays
- Assess if there were delays in project implementation and what were the reasons.
- Did the delay affect the achievement of project's outcomes and/or sustainability, and if it did then in what ways and through what causal linkages?

2.2 Contribution of Implementing and Executing Agencies:

b. Assess the role of UNDP and the State Agency on Environment Protection and Forestry under the government of the Kyrgyz Republic against the requirements set out in the UNDP Programme and Operations Policies and Procedures[7]. Consider:
- Field visits
- Participation in Steering Committees
- Project reviews, PIR preparation and follow-up
- GEF guidance
- Operational support

c. Consider the new UNDP requirements outlined in the UNDP Programme and Operations Policies and Procedures, especially the Project Assurance role, and ensure they are incorporated into the project's adaptive management framework.

d. Assess the contribution to the project from UNDP and Issyk-Kul municipality in terms of "soft" assistance (i.e. policy advice & dialogue, advocacy, and coordination).

e. Suggest measures to strengthen UNDP's soft assistance to the project management.

2.3 Stakeholder participation, partnership strategy (R):

[5] UNDP-GEF's system is based on the Atlas Risk Module. See the UNDP-GEF Risk Management Strategy resource kit, available as Annex XII at http://www.undp.org/gef/05/monitoring/policies.html

[6] RBM Support documents are available at http://www.undp.org/eo/methodologies.htm

[7] Available at http://content.undp.org/go/userguide/results/project/

a. Assess whether or not and how local stakeholders participate in project management and decision-making. Include an analysis of the strengths and weaknesses of the approach adopted by the project and suggestions for improvement if necessary.
b. Does the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in the implementation and evaluation of project activities?
c. Consider the dissemination of project information to partners and stakeholders, considering corporative requirements on equal access to information for women and men, and if necessary suggest more appropriate mechanisms.
d. Identify opportunities for stronger partnerships.

2.4 Sustainability:

a. Assess the extent to which the benefits of the project will continue, within or outside the project scope, after it has come to an end; commitment of the government to support the initiative beyond the project.
b. The evaluators may look at factors such as mainstreaming project objectives into the broader development policies and sectoral plans and economies.

The sustainability assessment will give special attention to analysis of the risks that are likely to affect the persistence of project outcomes. The sustainability assessment should also explain how other important contextual factors that are not outcomes of the project will affect sustainability. The following four dimensions or aspects of sustainability will be addressed:

- *Financial resources:* Are there any financial risks that may jeopardize sustenance of project outcomes? What is the likelihood of financial and economic resources not being available once the GEF assistance ends (resources can be from multiple sources, such as the public and private sectors, income generating activities, and trends that may indicate that it is likely that in future there will be adequate financial resources for sustaining project's outcomes)?
- *Socio-political:* Are there any social or political risks that may jeopardize sustenance of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long term objectives of the project?
- *Institutional framework and governance:* Do the legal frameworks, policies and governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems for accountability and transparency, and the required technical know-how are in place.
- *Environmental:* Are there any environmental risks that may jeopardize sustenance of project outcomes? The terminal evaluation should assess whether certain activities will pose a threat to the sustainability of the project outcomes.

On each of the dimensions of sustainability of the project outcomes will be rated as follows:

- *Likely* (L): There are no or negligible risks that affect this dimension of sustainability.
- *Moderately Likely* (ML): There are moderate risks that affect this dimension of sustainability.
- *Moderately Unlikely* (MU): There are significant risks that affect this dimension of sustainability
- *Unlikely* (U): There are severe risks that affect this dimension of sustainability.

3. Project results (outputs, outcomes and objectives)

3.1 Progress towards achievement of intended outputs, outcomes/measurement of change:

Progress towards results should be based on a comparison of indicators before and after (so far) the project intervention.

To determine the level of achievement of project outcomes and objectives following three criteria should be assessed:

- *Relevance*: Are the project's outcomes consistent with the focal areas/operational program strategies and country priorities?
- *Effectiveness*: Are the actual project outcomes commensurate with the original or modified project objectives? In case the original or modified expected results are merely outputs/inputs then the evaluators should assess if there are any real outcomes of the project and if yes then whether these are commensurate with the realistic expectations from such a project.
- *Efficiency*: Is the project cost effective? Is the project the least cost option? Is the project implementation delayed and if it is, then does that affect cost-effectiveness? Wherever possible, the evaluator should also compare the cost-time vs. outcomes relationship of the project with that of other similar projects.

Outcomes and the whole project should be rated as follows for relevance, effectiveness, efficiency:

- *Highly Satisfactory (HS):* The project has no shortcomings in the achievement of its objectives.
- *Satisfactory (S):* The project has minor shortcomings in the achievement of its objectives.
- *Marginally Satisfactory (MS):* The project has moderate shortcomings in the achievement of its objectives.
- *Marginally Unsatisfactory (MU)*: The project has significant shortcomings in the achievement of its objectives.
- *Unsatisfactory (U):* The project has major shortcomings in the achievement of its objectives.
- *Highly Unsatisfactory (HU):* The project has severe shortcomings in the achievement of its objectives.

V. EVALUATION DELIVERABLES

The core product of the Mid-Term Evaluation will be the Mid-Term Evaluation Report that includes:

- Findings with the rating on performance;
- Conclusions drawn;
- Recommendations for improving delivery of project outputs;
- Lessons learned concerning best and worst practices in producing outputs;
- A rating on progress towards outputs.

The report is proposed to adhere to the following basic structure:

1. Executive summary
   - Brief description of project
   - Context and purpose of the evaluation
   - Main conclusions, recommendations and lessons learned
2. Introduction
   - Project background
   - Purpose of the evaluation
   - Key issues to be addressed
   - The outputs of the evaluation and how will they be used
   - Methodology of the evaluation
   - Structure of the evaluation
3. The project and its development context
   - Project start and its duration
   - Implementation status
   - Problems that the project seeks to address
   - Immediate and development objectives of the project
   - Main stakeholders
   - Results expected
   - Analysis of the situation with regard to outcomes, outputs and partnership strategy
4. Findings and Conclusions
   4.1 Project formulation
      - Project relevance
      - Implementation approach

- Country ownership/Driveness
- Stakeholder participation
- Replication approach
- Cost-effectiveness
- Sustainability
- Linkages between project and other interventions within the sector
- Management arrangements

4.2 Project implementation
- Financial management
- Monitoring and evaluation
- Management and coordination
- Identification and management of risks (adaptive management)

4.3 Results
- Attainment of outputs, outcomes and objectives
- Project Impact
- Prospects of sustainability

5. Conclusions and recommendations
   - Findings
   - Corrective actions for the design, duration, implementation, monitoring and evaluation of the project
   - Actions to strengthen or reinforce benefits from the project
   - Proposals for future directions underlining main objectives
   - Suggestions for strengthening ownership, management of potential risks
6. Lessons learned
   - Good practices and lessons learned in addressing issues relating to effectiveness, efficiency and relevance
7. Annexes
   - Evaluation TOR
   - Itinerary
   - List of persons interviewed
   - Summary of field visits
   - List of documents reviewed
   - Questionnaire used (if any) and summary of results
   - Comments by stakeholders (only in case of discrepancies with evaluation findings and conclusions)

The Report will be supplemented by Rate Tables, attached in Annex 4 of this TOR

The Report will include a table of planned vs. actual project financial disbursements, and planned co-financing vs. actual co-financing in this project, according the table attached in Annex 1 of this TOR

The expected length of the report is around 50 pages in total. The first draft of the report is expected to be submitted to the UNDP Country Office in Kyrgyzstan within 2 weeks of the in-country mission for subsequent circulation to the key project stakeholders for comments. Any discrepancies between the interpretations and findings of the evaluator and the key project stakeholders will be explained in an annex to the final report.

VI. METHODOLOGY

An outline of an evaluation approach is provided below, however it should be made clear that the evaluation team is responsible for revising the approach as necessary. Any changes should be in-line with international criteria and professional norms and standards (as adopted by the UN Evaluation Group[8]). They must be also cleared by UNDP before being applied by the evaluation team.

[8] See http://www.uneval.org/

The evaluation must provide evidence-based information that is credible, reliable and useful. It must be easily understood by project partners and applicable to the remaining period of project duration.

Evaluators should seek guidance for their work in the following materials, which could be found at (www.undp.org/gef):

- UNDP Handbook on Monitoring and Evaluation for Results
- UNDP/GEF M&E Resource Kit
- Measuring Results of the GEF Biodiversity Programme

It is recommended that the evaluation methodology include the following:

- Documentation review (desk study), to include Project Document, GEF Project Implementation Reviews, Minutes of the Project Steering Committee meetings, GEF quarterly project updates;
- Interviews with Project Management Unit and key project stakeholders, including UNDP Country Office in Kyrgyzstan, UNDP Gender Team, GEF Regional Coordination Unit in Bratislava, the State Agency on Environment Protection and Forestry under the government of the Kyrgyz Republic and other stakeholders, as necessary;
- In-country field visits.

VII. EVALUATION TEAM

The evaluation will be undertaken by a team composed of an *International Consultant (Team Leader)* and a *Local Consultant*. They will receive the support of UNDP Country Office and Project Management Team, and will be assisted by a translator/interpreter (when needed).

The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The *International Consultant - Team Leader* will be responsible to deliver the expected output of the mission. Specifically, he/she will perform the following tasks:

- Lead and manage the evaluation mission;
- Design the detailed evaluation methodology and plan;
- Conduct desk-reviews, interviews and site-visits in order to obtain objective and verifiable data to substantive evaluation ratings and assessments, including:
    - Assessment of adequacy of the level and proposed modes of enforcement of the regulatory and programmatic documents developed within the project for conservation globally significant biodiversity in Issyk Kul lake;
    - Verification of the Management Effectiveness Tracking Tool data, as collected and reported by the project;
    - Validation of the adequacy and viability of Fishery Management Regime developed in frame of project;

- Draft the evaluation report and share with the key stakeholders for comments;
- Finalize the evaluation report based on the inputs from key stakeholders.

Qualification requirements for the *International Consultant - Team Leader*:

- Post Graduate Degree in Environment Studies and protected area management or related fields;
- Extensive experience and proven track record with policy advice and/or project development/implementation in protected area management/biodiversity in transition economies;
- Proven track record of application of results-based approaches to evaluation of projects focusing on protected area management/biodiversity (relevant experience in the CIS region and within UN system would be an asset);

- Familiarity with priorities and basic principles of biodiversity conservation and protected area management and relevant international best-practices;
- Knowledge of and recent experience in applying UNDP and GEF M&E policies and procedures;
- Competence in Adaptive Management, as applied to natural resource management projects;
- Recognized and demonstrated expertise in biodiversity conservation;
- Basic understanding of gender equality concept;
- Demonstrable analytical and report writing skills;
- Experience with multilateral or bilateral supported biodiversity projects;
- Excellent English communication skills, knowledge of Russian would be an asset;
- Good interpersonal skills.

The *Local Consultant* will provide input in reviewing all the project-relevant documentation and provide the Team Leader with a compilation of information prior to the evaluation mission. Specifically, the Local Consultant will perform the following tasks:

- Review the original documents;
- Participate in the design of the evaluation methodology;
- Organize the mission program, arrange and facilitate meetings with key stakeholders;
- Provide regular translation/interpretation as necessary;
- Draft related parts of the evaluation report, as relevant;
- Assist the International Team Leader in finalizing the draft report by incorporating inputs received;
- Provide other support services for the International Team Leader.

Qualification requirements for the *Local Consultant*:

- Masters degree (or equivalent) in environmental sciences (biology, zoology or related area);
- At least 5-year experience in project development and/or evaluation, preferably in the field of protected area management/biodiversity;
- Basic understanding of gender equality concept;
- Excellent time-management skills;
- Excellent interpersonal and communicational skills;
- Proficiency in English and Russian;
- Prior experience with UNDP would be an asset.

VIII. MANAGEMENT ARRANGEMENTS

The principal responsibility for managing this evaluation lies with UNDP Country Office in Kyrgyzstan. It will be responsible for liaising with the project team to set up the stakeholder interviews, arrange the field visits, coordinate with the Government.

These Terms of Reference follow the UNDP-GEF policies and procedures, and together with the final agenda will be agreed upon by the UNDP-GEF Regional Coordinating Unit, UNDP Country Office in Kyrgyzstan and the State Agency on Environment Protection and Forestry under the government of the Kyrgyz Republic. These three parties will receive a draft of the final evaluation report and provide comments on it prior to its completion.

The evaluation mission will take place during **30 August – 13 September 2010**. The total duration of the assignment will be 15 calendar days. The following timetable is recommended for the evaluation:

Desk review, development of methodology	2 days
In-country field visits, interviews	5 days
Drafting report	3 days
Draft report circulation	3 days
Finalization of report	2 days

Prepared by: _____ Approved by: _____

VII Application process

Applicants are requested to apply online on http\\:jobs.undp.org by 11 July 2010.

The application should contain current and complete P11 form in English with indication of the e-mail and phone contact.

Shortlisted candidates will be requested to submit price offer indicating the total cost of the assignment (including the daily fee, per diem and travel costs, preferably according the template attached in Annex 6.

UNDP applies fair and transparent selection process that would take into account the competencies/skills of the applicants as well as their financial proposals.

Qualified women and members of social minorities are encouraged to apply.

UNDP is a non-smoking work environment.

Due to large number of applicants, UNDP regrets that it is unable to inform the unsuccessful candidates about the outcome or status of the recruitment process.

ANNEXES:

- Annex 1: GEF terminology and project review criteria
- Annex 2: List of documents to be reviewed by the evaluators
- Annex 3: Revised project logical framework
- Annex 4: Rate tables
- Annex 5: Co-financing tables
- Annex 6: Cost breakdown template

ANNEX 1. GEF TERMINOLOGY AND PROJECT REVIEW CRITERIA

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/Driveness is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements where applicable. Project Concept has its origin within the national sectoral and development plans

Some elements of effective country ownership/driveness 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/driveness 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:

<u>Information dissemination</u>
- Implementation of appropriate outreach/public awareness campaigns

<u>Consultation and stakeholder participation</u>
- 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

<u>Stakeholder participation</u>
- 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[9].
- Strong financial controls, including reporting, and planning that allow the project management to make informed decisions regarding the budget at any time, allows 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.

Co-financing includes: grants, loans/concessional (compared to market rate), credits, equity investments, in-kind support, other contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries. Please refer to Council documents on co-financing for definitions, such as GEF/C.20/6.

[9] Please refer to Council documents on co-financing for definitions, such as GEF/C.20/6. The following page presents a table to be used for reporting co-financing.

Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector. Please briefly describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective.

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)

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.

Financial Planning Cofinancing

Co financing (Type/Source)	IA own Financing (mill US$)		Government (mill US$)		Other* (mill US$)		Total (mill US$)		Total Disbursement (mill US$)	
	Planned	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	*Actual*
– Grants										
– Loans/Concessional (compared to market rate)										
– Credits										
– Equity investments										
– In-kind support										
– Other (*)										
TOTALS										

* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

Leveraged Resources

Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector. Please briefly describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective.

ANNEX 2. LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS

General documentation

- UNDP Programme and Operations Policies and Procedures
- UNDP Handbook for Monitoring and Evaluating for Results
- GEF Monitoring and Evaluation Policy
- UNDP Global Gender Equality Strategy for 2008-2011
- UNDP KGZ Gender Mainstreaming Strategy for 2008-2011

Project documentation

- Project document
- Annual Work Plans
- Annual Project Reports
- Project Implementation Review
- GEF Operational Quarterly Reports

ANNEX 3
Revised Logical Framework

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Objective of the project : To strengthen the policy and regulatory framework to integrate requirements for endemic fish conservation into the fishery management regime	Productivity / population size of endemic fish species (Leuciscus schmidti, Leuciscus bergi, Schizothorax pseudoaksaiensis issykkuli, Gymnodiptychus dybowskii)1 showing continuing trend of significant increase by end of project.	Low numbers of 4 endemics -unable to quantify	At Issyk Kul: Naked Osman 40 tons2 per year per lake, Chebak 150 tons2 per year per lake, Issyk-Kul Marinka 40 tons2 per year per lake.	Monitoring records and data analyses of fish populations and species distributions. Samplings of the existing and newly reintroduced stocks of endemic fish species.	No other factors impacting sustainability of endemics (i.e. water quality, disease, etc). Monitoring is accurate. Enough females and males of the targeted3 species are found and propagated in 2009 and subsequent years. Restocking efforts of the lake are widely supported by both authorities and public4.
	Ratio of endemic to non-endemic species: significantly reduced number of alien species by end of project, particularly those in direct competition or predating on endemics.	Over 60 percent non-endemic species in the lake	60/40 endemic to non-endemic population size ration by project end, 90/10 ration 5 years after project completion	Catch statistics. Reports from Biological Station	Alien species (Sander lucioperca, Onchorhynchus mykiss, Abramis brama orientalis, Pseudoraspora parva)1 are removable or controllable. Alien species may now be an important component of an altered ecosystem.
	Newly established set aside area (fishing moratorium)	0 ha	56,000 ha	Lake Issyk Kul management plan	The decision for setting area aside might face opposition from fishermen, especially involved in poaching. The strategy of wider stakeholder consultations will be applied to mitigate the risk.
	Reduced fishing effort directly attributable to changes in livelihoods within fishers	1,500 persons fishing in lake. No established employment and income generating activity.	500 persons give up poaching on the lake. Accordingly the number of poachers is reduced to 1000 (reduced by 1/3).	Fisheries Management statistics. Reports to Steering Committee. Survey of increased employment and income generation.	Fishers willing to stop fishing. May be difficult to evaluate. Employment or/and income generating activities are readily available. People give up poaching when other source of income is available.

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Outcome 1 Strengthened systemic and institutional capacity for biodiversity friendly fisheries management regime	Effectiveness of policies and mechanisms for biodiversity friendly fishing	Absence of fisheries management plans	BDFMR adopted by the Government and providing for sustainable management targeting endemics	A formally endorsed and government-adopted BDFMR document.	Political will to adopt BDFMR in a form that does not compromise its effectiveness Other agencies willing to relinquish responsibility (and associated budgeting)
	Effectiveness of a management bodies (esp. FAC = Fisheries Advisory Committee) to deliver the biodiversity friendly regime in the long-term perspective.	Institutional fragmentation	FAC established and implementing effective policy	Minutes of FAC meetings. Project represented on FAC	Appropriate members selected. Assumes need for separate Committee. Role might be filled by Steering Committee.
	Percent of fisheries under control and monitoring	90% fishing illegal. Catches uncontrolled and unmonitored	90% of fishing legally licensed. Illegal fishing routinely prosecuted.	Database of licenses. Records of prosecutions. Reports from Fisheries Officers. Independent assessment.	Government prepared to act to eradicate corruption in ranks. Transparent enforcement procedures adopted and applied. Support from legislative arm and Courts
	Percent endemic lake fish species harvested	Endemics targeted as preferred catches	Reduced % of endemics in catches. Reduced overall fisheries catch from lake.	Catch statistics published by Management Body. Fisheries database established and accessible. Survey of markets.	Possible to target non-endemics without endemic by-catch. Can change market demand or provide alternate supply of popular endemic food fish (through pond culture)

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Outcome 2 Sustainable fisheries demonstrated which contribute to the conservation of endemic fish species and to improve livelihoods	The degree of the effectiveness of the breeding and restocking programs in sustain the viable endemic fish population	Limited restocking	Re-stocking rates: Marinka Schizothorax pseudoaksaiensis issykkuli – 500,000 per year Naked Osman Gymnodiptychus dybowskii – 240,000 per year	Project records. Reports from Biological Stations. Records of breeding plants	Possible to successful breed and release all spp. of endemics. Knowledge of number of individuals required. Enough females and males of the targeted species (especially Naked Osman) are found and propagated in 2009 and for this the hatchery facilities; both fix and mobile are ready.
	Average license period for fishing rights for a particular plot, assigned to one user/fishermen	Non-existing	At least 10 years	BDFMR document	Local fishermen may oppose establishment of long tenure. There is a need for a transparent bidding process behind the distribution of long-term fishing rights, and the process should incorporate assessment of the fishing experience and qualifications. These are the risk mitigation measures the project will incorporate
	Volumes of commercial fish supply produced from artificial ponds (higher volumes will contribute to reduction in required fishing effort).	Little to no pond culture The number and total of suitable fish ponds	At least on 50% of the total area of suitable ponds fish is produced on an environment friendly way. 250 kg/ha with extensive or 750 kg/ha with semi intensive techniques.	Project records. Site visits by Evaluators. Pond owners' and operators' records. Reports of private extension services.	Suitable ponds available. Pond cultured fish are acceptable to market. Cost-effective alternative to wild- caught fish. Fish seed supply is solved in order to stock the existing and new fish ponds. Sustainable integrated fish culture extension services in Issyk-Kul oblast is set and supported by the authorities5.
	The trend of changes in the levels of introduced alien fish species showing significant results.	No control or attempts to reduce alien species	Active control. Alien species number and sizes reduced	Field monitoring. Reports from Biological Station. Catch records.	Accurate information available on existing numbers and life-cycle/habitats. Control is feasible5.

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
Goal	The goal of the project is to conserve the globally significant biodiversity of Kyrgyz lakes				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
	The trend of employment of local people in livelihood fishing (a dropping trend will signify a relaxation of the catch loads)	Heavy concentration on fishing for livelihood. Limited opportunities for other employment.	Increase in other forms of employment. Decrease in fishing effort.	Fishing licenses. Independent survey. Local record of businesses and employment.	Other livelihoods are available and attractive alternative. Fishers willing to work in other trades. Employment or/and income generating activities are readily available. People give up poaching when other source of income is available.

1 All scientific names in this report have been updated from the Catalog of Fishes/California Academy of Sciences (2008) and Fishbase (2009).

2 It is obvious that these values are originally expressed in hundred kilos as is the style in the Kyrgyzstan and not in metric tonnes as in the Project Document.

3 Still more than two years ago when the Project Document was prepared there were more chances to find enough sexually matured fish to propagate and start restoring of the Lake. In early 2009 the number of specimens of the targeted endemic species, especially the Naked Osman specimens, reduced so much that finding of them will be a major achievement as such and by sure the mentioned targets are far too optimistic during the short lifespan of the project.

4 The set target is the final goal of restoration the very original size of populations of the three endemic species, because such results could be expected only before the introduction of exotic/alien species had started. For this reason and because of the number of years, which are needed for these species to reach their sexual maturation, the set target should be considered as 10 year target, while the 5 year target the same catches should be reached which were the average of the period of 1970s and 1980s.

5 After the design of the Project the authorities have allowed in the Lake large scale cage culture farming of the alien Rainbow Trout (Onchorhynchus mykiss). This is clearly a new risk for the success of the project as some of the Rainbow Trout are continuously escaping to the Lake from the cages adding the predatory pressure towards the endemic species. In addition, these cage farms are causing significant pollution at least in the close range of the farms. It would be desirable to close all cage farms in the Lake, but that might be impossible at least unless equally good alternative site is identified. Many farms have already invested considerable amount of money into this activity and at least three farms are getting good financial returns from the production. No measures have been implemented to limit or avoid the pollution of the Lake. Therefore the project is aiming to propose an environmental compensation / biodiversity fee; the cage farmers would pay against every produced kilo of Rainbow Trout to support the endemic species protection and reintroduction efforts.

ANNEX 4 – RATE TABLES

Table : Status of objective / outcome delivery as per measurable indicators

OBJECTIVE	MEASURABLE INDICATORS FROM PROJECT LOGFRAME	END-OF-PROJECT TARGET	STATUS OF DELIVERY*	RATING**
Objective :				
OUTCOMES	**MEASURABLE INDICATORS FROM PROJECT LOGFRAME**	**END-OF-PROJECT TARGET**	**STATUS OF DELIVERY**	**RATING**
Outcome 1:				
Outcome 2:				
Outcome 3:				
Outcome 4:				

*

Status of delivery colouring codes:

Green / completed – indicator shows successful achievement

Yellow – indicator shows expected completion by the end of the project

Red – Indicator show poor achievement - unlikely to be complete by end of Project

ANNEX 5 – CO-FINANCING TABLE

Co financing (Type/ Source)	IA own Financing (mill US$)		Government (mill US$)		Other Sources* (mill US$)		Total Financing (mill US$)		Total Disbursement (mill US$)	
	Proposed	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**
Grant										
Credits										
Loans										
Equity										
In-kind										
Non-grant Instruments *										
Other Types										
TOTAL										

- Other Sources refer to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector etc.

- "Proposed" co-financing refers to co-financing proposed at CEO endorsement.

- Describe "Non-grant Instruments" (such as guarantees, contingent grants, etc):
  - *Source/amount/in-kind or cash/purpose*.

- Explain "Other Sources of Co-financing":
  - *Source/amount/in-kind or cash*
  - …
  - …

ANNEX 6 – COST BREAKDOWN TEMPLATE

	Units*	Rate	Total
Home office			
Desk review			
Briefings by UNDP and PM			
Drafting of the evaluation report			
Validation of preliminary findings with stakeholders through circulation of draft reports for comments, meetings and other types of feedback mechanisms			
Finalization of the evaluation report (incorporating comments received on first draft)			
Mission			
Field visits, interviews, questionnaires, de-briefings			
International travel to and from Bishkek Kyrgyzstan			
Local travel (to be arranged and covered by the project)	n/a	n/a	n/a
DSA (overnights)			
TOTAL			

* Estimates are indicated in the TOR, the applicant is requested to review and revise, if applicable.

Draft Programme
Of International and local Mid-Term evaluators Mr. Spike Millington and Ms. Olesya Pavlova
23 August – 15 September, 2010

Date **Дата**	**Activity** **Деятельность**	**City/Country** **Город/Страна**	**Venue** **Место**	**Time** **Время**
23.08.10.-29.08.10	Original documents compiling and review	Bishkek, Kyrgyzstan	Home based work (Olesya Pavlova)	
30.08.10-01.09.10	Developing evaluation methodology, developing mission agenda	Bishkek, Kyrgyzstan	Home based work	
30.08.10-31.08.10	Review of ProDoc, UNDAF, CPAP	Beijing, China	Home based work (Spike Millington)	
01.09.10.	Arrival to Bishkek, Acquaintance with project document	Bishkek, Kyrgyzstan	Hotel "Gory Azii"	09:40-13:30
01.09.10	Meeting and briefing over project with Zharas Takenov, Head of Environment Unit, UNDP and Kumar Kylychev Program Assistant of Environment Unit, UNDP		UN House Tel: +(996 312) 611213 Chui 160	14:00-15:00
02.09.10	Meeting with Ms. Natalia Baydakova, Main expert of ecological strategy and policy department of State Agency of Environment Protection and Forestry	Bishkek, Kyrgyzstan	SAEPF office Tel: +(996 312) 549487 Gorkogo,142	09:00-11:30
	Meeting with Mr. Dokturbek Dogochiev , Director of the state enterprise «Kyrgyz Balygy»		MAWRPI Tel: +(996 312) 460313 Kievskaia 96 b	13:30-14:30
03.09.10	Departure to Issyk Kul Lake	Balykchi town, Issyk Kyl oblast, Kyrgyzstan		9:00 – 13:30
	Meeting with Mr. Askat Kysanov Director of Issy Kyl Biosphere reserve		Biosphere reserve office	14:00-15:30
03.09.10	Departure to Cholpon-Ata town	Cholpon-Ata town, Issyk Kyl oblast, Kyrgyzstan	Hotel, Sovetskaya 37, Cholpon-Ata	16:00
04.09.10-05.09.10	Drafting report	Cholpon-Ata town, Issyk Kyl oblast, Kyrgyzstan	Hotel, Sovetskaya 37, Cholpon-Ata	Whole day

06.09.10	Meeting with Mr. Akylbek Ryspaev , Academy of Sciences, Expert on realization of the program of development pond farms	Cholpon Ata, Issyk Kyl oblast, Kyrgyzstan	Ecocentre building, Sovetskaya str. 61. Cholpon-Ata town Tel.: 03943 72186	09.00-10.00
	Meeting with Mr. Avazbek Arynov, Head of department for biodiversity protection of State Agency of Environment Protection and Forestry Issyk-Kul branch		Interregional office of SAEPF	10.30-12.00
	Meeting with local fishermen, pond farm owners		Chon-Oruktuu village	12:30-16:30
	Meeting with manager UNDP/GEF “Strengthening policy and regulatory framework for mainstreaming biodiversity into fishery sector” project		Ecocentre building, Sovetskaya str. 61. Cholpon-Ata town Tel.: 03943 72186	16.30-17.30
07.09.10-08.09.10	Drafting report and finalization	Cholpon Ata, Issyk Kyl oblast, Kyrgyzstan	Hotel, Sovetskaya 37, Cholpon-Ata	
08.09.10.	Departure to Bishkek	Bishkek, Kyrgyzstan	Hotel, Sovetskaya 37, Cholpon-Ata	13:00-17:00
09.09.10	Draft report finalization	Bishkek, Kyrgyzstan	Hotel “Gory Azii”	09:00-13:00
	Presentation of draft report		UN House, Chui ave 160 Tel.: 0312 611213	14.00-16.00
10.09.10	Departure to China	Bishkek, Kyrgyzstan	(Spike Millington)	
11.09.10-13.09.10	Report finalization and submission	Beijing, China	Home based (Spike Millington)	
11.09.10-14.09.10	Report finalization and submission	Bishkek, Kyrgyzstan	Home based (Olesya Pavolva)	
15.09.10	Final evaluation report endorsed by UNDP Kyrgyzstan	Bishkek, Kyrgyzstan	Home based (Olesya Pavlova)	

List of Documents Reviewed

1. Project Document, Strengthening Policy and Regulatory Framework for Mainstreaming Biodiversity into Fishery Sector

2. Project APRs, PIRs and GEF Quarterly Reports

3. Project Inception Report, 2008

4. Annual Performance Review (APR) Project Implementation Report (PIR)

5. GEF Monitoring and Evaluation Policy

6. UNDP Programme and Operations Policies and Procedures

7. Mikkola, H. 2008. Tentative Structure of the Biodiversity Friendly Fisheries Management Regime within the Lake Issyk-Kul, Kyrgyzstan. UNDP/GEF- Project: Strengthening Policy and Regulatory Framework for Mainstreaming Biodiversity into Fishery Sector.

8. Ryspaev, A. & Woynárovich, A. 2008. Practical Recommendations on Protection of Endemic and Control of Alien Fish Species in the Lake Issyk-Kul and Sustainable Management of Fish Farms in Issyk-Kul Oblast. UNDP/GEF- Project.

9. Alamanov A. and Mikkola H. 2009. Workshop Report on lake Issyk-Kul Biodiversity Friendly Fisheries management Regime Proposal and Fisheries Co-Management, 10-12 September 2009

10. Alamanov, A. & Mikkola, H. 2009. Structure of the Biodiversity Friendly Fisheries Management Regime within the Lake Issyk-Kul, Kyrgyzstan. UNDP/GEF Project: Strengthening policy and regulatory framework for mainstreaming biodiversity into fishery sector.

11. Dept of Fisheries 2007. Programme of the Fish Industry Development in the Kyrgyz Republic for 2006-2010.

12. United Nations Development Assistance Framework (UNDAF) of the Kyrgyz Republic 2005-2010

13. Kyrgyzstan: United Nations Country Program Action Plan 2005-2010

14. Savvaitova, K.A. and T. Petr, 1999 – Fish and Fishery in Lake Lake Issyk-Kul (Tien Shan), River Chu and Pamir Lakes

15. Concept of Sustainable Development of Eco-economic System for the period until 2020. Approved by the Decree № 98 of the President of Kyrgyz Republic as of 10 February 2009